

Curriculum for MD/ MS Ayurveda
(PRESCRIBED BY NCISM)

अभ्यासात्प्राप्यते दृष्टिः कर्मसिद्धिप्रकाशिनी ।

Semester III-VI
Kayachikitsa
(Internal Medicine)

(SUBJECT CODE : AYPG-KC)

(Applicable from 2024-25 batch, from the academic year 2025-26 onwards until further notification by NCISM)



आयुषे सर्वलोकानाम्



Competency

Copability

SKILLS

Skill
Training



Preface

Kayachikitsa stands as the heart of Ayurvedic clinical practice, representing the science of internal medicine. Rooted in the classical principles of Nidana, Samprapti, Rupa, Upashaya, and Chikitsa, this discipline emphasizes the understanding of disease not just as a set of symptoms, but as a dynamic imbalance in the Dosha-Dhatu-Mala system. The postgraduate program in Kayachikitsa is designed to nurture physicians who are well-versed in classical diagnostics and therapeutic reasoning, while also being responsive to the evolving burden of chronic, metabolic, and psychosomatic illnesses in today's society.

In this curriculum, scholars engage deeply with the Trividha Chikitsa (Daivavyapashraya, Yuktivyapashraya, and Sattvavajaya), Oushadha Yoga Nirman, and the clinical utility of Srotovijnana. The integration of theory with Rogi-Pariksha, Vyadhi Vinischaya, and Chikitsa Siddhanta fosters the development of diagnostic accuracy and patient-centered treatment planning. Practical training in Avasthik Chikitsa, Atyayika Chikitsa, and Rasayana-Vajikarana expands the clinician's ability to manage acute conditions, degenerative diseases, and rejuvenative care. Exposure to Yuktisamatva, Anukta Vyadhi management, and evidence-oriented practice prepares scholars for the complex realities of clinical medicine.

The program promotes a dynamic and hands-on learning environment. Interactive pedagogies such as clinical case-based learning, simulation, therapeutic skill sessions, and interdisciplinary modules allow for active engagement. Assessment tools are aligned with real-world competencies, and emphasis is placed on research in Samprapti Vighatana and personalized treatment protocols. Scholars are encouraged to contribute to the growing field of integrative Ayurveda through clinical audits, collaborative research, and documentation of classical Chikitsa success stories. This curriculum aims to produce compassionate, competent, and visionary Ayurvedic physicians who can serve as healers, researchers, and advocates for the science in both national and global health landscape

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We want the education by which
character is formed, strength of
mind is increased, the intellect is
expanded, and by which one can
stand on one's own feet.

Swami Vivekananda



NCISM
(NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE)

Curriculum for MD/ MS Ayurveda
Kayachikitsa (AYPG-KC)

Summary & Credit Framework
Semester III-VI

Module Number & Name	Credits	Notional Learning Hours	Maximum Marks of assessment of modules (Formative Assessment)
Semester No : 3			
Paper No : 1 (Prana Anna Udaka Mootra and Prishavaha srotodushti vikara chikitsa)			
M 1 Pranavaha Srotodushti Vikara evum Chikitsa-I (Respiratory disorders and its management)	2	60	50
M 2 Pranavaha Srotodushti Vikara evum Chikitsa-II (Cardio-respiratory disorders and its management)	2	60	50
Paper No : 2 (Rasa, Rakta, Mamsa, Medovaha srotodushti vikara chikitsa)			
M 8 Rasapradoshaja Vikara- Jvara evum Atisantapa (Hyperthermia)	2	60	50
M 9 Rasapradoshaja vikara- Pandu	2	60	50
Paper No : 3 (Asthi Majja Shukravaha srotodushti vikara & Manoroga, Vata Vyadhi chikitsa)			
M 15 Asthi-Majjhavahasrotas Vikara evam Chikitsa (Management of Bone and Joint Disorders/ Skeletal System Disorders)	3	90	75
Paper No : 4 (Adhyatana Kayachikitsa (Updates in Kayachikitsa))			
M 21 Immunology, Organ transplantation, Gene therapy, radio isotopes	3	90	75
M 22 National health programmes and emerging diseases	2	60	50
Semester No : 4			
Paper No : 1 (Prana Anna Udaka Mootra and Prishavaha srotodushti vikara chikitsa)			
M 3 Annavaha Srotodushti Vikaras evum Chikitsa -I (Gastrointestinal disorders–I and its management)	2	60	50

Paper No : 2 (Rasa, Rakta, Mamsa, Medovaha srotodushti vikara chikitsa)			
M 10 Raktapradoshaja Vikara – Raktapitta & Yakrit pleeha roga	2	60	50
M 11 Raktapradoshaja vikara – Tvak roga	3	90	75
Paper No : 3 (Asthi Majja Shukravaha srotodushti vikara & Manoroga, Vata Vyadhi chikitsa)			
M 16 Vatavyadhi -1	3	90	75
M 17 Vatavyadhi – 2	3	90	75
Paper No : 4 (Adhyatana Kayachikitsa (Updates in Kayachikitsa))			
M 23 Advances in kayachikitsa	3	90	75
Semester No : 5			
Paper No : 1 (Prana Anna Udaka Mootra and Prishavaha srotodushti vikara chikitsa)			
M 4 Annavaha Srotodushti Vikara evum Chikitsa II (Gastrointestinal disorders and its management)	2	60	50
M 5 Udakavaha Srotodushti Vikaras evum Cikitsa (Water and electrolyte imbalance and its management)	3	90	75
Paper No : 2 (Rasa, Rakta, Mamsa, Medovaha srotodushti vikara chikitsa)			
M 12 Mamsa Pradoshaja vikara	3	90	75
Paper No : 3 (Asthi Majja Shukravaha srotodushti vikara & Manoroga, Vata Vyadhi chikitsa)			
M 18 Vatavyadhi - 3 (Neurodegenerative and Musculoskeletal disorders)	3	90	75
Paper No : 4 (Adhyatana Kayachikitsa (Updates in Kayachikitsa))			
M 24 Jaraja Vyadhi (Geriatric medicine)	2	60	50
M 25 Atyayika Avastha and Chikitsa -Pranavaha Srotasa and Hridroga (Respiratory and Cardiovascular Emergencies), udaka vaha srotasa, Sanyasa ,Moorcha, Marmabhighata.	3	90	75
Semester No : 6			
Paper No : 1 (Prana Anna Udaka Mootra and Prishavaha srotodushti vikara chikitsa)			
M 6 Mootravaha Srotodushti vikara evum Chikitsa (Genito-urinary and renal disorders and its management)	3	90	75
M 7 Purishavaha Srotodushti vikaras evum Chikitsa (Intestinal and colorectal disorders with worm infestations and its management)	2	60	50

Paper No : 2 (Rasa, Rakta, Mamsa, Medovaha srotodushti vikara chikitsa)			
M 13 Medo Doshaja Vikara	2	60	50
M 14 Chaya – Apachaya Janya roga (Metabolic disorders) & Anthasravi Granthi Roga (Endocrine disorders)	2	60	50
Paper No : 3 (Asthi Majja Shukravaha srotodushti vikara & Manoroga, Vata Vyadhi chikitsa)			
M 19 Manovaha Sroto Vikara	2	60	50
M 20 Shukravaha Srotovikara (Reproductive medicine)	2	60	50
Paper No : 4 (Adhyatana Kayachikitsa (Updates in Kayachikitsa))			
M 26 Vata Vyadhi (Neurological Emergency), Mootravaha sroto vyadhi, Annavaha, purishavaha, (Gastroenterological Emergencies), Udakavaha (fluid and electrolyte imbalance), Toxicological Emergencies (Visha)	3	90	75
	64	1920	1600

Credit frame work

AYPG-KC consists of 26 modules totaling 64 credits, which correspond to 1920 Notional Learning Hours. Each credit comprises 30 hours of learner engagement, distributed across teaching, practical, and experiential learning in the ratio of 1:2:3. Accordingly, one credit includes 5 hours of teaching, 10 hours of practical training, 13 hours of experiential learning, and 2 hours allocated for modular assessment, which carries 25 marks.

Important Note: The User Manual MD/MS Ayurveda is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. Each paper has 16 credits and each semester covers 16 credits across 4 papers. In case of difficulty and questions regarding the curriculum, write to syllabus24ayu@ncismindia.org

Credit Analysis Overview					
Sem/Paper	Paper No 1	Paper No 2	Paper No 3	Paper No 4	Credits
Semester 3	M-1 2 Crs M-2 2 Crs	M-8 2 Crs M-9 2 Crs	M-15 3 Crs	M-21 3 Crs M-22 2 Crs	16
Semester 4	M-3 2 Crs	M-10 2 Crs M-11 3 Crs	M-16 3 Crs M-17 3 Crs	M-23 3 Crs	16
Semester 5	M-4 2 Crs M-5 3 Crs	M-12 3 Crs	M-18 3 Crs	M-24 2 Crs M-25 3 Crs	16
Semester 6	M-6 3 Crs M-7 2 Crs	M-13 2 Crs M-14 2 Crs	M-19 2 Crs M-20 2 Crs	M-26 3 Crs	16

Credit Analysis Overview					
Sem/Paper	Paper No 1	Paper No 2	Paper No 3	Paper No 4	Credits
Credits	16	16	16	16	64
Semester VI University examination					
Theory			Practical*		
Paper	Marks	Total	Practical Heads	Marks	Total
Paper -1	100	400	Long case or procedure/Major practical as applicable	100	400
			Short case or procedure/Minor practical	50	
Paper -2	100		Spotters	50	
			Assessing teaching ability	20	
Paper -3	100		Assessing presentation skills	20	
			Viva (4 examiners: 20 marks/each examiner)	80	
Paper -4	100		Dissertation Viva	40	
			Logbook (Activity record)	20	
			Practical/Clinical Record	20	
Semester VI University examination – 800 Marks					

* Details in 6H table

Course Code and Name of Course

Course code	Name of Course
AYPG-KC	Kayachikitsa (Internal Medicine)

Table 1 : Course learning outcomes and mapped Program learning outcomes

CO No	A1 Course learning Outcomes (CO) AYPG-KC At the end of the course AYPG-KC, the students should be able to	B1 Course learning Outcomes mapped with program learning outcomes.
CO 1	Demonstrate proficiency in clinical examination, diagnostic investigations, and formulating appropriate Chikitsa (treatment) plans in accordance with Ayurvedic principles	PO1,PO2,PO3,PO7
CO 2	Perform diagnostic and therapeutic procedures adhering to legal, safety and regulatory standards as part of Kayachikitsa	PO1,PO2,PO3
CO 3	Develop proficiency to diagnose and manage atyayika Avastha	PO1,PO2,PO7
CO 4	Demonstrate leadership, empathy , compassion and communicate effectively with patients, care takers and other stakeholders	PO4,PO6
CO 5	Develop efficiency in administering aoushadha yogas according to the stage of the disease and the patient's condition	PO1,PO5,PO7
CO 6	Demonstrate skills in academic and research activities and imbibe advancements in the field of Kayachikitsa	PO1,PO5,PO7
CO 7	Develop competency in case of documentation, data management and ethics in health care	PO7,PO8
CO 8	Develop innovative, integrative and evidence based solutions for the emerging and challenging health conditions	PO1,PO3,PO7

Table 2: Course contents (Modules - Credits and Notional Learning Hours)

Paper No : 1 Prana Anna Udaka Mootra and Prishavaha srotodushti vikara chikitsa						
Semester No : 3						
2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-1 Pranavaha Srotodushti Vikara evum Chikitsa-I (Respiratory disorders and its management) This module imparts comprehensive knowledge in Ayurvedic and Contemporary methods of Roga Rogi Pariksha including Nidanpanchak, Trividha Pariksha, Ashtavidhapariksha and Dashvidha Pariksha, modern investigation techniques, Samanya evum Vishesh Chikitsa, standard treatment guidelines, nidan parivarjan, shamana, shodhana, panchkarma vidhi, rasayan vidhi, preventive measures including pathyapathya , critical care management, Aushadha parijnana and recent updates pertaining to Pranavaha Srotodushti Vikara (I) and its complications. • M 1U 1 Dexterity on Kasa, Parshwashoola and their conventional correlation ○ Kasa (SL41), Parshwashoola ○ Shwasanalikashotha (Bronchitis), Vatasphiti (Emphysema / chronic obstructive pulmonary disease or COPD), Vispharah (Bronchiectasis), Phuphphusasruti (Pleural effusion)	2	10	20	30	60

	• M 1U 2 Dexterity on Shwasa, Hikka and Swarabheda with conventional correlation ○ Hikka, Shwasa, Swarabheda ○ Tamaka Shwasa (Bronchial Asthma), Asthma-COPD Overlapping Syndrome (ACOS), Occupational, Obstructive and Restrictive lung diseases, Antaraalayi Phuphphusa Vikara (Interstitial Lung Disease-ILD), Phuphphusajanita Hridroga Vikara (Cor-pulmonale), respiratory acidosis and alkalosis.					
	M-2 Pranavaha Srotodushti Vikara evum Chikitsa-II (Cardio-respiratory disorders and its management) This module imparts comprehensive knowledge in Ayurvedic and Contemporary methods of Roga Rogi Pariksha including Nidanpanchak, Trividha Pariksha, Ashtavidhapariksha and Dashvidha Pariksha, modern investigation techniques, Samanya evum Vishesh Chikitsa, standard treatment guidelines, nidan parivarjan, shamana, shodhana, panchkarma vidhi, rasayan vidhi, preventive measures including pathyapathya , critical care management, Aushadha parijnana and recent updates pertaining to Pranavaha Srotodushti Vikara (II) and its complications. • M 2U 1 Dexterity on Rajayakshma and Urahkshata with conventional correlation ○ Rajayakshma and Urahkshat ○ Rajayakshma (Pulmonary tuberculosis), Shwasanaka Jwara (Pneumonia), Ayatashwasanam (Diseases under acute respiratory distress syndrome like COVID-19,	2	10	20	30	60

	RSV infection, Histoplasmosis, Legionnaires disease, Pertusis, Aspergillosis etc.) • M 2U 2 Dexterity on Hridroga with comparative studies on heart diseases ○ Hridroga ○ Hridgata dhamanisanga vikara (Coronary artery disease-Ischemic heart disease and Myocardial Infarction) (IHD), Amavatika Hṛdroga (RHD), Hridkapatika Vikara (valvular heart diseases), Hridpeshivridhijanya Vyadhi (cardiomyopathies), Hridayavaranaashotha (pericarditis), Endocarditis, Uchcharaktachaapa (Hypertension), Janmaja Hridroga (congenital heart diseases), Cardiac arrhythmias • M 2U 3 Dexterity on diagnostic approaches of cardio-respiratory diseases ○ Diagnostic approaches of cardio-respiratory diseases ○ Electrocardiography (ECG), Coronary Angiography (CAG), Pulmonary Function Test (PFT), Thoracocentesis, Chest X-ray, High Resolution Computed Tomography (HRCT), Treadmill Test (TMT), Metered Dose Inhaler (MDI), Nebulisation, bilevel positive airway pressure (BiPAP) and continuous positive airway pressure (CPAP)					
		4	20	40	60	120

Semester No : 4						
2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-3 Annavaha Srotodushti Vikaras evum Chikitsa -I (Gastrointestinal disorders–I and its management) This module imparts comprehensive knowledge in Ayurvedic and Contemporary methods of Roga Rogi Pariksha including Nidanpanchak, Trividha Pariksha, Ashtavidhpariksha and Dashvidha Pariksha, modern investigation techniques, Samanya evum Vishesh Chikitsa, standard treatment guidelines, nidana parivarjan, shamana, shodhana, panchkarma vidhi, rasayana vidhi, preventive measures including pathyapathya , critical care management, Aushadha parijnana and recent updates pertaining to Annavaha Srotodushti Vikara (I) and its complications. • M 3U 1 Dexterity on Ama dosha vikar and it's management ○ Ama dosha ○ Alasaka, Vishuchika, Vilambika (SM3A/ 3B) ○ Aanaha, Aadhmana, Aatopa (SM31) • M 3U 2 Dexterity on disorders of Agni. it's management and conventional correlation	2	10	20	30	60

	○ Ajeerna, Agnimandya, Aruchi and Chhardi (SM3L) ○ Amlapitta (SM39)(Gastro esophageal reflux disorders or GERD) ○ Gulma (SM3K) ○ Upper GI endoscopy					
		2	10	20	30	60
Semester No : 5						
2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-4 Annavaḥa Srotodushti Vikara evum Chikitsa II (Gastrointestinal disorders and its management) This module imparts comprehensive knowledge in Ayurvedic and Contemporary methods of Roga Rogi Pariksha including Nidanpanchak, Trividha Pariksha, Ashtavidhapariksha and Dashvidha Pariksha, modern investigation techniques, Samanya evum Vishesh Chikitsa, standard treatment guidelines, nidan parivarjan, shamana, shodhana, panchkarma vidhi, rasayan vidhi, preventive measures including pathyapathya, critical care management, Aushadha parijnana and recent updates pertaining to Annavaḥa Srotodushti Vikara (II) and its complications.	2	10	20	30	60

	• M 4U 1 Dexterity on Shoola in comparison with PUD and related disorders ○ Annadrava Shoola and Parinama Shoola (SM 3A,3B,3C,3D) ○ Amashaya-Grahanigata Vrana (Peptic ulcer diseases or PUD), ○ Agnashayagata Chirakari Pradaha (chronic pancreatitis) • M 4U 2 Dexterity on Grahani in comparison with IBS ○ Grahani (SM 36) ○ IBS (Assessment by Rome Criteria) and malabsorption syndrome • M 4U 3 Dexterity on diagnostic approach of GI disorders ○ Diagnostic approach of Gastro Intestinal (GI) disorders ○ Diagnostic approach with critical analysis like RUT (Rapid Urease Test), USG (Ultrasonography) of abdomen, HRCT (High Resolution Computed Tomography) of abdomen, Barium meal test, ERCP (Endoscopic Retrograde Cholangiopancreatography), etc.					
	M-5 Udakavaha Srotodushti Vikaras evum Cikitsa (Water and electrolyte imbalance and its management) This module imparts comprehensive knowledge in Ayurvedic and Contemporary methods of Roga Rogi Pariksha including	3	15	30	45	90

	Nidanpanchak, Trividha Pariksha, Ashtavidhapariksha and Dashvidha Pariksha, modern investigation techniques, Samanya evum Vishesh Chikitsa, standard treatment guidelines, nidan parivarjan, shamana, shodhana, panchkarma vidhi, rasayan vidhi, preventive measures including pathyapathya, critical care management, Aushadha parijnana and recent updates pertaining to Udakvaha Srotodushti Vikara and its complications. • M 5U 1 Trishna and conventional correlation ○ Trishna ○ Alteration of serum osmolarity • M 5U 2 Shotha and conventional correlation ○ Shotha (SP91) ○ Peripheral oedema, pulmonary oedema, cerebral oedema, lymphedema, angioedema, malnutritional oedema, and DVT • M 5U 3 Water and electrolyte imbalance ○ Water and electrolyte imbalance(Jaliyovidyutansha vaishamya) ○ Systemic acidosis & alkalosis ○ Assessment of electrolyte panel like Alpaksarah (hyponatremia), Alpadahatuh (hypokalemia), Alpabhasvarah (hypophosphatemia), Alpabhrajatuh (hypomagnesemia), Alpasudhah (hypocalcemia), Praksarah (hypernatremia), Pradahatuh (hyperkalemia), Prabhasvarah (hyperphosphatemia), Prabhrajatuh					

	(hypermagnesemia) and Prasudhah (hypercalcemia)					
	• M 5U 4 Udararoga and conventional correlation ○ Udararoga (SM32) ○ Antravarodha (intestinal obstruction) ○ Antraccheda (intestinal perforation) ○ Jalodara (ascites) ○ Yakritplihodara (hepatosplenomegaly) ○ Abdominal paracentesis, ascitic fluid analysis, X-ray of abdomen, CECT scan of abdomen					
		5	25	50	75	150
Semester No : 6						
2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-6 Mootravaha Srotodushti vikara evum Chikitsa (Genito-urinary and renal disorders and its management) This module imparts comprehensive knowledge in Ayurvedic and Contemporary methods of Roga Rogi Pariksha including Nidanpanchak, Trividha Pariksha, Ashtavidhapariksha and Dashvidha Pariksha, modern investigation techniques, Samanya evum Vishesh Chikitsa, standard treatment guidelines, nidan parivarjan, shamana, shodhana, panchkarma vidhi, rasayan vidhi, preventive measures	3	15	30	45	90

	including pathyapathya , critical care management, Aushadha parijnana and recent updates pertaining to Mootravaha Srotodushti Vikara and its complications. • M 6U 1 Mootrakrichra, Mootraghata and Conventional correlation ○ Mootrakrichra (SM82), Mootraghata (SM81) ○ Mootranalika Shotha [Urinary tract infections (UTI)] ○ Pourusha granthi vridhhi (Benign prostatic hyperplasia), ○ Pourusha granthi shotha (Prostitis) ○ Investigations in Genitourinary and renal disorders – urinalysis, urine culture and sensitivity, urine cytology,USG,PSA, Uroflowmetry,CBC,TRUS(transrectal ultrasound),ESR. ○ DRE(digital rectal examination), Application of international prostate symptom score (IPSS) as diagnostic parameter • M 6U 2 Mootrashmari and conventional correlation ○ Mootrashmari (SM8C) ○ Urolithiasis, Nephrolithiasis • M 6U 3 Vrikka rogas and conventional correlation ○ Vrikka roga ○ Acute kidney injury, Chronic kidney disease and Chronic kidney disease of uncertain aetiology (CKDu)					

	• M 6U 4 Renal disorders and its manifestation ○ Renal Disorders ○ Vrikka Koshika shotha (SM84) (Nephritis) ○ Vrikkakoshikasayah (Nephritic syndrome) ○ Apavrikkatva (Nephrotic syndrome) ○ Bastishotha (Cystitis)					
	M-7 Purishavaha Srotodushti vikaras evum Chikitsa (Intestinal and colorectal disorders with worm infestations and its management) This module provides comprehensive Knowledge in Ayurvedic and Contemporary methods of Roga Rogi Pariksha including Nidanapanchaka, Trividha Pariksha, Ashtavidhapariksha and Dashavidha Pariksha, Modern Investigation techniques, Samanya evum Visessa Chikitsa, Standard treatment guidelines, Nidanaparivarjana, Shamana, Shodhana, Panchakarma Vidhi, Rasayana Vidhi, Preventive measures including Pathyapathya, Critical care management, Aushadha Parijnana and recent updates pertaining to Purishavaha srotodushti Vikaras • M 7U 1 Purishavaha srotodushti vikara ○ Atisara (SM37) (Diarrhoea) , Pravahika (SM38)(Amoebic and bacillary dysentery), Udavarta ○ Antrashotha (Gastroenteritis) ○ Inflammatory bowel disease, Raktatisara (SM37) (Ulcerative colitis and Crohn's disease under IBD)	2	10	20	30	60

	• M 7U 2 Purishaja Krimi Vikara evum chikitsa ○ Purishaja krimi vikara ○ Intestinal helminthiasis • M 7U 3 Diagnostic techniques of Purishavaha Srotodushti Vikara (Intestinal and colorectal disorders) ○ Colonoscopy, Sigmoidoscopy ○ Stool examination • M 7U 4 Viruddha and Asatmya Ahara Janya Vikara (food poisoning) ○ Viruddha and Asatmya Ahara Janya Vikara (Food poisoning) ○ Classification, causative agents, prodromal signs and symptoms and aggravating factors of food poisoning ○ Learning the role of public health services in food poisoning outbreaks					
		5	25	50	75	150
		16	80	160	240	480
Paper No : 2 Rasa, Rakta, Mamsa, Medovaha srotodushti vikara chikitsa						
Semester No : 3						
			Notional Learning hours			

2A Module Number	2B Modules & units	2C Number of Credits	2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-8 Rasapradoshaja Vikara- Jvara evum Atisantapa (Hyperthermia) This module provides comprehensive knowledge in Ayurvedic and contemporary methods of Roga Rogi pariksha including Nidanapanchaka, Trividha pariksha, Ashtavidha pariksha and Dashavidha pariksha, modern investigation techniques, Samanya evum Vissha chikitsa, Standard treatment guidelines, Nidanaparivarjana, Shamana, Shodhana, Panchakarma vidhi, Rasayana vidhi, Preventive measures including Pathyapathya, Critical care management, Aushadha parijnana and recent updates pertaining to Jvara evum Atisantapa (Hyperthermia). • M 8U 1 Jvara 1. Jvara Bheda (SP 51)- Nava/Jeerna, Soumya/ Agneya, Sama/Vishama, Prakrita/ Vaikrita, Shareerika/ Manasika, Antarvegi/ Bahirvegi, Dahadi/Sheetadi, Bahya/Abhyantara, Ama/Pachyamana/Nirama, Dhatugatajvara and Punaravartaka jvara 2. Nija jvara (SP 52, SP 53, SP 54, SP 5Y, SP 5Z) – Ekadoshaja, Dvidoshaja, Samasannipata, Vishamasannipata, Vatabalasaka, Pralepaka. 3. Agantu Jvara (SP 59) – Abhighataja, Abhishangaja, Abhicharaja, Abhishapaja Jvara. 4. Vishama Jvara (SP 57) – Santata, Satata, Anyedyushka, Tritiyaka, Chaturtaka, Chaturtakaviparyaya	2	10	20	30	60

	5. Nirantara Jvara (Continuous), Vyatyasta jvara (Intermittent), Alpavisargi jvara (Remittent) and Pratyavarti jvara (Relapsing), Sankramaka jvara (Infectious Fevers) and Asamkramaka jvara (Noninfectious Fevers), Short-term Fever (Acute Fever)/ Long-term Fever (Persistent Fever) and Agyata jvara (SP 5Z) (FUO - Fever of Unknown Origin) 6. Investigations in Fever – Peripheral Smear, Polymerase Chain Reaction, Complete Blood Count, Erythrocyte Sedimentation Rate, C reactive protein, Liver Function Test, Renal Function Test, Urine Routine, Blood and Urine Culture, Serological tests, Molecular tests, Nucleic Acid Amplification Test (NAATs), Filarial Test strip (FTS), Direct Fluorescent antibody (DFA) test, Widal test, Mantoux test, Chest X-ray. • M 8U 2 Sankramaka Roga – Infectious fevers 1. Vata-shlaishmika jvara (Influenza), Avian Flu, Varaha jvara (Swine Flu), Korona (Covid 19), H1N1, Ebola virus, Nipah virus, Sandhiga sannipata jvara (Chikungunya), Dandaka jvara (Dengue fever and subtypes), Rabies, Poliomyelitis, Karnamoola shotha (Mumps) 2. Antrika jvara (Enteric fever - Typhoid), Leptospirosis, Granthika sannipata jvara (Plague), Dhanurvaata (Tetanus), Beejanu jvara (Anthrax), Peeta jvara (Yellow fever), 3. Shwasanaka jvara (Pneumonia), Mastishka avarana shotha (Meningitis), Mastishka shotha (Encephalitis)					

	• M 8U 3 Sankramaka Roga - Pidakajanya Jvara (Infectious fever with rash) This unit provide comprehensive knowledge about Pidakajanya Jwara and management 1. Romantika (Measles) 2. Masurika (Smallpox) 3. Laghumasurika (Chickenpox/ Shingles) 4. Sheetala, Scrub Typhus 5. Monkeypox • M 8U 4 Sankramaka jvara - Fevers of Parasitic origin 1. Vishama jvara (Malaria) 2. Krshnajvara (Kala Azar) 3. Shleepada (Filariasis - SM 01) 4. Visceral leishmaniasis 5. Giardiasis. • M 8U 5 Atisantapa (hyperthermia) 1. Atisantapa (Hyperthermia) 2. Tivra santapa (Malignant Hyperthermia) 3. Vataushnyaghatah (Heat stroke), Atapashrantih (Heat exhaustion) and Tapaghata (Sunburn).					
	M-9 Rasapradoshaja vikara- Pandu This module provides comprehensive knowledge in Ayurvedic and contemporary methods of Roga Rogi pariksha including Nidanapanchaka, Trividha pariksha, Ashtavidha pariksha and	2	10	20	30	60

	Dashavidha pariksha, Modern investigation techniques, Samanya evum Vissha Chikitsa, Standard treatment guidelines, Nidanaparivarjana, Shamana, Shodhana, Panchakarma vidhi, Rasayana vidhi, Preventive measures including Pathyapathya, Critical care management, Aushadha parijnana and recent updates pertaining to Pandu roga and Anaemia. • M 9U 1 Pandu ○ Pandu (SL 80) and its types. ○ Anaemia – Epidemiology, Classification, Clinical features and Complications. ○ Investigations – Complete Blood Count (Hemoglobin, Hematocrit, Mean Corpuscular Volume, Mean Corpuscular Hemoglobin and Mean Corpuscular Hemoglobin Concentration), Reticulocyte count, Iron profile (Serum Iron, Ferritin and TIBC), Peripheral Blood Smear, Serum Creatinine, Thyroid function Test , Coagulation Screen (Activated Partial Thromboplastin Time (APTT), Prothrombin time (PT) and International normalized ratio (INR) and Thrombin Time), Liver Function Test, Hemoglobin electrophoresis, Hemolysis panel (Haptoglobin, lactate dehydrogenase (LDH) and Indirect Bilirubin), Macrocytosis Profile (Vitamin B-12, folate, Methylmalonic acid and homocysteine), Urine Routine, USG abdomen, Bone marrow analysis. • M 9U 2 Pandu Vikara - Hypoproliferative anemia (Anemia of Central Origin) ○ Kalauhapandu (Iron deficiency anaemia)					

	○ Anyavyadhi Janya Pandu (Anemia of Chronic disease and Inflammation) ○ Vrikkaroga Janya Pandu (Anemia of Renal disease) ○ Vishajanya Pandu (Exposure to toxins or drugs) ○ Anemia due to endocrine abnormality ○ Anemia secondary to hematologic malignancies ○ Majja Pandu (anemia due to bone marrow failure syndromes) ○ Myelophthisic anemia • M 9U 3 Pandu Vikara - Anemia due to Maturation defect/ disorder ○ Cytoplasmic defects –Dushta Pandu (Thalassemia), Valayi Pandu (Sideroblastic anemia), Kalauha Pandu (Iron deficiency anemia) ○ Nuclear defects – Folate deficiency, Vit B12 deficiency, Drug toxicity, Myelodysplasia, Refractory anemia • M 9U 4 Pandu Vikara - Anemia due to Hemolysis/ Hemorrhage ○ Intrinsic causes and extrinsic causes - Hereditary spherocytosis, Rudhikavarnika vikara (Hemoglobinopathies), Datrapandu (Sickle cell anemia), Dushtapandu (Thalassemia and Congenital dyserythropoietic anemia), Acquired and Autoimmune hemolytic anemia. ○ Intravascular hemolysis and Extravascular hemolysis					

		4	20	40	60	120
Semester No : 4						
2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-10 Raktapradoshaja Vikara – Raktapitta & Yakrit pleeha roga This module provides comprehensive knowledge in Ayurvedic and Contemporary methods of Roga Rogi Pariksha including Nidanapanchaka, Trividha pariksha, Ashtavidha pariksha and Dashavidha pariksha, Modern investigation techniques, Samanya evum Visesha chikitsa, Standard treatment guidelines, Nidanaparivarjana, Shamana, Shodhana, Panchakarma vidhi, Rasayana vidhi, Preventive measures including Pathyapathya, Critical care management, Aushadha parijnana and recent updates pertaining to Raktapitta, Bleeding and coagulation disorders, Yakrit pleeha roga, Hepatobiliary and Splenic disorders • M 10U 1 Raktapitta 1. Raktapitta (SL 81) and its types. 2. Bleeding and Coagulation disorders (SL 81, SL 8Y, SL 8Z) -Raktaviratasravah (Haemophilia A & B), Von Willebrand disease, Senile Purpura, Henocho Schonlein Purpura, Deep vein thrombosis, Thrombocytopenia (ITP, TTP),	2	10	20	30	60

	Hemolytic Uremic Syndrome (HUS), Disseminated Intravenous Coagulation (DIC). 3. Investigations – Complete Blood Count with Platelet count, Activated Partial Thromboplastin Time (aPTT), Prothrombin Time , International normalized ratio (INR), Bleeding time, Liver Function Test, Urine Routine, Stool for occult blood, Von Willebrand factor (VWF) tests, Clotting Factor VIII test, Bethesda test, Genetic testing. • M 10U 2 Yakrit Roga 1. Kamala (SM 41), Kumbhakamala (SM 41), Halimaka (SM 41), Yakritvidradi (SM 40) 2. Hepatobiliary disorders (SM43, SM 4Y) – Yakrut shotha (Acute and Chronic hepatitis), Portal Hypertension, Jaundice/ Hyperbilirubinemia (Prehepatic, Hepatic and Post hepatic Jaundice), Pittashmari (Cholelithiasis), Pittashaya Shotha (Cholecystitis), Fatty Liver disease (Madyaatirek janya yakrut vikara [Alcohol Fatty Liver Disease], Madya etar karna janya yakrut vikara [Non-Alcohol Fatty Liver Disease - NAFLD, and nonalcoholic steatohepatitis-NASH), MAFLD (Metabolic dysfunction-associated fatty liver disease), Yakrit Vidradhi (Liver abscess), Hepatic hemangioma, Yakrit arbuda (Hepatocellular carcinoma), Fibrosis and Yakrit kathinyam (Cirrhosis of liver). 3. Investigations: Blood [Liver Function Test, Tumor Markers (AFP –L3, DCP, HSP70, HSP 27], Urine Routine, Radiological [Ultra Sonography, Computed tomography , Magnetic					

	resonance imaging (MRI) & Magnetic Resonance Cholangiopancreatography (MRCP), Percutaneous transhepatic cholangiography (PTC) & Percutaneous transhepatic biliary drainage (PTBD), Mesenteric angiography, Positron emission tomography (PET scan), Endoscopic retrograde cholangiopancreatography- ERCP, endoscopic ultrasound- EUS], Biopsy. • M 10U 3 Pleeha Roga 1. Pleeha dosha, Pleeha vidradi (SM 44) 2. Spleen disorders – Pleeha vriddhi (Splenomegaly), Splenic infarction, Felty's syndrome, Hemangioma of Spleen. 3. Investigations: Blood [Complete Blood Count, Tumor Markers (CA19-9, CA 125, CA 50, CEA)], Radiological [USG, CT, MRI], Bone marrow Biopsy.					
	M-11 Raktapradoshaja vikara – Tvak roga This module deals with diagnosis and management of various Tvak roga, hair and cosmetic issues by applying Ayurvedic and contemporary methods of Roga Rogi pariksha including Nidanapanchaka, Trividha pariksha, Ashtavidha pariksha and Dashavidha pariksha, modern investigation techniques, Samanya evum Vishesha chikitsa, Standard treatment guidelines, Nidanaparivarjana, Shamana, Shodhana, Panchakarma vidhi, Rasayana vidhi, preventive measures including Pathyapathya, Critical care management, Aushadha parijnana and recent updates	3	15	30	45	90

	• M 11U 1 Twak Vikara (SN 40 -SN9Z, SN 60- SN 6Z) 1. Kushtha 2. Shvitra 3. Visarpa 4. Sheetapitta, Udarda, Kota, Utkota (SN 4K, SN 4L) 5. Kshudraroga • M 11U 2 Twak roga - Infections and Infestations 1. Infections – Bacterial - [Pittaparpatika (Impetigo), Folliculitis, Vivrita (Furunculosis), Pidaka (Carbuncle), Koshika shotha (Cellulitis), Visarpa (Erysipelas), Galit Kushtha (Leprosy)], Viral [Charmakila (Warts), Molluscum contagiosum, Herpes Simplex Virus (HSV), Herpes Zoster Virus (HZV)], Fungal/Yeast [Dadru (Dermatophytosis, Candidiasis), Chippa (Onychomycosis)] 2. Infestations – Pama (Scabies - SN 46), Yuka, Pipilika/ Liksha (Pediculosis), Cutaneous larva migrans 3. Investigations – Skin biopsy, Tzanck smear, KOH preparation, Diascopy, Wood's light, Patch tests, CBC (Neutrophilia, Eosinophilia and Lymphocytosis), Liver Function Test, Renal Function Test, Anti neutrophil cytoplasmic antibodies (ANCA), Anti nuclear antibodies (ANA) profile • M 11U 3 Twak Roga due to inflammation					

	1. Yuvanapidika (Acne Vulgaris), Hidradenitis suppurativa, Seborrhoeic dermatitis, Stasis dermatitis. 2. Shalkayukta twak vikara (Papulosquamous disorders) - Psoriasis (SN 4A) and subtypes [Ekakushtha, Kitibha, Sidhma, Vipadika] 3. Shewalikabha twak vikara (Lichen planus, Pityriasis Rosae) 4. Anurjatajanya twak vikara (Allergic skin disorders) - Vicharchika [Eczema- Atopic dermatitis, Contact dermatitis], Urticaria [SN 4K], Wheal disorder [SN 4L]) • M 11U 4 Twak roga - Pigmentation disorders and Keratinization disorders 1. Hypopigmentation – Shvitra (Vitiligo (SN 4D), Leucoderma, Piebaldism, Idiopathic guttate hypomelanosis) 2. Hyperpigmentation - Seborrhoic keratosis, Café au lait macule, Melasma (SN 4G), lichen planus pigmentosa 3. Keratinization disorders - Ichthyosis (SN 4B), Keratosis pilaris, Palmoplantar Keratoderma. • M 11U 5 Hair and Cosmetic issues 1. Hair problems (SN 70 -SN 7Z) - Palitya (Grey hair), Kesha Shatana (Hair loss -Alopecia Areata/ Alopecia totalis), Hair damage, Excess Hair growth.					

	2. Cosmetic issues - wrinkles, sagging skin, dark spots, eye bags, dryness, excess oils etc. • M 11U 6 Autoimmune disorders w.s.r to Raktavahasrotas ○ Sphotaka (Pemphigus Vulgaris [SN 4P], P.Foliaceus), Visphotaka(Bullous Pemphigoid), Pratiraksijah (SLE), Scleroderma, Systemic inflammatory Vasculitis, Sjogren's Syndrome, Temporal arteritis, Dermatomyositis					
		5	25	50	75	150
Semester No : 5						
2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-12 Mamsa Pradoshaja vikara This module provides comprehensive Knowledge in Ayurvedic and Contemporary methods of Roga Rogi Pariksha including Nidanapanchaka, Trividha Pariksha, Ashtavidhpariksha and Dashavidha Pariksha, Modern Investigation techniques, Samanya evum Visessa Chikitsa, Standard treatment guidelines, Nidanaparivarjana, Shamana, Shodhana, Panchakarma Vidhi, Rasayana Vidhi, Preventive measures including Pathyapathya, Critical care management, Aushadha Parijnana and recent updates pertaining to Mamsa	3	15	30	45	90

	Pradoshaja Vikara like Galaganda, Gandamala, Apachi, Granthi, Arbuda and Neoplasm. • M 12U 1 Galaganda, Gandamala and Apachi ○ Galaganda, Gandamala, Apachi ○ Goitre, Lymphadenitis. ○ Investigations – Blood tests [TSH, T3, T4, Thyroid antibodies test], Imaging [CT scans, USG, Nuclear medicine tests – Thyroid scan, Radioactive Iodine uptake test], FNAC, Biopsy • M 12U 2 Granthi, Arbuda and Neoplasm ○ Granthi and its types. ○ Arbuda and its types. ○ Epidemiology, Aetiopathogenesis and Classification of Neoplastic disorders (benign neoplasms, in situ neoplasms, malignant neoplasms, and neoplasms of uncertain or unknown behavior). ○ Prognosis based on Clinical and Pathologic staging [tumor, node, and metastasis (TNM) classification] of tumors. ○ Tumor Markers: Hormones [human chorionic gonadotropin (HCG), Calcitonin, Catecholamines], Oncofetal Antigens [AFP, Carcinoembryonic antigen], Enzymes [Prostatic acid phosphates, Neuron Specific enolase, Lactate dehydrogenase], Tumor associated proteins [PSA, Monoclonal Immunoglobulin, CA-125, CA 19.9, CD 30, CD25] ○ Screening of Cancers: Mammography, MRI, PAP test, HPV test, Sigmoidoscopy,					

	Colonoscopy, FOBT, FIT, CT scan, Transvaginal Ultrasound, CA-125, PSA. - Management of Neoplastic disorders Contemporary methods – Ablation, Embolisation, Chemotherapy, Radiation, Hormonal therapy, Immunotherapy, Management of complications, Supportive care and Palliative care. Ayurvedic methods - Prophylactic [Primary, secondary and tertiary prevention], Adjuvant / Co-therapy along with Chemotherapy and radiation, Post-surgical care for symptoms like nausea, vomiting, sore throat, constipation, belching etc., Curative, Palliative and supportive treatment to improve Quality of life. Nutritional care in Ayurveda. • M 12U 3 Arbuda – Carcinoma - Adenocarcinoma - Basal Cell Carcinoma - Squamous cell Carcinoma - Transitional cell carcinoma • M 12U 4 Arbuda – Sarcoma - Osteosarcoma - Chondrosarcoma - Rhabdomyosarcoma/ Leiomyosarcoma • M 12U 5 Arbuda – Rakta Arbuda (Blood Cancer) - Raktakarkah (Leukemia) - Lasikarka (Lymphoma)					

	○ Myeloma ○ Myelodysplastic syndromes (MDS) ○ Myeloproliferative neoplasms (MPNs). • M 12U 6 Brain and Spinal cord Cancers ○ Glioma (Astrocytoma, Brain stem glioma, Optic glioma) ○ Chordoma ○ Meningioma ○ Germ cell tumors					
		3	15	30	45	90
Semester No : 6						
2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-13 Medo Doshaja Vikara This module provides comprehensive Knowledge in Ayurvedic and Contemporary methods of Roga Rogi Pariksha including Nidanapanchaka, Trividha Pariksha, Ashtavidhpariksha and Dashavidha Pariksha, Modern Investigation techniques, Samanya evum Vissha Chikitsa, Standard treatment guidelines, Nidanaparivarjana, Shamana, Shodhana, Panchakarma Vidhi, Rasayana Vidhi, Preventive measures including Pathyapathya, Critical care management, Aushadha Parijnana and recent updates pertaining to	2	10	20	30	60

	Medodoshaja Vikara like Medoroga, Sthoulya, Prameha, Diabetes Mellitus and complications • M 13U 1 Medo roga ○ Medoroga, Dyslipidemia ○ Investigations: Fasting Lipid Panel [T.Cholesterol, LDL, HDL and Triglycerides], Dual energy X-ray Absorptiometry (DEXA) • M 13U 2 Sthoulya ○ Sthoulya, Overweight, Obesity, Lipodystrophy. ○ Investigations: Fasting Lipid Panel [T.Cholesterol, LDL, HDL and Triglycerides], LFT, Dual energy X-ray Absorptiometry (DEXA), TSH • M 13U 3 Prameha ○ Prameha and types ○ Madhumeha(Diabetes Mellitus and types) ○ Investigations: A1C, Fasting Plasma Glucose, OGTT, Random Plasma Glucose test, Insulin test, Urine test for Glucose, Ketones and Albumin • M 13U 4 Prameha Upadrava ○ Upadrava roga of Prameha- Prameha Pidaka, Anya Upadrava					

	○ Complications of Diabetes Mellitus Acute – Durmehah (Diabetic Ketoacidosis), Hyperglycemic hyperosmolar non ketotic Syndrome, Alpasharkara (hypoglycemia) Late/ Chronic Complications – Microvascular (Diabetic Retinopathy, Diabetic Nephropathy, Diabetic Neuropathy), Macrovascular (Cardiovascular disease, Peripheral arterial disease) and other causes (Foot ulcers, Skin conditions like Acanthosis Nigricans, Diabetic dermopathy, Hearing loss, Cognitive impairment) ○ Investigations: A1C, Fasting Plasma Glucose, OGTT, Random Plasma Glucose test, Insulin test, Urine test for Glucose, Ketones and Albumin, Nerve Conduction Velocity, Vibrotherm.					
	M-14 Chaya – Apachaya Janya roga (Metabolic disorders) & Anthasravi Granthi Roga (Endocrine disorders) This module provides comprehensive Knowledge in Ayurvedic and Contemporary methods of Roga Rogi Pariksha including Nidanapanchaka, Trividha Pariksha, Ashtavidhapariksha and Dashavidha Pariksha, Modern Investigation techniques, Samanya evum Vissha Chikitsa, Standard treatment guidelines, Nidanaparivarjana, Shamana, Shodhana, Panchakarma Vidhi, Rasayana Vidhi, Preventive measures including Pathyapathya, Critical care management, Aushadha Parijnana and recent updates pertaining to metabolic and endocrinal disorders • M 14U 1 Metabolic disorders	2	10	20	30	60

	○ Metabolic Syndrome ○ Dhamanai Praticaya (Atherosclerosis) ○ Hyperuricemia, Kupratanaka (Amyloidosis) ○ Wilson's disease, Glycogen Storage diseases (Gaucher disease, Pompes disease etc.) ○ Phenylketonurea ○ Hemochromatosis. ○ Investigations – Blood glucose, LFT, RFT, Phenylketonuria (PKU) test, Serum Ceruloplasmin, serum protein electrophoresis (SPEP), Total blood Copper test, 24-hour Urine copper test, Serum Ferritin. • M 14U 2 Endocrine disorders ○ Epidemiology, Aetiological factors, Pathophysiology and Classification of Endocrine disorders. ○ Investigations – Blood tests [insulin-like growth factor (IGF), Growth hormone (GH), Prolactin, LH, FSH, estrogen, Progesterone, Testosterone, TSH, T3, T4, Thyroid antibodies test, PTH, Blood Calcium level, Vit-D, Catecholamines, Epinephrine, Norepinephrine, Dopamine, Cortisol, ACTH stimulation test, Oestradiol], Nuclear medicine tests – Thyroid scan, Radioactive Iodine uptake test, Osmolality of blood and Urine, Water deprivation Urine test, Late night salivary Cortisol, 24 hour Urinary cortisol excretion, Petrosal Sinus sampling, Potassium, Plasma aldosterone concentration, Plasma renin activity, plasma renin activity,					

	and plasma aldosterone concentration ratio: PRA/PAC ratio, Imaging [USG, CT, MRI] • M 14U 3 Endocrine disorders of Pituitary Gland ○ Vikayata (Acromegaly) ○ Upavrkkatiravah (Cushing's Syndrome) ○ Udakameha (Diabetes Insipidus) ○ Kapiyusakah (Hypopituitarism) ○ Pituitary adenomas • M 14U 4 Thyroid and Parathyroid gland disorders ○ Mandavatuh (Hypothyroidism) ○ Tivravatuh (Hyperthyroidism) ○ Nishkriyavatuh (Hashimoto thyroiditis), G ○ Grave's disease ○ Thyroid storm ○ Praparavatukah (Hyperparathyroidism) ○ Kaparavatukah (Hypoparathyroidism) • M 14U 5 Adrenal gland disorders ○ Upavrikkakasravah (Addison's disease), ○ Adrenal tumours [Pheochromocytoma, Cushing's and Conn's Syndromes, Adrenal Cancer] ○ Hirsutism • M 14U 6 Disorders of reproductive glands – Testes and Ovary					

	○ PCOD/PCOS ○ Ovarian insufficiency ○ Menopausal Symptoms ○ Gynaecomastia ○ Low Testosterone in males					
		4	20	40	60	120
		16	80	160	240	480

Paper No : 3 Asthi Majja Shukravaha srotodushti vikara & Manoroga, Vata Vyadhi chikitsa

Semester No : 3

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-15 Asthi-Majjavahasrotas Vikara evam Chikitsa (Management of Bone and Joint Disorders/ Skeletal System Disorders) This module provides comprehensive Knowledge in Ayurveda and Contemporary medicine towards various diseases related to Asthi-Majjavaha Srotas(Bone and Joint disorders) - Osteoporosis, Osteomalacia, Osteomyelitis, Inflammatory, Non-inflammatory Joint Disorders, Infective Joint Disorders, Suppurative Joint Disorders, Autoimmune and Metabolic Joint Disorders. Module also provides Modern Investigation techniques, Samanya evum Vishsha chikitsa, Standard treatment guidelines, Nidanaparivarjana, Shamana,	3	15	30	45	90

	Shodhana, Panchakarma vidhi, Rasayana vidhi, Preventive measures including Pathyapathya, Critical care management and Oushadha Parijnana pertaining to Asthi, Majja and Sandhis. • M 15U 1 Asthikshaya and Sandhigatavata ○ Asthikshaya, Asthigatavata, Majjagatavata, Sandhigatavata ○ Understanding the Etiopathogenesis of Asthikshaya (Osteopenia)(SP00), Ashti soushrya (Osteoporosis)(SP00-SP0Z). ○ Sandhigatavata(Osteoarthritis)(SP12), Sandhi Shotha(Inflammatory Joint Diseases), Sankramita Sandhivata (Suppurative Arthritis, Tuberculous Arthritis), Carpal tunnel syndrome, Nadigranthi (Cyst of Ganglion), Bursitis, Khandara Shotha (Tendonitis) • M 15U 2 Asthi-Majjavidradhi ○ Asthi-Majjavidradhi ○ Understanding the Etiopathogenesis of Majjashotha (Osteomyelitis), Myeloproliferative and suppression disorders • M 15U 3 Metabolic and autoimmune joint Disorders ○ Vatarakta(SP14) ○ Understanding the etiopathogenesis and management of - Vatarakta (Gout and Gouty Arthritis), Pseudo Gout ○ Amavata,(SP11)					

	○ Rheumatoid arthritis, Rheumatic fever, Kaishorya Sandhi shotha (Juvenile arthritis), Ekakushthaja Sandhivata (Psoriatic arthritis). • M 15U 4 Urustambha and prayoga shalina pariksha in Joint Disorders ○ Urustambha ○ Investigations - Hb%, TC, DC, ESR, CRP, RBS, RA, Anti-CCP, ANA, X-ray, Joint fluid analysis , CPK					
		3	15	30	45	90
Semester No : 4						
2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-16 Vatavyadhi -1 This module imparts the unique knowledge of Vata and Vatvyadhis. Provides profound knowledge of Ayurvedic and Contemporary understanding of Nidanapanchaka, Modern Investigation techniques, Samanya evum Vishesha chikitsa, Standard treatment guidelines, Nidanaparivarjana, Shamana, Shodhana, Panchakarma vidhi, Rasayana vidhi, Preventive measures including Pathyapathya, Critical care management and Oushadha Parijnana with respect to Spinal Disorders, Vegakalina Vatavyadhi and few specific Vatavyadhis.	3	15	30	45	90

	• M 16U 1 Vatavyadhi Parichaya ○ Nanatmja and Samsargaja Vatavyadhi ○ Shuddha vata lakshana, Saama vata lakshana, Kupita vata lakshana ○ Avarana vata Nidana, Lakshana, Chikitsa Siddhanta ○ Samanya Chikitsa Siddhanta of Vatavyadhi, Vatasya upakrama ○ Module Relevant investigations - Hb%, TC, DC, ESR, CRP, RBS, X-ray, MRI Spine, Joint fluid analysis • M 16U 2 Spinal cord disorders ○ Viswachi ○ Etiopathogenesis and management of Manyavikara (Cervical conditions) ○ Manyastambha (SP44) ○ Gridhrasi (SP41) ○ Katigraha (SP42) ○ Understanding the Katishula (Lumbago) (SP42), Gridhrasi (Sciatica) – Samprapti, Samprapti ghatakas, types and management. ○ Manyavikaras (Cervical Spondylitis, Cervical Spondylolisthesis, Cervical Spondylosis) Vamsa kaseru vikruti (Ankylosing Spondylitis). ○ Meru Rajju/Sushumna kanda Vikaras (Diseases of the Spinal cord)-, Merudanda Skalana (Herniated disk), Meru danda Bhagna (fracture), Meru Danda Kshaya (spinal degeneration), Meru danda Rakta pindinam (Spinal hematoma), Meru danda Granthi (Spinal tumor), Gativibhrama (Ataxia - Friedreich's Ataxia)					

	○ Cervical and Lumbar Radiculopathy, Manyastambha (Torticollis)(SP44). • M 16U 3 Snayu & Sandhi Vikara ○ Descriptive study of Avabahuka (Frozen Shoulder)(SP15). ○ Khalli(Muscle pain, Twisting disorder)(SP20), Khanja(Lamenes) (SK2Y), Pangu (causes for Antalgic gait) ○ Padaharsha (Tingling foot)(SP9Y), ○ Vatakantaka (Heel Spur/calcaneal Spur, Plantar fasciitis)(SP40) ○ Kroshtukasheersha (Synovial arthritis) • M 16U 4 VegakaalianaVatavyadhi ○ Akshepaka(SK30), Apatanaka, Apatantraka, Dandapatanaka, Hanugraha (SK5Y), Hanustambha, Dhanustambha, Abhyantarayama, Bahyayama. ○ Knowledge of Akasmika Pesi Sankocha (Convulsive Disorders)(SK20) and Dhanurvata (Tetanus)					
	M-17 Vatavyadhi – 2 This module imbibes comprehensive knowledge in Ayurvedic and Contemporary Roga rogi Pariksha vidhi including Nidanapanchaka, Modern Investigation techniques, Samanya evum Vishesha chikitsa, Standard treatment guidelines, Nidanaparivarjana, Shamana, Shodhana, Panchakarma vidhi, Rasayana vidhi, Preventive measures including	3	15	30	45	90

Pathyapathya, Critical care management and Oushadha Parijnana pertaining to Pakshaghata, Ardhitavata, Kampavata and Gatavatas • M 17U 1 Arditavata, Gatavata ○ Ardita vata (SK20) ○ Mooka, Minmina, Gadgada(SK553) ○ Disorders of Cranial Nerves - Facial palsy, Bell's Palsy. Vak Aghata (Disorders of Speech, Language and Communications) ○ Disorders of Phonation – Swarabhanga (Aphonia & Dysphonia) ○ Disorders of Articulation – Anarthria & Dysarthria ○ Disorders Fluency – Gadgada (Stammering/Stuttering) & Cluttering) ○ Disorders of Language – Mookata (Aphasia), Alexia, Vagvikara (Dyslexia), Agraphia ○ Twakgata, raktagata, mamsagata, medogata, snayugata, siragatavata. ○ Importance of virechana, anulomana, vasti in vatavyadhi, Pathya-apathya in vatavyadhi • M 17U 2 Madhya Shareeragata vata and Tuni ○ Koshtagata, gudagata, amashayagata, pakwashayagata vayu lakshana ○ Tuni, Pratituni(SM83) ○ Knowledge of Renal and Ureteric Colic(SM83) • M 17U 3 Kampavata/Parkinson's Disease and Bahu tantrika Shotha (Polyneuropathy)					

	- Understanding the Etiopathogenesis and management of – Jeerna Bahu tantrika Shotha (Chronic Polyneuropathy), Anuvamshika tantrika Shotha Hereditary Neuropathy, Chronic demyelinating polyneuropathy, Entrapment neuropathy, Multifocal neuropathy, Polyneuropathy, Tantrikanughatah(Guillain - Barre Syndrome) - Kampavata(SP52) - Nidana/ Chikitsa including Nidana Parivarjana, Pathya, Apathaya, Chikitsa siddhanta, Shamana, Shodhana, Panchakarma, Rasayana and VyapathChikitsa (Anupana, Drug/Nondrug) as per Ayurvedic and conventional therapeutics - Knowledge of - Kampavata (Parkinsonism) with Movement Disorders –Hypokinetic - Parkinson's and other Parkinsonian disorders(Parkinsonism plus syndrome)& Hyper Kinetic - Akathisia, Ataxia, Chorea, Dystonia, Myoclonus, Spasticity Steriotypies, Tics, Tremors (resting tremors, action tremors, postural tremors, intentional tremors) • M 17U 4 Pakshaghata - Pakshaghata(SK22)/ Pakshavadha, Adharanga Vata, Ekangavata(SK22) and Sarvanga Vata(SK22) - Knowledge of Etiopathogenesis and management of CVA - Ischemic CVA – TIA, Acute Ischemic Stroke, Cerebral Embolism, Lacunar Strokes					

	4. Mastishka asru srava (Haemorrhagic CVA) – Intra cerebral Haemorrhage, Sub Arachnoid Haemorrhage (SAH) 5. Knowledge of UMN & LMN lesions 6. Etiopathogenesis and management of Hemiplegia, Paraplegia, Monoplegia, Quadriplegia 7. Complications of Mastishka Aghata (CVA), Stroke(SK5Y) rehabilitation and Physiotherapy.					
		6	30	60	90	180
Semester No : 5						
2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-18 Vatavyadhi - 3 (Neurodegenerative and Musculoskeletal disorders) This module deals with diagnosis and management of various Neurodegenerative, Musculoskeletal disorders and Smriti Nasha, by applying Ayurvedic and Contemporary Roga rogi Pariksha vidhi including Nidanapanchaka, Modern Investigation techniques, Samanya evum Vishesha chikitsa, Standard treatment guidelines, Nidanaparivarjana, Shamana, Shodhana, Panchakarma vidhi, Rasayana vidhi, Preventive measures including Pathyapathya, Critical care management and Oushadha Parijnana	3	15	30	45	90

	• M 18U 1 Neurodegenerative disorders and Smriti Nasha ○ Dementia - Understanding the Etiopathogenesis and management of diseases like Dementia – with Functional anatomy, Vascular Dementia, Fronto-temporal Dementia, Parkinson’s Disease Dementia, Dementia with Lewy Bodies, Differential Diagnosis, Treatment. Smriti Nasha/ smriti lopa (Alzheimer’s Disease) – clinical manifestation, epidemiology, pathology and differential diagnosis. ○ Smriti Nasha/ Smriti lopa – classical references as lakshana, as Chikitsa, as guna, as hetu, as arista ○ Huntington’s disease/chorea and other chorea, difference between Chorea, Athetosis and Hemiballismus • M 18U 2 ALS AND Multiple Sclerosis ○ Amyotrophic lateral sclerosis (ALS), Restless leg syndrome. ○ Multiple Sclerosis – pathogenesis, clinical manifestations, disease course, diagnosis, prognosis and treatment • M 18U 3 Musculoskeletal disorders ○ Tantrighaata (Motor Neuron Diseases)– Sporadic, Genetic and other motor neuron diseases like selected upper and lower motor neuron disorders,					

	○ Peshi Vikaras (Myopathies) - Janmajata Peshi Vikaras (Congenital myopathies), Mitochondrial myopathies and other Myopathies - Peshi Sosha (Muscular dystrophy), Myotonia. ○ Knowledge of Peshi Dourbalya (Myasthenia Gravis)- importance of plasma therapy and immunoglobulin therapy. ○ Investigations – MRI/CT Brain, Spine, PET Scan • M 18U 4 Myelopathy ○ Knowledge of Compressive myelopathy (cervical and lumbar) ○ Difference between Ascending versus Descending Paralysis, Botulism, Poliomyelitis, Transverse myelitis ○ Knowledge of EMG, EEG and NCV TEST.					
		3	15	30	45	90
Semester No : 6						
2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-19 Manovaha Sroto Vikara “Manovaha Srotovikara” refers to disorders related to the mind. It focuses on how imbalances in the manovaha srotas can affect mental health. This module describes the	2	10	20	30	60

Manovahasroto vikaras like Unmada, Apasmara, Atatvabhinivesha along with Contemporary related Psychiatric ailments and management of Madatyaya, Mada, Moorcha, Sanyasa with its related disorders including Nidanapanchaka, Modern Investigation techniques, Samanya evum Vishesha chikitsa, Standard treatment guidelines, Nidanaparivarjana, Shamana, Shodhana, Panchakarma vidhi, Rasayana vidhi, Preventive measures including Pathyapathya, Critical care management and Oushadha Parijnana. • M 19U 1 Unmada ○ Unmada ○ Common Psychiatric disorders: Diagnosis and Classification(WHO-ICD 10) of psychiatric ailments. ○ Psychiatric history taking and Examination. ○ Disorders of thought like Schizophrenia. ○ Disorders of Mood like Manic episode, Depressive episode, Bipolar mood(affective) disorder, Recurrent depressive disorder, Persistent mood disorder. • M 19U 2 Apasmara and Atatvabhinivesha ○ Apasmara ○ Knowledge of Epileptic Disorders. ○ Atatvabhinivesha ○ Neurosis (stress, depression, OCD), Manovikshpta(Psychosis), personality disorders(Samvibhramah), psychosexual disorders • M 19U 3 Mada, Moorcha, Sanyasa					

	○ Mada, Moorcha, Sanyasa ○ Knowledge of Intoxication, Fainting, Various levels of Consciousness – Lethargy, ○ Syncope, Delirium, Stupor, Coma ○ Knowledge of Glasgow Coma scale ○ Investigations – MRI or CT Brain • M 19U 4 Madatyaya ○ Madatyaya ○ Alcohol misuse and dependence. ○ Substance abuse ○ Warning signs and symptoms of Substance abuse like Alcohol, Psychoactive drugs etc. ○ Prevention, education, awareness, campaign • M 19U 5 Organic and non-organic Mental(brain) disorders ○ Organic mental disorders – due to physical trauma, damage from chemicals or toxins, infection, cancer and such other diseases. ○ Non-organic mental disorders – Manovikshipta(Reactive Psychosis),Avasada(Depression), Chittodwega(Anxiety disorders) ○ Knowledge of different mental examination scales. ○ Knowledge of Rehabilitation Therapies ○ GAD-7 Anxiety scale ○ Hamilton Depression Rating Scale ○ Hamilton Anxiety Rating Scale (HAM-A) ○ Mini Mental State Examination(MMSE)					

	M-20 Shukravaha Srotovikara (Reproductive medicine) Śukravaha Srotas are channels responsible for carrying Śukra Dhātu (reproductive tissue). They play a significant role in fertility, reproduction, and vitality. This module provides comprehensive Knowledge in Ayurvedic and Contemporary methods including Nidanapanchaka, Modern Investigation techniques, Samanya evum Vishesha chikitsa, Standard treatment guidelines, Nidanaparivarjana, Shamana, Shodhana, Panchakarma vidhi, Rasayana vidhi, Preventive measures including Pathyapathya, Critical care management and Oushadha Parijnana pertaining to Shukravaha Srotovikara including Klaibya, Vandhyatva and other Psychosexual and Male reproductive system related diseases. • M 20U 1 Klaibya ○ Klaibya types and management ○ Knowledge of Impotence/Erectile dysfunction ○ Reproductive hormones ○ Knowledge of Psychosexual disorders ○ Gender identity disorders ○ Sexual dysfunction - Premature ejaculation, Lack of sexual desire Paraphilia • M 20U 2 Male Reproductive Disorders ○ Knowledge of Male reproductive disorders ○ Phiranga (Syphilis) ○ Understanding the Etiopathogenesis, types, Stages and management of Syphillis ○ Upadamsha	2	10	20	30	60

	○ Knowledge of Chancroid/Soft Chancre and its management. ○ Puyameha ○ Gonorrhea- Understanding the etiopathogenesis and management of Gonorrhea ○ Other Sexually transmitted disorders (HPV infection, Genital Herpes, Chlamydia, Trichomoniasis). ○ Disorders of glans penis – Balanitis, Baleno Posthitis, Lichen Planus, Pyronie’s disease, Priapism ○ Knowledge of Pourush Granthi Vriddhi(BPH- Benign prostatic Hyperplasia), Anda Vriddhi (Varicocele) ○ Investigations – VDRL(Venereal Disease Research Laboratory) or RPR(Rapid Plasma Reagin), TP-PA (T pallidum passive particle agglutination). • M 20U 3 Vandyatva and Vajeekarana ○ Knowledge of Vandyatva – Nidana, Samprapti, Beda and management ○ Knowledge about infertility ○ Causes of Male and female infertility ○ Sub fertility – causes, risk and treatment for subfertility, ○ Computer assisted semen analysis and DNA fragmentation test and index ○ Disorders of micturition – wsr to Storage and Emptying of urine ○ Explain etiopathogenesis, signs, symptoms and management of Dhat Syndrome.					

	○ Vajeeekarana and Role of Vajeeekarana in Reproductive health					
		4	20	40	60	120
		16	80	160	240	480

Paper No : 4 Adhyatana Kayachikitsa (Updates in Kayachikitsa)

Semester No : 3

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-21 Immunology, Organ transplantation, Gene therapy, radio isotopes It gives insight into advances in Immunology, Organ transplantation, Gene therapy, radio isotopes. It includes indications and importance of Organ transplantation, Ethical and legal issues involved in that. Transplantation biology, Organ procurement, Transplant procedure. Role of Ayurveda in different stages of organ transplantation. It introduces basics of Gene therapy, Stem cell therapy, Genetic modelling and chromosomal disorders in different disease conditions and their understanding with Ayurveda parlance. It highlights the advances in Radio-isotopes, disease and tumor markers in diagnosis and assessment of therapy • M 21U 1 Immunology 1. Innate and Acquired Immunity	3	15	30	45	90

	2. Antigens, antibodies, antigen-antibody and antigen-receptor interactions 3. Cytokines, complement activation 4. Applied aspect of Immunology in Vaccines, Tumor Immunology, Autoimmune Diseases, Allergies • M 21U 2 Organ transplantation 1. Biology of Organ transplantation 2. Indications and importance of Organ transplantation 3. Ethical issues and challenges in Organ transplantation 4. Role of Ayurveda in different stages of Organ transplantation • M 21U 3 Gene therapy 1. Biology of Gene therapy 2. Indications and importance of Gene therapy 3. Ethical issues and challenges in Gene therapy 4. Role of Ayurveda in different stages of Gene therapy • M 21U 4 Radio isotopes 1. Radio isotopes 2. Utility of radio isotopes in disease and tumour markers 3. Indications and application of Radio isotopes in treatment					

	4. Utility of Radio isotopes in kayachikitsa practice					
	M-22 National health programmes and emerging diseases This module give gross understandings of National Health Campaigns of Ayush, National Ayush Mission, Ayushman Bharat. It give insights in to new emerging health challenges, their Ayurveda understanding and Ayurveda role in these challenges. It includes Chikungunya, HIV/AIDs, Swineflu, Chickenflu, Dengue, Sick building syndrome, Fibromyalgia, COVID-19 and their integrative management strategies. • M 22U 1 National health Programmes 1. Understanding the National health campaigns and 2. Comprehend the AYUSH health campaigns 3. Identify the current AYUSH campaigns and health campaigns 4. Constructing the strategy in supporting, participating and executing the AYUSH campaigns and health campaigns • M 22U 2 Emerging Health Challenges 1. Identifying the Emerging Health Challenges through various authentic sources 2. Ayurveda understanding of Emerging Health Challenges 3. Planning the possible Ayurveda solutions to the Emerging Health Challenges	2	10	20	30	60

		5	25	50	75	150
Semester No : 4						
2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-23 Advances in kayachikitsa Introduces advances in Ayurveda that contribute to Kayachikitsa practice like Kayachikitsa fundamentals, Ayurveda disease diagnosis, Chikitsa Sootra (treatment algorithm), treatment protocol, integrative protocols, Shamana Chikitsa, Rasayana Chikitsa, Pathya-Apathya, and integrative medicine. It intends to inculcate the advances in Rasayana, Vajikarana, Manasaroga, and Panchakarma in Kayachikitsa practice in terms of disease diagnosis, Chikitsa Sootra, treatment protocol, Panchakarma procedures, Bheshaja, Matra, Anupana, Bheshaja Kala, Pathya-Apathya, Daivavyapashraya, Satwavajaya Chikitsa, technology, and adverse events.	3	15	30	45	90
	• M 23U 1 Advances in Kayachikitsa - Advances in sciences that contribute to kayachikitsa practice - advances in Ayurveda sciences that contribute to kayachikitsa practice - Design and develop Ayurveda protocols, assessment tools needed for Kayachikitsa practices					

	4. Execute the advances in kayachikitsa /Ayurveda protocols, evidence based medicine in Kayachikitsa practices • M 23U 2 Integrative Medicine 1. Understanding the Principle and practice of Integrative medicine. 2. Comprehending the strengths of different systems of medicine like Ayurveda, yoga, physiotherapy, physical medicine and rehabilitation and conventional medicines in a management of different diseases 3. Development of Integrative medicine protocol comprising of different systems of medicine. 4. Developing strategies to address issues/challenges in executing Integrative medicine protocols 5. Execution of Integrative medicine protocol in different diseases • M 23U 3 Advances in Rasayana, Vajikarana, Manasaroga 1. Advances in the field of Rasayana 2. Advances in the field of Vajikarana 3. Advances in the field of Manasaroga 4. Integrating advances in Rasayana, Vajikarana, Manasaroga components in Kayachikits practice • M 23U 4 Advances in Panchakarma 1. Advances in the field of Shodhana chikitsa 2. Advances in the field of Bahiparmiarjana chikitsa					

	3. Advances in the field of Technology in panchakarma practice 4. Integrating advances in panchakarma components in Kayachikits practice					
		3	15	30	45	90
Semester No : 5						
2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-24 Jaraja Vyadhi (Geriatric medicine) Module provides a comprehensive understanding of geriatrics, Ayurveda biology of geriatrics, Altered physiology and vulnerability to diseases, Jaraja vyadhi related to different srotas, Ahara vihara in Jara, Shodhana, Shamana and Rasayana in context of Jara. Application of Palliative care principles and practises in Kayachikitsa practises • M 24U 1 Jaraja Vyadhi 1. Knowledge of Geriatric Care 2. Ayurveda Biology of Aging and Geriatrics 3. Understanding of jaraja diseases according to different srotas and their comprehensive management 4. Panchakarma Procedures and Shamana Chikitsa in Context of Jara in various diseases 5. Optimizing Care and Pain Management through Ayurvedic Approaches	2	10	20	30	60

	6. Knowledge and application of palliative care in Kayachikitsa practises					
	M-25 Atyayika Avastha and Chikitsa -Pranavaha Srotasa and Hridroga (Respiratory and Cardiovascular Emergencies), udaka vaha srotasa, Sanyasa ,Moorcha, Marmabhighata. It gives deeper insights and skills needed for diagnosis and management of Atyayika Avastha. Comprehensive understanding of Emergency medicine, critical care and ICU care, it's Infrastructure, use of Information technology, essential manpower and equipment. It provides deeper understandings of Important aspects of Atyayika Chikitsa like Pranarakshana, Oja Rakshana, Agni Rakshana, Indriya Rakshana. Knowledge and skill required for Teevra Shwasa and Hikka Vegavastha (including Respiratory emergencies), Hridrog (cardiac emergencies), Marmabhighata Chikitsa (Shock management), conventional life saving drugs. • M 25U 1 Basics of Emergency medicine and Atyayika chikitsa 1. What is Atyaya and Atyayika Chikitsa 2. Important aspects of Atyayika Chikitsa like Pranarakshana, Oja Rakshana, Agni Rakshana, Indriya Rakshana • M 25U 2 ICU care devices, instruments and procedures 1. ICU care devices, instruments and procedures 2. Endotracheal intubation, Cardiopulmonary resuscitation techniques, defibrillator, pulse	3	15	30	45	90

	oximetry, Inhaler therapy, oxygen delivery, nebulization • M 25U 3 Teevra Shwasa and Hikka Vegavastha Respiratory emergencies- Introduction, approach of respiratory emergency, anaphylaxis, acute severe asthma, exacerbation of chronic obstructive airways disease, acute exacerbations of chronic respiratory disease, pneumonia, pneumothorax, pleural effusions, respiratory failure • M 25U 4 Svatanttra and Paratantra Hridroga severe hypertension, acute heart failure, acute coronary syndrome, arrhythmias, thromboembolic disease, cardiac arrest, oxygen therapy-oxygen delivery devices, Adult basic life support training • M 25U 5 Teevra Jwara Saamajwara Jeernajwara, Jwara with Dhatupaka Jwara with Indriya and Mana Santapa and Vishajanya Jwara, vishama jawara, Sannipatika Jwara Sannipatika Jwara - Pradhana Upadrava • M 25U 6 Marmabhighata Chikitsa Septic shock, cardiogenic shock, Hypovolemic shock and Udakavaha sroto dusthi like electrolyte imbalance – Hyponatremia, Hypernatremia, hypocalcaemia, Hypercalcaemia, Hyperkalaemia, Hypokalaemia) and haemorrhagic shock, obstructive (pulmonary embolism, tamponade), anaphylaxis					
		5	25	50	75	150
Semester No : 6						

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-26 Vata Vyadhi (Neurological Emergency), Mootravaha sroto vyadhi, Annavaha, purishavaha, (Gastroenterological Emergencies), Udakavaha (fluid and electrolyte imbalance), Toxicological Emergencies (Visha) It gives deeper insights and skills needed for diagnosis and management in atyayika Avasthas. Atyayika Avastha of Vata Vyadhi (Neurological Emergency) like Vegavastha of Pakshaghata, Ardita, Ekanga-Sarvanga Roga, Vatavyadhi atyayika including (Including Mastiṣkāvaraṇaśoṭhaḥ (Meningitis), teevra apasmara (Status Epilepticus), Acute Ischemic Stroke, Cerebral Haemorrhage and Haematomas), Teevra Shoola (Acute Neuronopathies). Atyayika chikitsa in Mootrakricchra and Mutraghata (including Acute Kidney Injury, Durmehaḥ (Diabetic Ketoacidosis), Hypoglycaemia, Hyperosmolar Non-Ketosis). Atyayika chikitsa in Annavaha, purishvaha and Udakavaha srotas. Atyayika Avastha of Panchakarma vyapata management. Management of drug overdoses (both accidental and non-accidental), acute drug reactions, anaphylaxis and Poisonings. • M 26U 1 Vegavastha of Pakshaghata, Ardita, Ekanga-Sarvanga Roga Vatavyadhi (Including Meningitis, Status Epilepticus, Acute Ischemic Stroke, Cerebral Haemorrhage and Haematomas), Teevra Shoola (Acute Neuronopathies, Acute musculoskeletal pain, visceral pain-Raktamokshana, Agnikarma, cupping etc)	3	15	30	45	90

	• M 26U 2 Atyayika chikitsa in Mootrakricchra and Mutraghata Mootrakricchra and Mutraghata (including Acute Kidney Injury, Diabetic Ketoacidosis, Hypoglycaemia, Hyperosmolar Non-Ketosis, Acute Hypercalcaemia, Thyrotoxicosis, Hypocalcaemia, Adrenal crisis) • M 26U 3 Atyayika chikitsa in Annavaha, purishvaha and Udakavaha srotas. Teevra Chardi, Sarakta Chardi(including Upper GI Haemorrhage, Acute Intractable Vomiting), Teevra Atisara, Raktatisara (Including conditions due to , GI Infections (such as Dysentery and Gastroenteritis), Grahani (Inflammatory Bowel Disease), Kamala (Acute Liver Disease), Udara Shoola, Udara (Hepatic Encephalopathy, Cirrhosis), GI Malignancy • M 26U 4 Panchakarma Vyapad Panchakarma VyapadVamana, virechana, Basti, Nasya, Raktamokshana, Bahi parimarjana chikitsa • M 26U 5 Drug overdoses and poisoning Drug overdoses (both accidental and non-accidental), acute drug reactions and anaphylaxis. Poisonings.					
		3	15	30	45	90
		16	80	160	240	480
		64	320	640	960	1920

**Table 3 : Modules - Unit - Module Learning Objectives and Session Learning Objective-
Notional Learning Hours- Domain-Level- TL Methods**

Paper No : 1(Prana Anna Udaka Mootra and Prishavaha srotodushti vikara chikitsa)						
Semester No : 3						
Module 1 : Pranavaha Srotodushti Vikara evum Chikitsa-I (Respiratory disorders and its management)						
Module Learning Objectives (At the end of the module, the students should be able to) 1. Diagnose the diseases under Pranavaha Srotas with special reference to respiratory disorders 2. Compare with akin conditions in conventional medical science 3. Plan Ayurvedic treatment on the basis of chikitsasutra 4. Plan clinical research for the diseases under Pranavaha Srotas						
Unit 1 Dexterity on Kasa, Parshwashoola and their conventional correlation • Kasa (SL41), Parshwashoola • Shwasanalikashotha (Bronchitis), Vatasphiti (Emphysema / chronic obstructive pulmonary disease or COPD), Vispharah (Bronchiectasis), Phuphphusasruti (Pleural effusion)						
References: 1,2,3,7,8,16						
3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teachin g Learning Methods
CO1,CO2	Analyse samprapti of different types of Kasa (SL41) on the basis of specific Samprapti	1	Lecture	CAN	Knows-how	L&PPT

CO1,CO2	Illustrate Chikitsa of Kasa (SL41) with respect to condition of Roga and Rogi Bala	1	Lecture	CAN	Knows-how	FC,L&PP T
CO1,CO2,C O4	Assess and differentiate the therapeutic approach (Shodhana, Shamana, Rasayana) based on the type and stage of Kasa, and justify the selection of drugs, procedures, and dietary guidelines.	2	Practical1.1	PSY- ADT	Shows-how	PT,D- BED,CB L
CO1,CO2,C O4,CO5,CO8	Formulate Ayurvedic chikitsa (treatment) plan like Shodhana (purification), Shamana (palliative), and Rasayana Chikitsa for different types of Kasa (Cough) based on the predominant Dosha and Dushya, as per classical Ayurvedic texts.	2	Experiential- Learning1.1	CE	Does	CBL,BS, BL
CO1,CO2	Distinguish Parshwashoola in conformity with Samprapti ghatakas	1	Lecture	CAN	Knows-how	L&PPT
CO1,CO2,C O5	Interpret Ayurvedic management (Shodhana, Shamana and Rasayana) of different types of Parshwashoola	2	Practical1.2	PSY- GUD	Shows-how	BS,CBL, L&GD
CO1,CO4,C O5,CO6,CO8	Demonstrate the application of Dosha-specific Chikitsa in various types of Parshwashoola, including selection of appropriate Oushadha, Anupana, and formulation of Pathya–Apathya, with proper clinical justification and ethical patient-centered care.	2	Practical1.3	PSY- GUD	Shows-how	BS,D- BED,PBL ,CBL
CO1,CO2,C O3,CO4,CO5 ,CO8	Justify application of specific types of Shodhana, Shamana and Rasayana Chikitsa on different types of Parshwashoola	3	Experiential- Learning1.2	CAP	Does	PBL,BL, CD,BS
CO1,CO2	Illustrate pathogenesis, prevalence and clinical manifestation of Jirna Shwasakrichchhanika (chronic obstructive pulmonary disease (COPD) like emphysema and chronic bronchitis) in different categories of patients	1	Lecture	CAN	Knows-how	L&PPT
CO1,CO2,C O3,CO5,CO8	Create rational methods for identification and differential diagnosis of Jirna Shwasakrichchhanika (chronic obstructive pulmonary disease or COPD)	3	Experiential- Learning1.3	CS	Does	BS,C_L, D,CD

CO1,CO2,C O7	Demonstrate and rationalise laboratory investigation for diagnosis of Jirna Shwasakrichchhanika (COPD) in different avastha of Rogi	2	Practical1.4	PSY- ADT	Shows-how	DL,D,PT
CO1,CO2	Differentiate Vispharah (Bronchiectasis) and Klomanalika nishkramana (Cystic fibrosis) based on Rogi avastha	1	Lecture	CAN	Knows-how	L&PPT
CO1,CO2,C O3	Assess and illustrate differential diagnosis between Vispharah (Bronchiectasis) and Klomanalika nishkramana (cystic fibrosis) on the basis of clinical presentations	2	Experiential- Learning1.4	CS	Does	D- BED,CB L,PBL
CO1,CO2,C O3	Demonstrate and analyze laboratory investigation of Vispharah (Bronchiectasis) and Klomanalika nishkramana (cystic fibrosis) on different conditions of patients	2	Practical1.5	PSY- MEC	Shows-how	CBL,DL, CD
CO1,CO2,C O3,CO4	Assess and interpret rational procedure for identification and differential diagnosis of Phuphphusasruti (Pleural effusion) in different conditions of patients.	3	Experiential- Learning1.5	PSY- MEC	Does	BS,CBL
CO1,CO2,C O5,CO6	Demonstrate Vishista Chikitsa including Rasayana and Pathyapathya in Vispharah (Bronchiectasis) on the variations of Rogi Bala	2	Practical1.6	PSY- MEC	Shows-how	CBL,BL
CO1,CO2,C O3,CO4,CO5 ,CO8	Examine Shodhana and Shamana Chikitsa with special emphasis on Rasayana in Vispharah (Bronchiectasis)	3	Experiential- Learning1.6	PSY- MEC	Does	D,BS,CD ,CBL

Unit 2 Dexterity on Shwasa, Hikka and Swarabheda with conventional correlation

- Hikka, Shwasa, Swarabheda
- Tamaka Shwasa (Bronchial Asthma), Asthma-COPD Overlapping Syndrome (ACOS), Occupational, Obstructive and Restrictive lung diseases, Antaraalayi Phuphphusa Vikara (Interstitial Lung Disease-ILD), Phuphphusajanita Hridroga Vikara (Cor-pulmonale), respiratory acidosis and alkalosis.

References: 1,2,3,7,8,15,16,23,40,42,45

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teachin g Learning Methods
CO1,CO2	Differentiate various types of Shwasa (SL42) with respect to Samprapti ghataka, Bheda and Avastha	1	Lecture	CAN	Knows-how	L&GD
CO1,CO2	Describe Hikka (SM74) and Swarabheda on the basis of the Samprapti ghatakas in different avastha of Rogi	1	Lecture	CAN	Knows-how	L&PPT
CO1,CO2,C O5,CO6	Assess and distinguish Vishishta Chikitsa including Anupana, Rasayana, Sadhyasadyata and Pathyapathya of Hikka (SM74) and Swarabheda in different Avastha of Rogi	2	Practical1.7	PSY- MEC	Shows-how	D- BED,CB L
CO1,CO2,C O4,CO6,CO7	Justify with rationality on Shodhana, Shamana and Rasayana Cikitsa of Hikka (SM74) and Swarabheda in different Avastha of Rogi	3	Experiential- Learning1.7	CS	Does	BS,CBL, CD
CO1,CO2	Describe pathogenesis, prevalence and clinical manifestation of Tamaka Shwasa (bronchial asthma) (SL40) in different conditions of Rogi	1	Lecture	CAN	Knows-how	L&PPT
CO1,CO2,C O6,CO7	Demonstrate and rationalise laboratory investigation for diagnosis of Tamaka Shwasa (bronchial asthma) (SL40), occupational, obstructive & restrictive lung diseases and asthma COPD overlapping syndrome (ACOS) in different avastha of Rogi	2	Practical1.8	CAN	Does	CD,D- BED,DL
CO1,CO2,C O4,CO5,CO6	Examine and formulate a mapping of various modules for the differential diagnosis of Tamaka Shwasa (bronchial asthma) (SL40), correlating it with relevant diseases across different levels of severity	3	Experiential- Learning1.8	CS	Does	CBL,BL, CD
CO1,CO2	Justify diagnostic approaches of patients of asthma COPD overlapping syndrome (ACOS)	1	Lecture	CAN	Knows-how	L&PPT

CO1,CO2	Interpret clinical relevance of interstitial lung diseases (ILD), cor pulmonale, respiratory acidosis and alkalosis with concomitant Ayurvedic relevance	1	Lecture	CAN	Knows-how	L&PPT
CO1,CO2,C O6,CO7	Demonstrate and interpret laboratory investigation of interstitial lung disease (ILD), Phupphusajanita Hridroga Vikara (cor pulmonale), respiratory acidosis and alkalosis in different conditions of Rogi	2	Practical1.9	CAN	Shows-how	CD,CBL, DL
CO1,CO2,C O4,CO5,CO7	Analyse the diagnosis and innovative Ayurvedic treatment protocol in Shwasa (SL42) with special reference to Tamaka Shwasa (SL40)	2	Experiential-Learning1.9	CS	Shows-how	BS,Mnt,B L,CD
CO1,CO2,C O5,CO6,CO7 ,CO8	Design Ayurvedic process of diagnosis of Phupphusajanita Hridroga Vikara (cor pulmonale) and rationalise its treatment protocol	2	Experiential-Learning1.10	CS	Shows-how	C_L,DIS, BS,D- BED
CO1,CO2	Demonstrate diagnostic approaches of patients of asthma COPD overlapping syndrome (ACOS)	2	Practical1.10	PSY-MEC	Does	DIS,LRI, PT

Practical Training Activity

Practical Training 1.1 Designing of special treatment for different types of Kasa (SL41)

Teacher Activities:

1. Case-Based Introduction:
 - Present different case profiles of Kasa (e.g., Kaphaja Kasa in Madhyama Avastha, Vataja Kasa in Jeevoparodhi stage).
 - Guide students to identify Dosha, Dushya, and Srotas involved.
2. Demonstrate Chikitsa Planning:
 - Explain when to choose Shodhana (e.g., Vamana), Shamana or Rasayana therapy.
 - Discuss rationale from classics (e.g., Charaka, Chakradatta).
3. Show Formulation Preparation:
 - Display preparation of Avaleha, Kashaya, and Vati relevant to each Kasa type.
4. Compare Pathya–Apathya:
 - Discuss variations in diet/lifestyle advice for different Kasa types and stages.
5. Supervise Student Presentations:
 - Monitor group work where students create and present treatment plans.

Student Activities:

1. Clinical Case Evaluation:
 - Perform Rogi–Roga Pareeksha on actual or simulated Kasa patients.
 - Diagnose the type and stage (Purvarupa, Rupa, Bheda Avastha).
2. Therapeutic Differentiation Exercise:
 - Identify whether Shodhana or Shamana is indicated.
 - Select Rasayana therapy post-Shamana or during Kshayaja Kasa.
3. Prescription Drafting:
 - Write detailed Ayurvedic prescriptions with classical formulations and Anupana.
4. Diet & Lifestyle Planning:
 - Recommend Pathya–Apathya (e.g., warm Yusha for Kaphaja, Ghrita for Vataja).
5. Group Presentation:
 - Present justification for chosen chikitsa approach and drug selection based on Avastha.
6. Peer Feedback:
 - Participate in discussion and give feedback on peer's plans and prescriptions.

Practical Training 1.2 Clinical Understanding and Management of Parshwashoola**Teacher's Activities****1. Introduction and Orientation**

- Brief lecture on the classical definition, etiology (nidana), samprapti, and lakshana of Parshwashoola.
- Present differential diagnosis from modern perspective (e.g., intercostal neuralgia, pleurisy).

2. Clinical Case Presentation

- Present a case (real or simulated) with typical symptoms of Parshwashoola.
- Discuss the signs and symptoms correlating with classical references (Charaka, Sushruta, Madhava Nidana).

3. Interactive Group Discussion

- Guide discussion on the basis of Dosha, Dushya, Desha, Kala, Rogi bala etc.

- Encourage interpretation of the case using Ayurvedic diagnostic principles like Roga-Rogi Pariksha.

4. Classification Session

- Explain different types of Parshwashoola based on Dosha predominance:
 - Vataja Parshwashoola
 - Pittaja Parshwashoola
 - Kaphaja Parshwashoola
 - Sannipataja Parshwashoola

5. Treatment Design Workshop

- Facilitate treatment planning session:
 - Shodhana Chikitsa – Indications of Virechana, Basti, Nasya.
 - Shamana Chikitsa – Herbs and formulations based on dosha dominance.
 - Rasayana Therapy – Use of rejuvenatives for long-term management.
 - Emphasis on Samprapti Vighatana.

Student Activities

1. Clinical Case Analysis

- Analyze the given case history and identify the classical signs of Parshwashoola.
- Correlate symptoms with doshic involvement.

2. Group Presentation

- Present the diagnosed type of Parshwashoola based on clinical features.
- Justify diagnosis with classical references (text citations encouraged).

3. Treatment Plan Design

- In groups, develop a comprehensive Ayurvedic treatment protocol for the case.
- Include appropriate Shodhana, Shamana and Rasayana measures with rationale.

4. Chart Preparation

- Prepare charts for:
 - Types of Parshwashoola
 - Dosha-wise symptoms
 - Chikitsa Sutra (treatment outline)

5. Peer Review and Discussion

- Exchange treatment plans with another group for critique and discussion.
- Discuss possible improvements or modifications based on different patient conditions.

Practical Training 1.3 Application of chikitsa for different types of Parshwashoola

Activities to be Done by Teacher:

1. Introduce clinical types of Parshwashoola (Vataja, Pittaja, Kaphaja, Sannipataja) with classical references.
2. Explain the principles of Chikitsa based on Dosha, Dusya and Roga Avastha.
3. Demonstrate Roga–Rogi Pariksa techniques relevant to Parshwashoola
4. Showcase formulation of treatment protocols, including appropriate:
 - Aushadha selections
 - Anupana
 - Pathya–Apathya planning
5. Present real or simulated case scenarios and explain therapeutic decision-making.
6. Facilitate group discussions to encourage peer learning.
7. Assess students' treatment plans and provide feedback on clinical reasoning.
8. Emphasize ethical considerations in individualized care.
9. Encourage reflection on the integration of Ayurvedic theory and practice.

Activities to be done by Students:

1. Take detailed clinical history from a patient with flank/side pain Parshwashoola
2. Perform Roga–Rogi Parikhsya, including Dashavidha and Ashtavidha parameters.

3. Classify the type of Parshwashoola based on symptoms and Dosha Laksanas.
4. Interpret Samprapti and identify Dosha–Dushya–Srotas involvement.
5. Select appropriate Aushadha Yogas -
6. Choose suitable Anupana based on Dosha .
7. Formulate Pathya–Apathya recommendations aligned with the clinical condition.
8. Present their treatment plan in small groups or case discussions.
9. Justify their clinical choices with classical references and reasoning.
10. Document the case and treatment strategy in a clinical logbook.
11. Participate in Q&A/discussion sessions with critical thinking.
12. Reflect on learning outcomes and feedback given by the teacher.

Practical Training 1.4 Laboratory investigation of Jirna Shwasakrichchhanika (COPD)

Teachers' Activity

1. Explain the Concept of Jirna Shwasakrichchhanika (COPD)
 - Define Jirna Shwasa as per Ayurvedic texts with Nidana, Samprapti, and Lakshanas.
 - Correlate it with COPD in modern terms—chronic airflow limitation due to bronchitis/emphysema.
 - Emphasize Dosha-Dushya involvement, mainly Vata-Kapha Pradhana.
2. Guide on Clinical Identification
 - Discuss clinical signs like chronic breathlessness, wheezing, chronic cough, sputum production.
 - Explain how to assess Rogi bala (strength of the patient) and Roga bala (severity of disease).
3. List Appropriate Laboratory Investigations
 - Pulmonary Function Test (PFT): FEV1/FVC ratio, peak expiratory flow.
 - Chest X-ray: Look for hyperinflation, bronchial wall thickening.
 - Routine blood tests: CBC (check for eosinophilia/anemia), ESR, CRP (inflammatory markers), ABG (optional for severe cases).
4. Assist in Interpretation of Reports
 - Demonstrate how to analyze and correlate PFT, X-ray findings with clinical features.
 - Discuss Ayurvedic interpretation of pathology.
5. Facilitate Diagnostic Reasoning
 - Help students map clinical and lab findings to Ayurvedic Nidana Panchaka.
 - Emphasize on Prakriti, Vikriti, Srotodushti, and Vyadhi Lakshanas.

Students' Activity

1. Identify a Case of Jirna Shwasakrichchhanika
 - Take a detailed history (smoking, occupational exposure, recurrent infections).
 - Examine the patient (respiratory rate, chest auscultation, sputum analysis).
2. Select and Perform Relevant Investigations
 - Coordinate with clinical lab for PFT and chest X-ray.
 - Collect and analyze routine blood test reports.
3. Analyze the Reports with Teachers
 - Present findings and raise queries.
 - Discuss Ayurvedic interpretation with modern diagnostic reports.
4. Prepare a Diagnostic Summary
 - Formulate a diagnosis of Jirna Shwasakrichchhanika based on:
 - Nidana Panchaka (Hetu, Poorvaroop, Roopa, Samprapti, Upashaya).
 - Dosha-Dushya predominance and Srotas involved.
 - Rogi and Roga Bala assessment.

Practical Training 1.5 Laboratory diagnosis of Vispharah (Bronchiectasis) and Klomanalika nishkramana (cystic fibrosis)

Activities Done by Teacher:

1. Introduce the Ayurvedic correlation of:
 - Vispharah with Bronchiectasis
 - Klomanalika Niskramana with Cystic Fibrosis
2. Explain the clinical features and Ayurvedic Samprapti of these conditions.
3. Discuss classification of disease states (acute, chronic, infective, non-infective, congenital).
4. Demonstrate relevant diagnostic techniques, such as:
 - Interpretation of HRCT Thorax findings (honeycombing, tram-track appearance)
 - Sputum culture & sensitivity (especially for Pseudomonas)
 - Sweat chloride test for cystic fibrosis
 - Genetic testing reports
 - CBC, CRP, ESR and other inflammatory markers
 - PFT (to assess obstructive changes)
5. Display radiological images/videos and explain findings.
6. Explain the role of investigations in staging, prognosis, and follow-up.
7. Facilitate group discussion on correlating lab reports with disease severity and Ayurvedic diagnosis.

8. Supervise students during patient interaction or clinical case simulations.
9. Evaluate students' ability to rationalize investigation choices based on Rōgi Avastha and Bala.
10. Encourage integration of investigation findings into Chikitsa planning.

Activities Done by Students:

1. Take detailed clinical history focusing on chronic cough, hemoptysis, sputum, and family history.
2. Perform Ayurvedic Rōga-Rōgi Parikhyā, noting signs of Dūṣya involvement (Rasa, Rakta, Prāṇa).
3. Identify stage and condition (acute infection, chronic scarring, congenital features).
4. Suggest and interpret investigations, such as:
 - Chest X-ray and HRCT Thorax
 - Sputum AFB, culture & Gram stain
 - Sweat chloride test (for CF)
 - Genetic test reports (CFTR mutation)
 - PFT to assess lung function
 - Blood markers (IgE, CRP, eosinophil count)
5. Record findings and compare with Ayurvedic Samprapti.
6. Rationalize the selection of investigations according to:
 - Avastha of Rōgi
 - Chronicity
 - Dosha predominance
7. Prepare a case report or presentation, integrating:
 - Clinical symptoms
 - Lab/radiology findings
 - Ayurvedic diagnosis
8. Participate in group discussions, case-based learning and Q&A sessions.
9. Develop a basic treatment plan based on findings and disease condition.
10. Reflect on gaps in knowledge and areas for improvement in clinical decision-making.

Practical Training 1.6 Demonstration of special treatment methods in Vispharah (Bronchiectasis)

1. Identification of Patients Suffering with Vispharah (Bronchiectasis)
 - Teacher's Role:
 - Guide students through clinical signs and symptoms like chronic productive cough, hemoptysis, recurrent respiratory infections, and auscultatory findings (e.g., coarse crepitations).

- Discuss differential diagnosis with Klomanalika Nishkramana (Cystic Fibrosis) and other chronic respiratory conditions.
 - Student Activity:
 - Take detailed patient history and conduct a physical examination.
 - Observe and document symptoms consistent with classical features of Vispharah.
 - Use available diagnostic tools (X-ray, HRCT Chest, sputum culture).
2. Categorize the Types of Shwasa (SL42) Involved
- Teacher's Role:
 - Teach the classification of Shwasa (Mahashwasa, Urdhwashwasa, Chhinna, Tamaka, Kshudra Shwasa).
 - Correlate modern presentation of bronchiectasis with Ayurvedic types.
 - Student Activity:
 - Assess the patient's breathlessness pattern, frequency, and aggravating factors.
 - Categorize the patient's condition under appropriate Shwasa type (e.g., Tamaka Shwasa in chronic recurrent cases with wheezing and productive cough).
3. Understand the Samprapti Vighatana Based on Dosha-Dushya Involvement
- Teacher's Role:
 - Explain the pathogenesis (Samprapti) of Vispharah from Ayurvedic perspective.
 - Discuss Dosha (Kapha-Vata predominance), Dushya (Rasa, Rakta, Mamsa), and Srotas (Pranavaha).
 - Student Activity:
 - Analyze the case to map Dosha and Dushya involvement.
 - Prepare a chart outlining:
 - Hetu (Nidana)
 - Dosha-Dushya
 - Srotodushti Lakshana
 - Samprapti (Sanchaya to Vyakti)
4. Selection of Specific Aushadha Yoga Based on Guna-Karma
- Teacher's Role:
 - Discuss the Guna (properties), Karma (actions), and Yukti (rational selection) for herbal or herbo-mineral formulations.
 - Recommend suitable Yogas for:
 - Shamana (e.g., Sitopaladi Churna, Vasa Avaleha)
 - Shodhana if needed (e.g., Vamana, Nasya in recurrent cases)

- Rasayana for tissue rejuvenation.
- Student Activity:
 - Suggest individualized prescriptions based on Rogi Bala, Roga Bala, and Dosha predominance.
 - Document the Yogas with proper Matra (Dose), Anupana, and Kala.

5. Document the Treatment Protocol

- Teacher's Role:
 - Review and guide corrections in documentation.
 - Emphasize the importance of rational planning, follow-up, and prognosis assessment.
- Student Activity:
 - Record:
 - Diagnosis (Ayurvedic and Modern)
 - Treatment plan (Shodhana/Shamana/Rasayana)
 - Medicine, dosage, Anupana, and diet-lifestyle recommendations (Pathya-Apathya)
 - Monitoring parameters (breathlessness score, sputum volume, PFT changes)

Practical Training 1.7 Laboratory investigations for obstructive lung diseases

Activities to be Done by Teacher:

1. Demonstrate the rational selection of laboratory investigations for diagnosis of Tamaka Shwasa (bronchial asthma) (SL40), occupational, obstructive & restrictive lung diseases and asthma COPD overlapping syndrome (ACOS) including:
 - Pulmonary Function Test (PFT) – FEV1, FVC, FEV1/FVC ratio
 - Peak Expiratory Flow Rate (PEFR)
 - Arterial Blood Gas (ABG)
 - Chest X-ray, HRCT Thorax
 - Eosinophil count, IgE level, ESR, CRP
 - Allergy testing (skin prick/RAST)
 - Sputum AFB & culture in differential diagnosis
2. Discuss investigation variations in obstructive, restrictive, and mixed patterns.
3. Correlate modern diagnostics with Ayurvedic Nidan Panchaka.
4. Provide clinical case scenarios or real patient demonstrations.
5. Facilitate group-based interpretation of investigation reports.
6. Guide students in writing rational investigation plans for individual Rogi-Avastha.

7. Assess students' diagnostic justifications and offer constructive feedback.

Activities to be Done by PG Students:

1. Elicit clinical history and identify symptoms suggestive of Tamaka Shwasa and related disorders.
2. Perform Roga–Rogi Pariksha based on Ayurvedic diagnostic principles (Dashavidha, Ashtavidha).
3. Classify the Avastha of Rogi (acute, chronic, exacerbation, remission).
4. List and interpret required investigations based on:
 - Suspected diagnosis (Tamaka Shwasa, COPD, ILD, ACOS)
 - Disease severity and chronicity
5. Observe and interpret PFT readings and correlate with clinical features.
6. Review and analyze lab reports (IgE, eosinophil count, ABG, X-ray).
7. Prepare and present case summaries with rationalized investigation strategies.
8. Discuss Ayurvedic Chikitsa plans supported by laboratory findings and Rogi Bala.
9. Engage in peer discussion to compare interpretation of obstructive vs. restrictive patterns.
10. Document the case work-up and clinical reasoning in logbooks.
11. Reflect on the outcome of investigations and how they support diagnosis and management.

Practical Training 1.8 Laboratory diagnosis of ILD, Phupphusajanita Hridroga Vikara (cor pulmonale), respiratory acidosis and alkalosis

Teachers' Activities

1. Select the Patients
 - Identify and select patients suffering from:
 - Interstitial Lung Disease (ILD)
 - Phupphusajanita Hridroga Vikara (Cor Pulmonale)
 - Respiratory Acidosis
 - Respiratory Alkalosis
 - Correlate modern clinical findings with Ayurvedic understanding of Roga-Rogi Bala and Dosha-Dushya involvement.
2. Select Relevant Laboratory Investigations
 - X-ray Chest – to evaluate lung parenchyma and cardiac size.
 - Routine Blood Examination – CBC, ABG (Arterial Blood Gas), ESR, CRP, etc.
 - Peak Flow Meter Test – to assess airflow obstruction and lung capacity.
 - Pulmonary Function Test (PFT) – to differentiate restrictive vs. obstructive patterns and assess sever

Students' Activities

1. Analyse the Reports and Predict Diagnosis
 - Interpret results from laboratory and radiological tests.
 - Correlate clinical features with:
 - ABG values for acid-base status.
 - X-ray findings for ILD or cor pulmonale.
 - PFT results to determine restrictive/obstructive pattern.
 - Integrate Ayurvedic parameters for differential diagnosis and formulation of Samprapti.
2. Record the Findings and Document
 - Prepare a case sheet for each patient including:
 - History, symptoms, examination findings
 - Modern and Ayurvedic diagnosis
 - Lab report interpretations
 - Final integrated diagnosis and prognosis
 - Maintain systematic documentation for academic and clinical reference.

Practical Training 1.9 Treatment Schedule of Hikka (SM74) and Swarabheda

Activities Done by Teacher (Practical Class):

1. Demonstration & Clinical Explanation:
 - Present clinical case(s) of Hikka and Swarabheda with varying avastha (e.g., chronic, acute, kāṣṭa lakṣaṇa).
 - Explain Dosha predominance and Samprapti vigatana.
2. Conceptual Clarification:
 - Discuss Vishishtha Chikitsa principles for each condition including:
 - Anupana selection based on Doṣa (e.g., Ghṛta, Madhu, Takra).
 - Rasayana usage in chronic conditions or after recovery.
 - Sadhya-Asadhyata analysis based on chronicity, upadrava, and Rogi Bala.
 - Condition-specific Pathya-Apathya (e.g., avoiding ruksha aahara in Vataja Hikka).
3. Clinical Reasoning Session:
 - Present 1–2 differential diagnosis scenarios.
 - Guide students through reasoning and therapy decisions.
4. Support Investigative Learning:
 - Correlate modern findings (ENT, laryngoscopy, imaging in chronic hiccups) with Ayurvedic assessment.

5. Provide Diagnostic Tools & Charts:

- Distribute tools such as:
 - Dosha-vikriti mapping charts
 - Rasayana indication sheets
 - Chikitsa paddhati handouts

6. Supervise Group Work & Discussion:

- Divide students into groups to prepare case-based chikitsa plans.
- Guide in interpreting the sadhya–asadhyatva based on text references.

Activities Done by Students :

1. Rogi Parikshya & Assessment:

- Perform Roga-Rogi Parikhsya including Nadi, Jihva, Shabda, and clinical symptoms.
- Classify type of Hikka (e.g., Vataja, Kaphaja, Annaja) or Swarabheda.

2. Chikitsa Differentiation Exercise:

- Prepare comparative tables of treatment for Hikka vs Swarabheda across:
 - Anupana
 - Pathya–Apathya
 - Rasayana
 - Prognosis (Sadhya-Asadhyata)

3. Rationale-based Prescription Drafting:

- Select appropriate classical formulations and justify:
 - Hikkani-grahana Rasa, Saraswatarishta, Pippalyadi Ghrita, etc.

4. Peer Teaching & Case Presentation:

- Present findings and management plans to peers with textual support.

5. Group Discussions:

- Analyze prognosis based on Rogi Bala, Vyadhi Bala, chronicity.
- Propose modified chikitsa for comorbidities or specific patient categories (e.g., geriatrics).

6. Reflection & Feedback:

- Submit reflective logs on learning outcomes and mistakes.
- Respond to faculty feedback and revise treatment plans accordingly.

Practical Training 1.10 Demonstration of diagnostic approaches of patients of asthma COPD overlapping syndrome (ACOS)

1. Identification of Patients Suffering with asthma COPD overlapping syndrome (ACOS)

- **Teacher's Role:**
 - Guide students through clinical signs and symptoms like dyspnoea, chronic cough, recurrent respiratory infections, and auscultatory findings
 - Discuss and explain various diagnostic approaches – clinical and investigative.
 - Show X rays, HRCT films, PFT Reports and explain.
 - Show audio-visuals to facilitate correct understanding.
 - Discuss differential diagnosis with other chronic respiratory conditions.
- **Student Activity:**
 - Take detailed patient history and conduct thorough clinical examination.
 - Observe and document symptoms consistent with classical features of asthma COPD overlapping syndrome (ACOS).
 - Use available diagnostic tools (X-ray, HRCT Chest, PFT).

Experiential Learning Activity

Experiential-Learning Learning 1.1: Formulation of specific treatment in varieties of Kasa (SL41)

Teacher's activity

1. Demonstrate the technique for identification of patients of different types of Kasa (SL41) on the basis of involvement of Dosha and Dushya
2. Refresh in brief about the procedure and mode of action of specific Shodhana, Shamana Chikitsa and Rasayana in different types of Kasa

Student's Activity

1. Identify the patients of Kasa on the basis of the nature and stage with respect to gunavikalpa samprapti
2. Determine the specificity of selection of treatments on the basis of involvement of specific doshas

Vataja Kasa

Shodhana Chikitsa:

1. Niruha Basti with Dashamoola decoction
2. Anuvasana Basti with Bala Taila, Ashwagandha Taila

Shamana Chikitsa:

1. Kashaya: Dashamoola, Yastimadhu, Vasa
2. Ghrita: Vata-anulomana like Bala Ghrita, Yastimadhu Ghrita
3. Churna: Sitopaladi + Yastimadhu + Pippali with honey

Rasayana Chikitsa:

1. Ashwagandha Rasayana
2. Bala Taila Abhyanga
3. Chyawanprasha

Pittaja Kasa

1. Virechana with Trivrit Lehya or Avipattikara Churna

Shamana Chikitsa:

1. Kashaya: Vasaka, Kantakari, Yastimadhu, Musta
2. Ghrita: Tikta Ghrita, Vasaghrita
3. Churna: Sitopaladi + Svarna Makshika Bhasma + Praval Pishti

Rasayana Chikitsa:

1. Guduchi Rasayana
2. Vasavaleha
3. Amlaki Rasayana

Kaphaja Kasa

Shodhana Chikitsa:

1. Vamana with Madana Phala or Ikshvaku
2. Nasal Therapy: Nasya with Katu Taila

Shamana Chikitsa:

1. Kashaya: Pippali, Haridra, Tulasi, Trikatu
2. Churna: Trikatu, Talisadi, Sitopaladi with honey
3. Lepa: Haridra + Saindhava on chest if needed
4. Apply the treatment and observe the effect
5. Prepare a standard treatment algorithm

Experiential-Learning Learning 1.2: Development of standard treatment schedule for Parshwashoola

Teachers Activity

1. Recap about the diagnostic procedures of different types of patients of Parshwashoola
2. Discuss in brief about the procedure for selection of specific Shodhana, Shamana, Rasayana and Atiyayika Chikitsa of Parshwashoola

Students Activity

1. Identify number of patients suffering with Parshwashoola of different stages
2. Diagnose the patients on the basis of classical Ayurvedic procedures and clinical examination
3. Analysis Dosha-Dushya involvement of each patient and inferred common output
4. Rationalize the selection of specific Shodhana and Shamana on the basis of Guna Vichara of Ausadhi Yoga
5. Rationalize the post treatment Rasayana therapeutics as rehabilitation measure
6. Select specific Ayurvedic Atiyayika chikitsa schedule on acute condition
7. Select specificity of diet and regimen for the specific condition of the disease
8. Narrate a standard treatment guideline for the disease as per availability

Experiential-Learning Learning 1.3: Development of methods for diagnosis of Jirna Shwasakrichchhanika (COPD)

Teachers Activity

1. Narrate clinical features of Jirna Shwasakrichchhanika (COPD)
2. Narrate the clinical examination to be done for identification of COPD and other related diseases of respiratory system

3. Narrate the relevant laboratory investigations to establish the diagnosis of COPD and exclusion of other relevant diseases of respiratory system

Students Activity

1. Identify number of patients suffering with Jirna Shwasakrichchhanika (COPD)
2. Assemble presenting clinical features of different patients of Jirna Shwasakrichchhanika (COPD)
3. Detect the etiological factors involvement in the disease process
4. Select and standardize specific diagnostic clinical examination procedure using inspection, palpation, percussion, auscultation and 6-minute walk test
5. Predict pathogenesis of the disease
6. Develop standard Case Record Form (CRF) for Jirna Shwasakrichchhanika (COPD)

Experiential-Learning Learning 1.4: Standardization of differential diagnosis of Vispharah (Bronchiectasis) and Klomanalika Niskramana (cystic fibrosis)

Teacher's Activity

1. Identify cases of Vispharah (Bronchiectasis) and Klomanalika nishkramana (cystic fibrosis)
2. Explain the presenting clinical features of the Vispharah (Bronchiectasis) and Klomanalika nishkramana (cystic fibrosis)
3. Narrate the relevant laboratory investigations to include and exclude other relevant diseases
4. Narrate the complications of diseases
5. Infer the final diagnosis

Students Activity

1. Observe the patients under the guidance of teachers
2. Apply the knowledge imparted by teachers
3. Individually examine the patients of Vispharah (Bronchiectasis) and Klomanalika nishkramana (cystic fibrosis)
4. Make a case history sheet for interpretation of differential diagnosis

Experiential-Learning Learning 1.5: Standard procedures for identification and differential diagnosis of Phupphusasruti (pleural effusion)

Teacher's Activity

1. Identify cases of Phuphphusasruti (Pleural effusion)
2. Recap about the presenting clinical features of the Phuphphusasruti (Pleural effusion)
3. Narrate the relevant laboratory investigations to include and exclude other diseases
4. Narrate the complications of diseases
5. Infer the identification and show the differential diagnosis

Student's Activity

1. Observe the patients allotted by the teachers
2. Apply the knowledge imparted by teachers to a new case
3. Individually examine the patients of Phuphphusasruti (pleural effusion)
4. Make a case history sheet individually for interpretation of identification and differential diagnosis

Experiential-Learning Learning 1.6: Mapping of special treatment for Vispharah (Bronchiectasis)

Teacher's Activity

1. Identify separate number of cases of Vispharah (Bronchiectasis)
2. Recap the presenting clinical features of the Vispharah (Bronchiectasis)
3. Judge the involvement of Dosha Dushya on the basis of the presenting clinical features
4. Describe the relevant laboratory investigations to include and exclude other relevant diseases
5. Select the Ausadha Yoga for palliative care on the basis of the Dosha-Guna Vichara
6. Apply the specific Ayurvedic Atyaika Chikitsa for acute condition of the disease
7. Observe and follow up

Students Activity

1. Observe the patients allotted by the teachers
2. Apply the knowledge imparted by teachers
3. Individually examine the Samprapti ghataka, Roga Vala and Rogi Vala
4. Select the treatment protocol
5. Record the outcome and documented for further applications in future

Experiential-Learning Learning 1.7: Rationalization of Shodhana, Shamana and Rasayana Chikitsa of Hikka (SM74) and Swarabheda

Teacher's Activity

1. Identify different cases of Hikka (SM74) and Swarabheda
2. Explain the presenting clinical features of the Hikka (SM74) and Swarabheda
3. Judge the involvement of Dosa Dusya on the basis of the presenting clinical features
4. Select the Ausadha Yoga for palliative care on the basis of the Dosha-Guna Vichara
5. Apply, observe and follow up

Students Activity

1. Observe the patients under the guidance of teachers
2. Apply the knowledge imparted by teachers
3. Individually select the patients Hikka (SM74) and Swarabheda
4. Select specific Shodhana and Shamana treatment on the basis of the Dosa Guna Vichara and Ayurvedic pharmacokinetics of drugs
5. Select specific Rasayana Chikitsa for post treated patients and follow up
6. Record the outcome and document

Experiential-Learning Learning 1.8: Mapping for differential diagnosis of Tamaka Shwasa (bronchial asthma) (SL40)

Activities Done by Teacher:

1. Orient students to Ayurvedic and modern perspectives of Tamaka Shwāsa:
 - Samprapti (Vyadhi utpatti)
 - Dosha–Dushya–Srotas involvement
 - Nidana, Lakshana, and Avastha
2. Introduce differential diagnostic modules, including:
 - Occupational asthma
 - Exercise-induced asthma
 - Allergic rhinitis
 - COPD
 - ACOS (Asthma–COPD Overlap Syndrome)
 - Restrictive lung disease
 - GERD-related respiratory symptoms
3. Provide clinical decision trees/flowcharts for step-wise diagnosis.
4. Demonstrate symptom mapping tools, like:

- Ayurvedic Dosha-dominance charts
 - Symptom-severity scales
 - Spirometry interpretation
 - Allergen profiles and IgE testing
5. Facilitate patient interaction or simulation, exposing students to different severity levels (mild/moderate/severe).
 6. Supervise student creation of mapping modules integrating:
 - Ayurvedic classification (Vega, Avega, Kshudra Shwasa, Pratamaka Lakshana)
 - Modern parameters (PFT, PEFR, reversibility tests)
 7. Encourage use of software/digital mind-mapping tools for module creation.
 8. Moderate presentations and provide constructive feedback.
 9. Assign reflection tasks or peer assessments.

Activities Done by Students:

1. Review classical Ayurvedic texts for Tamaka Shwasa differential features.
2. Collect clinical data through patient interviews or case sheets.
3. Perform Roga-Rogi Pariksha and note signs of different Dosha predominance.
4. Create differential diagnosis tables comparing:
 - Nidana
 - Lakshana
 - Dosha involvement
 - Modern diagnosis (e.g., asthma vs. COPD vs. bronchiectasis)
5. Use investigation findings (e.g., PFT, CBC, IgE, X-ray) to rule in/out conditions.
6. Map diseases into levels of severity, such as:
 - Mild intermittent asthma vs. Moderate persistent vs. Severe persistent
 - Comparison with COPD (GOLD staging), ACOS overlap
7. Design flowcharts and Venn diagrams showing:
 - Overlapping features (e.g., in ACOS)
 - Distinct Ayurvedic Lakshanas for accurate diagnosis
8. Present modules to peers and faculty for feedback.
9. Revise and finalize mappings based on feedback.
10. Document findings and modules in a clinical/practical logbook.
11. Reflect on learning outcomes, diagnostic accuracy, and integrated approach.

Experiential-Learning Learning 1.9: Teaching capacity development in Shwasa (SL42) with special reference to Tamaka Shwasa (SL40)

Teachers Activity

1. Provide documents of clinical treatment protocol of Shwasa (SL42) with special reference to Tamaka Shwasa (SL40)
2. Explain the fundamental aspects of the disease
3. Explain the treatment protocol design and its rationality of with special reference to Tamaka Shwasa (SL40) on the basis of Ayurvedic Standard Treatment Guideline like Shunthi Siddha Jala, Dashamool-arishta, Chandrashura Beeja Kwatha, Swasakuthara Rasa, Talishadi Churna, Sitopaladi Churna, Shatyadi Churna, Dasamoola Kwatha, Bharangyadi Kwatha, Gojihvadi Kwatha, Vasavaleha, Dashamoola Rasayana, Agasthya Rasayana for Kaphadhika Tamaka Shwasa and Vidaryadi Kashaya, Vayu Gutika, Dhanwantara Gutika, Nayopayam Kwatha, Kantakari Ghrita, Vidaryadi Ghrita, Somasava, Mahanarayana Taila in Vatadhika Tamaka Shwasa.

Students Activity

1. Analyse the documents provided by teachers
2. Interpret relevant documents with other literary documents
3. Analyse specific treatment with rationality of Dosha-Dushya Vivechana and Roga avastha.
4. Deliver lecture to UG students

Experiential-Learning Learning 1.10: Diagnosis and stadardization of treatment protocol of Phuphphusajanita Hridroga Vikara (cor pulmonale)

Teachers Activity

1. Describe process of selection of the patients of Phuphphusajanita Hridroga Vikara (cor pulmonale)
2. Instruct to distinguish the common manifestations and complications
3. Narrate relevant palliative and curative Ayurvedic management

Students Activity

1. Identify the cases of Phupphusajanita Hridroga Vikara (cor pulmonale) 2. Establish the diagnosis on the basis of the clinical presentation and laboratory findings 3. Analyse the involvement of Dosha and Dushyas with Samprapti Vinashana 4. Select Aushadhi Yoga for palliative and curative management and design a standard treatment protocol 5. Develop a SOP of the treatment method for the management of Phupphusajanita Hridroga Vikara (cor pulmonale)	
Modular Assessment	
Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome-Based Assessment: 02 credits x 04 hours x 50 marks • Practical Learning Outcome Assessment: Apply Ayurvedic principles of diagnosis and management—based on Roga and Rogi Pariksha—in the assessment and management of a case of Shwasa. [25 marks x 2 hour] Instructions: The instructor shall provide real/ simulated case or case scenario of Shwasa to each scholar. The scholars will be instructed to: ○ Perform a clinical evaluation based on Ayurvedic principles. ○ Suggest appropriate investigations with justification. ○ Identify the type of Shwasa and explain the Samprapti (pathogenesis). ○ Frame a chikitsa plan, including: 1. Aushadha (internal and external) 2. Kriyakrama (if any) 3. Pathya-Apathya ○ Justify their treatment based on classical references. Assessment Method: Mini-CEX / OSCE – Rubric-Based Evaluation (Clinical Evaluation [History & Examination]) Investigations (Lab, Radiological and others), Understanding Samprapti, Sadhyasadhyata & Roga Nirnaya, Propose the Chikitsa Plan, Justification with respect to classical reference, Communication & Presentation Skills) • Structured viva (10 marks x 1 hour)	4

• Experiential Learning Outcome Assessment: [15 marks x 1 hour] Eg: What are the challenges encountered while managing different types of Shwasa? How did you solve it? Same activity can be repeated for other diseases such as Kasa, Hikka, Swarabheda etc. Or Any practical in converted form can be taken for assessment. (25 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (25 marks)						
Module 2 : Pranavaha Srotodushti Vikara evum Chikitsa-II (Cardio-respiratory disorders and its management)						
Module Learning Objectives (At the end of the module, the students should be able to) 1. Diagnose the diseases under Pranavaha Srotas with special reference to Rajayakshma, Urahkshata, Hridroga and cardiac disorders 2. Compare with concomitant diseases of conventional medical science 3. Plan for Ayurvedic treatment for the diseases under Pranavaha Srotas with special reference to Rajayakshma, Urahkshata, Hridroga and cardiac disorders 4. Plan for clinical research for the diseases under Pranavaha Srotas with special reference to cardio-respiratory disorders						
Unit 1 Dexterity on Rajayakshma and Urahkshata with conventional correlation • Rajayakshma and Urahkshat • Rajayakshma (Pulmonary tuberculosis), Shwasanaka Jwara (Pneumonia), Ayatashwasanam (Diseases under acute respiratory distress syndrome like COVID-19, RSV infection, Histoplasmosis, Legionnaires disease, Pertusis, Aspergillosis etc.) References: 1,3,7,8,14,16,41						
3A Course Outcome	3B Learning Objective (At the end of the	3C Notional	3D Lecture/ Practical	3E Domain/	3F Level (Does/Show	3G Teachin g

	(lecture/practical training /experiential learning) session, the students should be able to)	learning Hours	Training/ Experiential Learning	Sub Domain	s how/Knows how/Know)	Learning Methods
CO1,CO2	Differentiate varioust types of Rajayakshma with respect to Samprapti	1	Lecture	CAN	Knows-how	Mnt,L&G D,FC
CO1,CO2,C O4,CO7,CO8	Demonstrate Vishista Chikitsa including Anupana, Rasayana, Sadhyasadhyata and Pathyapathya of Rajayakshma	2	Practical2.1	PSY-MEC	Shows-how	D-BED,DIS ,CBL
CO1,CO2,C O4,CO5,CO7	Justify Shodhana and Shamana Chikitsa for Rajayakshma in different Avastha of Roga	2	Experiential-Learning2.1	PSY-MEC	Shows-how	CBL
CO1,CO2,C O4,CO5	Identify laboratory investigation for diagnosis of Shwasanaka Jwara (pneumonia) in different avastha of Roga	2	Practical2.2	PSY-GUD	Shows-how	CBL,PBL ,DL,CD,L RI
CO1,CO2,C O4,CO7,CO8	Prescribe the Rasayana Chikitsa schedule in Urakshata based on different condtions of the disease	3	Experiential-Learning2.2	PSY-ADT	Does	CBL,BS
CO1,CO2	Analyze diagnostic approaches of Rajayakshma (pulmonary tuberculosis) on various stages of diseases and assess post-tubercular complications	1	Lecture	CAN	Knows-how	FC,L&PP T
CO1,CO2	Describe and differentiate various conditions of Shwasanaka Jwara (pneumonia) with respect to state of Samprapti on the variations of Roga Avastha	1	Lecture	CAN	Knows-how	FC,L&PP T
CO1,CO2,C O4,CO5,CO7	Demonstrate Vishista Chikitsa including Anupana, Rasayana, Sadhyasadhyata and Pathyapathya of Urakshata in different Aavstha of Roga	2	Practical2.3	PSY-MEC	Shows-how	CD,PBL, CBL
CO1,CO2,C O4,CO5,CO6 ,CO8	Compare differential diagnosis of Shwasanaka Jwara (pneumonia) on varitions of Avastha of Roga and plan for selection of specific Chikitsa	2	Experiential-Learning2.3	PSY-ADT	Shows-how	CD,D-BED,RL E
CO1,CO2	Analyse the pathogenesis, prevalence and clinical manifestation of other infectious lung diseases	1	Lecture	CE	Knows-how	DIS,C_L, D

CO1,CO2,C O4,CO5,CO7 ,CO8	Demonstrate differential diagnosis of other infectious lung diseases and selection of Vishesa Chikitsa based on Roga Avastha	3	Experiential-Learning2.4	PSY-MEC	Does	CBL
CO1,CO2,C O4,CO7,CO8	Analyse the evidences pertaining to Rajayakshma and Urakshata management in published and unpublished documents	2	Experiential-Learning2.5	CS	Shows-how	JC,BS,DI S
CO1,CO2,C O4,CO5,CO6 ,CO8	Design protocol for administration of Shodhana and Shamana Chikitsa in Hridroga	3	Experiential-Learning2.6	CS	Shows-how	BS,D,CB L,C_L
CO1,CO2,C O5,CO6,CO8	Examine and distinguish the diagnosis of Hrutkapatika Vikara (valvular heart diseases), Hridpeshivridhdhijanya Vyadhi (cardiomyopathies), Hridayavaranasopha (pericarditis), Antarhrcchothah (endocarditis), Janmaja Hridroga (congenital heart diseases), Hritshoola (congestive cardiac failure) according to Ayurvedic parameters along with conventional correlation	2	Experiential-Learning2.7	AFT-SET	Shows-how	BS,CBL, BL,D- BED

Unit 2 Dexterity on Hridroga with comparative studies on heart diseases

- Hridroga
- Hridgata dhamanisanga vikara (Coronary artery disease-Ischemic heart disease and Myocardial Infarction) (IHD), Amavatika Hridroga (RHD), Hridkapatika Vikara (valvular heart diseases), Hridpeshivridhdhijanya Vyadhi (cardiomyopathies), Hridayavaranasopha (pericarditis), Endocarditis, Uchcharaktachaapa (Hypertension), Janmaja Hridroga (congenital heart diseases), Cardiac arrhythmias

References: 1,2,3,7,8,14,16,40,41,42

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/	3E Domain/ Sub Domain	3F Level (Does/Show s	3G Teachin g

			Experiential Learning		how/Knows how/Know)	Learning Methods
CO1,CO2	Describe nidana, samprapti, lakshana of different types Hridroga based on clinical presentation and their understanding in contemporary science	1	Lecture	CAN	Knows-how	L&PPT ,FC
CO1,CO2,C O7	Apply the samanya and vishishta chikitsa of Hridroga (SL61) based on roga avastha and rogi bala	1	Lecture	CAP	Knows-how	L&PPT ,FC
CO1,CO2,C O4,CO5,CO7 ,CO8	Demonstrate Vishista Chikitsa including Anupana, Rasayana and Pathyapathya in different types Hridroga (SL61) in relation to clinical practice	3	Practical2.4	CS	Shows-how	CBL,CD, D,D-BED
CO1,CO2,C O6	Interpret methodology for diagnosis of Vatakaphaja Hridroga (IHD), Amavatika Hridroga (RHD), Kshinakapardika (MI) and Hridchanda Vikara (cardiac arrhythmias) on Ayurvedic parameters along with conventional correlation	1	Lecture	CAP	Knows-how	L&PPT ,FC
CO1,CO2,C O5,CO7,CO8	Demonstrate laboratory investigation of different Hridroga (SL61)	2	Practical2.5	PSY-GUD	Shows-how	CBL,DL, D
CO1,CO2	Illustrate the diagnosis of valvular heart diseases	1	Lecture	CAN	Knows-how	L,FC
CO1,CO2,C O4,CO5,CO7 ,CO8	Develop methods for differential diagnosis of Hritkapatika Vikara (valvular heart diseases)	3	Experiential-Learning2.8	CS	Does	BS,CBL, CD,D-BED
CO1,CO2,C O4,CO5,CO6 ,CO8	Plan treatment protocol of Hritkapatika Vikara (valvular heart diseases) on different Avastha of Roga	3	Practical2.6	PSY-ADT	Shows-how	CBL,CD, D,D-BED
Unit 3 Dexterity on diagnostic approaches of cardio-respiratory diseases Diagnostic approaches of cardio-respiratory diseases						

- Electrocardiography (ECG), Coronary Angiography (CAG), Pulmonary Function Test (PFT), Thoracocentesis, Chest X-ray, High Resolution Computed Tomography (HRCT), Treadmill Test (TMT), Metered Dose Inhaler (MDI), Nebulisation, bilevel positive airway pressure (BiPAP) and continuous positive airway pressure (CPAP)

References: 16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teachin g Learning Methods
CO1,CO2	Describe cardiac rhythms, junctional tissues, leads, Einthoven triangle, hexa-axial vectors of ECG for diagnosis of Hridroga (SL61)	1	Lecture	CAN	Knows-how	L&GD
CO1,CO2	Diagnose different types of cardiological diseases on the basis of the analysis and judgement of different leads of ECG	1	Lecture	CAN	Knows-how	FC,L
CO1,CO2,C O4,CO5,CO6	Examine and interpret ECG of different types of patients with different conditions and interpret	3	Practical2.7	PSY- ADT	Shows-how	D,CBL,C D,D-BED
CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Assess and distinguish characteristics of Echo-cardiography and coronary angiography (CAG) on patients of Hridroga (SL61) and apply the results for selection of specific Ayurvedic treatment	3	Experiential- Learning2.9	PSY- MEC	Does	CBL,D,C D
CO1,CO2,C O5,CO6,CO8	Demonstrate the knowledge on diagnosis of cardio-respiratory diseases on the basis of Peak flow meter, PFT, Thoracentesis, Chest X-ray, HRCT scan of Chest	3	Practical2.8	PSY- GUD	Shows-how	CBL,D- BED,CD
CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Perform Treadmill Test (TMT), pulmonary function test (PFT), metered dose inhaler (MDI), Nebulisation, Bilevel Positive Airway Pressure (BiPAP) and Continuous Positive Airway Pressure (CPAP) on different Avastha of Pranavaha Srota Gata Vyadhis and design for treatment pattern	3	Experiential- Learning2.1 0	PSY- MEC	Does	D,CD,DL ,D- BED,CB L

Practical Training Activity

Practical Training 2.1 Formulating Ayurvedic treatment algorithm of Rajayakshma

Teacher's Activities

1. Clinical Demonstration

- Present a real/virtual case of suspected Rajayakshma.
- Show how to elicit history (kasa, svasa, raktapitta, soṣa, etc.).
- Correlate modern TB findings with Ayurvedic perspective.

2. Concept Clarification

- Explain Vishista Chikitsa, Rasayana drugs, Anupana selection with patient profile.
- Discuss prognosis (Sadhyasadhyata) with clinical examples.

3. Guided Practice

- Demonstrate preparation/dispensing of Chyavanaprasa, Pippali Rasayana, Ghrita Kalpana.
- Involve students in drug identification and posology calculation.

4. Interactive Learning

- Ask students to compare modern anti-TB regimen with Ayurvedic Rasayana concept.
- Encourage case-based discussion and critical analysis.

Student's Activities

1. Active Observation & Participation

- Take patient history, examine, and record Ayurvedic findings.
- Suggest suitable Vishista Chikitsa with Anupana selection.

2. Practical Skill Development

- Prepare and demonstrate Rasayana formulations under supervision.
- Write prescription (pathya-apathya, rasayana, anupana) in Ayurvedic format.

3. Analytical Work

- Present short case seminar: "Management of Rajayakshma with Vishista Chikitsa."
- Discuss prognosis (sadhya-asadhyata) of presented patient.

4. Reflective Learning

- Compare Ayurveda-based management with contemporary TB treatment.
- Record learning points in practical journal.

Practical Training 2.2 Laboratory interpretation of Shwasanaka Jwara (pneumonia)

Teachers Activities:

1. Identify the patient of Shwasanaka Jwara (pneumonia)
2. Judge the status of the Roga
3. Plan for selectivity of specific laboratory investigations like X-ray Chest, routine examination of blood, if needed culture and sensitivity, serum electrolyte levels and other relevant investigations in relation to comorbidity

Students Activities:

1. Perform the investigation
2. Interpret and analyse the reports rationally for final diagnosis of the disease

Practical Training 2.3 Special Treatment Protocol of Urakshata

Teacher's Activities

1. Present a real/virtual case of Urakshata.
2. Demonstrate how to elicit history and clinical findings.
3. Explain differentiation of acute, sub-acute, and chronic stages.
4. Demonstrate preparation/dispensing of medicines (e.g., Vasa svarasa with Madhu, Pippali Rasayana).
5. Explain choice of Anupāna and Rasayana for each stage.
6. Discuss prognosis (sadhya/sadhyata) with examples.
7. Explain Pathya–Apathya and correlate with modern lifestyle advice.
8. Conduct interactive discussion and clarify doubts.

Student's Activities

1. Observe and record the presented case.
2. Take patient history and perform examination under supervision.
3. Identify the stage of roga and propose suitable visista cikitsa.
4. Prepare formulations practically (e.g., ghrta, rasayana).
5. Write prescriptions including Anupāna, Rasayana, Pathya–Apathya.
6. Discuss prognosis of the case (sadhya/kṛcchra-sadhya/asadhya).

7. Present case summary or short seminar to peers.
8. Reflect and record learning in practical journal.

Practical Training 2.4 Special Treatment Schedule on Hridroga (SL61)

Teacher's Activities

1. Introduce topic of **Hridroga types** and their Ayurvedic classification.
2. Present a patient with clinical cardiac symptoms (e.g., angina, palpitations, breathlessness).
3. Demonstrate how to take history and identify the doṣa predominance.
4. Correlate clinical signs with classical descriptions of Hridroga.
5. Show the preparation/dispensing of medicines like **Arjuna Ksira Kalpa, satavari ghrta, PippaliRasayana**.
6. Explain the choice of **Anupana** and **Rasayana** in each type of Hrdroga.
7. Discuss **Pathya–Apathya** with modern equivalents (dietary & lifestyle counselling).
8. Facilitate case-based discussion and clarify queries.
9. Conclude with prognosis and integration into clinical practice.

PG Scholar's Activities in Practical Class

1. Observe the presented case and take detailed clinical history.
2. Perform examination (nadi pariksa, doṣa lakṣaṇa analysis, general clinical exam).
3. Identify the type of Hrdroga based on doṣa dominance.
4. Propose appropriate **Visista Cikitsa** with selection of drug, anupana, and rasayana.
5. Participate in preparation of formulations (e.g., Arjuna kshira, Rasayana yogas).
6. Write a prescription including Pathya–Apathya advice.
7. Present findings in small group discussion/seminar.
8. Compare Ayurvedic management with modern cardiology treatment for deeper understanding.
9. Record observations and learning in practical journal for evaluation.

Practical Training 2.5 Diagnosis of Hridroga (SL61)

Teachers activities:

1. Identify the patient of Hridroga (SL61)
2. Judge the status of the Hridroga

3. Plan for selectivity of specific laboratory investigations like X-ray Chest, routine examination of blood, electrocardiography (ECG), coronary angiography (CAG), high resolution computed tomography (HRCT) scan of Chest, Treadmill test (TMT), etc.

Students activities:

1. Perform the investigation on the patient according to the specificity of the complaint
2. Interpret and analyse the reports rationally for final diagnosis of the disease

Practical Training 2.6 Treatment protocol designing for Hritkapatika Vikara (valvular heart diseases)**Teacher's Activities**

1. Present a case of suspected valvular heart disease with clinical features.
2. Guide students to identify stage (early, moderate, advanced).
3. Demonstrate classical history taking and examination (pulse, cardiac signs, dosha predominance).
4. Explain how treatment protocol changes in each avastha.
5. Demonstrate preparation/dispensing of Arjuna ksheera or Rasayana formulation.
6. Discuss pathya and apathya relevant to heart diseases.
7. Correlate with modern understanding of valvular disease.
8. Conduct discussion, clarify doubts, and assess student responses.

Student Activities

1. Observe the case presented and note down history.
2. Perform examination and record findings under supervision.
3. Identify the avastha of roga.
4. Suggest appropriate line of treatment with drug, anupana, rasayana, and pathya-apathya.
5. Prepare formulation practically (e.g., Arjuna ksheera).
6. Write a prescription in Ayurvedic format.
7. Present short seminar/discussion on treatment protocol.
8. Compare Ayurvedic approach with modern cardiac management.
9. Record learning points and submit case report for evaluation.

Practical Training 2.7 Interpretation of ECG findings

Teachers' Activities

1. Supervise patient selection
 - Guide students in identifying relevant cardiac symptoms and choosing appropriate patients for ECG
2. Demonstrate ECG procedure
 - Explain each step of ECG recording
 - Emphasize correct lead placement and common errors to avoid
3. Facilitate interpretation training
 - Teach systematic approach to reading ECG (rate, rhythm, axis, intervals, waves, segments)
 - Use case-based discussions to deepen understanding
4. Correlate clinical features with ECG findings
 - Present clinical cases and lead discussions on pathophysiology
 - Encourage students to form clinical impressions based on combined data
5. Evaluation and Feedback
 - Assess students' performance in history taking, ECG recording, and interpretation
 - Provide constructive feedback for improvement
6. Documentation and Reporting
 - Guide students in proper case documentation, ECG report writing, and data recording for academic and clinical purposes

Students activities:

1. Identify patients suffering with different heart diseases
 - Selection of patients with conditions like ischemic heart disease, valvular heart disease, arrhythmias, cardiomyopathies, etc.
 - Document clinical features such as chest pain, palpitations, breathlessness, edema, etc.
2. Perform ECG on the selected patients
 - Demonstrate proper lead placement and machine setup to students
 - Instruct on infection control and patient safety
 - Record ECG under supervision, ensuring standard protocol is followed
3. Interpret ECG findings and correlate with clinical history
 - Identify rhythm abnormalities, ST-T changes, hypertrophy patterns, conduction blocks, etc.
 - Correlate ECG patterns with symptoms and history (e.g., myocardial infarction, atrial fibrillation, heart block)
 - Discuss prognosis and treatment implications with teachers

Teacher's Activities

1. Show instruments like peak flow meter and demonstrate their use.
2. Explain how to record values and interpret results.
3. Present PFT reports and guide students to differentiate obstructive and restrictive patterns.
4. Demonstrate thoracentesis technique (on manikin/model or through video).
5. Show chest X-ray films of different cases (TB, pneumonia, pleural effusion, cardiomegaly).
6. Present HRCT images highlighting different cardio-respiratory diseases.
7. Correlate findings with clinical signs and symptoms.
8. Conduct interactive discussion and ask students to interpret given case data.

Student Activities

1. Observe demonstration of peak flow meter and then practice recording values.
2. Collect and interpret PFT data under supervision.
3. Assist or simulate thoracentesis procedure on model/under guidance.
4. Study chest X-ray films and identify pathological findings.
5. Interpret HRCT images with teacher's guidance.
6. Correlate diagnostic findings with clinical features of patients.
7. Present short case discussions or seminars on given diagnostic reports.
8. Record observations and learning in practical journal.

Experiential Learning Activity

Experiential-Learning Learning 2.1: Shodhana and Shamana Chikitsa in Rajayakshma

Teacher's Activities

1. identify different cases (real or simulated) or case scenarios of Rajayakshma in different stages.
2. Guide students to identify the avastha of roga based on history and examination.
3. Explain the logic of when shodhana is possible (mridu, early, bala yukta) and when contraindicated.
4. Demonstrate preparation of shamana medicines (e.g., Chyavanaprasha, Pippali rasayana).
5. Facilitate discussion comparing classical guidelines with modern management of TB.
6. Encourage reflective learning: why shamana is central in Rajayakshma and shodhana is rarely used.

7. Supervise student-led case presentations and give feedback.

Student's Activities

1. Observe and take detailed history of patient (kasa, swasa, jwara, rakta pitta, bala, oja status).
2. Assess and classify the stage of Rajayakshma.
3. Discuss whether shodhana is indicated or contraindicated in that stage.
4. Suggest appropriate shamana chikitsa with anupana, rasayana, and pathya-apathya.
5. Practice preparation of rasayana formulations under guidance.
6. Prepare a case report including chikitsa plan and present it to peers.
7. Reflect on the clinical reasoning and record learning in practical journal.
8. Compare patient outcomes with theoretical expectations.

Experiential-Learning Learning 2.2: Development of Schedule for Palliative management of Urakshata

Teacher's Activities

1. Present clinical cases of Urakshata in different avasthā (acute, sub-acute, chronic).
2. Guide students to assess whether Rasayana is indicated or contraindicated.
3. Demonstrate preparation of simple Rasayana formulations (e.g., Pippali Rasayana, Arjuna kshira pak).
4. Correlate classical references with modern management of chest trauma recovery.
5. Facilitate discussion: "Why Rasayana should be postponed in acute stage but emphasised in chronic stage?"
6. Supervise reflective learning through group discussion.

Student's Activities

1. Observe the presented case and identify stage of roga (arambha, madhyama, jirna).
2. Discuss whether Rasayana chikitsa is suitable at that stage.
3. Suggest appropriate Rasayana formulation and schedule (matra, anupana, duration).
4. Practice preparation of selected Rasayana under supervision.
5. Prepare a case note with justification of therapy.
6. Compare outcomes of classical Rasāyana therapy with modern supportive therapy.
7. Reflect on learning and present experience in peer group.
8. Record observations in practical journal for evaluation.

Experiential-Learning Learning 2.3: Differential diagnosis and selectivity of treatment schedule in Shwasanaka Jwara (pneumonia)

Teacher's Activities

1. Present clinical cases (real or simulated) of pneumonia in different stages.
2. Guide students to apply avastha-vicara to distinguish between early, progressive, and chronic forms.
3. Demonstrate differential diagnosis between shwasanaka Jwara, Kasa, Rajayakhsma, and swasa roga.
4. Facilitate interpretation of investigations (chest X-ray, sputum report, CBC) alongside Ayurvedic reasoning.
5. Demonstrate preparation of suitable yogas (e.g., Vasa guḍa, Pippali rasayana).
6. Encourage reflective discussion on why chikitsa changes with stage of disease.
7. Supervise clinical examination and guide prescription writing.

Student's Activities

1. Observe the case presentation and take detailed history (jwara lakshna, swasa, kasa, dosha dominance).
2. Identify the avastha of the roga (arambha, madhyama, jirna).
3. Suggest possible differential diagnosis within Ayurvedic framework.
4. Plan appropriate chikitsa: shodhana or shamana, rasayana, and pathya-apathya.
5. Prepare or assist in making simple formulations in practical class.
6. Present their own case analysis with justification of treatment selection.
7. Compare Ayurvedic management with modern treatment approach.
8. Reflect on learning, record in journal, and present feedback in group discussion.

Experiential-Learning Learning 2.4: Diagnosis and Selectivity of Treatment Schedule for other infectious lung diseases

Teacher's Activities

1. Present different case scenarios of infectious lung diseases.
2. Guide students to differentiate pneumonia, TB, bronchitis, empyema, and abscess.
3. Demonstrate interpretation of chest X-ray, sputum exam, pleural fluid analysis.
4. Explain avastha-based planning of vishesha chikitsa.
5. Show preparation of formulations (e.g., Vasa avaleha, Pippali rasayana).
6. Lead a reflective discussion comparing classical texts with modern diagnosis.

7. Supervise student group work and give feedback.

Student's Activities

1. Take detailed history and examine presented cases.
2. Identify differential diagnosis of the condition.
3. Classify the avastha of the disease (early, madhyama, jirna).
4. Propose a vishesha chikitsa plan with justification.
5. Practice preparation of simple formulations under guidance.
6. Present case findings and treatment plan to peers.
7. Compare Ayurvedic approach with modern management.
8. Record observations, reflections, and learning points in practical journal.

Experiential-Learning Learning 2.5: Evidence based medicine analysis on Rajayakshama and Urakshata

Teacher's Activity

1. Select specific segment of topic under Rajayakshma and Urakshata
2. Provide necessary source of documentations from classical and recent advances like pubmed, Research Gate, Medline Plus, Medscape, Biomed central, Science Direct, etc.
3. Narrate the procedure of preparation of training material and mode of presentation with clinical experiences

Student's Activity

1. Collect documents as advised by the teacher
2. Attend patients suffering with Rajayakshma and Urakshata at bed side and collect relevant information
3. Refer relevant text book as advised by the teacher to find appropriate procedure and aushadha for the condition
4. Collect information from online or offline library regarding recent advances of research with RCT (randomised controlled trial) of Ayurveda in Rajayakshma and Urakshata
5. Prepare the teaching material in PPT or Flipped Classroom manner
6. Deliver lecture to the UG students on the topic

Experiential-Learning Learning 2.6: Shodhana and Shamana Chikitsa in Hridroga

Teacher's Activities

1. Present a case of hridroga (real patient or simulated case).
2. Demonstrate history taking focusing on chest pain, palpitations, dyspnoea, lifestyle factors.
3. Guide students to identify dosha predominance and stage of disease.
4. Explain when shodhana is indicated and when only shamana is suitable.
5. Show the preparation/dispensing of Arjuna ksheera or Arjuna avaleha.
6. Correlate Ayurvedic protocol with modern understanding of cardiac diseases.
7. Lead group reflection on advantages and limitations of each chikitsa.

Student's Activities

1. Observe and record clinical history and findings of the patient.
2. Assess dosha predominance and avastha of the disease.
3. Decide whether shodhana can be planned or shamana alone is suitable.
4. Prepare chikitsa plan including drug, anupana, rasayana, pathya.
5. Practice preparation of Arjuna ksheera or similar formulations under guidance.
6. Present case analysis and justify choice of therapy to peers.
7. Compare Ayurvedic treatment protocol with modern cardiac management.
8. Reflect on learning and write in practical journal.

Experiential-Learning Learning 2.7: Diagnosis of Kapatika and Peshi Vikriti Janya Hridroga (SL61)

Teacher's Activity

1. Identify separate number of cases of Kapatika and Peshi Vikriti Janya Hridroga
2. Explain the presenting clinical features of the Kapatika and Peshi Vikriti Janya Hridroga according to Ayurvedic classical features and conventional correlation
3. Narrate the relevant laboratory investigations to include Kapatika and Peshi Vikriti Janya Hridroga and exclude other relevant diseases
4. Narrate the complications of diseases
5. Infer the final diagnosis

Students Activity

1. Observe the patients of Kapatika and Peshi Vikriti Janya Hridroga including Hritshoola (congestive cardiac failure) under the guidance of teachers
2. Apply the knowledge imparted by teachers and search relevant Ayurvedic and modern text book
3. Individually examine the patients of Kapatika and Peshi Vikriti Janya Hridroga
4. Review relevant laboratory investigations
5. Prepare case record form (CRO) on the basis of Ayurvedic clinical features with concomitant modern correlation
6. Standardize the document

Experiential-Learning Learning 2.8: Methods for differential diagnosis of Hritkapatika Vikara (valvular heart diseases)

Teacher's Activity

1. Identify patients of Hritkapatika Vikara (valvular heart diseases)
2. Explain the presenting clinical features of the Hritkapatika Vikara (valvular heart diseases)
3. Narrate the relevant laboratory investigations to include and exclude other relevant diseases
4. Narrate the complications of diseases
5. Infer the final diagnosis

Students Activity

1. Observe the patients under the guidance of teachers
2. Apply the knowledge imparted by teachers
3. Individually examine the patients of Hritkapatika Vikara (valvular heart diseases)
4. Make a case history sheet for interpretation of differential diagnosis
5. Documentation and prepare SOP

Experiential-Learning Learning 2.9: Utility of ECHO and CAG for diagnosis of Hridroga (SL61)

Teachers activity

1. Identify the specific condition patients of Hridroga (SL61) needed for Echocardiography
2. Demonstrate the understanding of the Echocardiography
3. Identify application of coronary angiography (CAG) in certain cases of Hridroga on the basis of the Echocardiography
4. Analyse the report of CAG

5. Suggest for relevant Ausadhi Yoga on the basis of the reports of Echo-cardiography and CAG

Students Activity

1. Follow the advices of teachers
2. Identify the patients of Hridroga require for intensive diagnostic procedures
3. Observe the technologies of Echocardiography and CAG
4. Analyse the investigation reports of Echocardiography and findings of CAG
5. Review the literature
6. Design protocol for the specific Ayurvedic management on variations of patients of Hridroga on the basis of Hridroga and CAG
7. Standardize the protocol on application

Experiential-Learning Learning 2.10: Justification of diagnostic tools and treatment protocol for diseases under Pranavaha Srota

Teacher's Activities

1. Present cases of pranavaha srota gata vyadhis (asthma, COPD, ILD, OSA).
2. Demonstrate use of PFT machine and interpretation of reports.
3. Show correct technique of using MDI with spacer.
4. Demonstrate nebulisation set-up and indications.
5. Explain principles of TMT, BiPAP, CPAP with case-based discussion.
6. Correlate modern tools with Ayurvedic diagnostic and treatment principles.
7. Guide students in preparing avastha-based treatment plan (shamana, rasayana, pathya).

Student's Activities

1. Observe patient cases and perform detailed history and clinical examination.
2. Practice performing PFT under supervision and interpret values.
3. Demonstrate correct use of MDI and nebuliser on model/patient.
4. Participate in case-based discussion on when to select BiPAP or CPAP.
5. Suggest Ayurvedic chikitsa pattern according to avastha of disease.
6. Present case analysis including modern diagnostic support and Ayurvedic treatment plan.
7. Reflect on learning, record in journal, and share feedback in peer group.

Modular Assessment	
Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome-Based Assessment: 02 credits x 04 hours x 50 marks - Practical Learning Outcome Assessment: Comprehensive Roga–Rogi pariksha and individualized Chikitsa Yojana in the Management of Hridroga. [25 marks x 2 hour] Instructions: The instructor shall provide real/ simulated case or case scenario of Hridroga to each scholar. The scholars will be instructed to: • - Perform a clinical evaluation based on Ayurveda and contemporary principles. - Suggest appropriate investigations with justification. - Identify the type of Hridroga and explain the Samprapti (pathogenesis). - Frame a chikitsa plan, including: 1. Aushadha (internal and external) 2. Kriyakrama (if any) 3. Pathya-Apathya - Justify their treatment based on classical references. Assessment Method: Mini-CEX / OSCE – Rubric-Based Evaluation (Clinical Evaluation [History & Examination]) Investigations (Lab & Radiological, Sonological, ECG), Understanding Samprapti, Sadhyasadhyata & Roga Nirnaya, Propose the Chikitsa Plan, Justification with respect to classical reference, Communication & Presentation Skills) - Structured viva (10 marks x 1 hour) - Experiential Learning Outcome Assessment: [15 marks x 1 hour] Eg: Reflect on the learning outcomes from any Hridroga case, including any challenges in applying classical knowledge in real-world settings? Same assessment pattern can be applied for other diseases like ARDS, Rajyakshma, Urahkshata	4

Or						
Any practical in converted form can be taken for assessment. (25 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (25 marks) especially HRCT, X-RAY, ECG etc.						
Semester No : 4						
Module 3 : Annavaha Srotodushti Vikaras evum Chikitsa -I (Gastrointestinal disorders–I and its management)						
Module Learning Objectives (At the end of the module, the students should be able to) 1. Diagnose the diseases under Annavaha Srotas 2. Compare with concomitant diseases of conventional medical science 3. Plan for ideal Ayurvedic treatment guidelines of the certain diseases under Annavaha Srotas 4. Plan for directions of clinical research of the diseases under Annavaha Srotas						
Unit 1 Dexterity on Ama dosha vikar and it's management • Ama dosha • Alasaka, Vishuchika, Vilambika (SM3A/ 3B) • Aanaha, Aadhmana, Aatopa (SM31)						
References: 1,2,3,8						
3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teachin g Learning Methods

CO1,CO2	Describe Nidana-Samprapti and effect of Ama dosha on manifestation of diseases with examples and clarification on different avastha of Roga	1	Lecture	CAN	Knows-how	FC,L&PPT
CO1,CO2,C O5,CO6	Demonstrate and distinguish Samanya and Vishesh Chikitsa with directions of Pathyapathya for Ama Dosha Vikara	2	Practical3.1	PSY-GUD	Shows-how	CD,D-BED,CBL,D
CO1,CO2,C O4,CO5,CO6 ,CO7	Justify selection of Shodhana, Shamana and Pathyapathya for Ama dosha Vikara depending upon hetu, samprapti and dosh-dushya involved	3	Experiential-Learning3.1	AFT-VAL	Shows-how	BL,CD,CBL,D
CO1,CO2	Illustrate treatment protocol of Alasaka, Vishuchika and Vilambika (SM3A, 3B)	1	Lecture	CAN	Knows-how	L&PPT,FC
CO1,CO2	Elaborate action of various Kalpa along with its action on Ama and specific Pathyapathya for Alasaka, Vishucika and Vilambika	1	Lecture	CAN	Knows-how	L&PPT
CO1,CO2,C O4,CO5,CO6 ,CO8	Apply Cikitsasutra and Chikitsa upakrama of Alasaka, Vishuchika and Vilambika (SM 3A, 3B)	2	Practical3.2	PSY-SET	Shows-how	BS,BL,CBL
CO1,CO2,C O5,CO6,CO7	Demonstrate selection of pathyapathya for Alasaka, Vishuchika and Vilambika (SM 3A, 3B) according to Avastha of Ama.	2	Practical3.3	PSY-MEC	Shows-how	D,C_L,CBL
CO1,CO2,C O4,CO5,CO7	Justify specific Shodhana and Shamana Chikitsa in Alasaka, Vishuchika and Vilambika (SM 3A, 3B)	3	Experiential-Learning3.2	PSY-MEC	Does	D-BED,CD,CBL,BS
CO1,CO2	Describe role of Ama in Samprapti of vyadhi and differentiate its lakshan and chikitsa as per its Adhishthan (site) e.g. Koshtagat Ama, Rasagat Ama, Sandhigat Ama etc.	1	Lecture	CAN	Knows-how	L&PPT

CO1,CO2,C O4,CO5	Analyse chikitsa upakram for Ama with reference to various hetu, samprapti, lakshan, upadrav. Discuss range of chikitsa prakar and its specific stage for managing Ama. Enlist dravya and kalpa and describe its specific action on Ama.	3	Experiential-Learning3.3	PSY-ADT	Shows-how	CBL,DIS, D-BED,CD
CO1,CO2,C O5,CO7,CO8	Demonstrate skill on management of various forms of Ama in Annava srotas	3	Experiential-Learning3.4	PSY-MEC	Does	BS,CBL, CD,DIS
CO1,CO2,C O5,CO6,CO7	Interpret Ama chikitsa with reference to dosha-dushya sammurchhana, agni dushti, koshta, srotas, Rasadhatu with example of 5 diseases.	2	Practical3.4	CE	Knows-how	BS,BL,C BL,DIS,L RI
CO1,CO2	Illustrate Samprapti and chikitsa of Aanaha, Aadhmana and Aatopa (SM31)	1	Lecture	CAN	Knows-how	FC,L&PP T
CO1,CO2,C O4,CO6,CO7 ,CO8	Prescribe Chikitsa of Aanaha, Aadhmana, Aatopa (SM31)	3	Experiential-Learning3.5	PSY-MEC	Does	PBL,CBL
CO1,CO2,C O4,CO6,CO7	Assess and differentiate Aanaha, Aadhmana and Aatopa (SM31) and frame Avasthanusari chikitsa for all 3 disorders.	2	Practical3.5	PSY-GUD	Shows-how	DL,CBL, CD
CO1,CO2,C O6,CO7,CO8	Identify dravya and kalpa (atleast 5 each) for Aanaha, Aadhmana, Aatopa (SM31)	2	Experiential-Learning3.6	PSY-MEC	Shows-how	BS,D,BL, DIS

Unit 2 Dexterity on disorders of Agni. it's management and conventional correlation

- Ajeerna, Agnimandya, Aruchi and Chhardi (SM3L)
- Amlapitta (SM39)(Gastro esophageal reflux disorders or GERD)
- Gulma (SM3K)
- Upper GI endoscopy

References: 1,2,3,7,8,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teachin g Learning Methods
CO1,CO2	Discuss Samprapti and chikitsa of different types of Ajeerna, Agnimandya, Aruchi and Chhardi (SM3L)	1	Lecture	CC	Knows-how	D,FC,BS, L&GD
CO1,CO2,C O5,CO6,CO7	Analyse Chikitsasutra, Samanya Chikitsa of Amlapitta (SM-39)	2	Practical3.6	PSY- MEC	Shows-how	BS,DIS, CBL
CO1,CO2,C O4,CO6,CO7	Justify Shodhana and Shamana Chikitsa of Ajeerna, Agnimandya, Aruchi and Chhardi (SM 3L)	3	Experiential- Learning3.7	AFT-SET	Shows-how	BS,CBL, DIS,IBL
CO1,CO2	Analyze Samprapti of different types of Amlapitta (SM-39) based on the clinical presentations	1	Lecture	CAN	Knows-how	L&PPT ,L&GD,F C
CO1,CO2,C O4,CO6,CO7	Interpret laboratory investigations related to Amlapitta (Gastro esophageal reflux diseases or GERD) (SM39)	2	Practical3.7	PSY- GUD	Shows-how	D,DL,CD ,DIS
CO1,CO2,C O4,CO5,CO6	Demonstrate Chikitsa Yojana and Pathyapathya of Ajeerna, Agnimandya, Aruchi and Chhardi (SM3L)	2	Practical3.8	PSY- GUD	Shows-how	D- BED,DIS ,DL,CBL
CO1,CO2,C O4,CO5,CO6 ,CO8	Justify Shodhana, Shamana and Rasayana Chikitsa in Amlapitta (SM39)	3	Experiential- Learning3.8	AFT-SET	Does	BS,CD,C BL,BL
CO1,CO2	Interpret pathogenesis, clinical manifestations of GERD with relevance to classical Amlapitta (SM31)	1	Lecture	CAN	Knows-how	FC
CO1,CO2	Illustrate indications, procedure (with pre-procedure preparation, actual procedure and post-procedure care), contra-indications, complications of upper GI Endoscopy.	1	Lecture	CAN	Knows-how	L_VC

CO1,CO2,C O5,CO6,CO7	Prepare chikitsa for Gulma (SM3K). Elaborate role of Snehana in shamana chikitsa	2	Practical3.9	CE	Shows-how	BL,D,CD, BS
CO1,CO2	Interpret Hetu, Samprapti and samanya, Vishesh Chikitsa of Gulma (SM3K). Describe role of Sneh in Gulma chikitsa	1	Lecture	CAN	Knows-how	L&PPT ,L&GD,F C
CO1,CO2,C O4,CO6,CO7	Diagnose and manage patient of Gulma (SM3K)	3	Experiential- Learning3.9	PSY- ADT	Does	CBL,BL, CD,DIS
CO1,CO2,C O4,CO6,CO7 ,CO8	Demonstrate Vishishta Chikitsa Upakrama (Treatment protocol) for various types and conditions in Amlapitta (SM-39)	2	Practical3.1 0	PSY- GUD	Shows-how	CBL,D- BED,CD, D

Practical Training Activity

Practical Training 3.1 Treatment modalities for Ama Dosha Vikara

Teacher's Activity:

1. Identification of Patients

Identify patients presenting with clinical features suggestive of Ama in the context of Annavaha Srotas disorders

2. Record presenting symptoms such as Agnimandya (loss of appetite), Aruchi (aversion to food), Gaurava (heaviness), Amalasrava (foul stools), and Avipaka (indigestion).

- Categorization of Severity

- Categorize patients based on severity and stage of Ama involvement (e.g., Sama stage with Prabhoot Ama, Alpa Ama as well as Vibaddha Ama, Utkleshit Ama.
- Analyze Samprapti Vighatana based on Dosha-Dushya Sammurchana, involvement of Agni, and type of Srotodushti (Sanga, Vimarga Gamana, Atipravritti).

3. Textual Correlation and Principle Selection

- Refer to classical Ayurvedic texts (Charaka Samhita, Ashtanga Hridaya, etc.) for principles of Ama Dosha management in diseases of Annavaha Srotas.
- Identify principles such as Langhana, Pachana, Deepana, and Shodhana according to Dosha predominance and status of Ama.

4. Aushadha Yoga Selection

- Select appropriate herbal, herbo-mineral, mineral formulations (Aushadha Yoga) based on clinical assessment.
- Examples:
 - Ama with Kapha dominance: Trikatu, Shunthi, Vaishwanara Churna
 - Ama with Vata dominance: Hingvadi Churna, Indukanta Ghrita
 - Ama with Pitta involvement: Guduchi, Musta, Amalaki-based preparations

Scholar's Activity:

1. Patient Advice and Follow-Up

- Counsel patients regarding Ahara-Vihara (diet and lifestyle) to prevent Ama formation.
- Emphasize light, easily digestible foods, Aushadhi Siddha Ahara and avoiding incompatible combinations (Viruddha Ahara).

2. Plan regular follow-ups to monitor:

- Agni bala
- Ama reduction
- Disease progression or regression
- Tolerance and efficacy of selected Aushadha Yoga

Practical Training 3.2 Chikitsa Upakram of Alasaka, Vishuchika and Vilambika

1. Conceptual Clarification: Teacher explains definitions, samprapti, and differences between Alasaka (stagnation of undigested food with suppressed vomiting/diarrhea) , Vishuchika (sudden expulsion from both ends due to agnimandya) and Vilambika.
2. Practical Demonstration: Conduct case simulations; scholars diagnose, decide intervention based on bala, dosha, stage of Ama.
3. Chikitsasutra Explanation: Introduce principles – Amapacana, Vamana in Alasaka if balavat dosha, and quick dosha elimination in Vishuchika.
4. Chikitsa Upakrama:
 - Alasaka: Deepana-Pachana, mridu virechana if necessary; snehabhyanga if Vata aggravates.

- Vishuchika: Langhana, Shodhana if strength permits; use of lavanodaka, takra for hydration; grahi dravyas post-srotoshodhana.
5. Outcome Discussion and present reflective analysis: Scholars analyze patient response, complications(if any), prognosis. Teacher encourage critical appraisal of treatment with modern correlation to gastroenteritis management.
 6. Follow-Up and Documentation:
 - Monitor the patient's symptoms regularly
 - Record progress in terms of agni, bala, and symptoms
 - Document outcomes and modify treatment if necessary

Practical Training 3.3 Pathyapathya for Alasaka, Vishuchika and Vilambika

1. Teacher Identify and present real or simulated cases reflecting early, middle, and advanced/ regressive stages (depending on Prabhutatva of Aam and anubandhi Dosha).
2. Teacher guides scholars in recognizing classical signs and symptoms (e.g., Gaurava, Atipravritti Vamana, Shoola, etc).
3. Scholars Study the patient based on clinical presentation and stage of disease. Correlate findings with Ayurvedic textual references.
4. Teacher explains the role of Dosha, Dushya, Agni, Ama, Srotas and Udbhava & Adhishtana in the pathogenesis. Compile references and interpret them.
5. Prepare a list of Pathya and Apathya for Alasaka, Vishuchika and Vilambika.
6. Teachers' Role: Guide students in differentiating Pathya-Apathya based on disease stage (e.g., acute, sub-acute, advanced/ emergency/recovery).
7. Students' Role: Create stage-wise chart of Aahar-Vihar for Chikitsa of Ama: Acute Stage, Post- treatment/Recovery Stage. Counsel patients and record follow-up data. Provide personalized Pathya-Apathya advise. Monitor recurrence or new symptoms and report.

Practical Training 3.4 Ama chikitsa

Teacher's activity-

- Identify cases with Ama as causative factor and explain Ayurvedic etiopathogenesis with History and clinical examination. Discuss about relevant Lab investigations. Co-relate clinical features with Ayurvedic symptoms and lab investigations.

Scholar's activity-

1. Identify Ama, dosha, dushya with clinical features in bed side patients or simulated cases.

2. Recommend investigations such as:

- Stool examination: for presence of blood, pus, ova, cysts, or parasites
- CBC: to check for leukocytosis, indicating infection.
- CRP/ESR: markers of inflammation
- Culture tests (stool/blood) if infection is suspected.

3. Analyse and justify

- Dosha predominance
- Presence of Ama Lakshana
- Agnimandya
- Status of Dushya (Rasa, Rakta, Mamsa)

4. Formulate chikitsa plan with duration of each chikitsa upakram and postulate expected outcomes in that time period.

5. Collect data of 20 cases throughout course of 6 months to confirm.

Practical Training 3.5 Aanaha, Aadhmana, Aatopa chikitsa (SM31)

Teachers Role:

1. Identify patients in OPD or case sheets of simulated patients.
2. Identify Aanaha, Aadhmana, Aatopa with specific features.
3. Elaborate chikitsa upakram for the same.

Students Role:

1. Elicit history focused on Hetu, Lakshan, Upashaya-Anupashaya
2. Perform targeted examination for Agni, Ama, Vata, Annavaha Srotas and Koshta
3. Grade Rogabala (duration, complications, toxin load) and Rogibala (prakriti, ahara-shakti, satva, ojas).
4. Prepare step by step chikitsa upakram. Choose appropriate drugs for specific stages. Observe and evaluate.
5. Submit a brief case-record with conclusions and a reflective note regarding management.

Practical Training 3.6 Gulma Chikitsa

Teacher's Activity:

1. Identify cases of Gulma on bed-side or give 5 different case scenarios of Gulma.
2. Explain clinical features and guide to formulate chikitsa upakram.
3. Elaborate role of Sneha by different ways in management of Gulma.

Scholar's Activity:

1. Examine patient clinically and understand samprapti.
2. Apply chikitsa sutra and plan treatment protocol for given patient.
3. Analyse role of each chikitsa advised and expected outcome.
4. Explain role of Sneha in chikitsa.
5. Enlist 10 sneha useful in chikitsa of Gulma

Practical Training 3.7 Chikitsa Upakrama for Amlapitta

1. Teachers Activity:
2. Identification of Patients Suffering from Amlapitta
3. Elaborate clinical symptoms such as Utklesha (nausea), Tikta-Amla Udgara (sour or bitter belching), Hrit-Kantha Daha (burning sensation in chest/throat), Chhardi (vomiting), Aruchi (anorexia) etc.
4. Confirm diagnosis based on Ayurvedic clinical assessment and history.
5. Categorization of Amlapitta Based on Doshik Involvement as Vataja , Pittaja, Kaphaja , Sannipataja Amlapitta
6. Categorize as per Dosha gati as Urdhvaga and Adhoga Amlapitta.
7. Detection and explanation of Samprapti Ghatakas (Pathological Factors)
8. Analyze the Dosha, Dushya, Agni, Ama, Srotas, Udbhava Sthana, Sanchara Sthana, and Adhithana involved
9. Explain the Samprapti (pathogenesis) to detect the stage and chronicity of the disease.
10. Ask scholars to review relevant sections from ancient texts to understand disease description, chikitsa sutra, and aushadha yoga.
11. Guide scholars for formulation of a Suitable Prescription and Patient Guidelines
 - Select appropriate Deepana-Pachana, Virechana, Shamana or Shodhana treatment according to the patient's condition.
 - Prescribe relevant Aushadha Yogas (e.g., Kamdudha Ras, Shankh Bhasma, Avipattikar Churna, Yashtimadhu Churna).
 - Advice on Pathya-Apathya (diet and lifestyle).

Scholar's Activity:

- Administration of the Treatment Schedule

- Initiate and monitor the chosen treatment protocol under supervision.
- Ensure patient compliance and timely administration of medicines and procedures.
- Observation Quality of Life (QoL) Post Treatment
 - Assess improvement in symptoms and digestion
 - Assess Quality of Life.
- Documentation of the Treatment Module
 - Record:
 - Case history
 - Diagnosis
 - Samprapti ghataka
 - Treatment administered
 - Outcome and follow-up details
- Maintain a treatment register for future reference and academic purposes.

Practical Training 3.8 **Laboratory investigations for Amlapitta (SM39)**

Teacher's Activity:

1. Enlist various tests , lab investigations for Amlapitta
2. Explain methodology of investigations
3. Plan and Select Specific Laboratory Investigations:
 - Upper GI Endoscopy
 - Barium Meal Study (Ba-meal)
 - UBT
 - Stool antigen test for H-Pylori etc.

Scholar's Activity:

1. Observe the Investigation Procedures:
Actively watch the procedures being conducted in the diagnostic department to understand the methodology, patient preparation, and clinical significance of the findings.
2. Interpret and Analyse Reports Rationally:
 - Correlate findings from modern diagnostic tools with Ayurvedic understanding of Amlapitta.
 - Finalize diagnosis considering both classical Ayurvedic texts and contemporary diagnostic evidence.
 - Identify whether it is Vataja, Pittaja, or Kaphaja Amlapitta based on symptomatology and Samprapti (pathogenesis).

Practical Training 3.9 Chikitsa Yojana of Ajeerna, Agnimandya, Aruchi and Chhardi

1. Case-Based Grouping: Divide scholars into four groups, each assigned one condition (Ajirṇa, Agnimandya, Aruchi, Chhardi). Provide simulated patient profiles.
 2. Assessment & Diagnosis: Students identify nidana, samprapti, dosha dominance, and ama status using various clinical examinations.
 3. Upakrama Planning: Designing of Chikitsa Upakrama is done. Scholar will elaborate and justify upakrama with reasoning.
 4. Demonstration & Justification: Each group presents chikitsa rationale, classical references, and expected outcomes.
 5. Feedback & Evaluation: Faculty provides input; students reflect on evidence-based Ayurvedic reasoning.
 6. Observation and Documentation
- Students Activities:
 - Maintain patient progress notes (before, during, after treatment).
 - Document symptomatic relief, Agni status, appetite, bowel regularity, and general well-being.
 - Teachers Activities:
 - Evaluate treatment outcomes.
 - Encourage research-based documentation and case presentation.

Practical Training 3.10 Protocol for vishishta chikitsa of Amlapitta

1. Teacher's Activities:
2. Identification of Patient Suffering from Amlapitta
 - Recognize clinical features of Amlapitta such as: Utklesha (nausea), Amla Udgara (sour belching), Hrit-Kantha Daha (burning in chest and throat), Udgara, Tikta-Amla Vamana, Aruchi etc.
3. Categorization of Types of Amlapitta

Scholar's Activities:

1. Application, Review, Follow-up and Record of Effects
 -
 - Administer the prepared treatment protocols to respective patients
 - Observe for symptomatic improvement in initial stage
 - Schedule follow-ups weekly or bi-weekly for verifying Samprapti bhanga
2. Refer to Classical Textbooks of Ayurveda for Management. Refer to Charaka Samhita (Chikitsa Sthana - 15/58-77) Ashtanga Hridaya (Chikitsa Sthana - 9/8-20) Bhavaprakasha, Yogaratnakara, and other Nighantu texts, Chikitsa (treatment modalities), Pathya-Apathya (diet and lifestyle advice)

3. Preparation of Common Treatment Schedule for Each Type

- Use clinical proforma to record: Subjective improvement, Objective parameters (tongue coating, appetite, etc.
- Documentation of the Treatment Module
- Identify Samprapti Ghatakas: Dosha: Mainly Pitta, with Vata/Kapha involvement, Dushya: Rasadhātu, Annavaha srotas, Srotas involved: Annavaha and Rasavaha, Adhishthana: Amashaya, Udbhava sthana: Amashaya, Vyakta sthana: Hrit, Kantha, Jivha
- Classify based on Dosha dominance: Vataja Amlapitta – associated with dryness, pain, gurgling sounds, Pittaja Amlapitta – more burning, sour taste, increased thirst, Kaphaja Amlapitta – heaviness, nausea, white coating on tongue, Sannipataja Amlapitta – mixed symptoms, Urdhvag Amlapitta, Adhog Amlapitta

Experiential Learning Activity

Experiential-Learning Learning 3.1: Rationalization of treatment protocol for Ama Dosha Vikara

1. Teacher identify cases of Ama Dosha Vikriti and quickly revise about management. Teacher elaborates Steps of Chikitsa Upakrama and stages at which specific upakram should be incorporated.
2. Scholars identify cases of Ama Dosha Vikriti.
3. Scholars Individually examine the patients and judge Samprapti ghatakas, Roga bala and Rogi bala and Avastha of Ama.
4. Scholars Select and apply either procedural therapy or Aushadha Yoga on the basis of Dosha-Guna Vichara and severity of disease condition due to involvement of specific stages of Ama
5. Scholars follow up the case and analyse the results. Identify lacunae, if any and modify the management with help of teacher.

Experiential-Learning Learning 3.2: Justification of Shodhana and Shamana Treatment of Alasaka, Vishuchika and Vilambika. (SM 3A, 3B)

Teacher's activity

1. Guide for selectivity of Shamana Aushadha Yoga and Shodhan procedures with perspective to Ama and Dosha-Dushya involvement.

Student's activity

1. Identify bedside or OPD patients / Simulated patients presenting features relevant to Alasaka, Vishuchika and Vilambika.
2. Diagnose the patients of Alasaka, Vishuchika and Vilambika (SM3A, 3B) on the basis of clinical features, laboratory investigations.

3. Strictly analyse Ama with respect to its specific hetu, samprapti, condition, quantity, site and sammurchhana with Dosh-Dushya.
4. Refer relevant text books as advised by the teacher to find appropriate procedure and aushadha for the condition.
5. Select and prepare a treatment schedule for Shamana and Shodhana separately on the basis of the condition of the patient.
6. Administer the schedule, follow up and record the documents.
7. Prepare a SOP of the whole procedure.

Experiential-Learning Learning 3.3: Chikitsa Upakram for Ama.

Teacher's activity

1. Demonstrate the process of identification of patients of Ama on bed side
2. Demonstrate features of Ama and guide selectivity of relevant laboratory diagnostic procedure
3. Discuss chikitsa upakram for specific condition of Ama.

Scholar's activity

1. Identify number of patients presenting with features of Ama.
2. Refer relevant text book as advised by the teacher to find specific clinical features
3. Confirm diagnosis of Ama with reference to various hetu, samprapti, lakshan, upadrav.
4. Discuss chikitsa upakram and its specific stage for managing Ama. (When to give Shodhan, Pachan, Deepan, Grahee, Vishaghna, Langhan etc.)
5. Enlist dravya and kalpa and describe its specific action on Ama.
6. Compile information in log book

Experiential-Learning Learning 3.4: Management of Annavaaha srotogat Ama.

1. Teacher identifies patients/ simulated cases/ case scenarios for different samprapti and lakshanani of Ama.
2. Scholars observe the patients under the guidance of teachers
3. Judge the Dosha, Dushya, Mala, Agni, Koshtha, Ama on the basis of the presenting clinical features
4. Confirm Samprapti Ghatak, Roga bala and Rogi bala
5. Select 30 Ausadha Yoga for Shamana on the basis of the Dosha-Guna Vichara
6. Specify mode of action, stage of incorporation of each kalpa.
7. Record and document accordingly.
8. Standardize the SOP

Experiential-Learning Learning 3.5: Chikitsa upakram, Kalpa and pathyapathya for Aanaha, Aadhmana, Aatopa (SM31)

Teacher's activity

1. Identify cases of Aanaha, Aadhmana, Aatopa.
2. Ask scholars to identify vyadhi ghatak and formulate shaman chikitsa and pathyapathya.

Scholar's activity

1. Identify and Diagnose patient presenting with features relevant to Anaha, Aadhmana, Aatopa
2. Refer relevant text books to find appropriate palliative management of Aanaha, Aadhmana, Aatopa.
3. Select proper kalp, postulate its expected action and duration.
4. Design Pathyapathya chart for Aanaha, Aadhmana, Aatopa.

Experiential-Learning Learning 3.6: Dravya and Kalpa analysis for mode of action

Teachers Activity:

1. Teacher gives list of 20 dravya, 20 kalpa useful in Aanaha, Aadhmana, Aatopa.
2. Teacher gives 10 different case scenarios of Aanaha, Aadhmana, Aatopa to scholars.
3. Scholars analyse case, identify Dosha, Dushya, Agni, Ama, Bala and diagnose case.
4. Scholars prepare Chikitsa Patrak and explain to teacher and peers about expected mode of action of drug.
5. All discuss and teacher corrects wherever needed.

Student's activity

1. Identify patients presenting features relevant to Aanaha, Aadhmana, Aatopa.
2. Diagnose the patients of Aanaha, Aadhmana, Aatopa.excluding other diseases of relevant features on the basis of clinical and laboratory investigations
3. Refer relevant text book as advised by the teacher to find appropriate procedure and aushadha for the condition
4. Standardize and prepare document accordingly

Experiential-Learning Learning 3.7: Selection of Shodhana and Shamana Chikitsa in Ajeerna, Agnimandya, Aruchi and Chhardi

Teacher's activity

1. Demonstrate the process of identification of patient of Ajeerna, Agnimandya, Aruchi and Chhardi on bed side
2. Demonstrate the way of diagnosis on the basis of the Dosha - Dushya involvement
3. Guide selectivity of relevant laboratory diagnostic procedure
4. Guide for selectivity of specific treatment schedule of Shamana and Shodhana according to the avastha of Roga
5. Guide for selectivity of Aushadha Yoga and therapeutic procedure pertaining to Dosha-Dushya involvement

Student's activity

1. Identify number of patients presenting features relevant to Ajeerna, Agnimandya, Aruchi and Chhardi on bed side
2. Diagnose the patients of Ajeerna, Agnimandya, Aruchi and Chhardi on bed side on the basis of clinical features and laboratory investigations
3. Refer relevant text book as advised by the teacher to find appropriate procedure and aushadha for the condition
4. Select and prepare a treatment schedule for Shamana and Shodhana separately on the basis of the condition of the patients
5. Administer the schedule, follow up and record the documents
6. Study all kalpas mentioned in DFI and STG.

Experiential-Learning Learning 3.8: Chikitsa Upakram with Shodhana, Shamana and Rasayana Cikitsa in Amlapitta

Teacher's activity

1. Demonstrate the process of identification of patients of Amlapitta on bed side
2. Demonstrate the way of diagnosis on the basis of the Dosa - Dusya involvement
3. Guide selectivity of relevant laboratory diagnostic procedure
4. Guide for selectivity of specific treatment schedule of Shodhana and Shamana according to the avastha.

Scholar's activity

1. Identify number of patients presenting with features relevant to Amlapitta on bed side
2. Diagnose on the basis of clinical features and laboratory investigations
3. Refer relevant text book to enlist appropriate Procedure and Ausadha for the condition
4. Select and prepare a treatment schedule for Shodhana, Shamana and Pathya-apathya.
5. Determine the condition and time for rendering Rasayana Therapy. Select and Advise the Rasayana drugs
6. Follow up the case and record the documents
7. Prepare a SOP of the whole procedure

Experiential-Learning Learning 3.9: Management of Gulma	
Teacher's activity 1. Demonstrate the process of identification of patients of Gulma on bed side on the basis of the Dosha - Dushya involvement. 2. Guide selectivity of relevant laboratory diagnostic procedure 3. Guide for selectivity of Aushadha Yoga with perspective to Dosha-Dushya involvement Scholar's activity 1. Identify number of patients presenting with features relevant to Gulma. 2. Refer relevant textbooks as advised by the teacher to find appropriate shodhan procedure and Aushadha yoga. 3. Finalize the treatment protocol and choose appropriate drugs and explain to peers. 4. Evaluate efficacy of treatment with upashaya in patient. Compile and present the case.	
Modular Assessment	
Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome-Based Assessment: 02 credits x 04 hours x 50 marks • Practical Learning Outcome Assessment: Application of Ayurvedic Principles in Diagnosis and Management of Amlapitta. [25 marks x 2 hour] Instructions: The instructor shall provide real/ simulated case or case scenario of Amlapitta to each scholar. The scholars will be instructed to : ○ Analyze the case using Roga-Rogi Pariksha and Nidana Panchaka. ○ Evaluate Samprapti ghataka, determine Roganirnaya and Sadhyasadyata. ○ Advice and Interpret lab investigations in line with clinical presentation. ○ Propose a treatment plan incorporating appropriate Aushadha, Kriyākramas, and Pathya-Apathya.	4

○ Justify chikitsā siddhānta with classical reasoning. Assessment Method: Mini-CEX / OSCE – Rubric-Based Evaluation (Clinical Evaluation [History & Examination]) Investigations (Lab & Radiological), Understanding Samprapti, Sadhyasadyata & Roga Nirnaya, Propose the Chikitsa Plan, Justification with respect to classical reference, Communication & Presentation Skills) • Structured viva (10 marks x 1 hour) • Experiential Learning Outcome Assessment: [15 marks x 1 hour] Eg: What were the most frequent Ayurvedic signs and symptoms you observed in patients with Amlapitta? What part of the clinical reasoning or decision-making process did you find most challenging while dealing with Amlapitta rogi? Same assessment pattern can be applicable for other diseases like Gulma, Chhardi, Ajeerna, Aadhmana etc. Or Any practical in converted form can be taken for assessment. (25 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (25 marks) especially for GI Endoscopy	
Semester No : 5	
Module 4 : Annavaha Srotodushti Vikara evum Chikitsa II (Gastrointestinal disorders and its management)	
Module Learning Objectives (At the end of the module, the students should be able to) 1. Diagnose the diseases under Annavaha Srotas 2. Compare with concomitant diseases of conventional medical science 3. Plan for ideal Ayurvedic treatment guidelines of the diseases under Annavaha Srotas. 4. Plan for clinical research of the diseases under Annavaha Srotas.	
Unit 1 Dexterity on Shoola in comparison with PUD and related disorders • Annadrava Shoola and Parinama Shoola (SM 3A,3B,3C,3D) • Amashaya-Grahanigata Vrana (Peptic ulcer diseases or PUD),	

- Agnashayagata Chirakari Pradaha (chronic pancreatitis)

References: 1,2,3,51

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teachin g Learning Methods
CO1,CO2	Illustrate selection of Chikitsa on the basis of the Samprapti Vinashana in Annadrava Shula	1	Lecture	CAN	Knows-how	L&GD
CO1,CO2,C O4,CO5,CO6	Plan Vishishta Chikitsa including Anupana, Rasayana, Sadhyasadyata and Pathyapathya of Annadrava Shula on variations from case to case according to severity	2	Practical4.1	PSY- GUD	Shows-how	CD,DIS, CBL
CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Apply Shodhana, Shamana and Rasayana Chikitsa of different stages of Annadrava Shoola	3	Experiential- Learning4.1	PSY- MEC	Does	CD,DIS, BS,BL
CO1,CO2,C O5	Illustrate specification of treatment schedule on the variations of Samprapti vinashana and Sadhyasadyata in Parinama Shula	1	Lecture	CE	Knows-how	BS,FC
CO1,CO2,C O4,CO5,CO6 ,CO7	Demonstrate Chikitsasutra, Sapekhsya Nidana, Samanya Chikitsa of Annadrava and Parinama Shoola on different Avastha of Roga	2	Practical4.2	PSY- GUD	Shows-how	BS,D- BED,CB L
CO1,CO2,C O5,CO6,CO7	Plan Vishista Chikitsa including Anupana, Rasayana and Pathyapathya of Parinama Shula on variations of Roga avastha	2	Practical4.3	PSY- GUD	Shows-how	CBL,D- BED,DIS ,BS,BL
CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Justify Shodhana, Shamana and Rasayana Cikitsa of Parinama Shoola	3	Experiential- Learning4.2	AFT-SET	Does	BL,D,BS
CO1,CO2,C O4,CO7	Illustrate clinical manifestation of peptic ulcer diseases (PUD) on the background of aetiopathogenesis	1	Lecture	CAN	Knows-how	L&GD

CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Assess and differential diagnosis of Amashaya- Grahanigata Vrana vis-a-vis peptic ulcer diseases (PUD)	3	Experiential- Learning4.3	PSY- MEC	Does	DIS,C_L, BS,CBL
CO1,CO2,C O4	Describe clinical manifestation of Agnasayagata Chirakari Pradaha (chronic pancreatitis)	1	Lecture	CAN	Knows-how	L&PPT ,FC
CO1,CO2,C O4,CO5	Interpret laboratory investigation of Agnasayagata Chirakari Pradaha (chronic pancreatitis) on variations of different states of Rogi	2	Practical4.4	PSY- GUD	Shows-how	DL,CBL, DIS
CO1,CO2,C O5,CO6	Assess comparative textual review on clinical course of Agnashayagata Chirakari Pradaha (chronic pancreatitis) according to Ayurveda	1	Lecture	CE	Knows-how	L&PPT ,FC
CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Discuss on comparative analysis of Annadrava Shoola, Parinama Shoola and Agnasayagata Chirakari Pradaha Discuss and assess the clinical presentation of Annadrava Shoola, Parinama Shoola and Agnisayagata ChirakariPradaha through critical comparison of classical references and modern correlates.	3	Experiential- Learning4.4	PSY- GUD	Does	L&GD,DI S,C_L,B S,CBL

Unit 2 Dexterity on Grahani in comparison with IBS

- Grahani (SM 36)
- IBS (Assessment by Rome Criteria) and malabsorption syndrome

References: 1,2,3,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teachin g Learning Methods

CO1,CO2,C O4,CO6	Justify Sampraptivinasana and Bheda of Grahani on variations of avastha of Roga	1	Lecture	CAN	Knows-how	L&GD,L& PPT ,FC
CO1,CO2,C O4,CO5,CO6	Describe treatment schedule in Grahani on variations of Roga Avastha	1	Lecture	CC	Knows-how	L&PPT ,C_L,D
CO1,CO2,C O4,CO5,CO6	Demonstrate application of Cikitsasutra, Sapekhsya Nidana, Samanya Chikitsa of Grahani in different Avastha of Roga	3	Practical4.5	PSY- MEC	Shows-how	CBL,DIS, D
CO1,CO2,C O4,CO5,CO6 ,CO7	Plan for Vishistata Chikitsa of Grahani	3	Practical4.6	PSY- GUD	Shows-how	BS,DIS, CBL
CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Design Pathyapathya of Grahani	2	Experiential- Learning4.5	PSY- ADT	Shows-how	BS,BL,J C,EDU,D IS
CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Assess and design Shodhana and Shamana Chikitsa of Grahani on variations of Roga Avastha	2	Experiential- Learning4.6	PSY- ADT	Shows-how	CBL,BS, BL,DIS
CO1,CO2,C O4	Describe etiopathogenesis, clinical manifestation and diagnostic process of IBS (irritable bowel syndrome)	1	Lecture	CAN	Knows-how	L&PPT ,D
CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Diagnose Grahani (IBS) on the basis of Manning, Rome IV, Asian diagnostic criteria and Bristol stool chart	3	Experiential- Learning4.7	PSY- ADT	Does	BS,CBL, EDU,D- BED,BL
CO1,CO2,C O4	Illustrate clinical manifestation of Ahara Poshana Shosana Avaghata (malabsorption syndrome) on the basis of etiopathogenesis on variations of diseases	1	Lecture	CAN	Knows-how	L&PPT
CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Assess diagnosis, differential diagnosis and critical analysis of Ahara Poshana Shosana Avaghata (malabsorption syndrome)	3	Experiential- Learning4.8	PSY- MEC	Does	BS,DIS,B L,CBL
CO1,CO2,C O4,CO5,CO6	Interpret laboratory investigation regarding differential diagnosis of Ahara Poshana Shosana Avaghata (malabsorption syndrome)	2	Practical4.7	CS	Shows-how	D,DL,CB L,DIS

Unit 3 Dexterity on diagnostic approach of GI disorders

- Diagnostic approach of Gastro Intestinal (GI) disorders
- Diagnostic approach with critical analysis like RUT (Rapid Urease Test), USG (Ultrasonography) of abdomen, HRCT (High Resolution Computed Tomography) of abdomen, Barium meal test, ERCP (Endoscopic Retrograde Cholangiopancreatography), etc.

References: 1,2,3,16,51

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teachin g Learning Methods
CO1,CO2,C O4,CO5	Describe fundamental knowledge related to the indication, application, diagnostic procedure of RUT (rapid urease test) and the barium meal test	1	Lecture	CAN	Knows-how	FC
CO1,CO2,C O4,CO5,CO6	Interpret x-ray, USG, RUT and Barium meal test for diagnosis of diseases under Annavaha srotas/Mahasrotas	2	Practical4.8	PSY- MEC	Shows-how	EDU,D,D L,DIS
CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Interprete USG (ultrasonography) of abdomen and HRCT (high resolution computed tomography) of abdomen	2	Experiential- Learning4.9	PSY- ORG	Does	CBL,BS, D,BL,DL
CO1,CO2,C O4,CO5,CO6	Interpret USG of abdomen and HRCT of abdomen under Annavaha Srotas	2	Practical4.9	PSY- MEC	Shows-how	DL,DIS,C BL,CD
CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Illustrate demonstration in classroom teaching to UG students regarding selctivity of investigations for diseases under Annavaha Srotas	2	Experiential- Learning4.1 0	PSY- MEC	Shows-how	BS,D,DI S,LS,BL

Practical Training Activity

Practical Training 4.1 Planning for Treatment Methods in Annadrava Shula

Teachers Activities:

1. Identification of Patients

- Teacher alongwith scholars, will visit the bedside patient presenting with clinical symptoms resembling Annadrava Shula.
- Teacher will Identify and tell scholars to document signs such as pain after food intake, burning sensation, bloating, belching, nausea, etc.
- Teacher will guide scholars to record demographic and case history details.

2. Selectivity and Categorization

- Teacher will classify patients into groups based on Dosha-Dushya involvement (e.g., Vata-dominant, Pitta-dominant, Kapha-dominant conditions).
- Teacher will correlate clinical symptoms with Ayurvedic samprapti (pathogenesis) to understand disease stages.

3. Teacher will explain scholars about how to analyse Laboratory Investigations

- Teacher will review available lab investigations (e.g., Upper GI endoscopy, Barium meal, H. pylori tests).
- Teacher will correlate findings with the clinical condition and Ayurvedic understanding.

Scholar's Activities:

1. Scholars will search Textual References

- Scholars will refer classical texts such as Charaka Samhita, Ashtanga Hridaya, Madhava Nidana, and commentaries for references on Annadrava Shula.
- Scholars will highlight similarities in signs and symptoms with modern diagnostic labels like GERD, peptic ulcers etc.

2. Scholars will select treatment Modalities and Sort them

- Scholar will compile a list of treatment options mentioned in classical and contemporary Ayurvedic texts.
- Scholar will sort the therapies based on specific conditions (acute/chronic stage, doshic predominance, etc.).
- Include Shamana (palliative), Shodhana (purificatory), and Pathya-Apathya (diet-lifestyle) considerations.

3. Scholar will advice, conduct Follow-ups and Documentation of changes will be maintained.

- Scholar will prepare and administer patient-specific treatment plans.
- Scholar will give dietary and lifestyle advice in line with Pathya-Apathya.
- Scholar will maintain follow-up records noting response to treatment and adjust the therapy accordingly.
- Scholars will Document observations and outcomes for academic discussion and case study preparation under the guidance of teacher.

Practical Training 4.2 Practical Training on treatment methods and differential diagnosis in Annadrava and Parinama Shoola

Teachers Activities:

1. Identification of Patients
 - Teacher will identify patients suffering from Annadrava Shoola and Parinama Shoola at the bedside.
 - Teacher will categorize patients based on variations in Samprapti Vighatana, considering the involvement of Dosha, Dushya, Agni, Srotas, and Strotodushti.
2. Teacher will demonstrate Clinical Diagnosis and Differential Diagnosis
 - Teacher will Diagnose the disease on the basis of:
 - Classical Roga Lakshana (symptomatology)
 - Dosha-Dushya Vivechana (pathophysiological analysis) will be explained.
 - Clinical examination findings will be explained by teacher.
 - Relevant laboratory investigations (e.g., Upper GI endoscopy, Barium meal study, USG abdomen) will be advised by teacher.
 - Teacher will elaborate how to Differentiate the condition from other similar disorders like Amlapitta, Grahani, and Udara Shula.
3. Teacher will explain in details about Selection of Aushadha Yoga
 - Teacher will guide about Referring to classical Ayurvedic texts (like Charaka Samhita, Ashtanga Hridaya, Bhavaprakasha, etc.)
 - Teacher will guide about Selection of appropriate Oushadha Yoga based on:
 - Type and stage of Roga
 - Rogi Bala, Agni, Satva, and Vyadhi Bala
 - Teacher will Justify selection with logical reasoning and give textual references.

Scholar's Activities:

1. Scholars will Prepare Standard Prescriptions
 - Scholars will Design standard treatment protocols for different variations of the disease (e.g., Vataja, Pittaja, Kaphaja Shoola).
 - Protocol will Include:
 - Internal medications (e.g., Avipattikara Churna, Hingvashtaka Churna, Shankha Vati, etc.)
 - External treatments if required (e.g., Abhyanga, Swedana)
 - Pathya-Apathya guidelines
 - Dietary modifications
2. Scholar will monitor Follow-Up and will Document it properly.
 - Scholar will conduct regular follow-up visits to assess the effect of the treatment.
 - Scholar will Document about-
 - Clinical progress
 - Changes in signs and symptoms

- Investigative parameters (if repeated)
- Adverse effects or patient compliance issues

3. Scholar will Modify treatment as per the response and disease progression.(under the guidance of teacher)

Practical Training 4.3 Practical training on associated treatments methods in Parinama shula

Teacher's Activities:

1. Teacher will identify Patients.
 - Teacher will examine and identify patients presenting with classical symptoms of Parinama Shula (pain during digestion, epigastric discomfort, periodicity of pain, etc.).
 - Teacher will categorize based on:
 - Dosha predominance (Vataja, Pittaja, Kaphaja, Sannipataja)
 - Stage and chronicity of disease
 - Associated symptoms (e.g., vomiting, bloating, anorexia)
2. Teacher will Select and Shortlist Based on Dosha-Dushya and Clinical Features based on:
 - Dosha-Dushya involvement
 - Clinical features like pain timing, appetite pattern, digestion, stool consistency
 - Prakriti, Agni status, and Srotodushti
3. Teacher will do analysis of Existing Laboratory Investigations
 - Teacher will evaluate available clinical reports such as:
 - Upper GI Endoscopy
 - H. pylori status (RUT or biopsy)
 - Routine blood tests (Hb, ESR, CBC)
 - Stool occult blood test
 - Barium meal follow-through, if available

Scholar's Activities:

1. Scholar will search for Textual References on the Disease-Specific Conditions
 - Scholar will refer authoritative Ayurvedic texts like:
 - Charaka Samhita – Chikitsa Sthana
 - Ashtanga Hridaya
 - Bhavaprakasha

- Madhava Nidana
 - Scholar will extract definitions, nidana, samprapti, chikitsa sutra, and relevant formulations
- 2. Scholar will enlist Treatment Modalities
 - Scholar will list treatment approaches from classics:
 - Shamana Chikitsa (Deepana, Pachana, Shoola-hara)
 - Shodhana if needed (Virechana, Basti)
 - Formulation shortlisting based on Dosha (e.g., Shankha Vati, Avipattikara Churna, Kamdudha Ras, Shatavaryadi Churna, etc.)
 - Scholar will match treatment plan with patient's clinical condition and lab findings
- 3. Scholar will demonstrate the Lists of Dietetics (Pathya-Apathya) under the guidance of teacher.
 - Scholar will identify appropriate Ahara-Vihara per Dosha:
 - Vataja: warm, unctuous, easily digestible diet
 - Pittaja: cooling, non-spicy, milk-based diet
 - Kaphaja: light, warm, dry diet
 - Scholar will explain specific meal timings, frequency, and restrictions to patient.
- 4. Scholar will demonstrate the Condition for Advising Rasayana by
 - Identifying patients with chronicity, depleted Dhatus, or post-treatment recovery
 - Scholar will choose appropriate Rasayana like:
 - Shatavari, Yashtimadhu, Guduchi, Amalaki
 - Indicate time, dosage, and adjuvants
 - Explain contraindications and indications for Rasayana
- 5. Scholar will advice, conduct Follow-up and Document the details.
 - Prepare individualized prescriptions
 - Counsel patients for follow-up visits
 - Maintain proper documentation:
 - Case history
 - Dosha-Dushya analysis
 - Treatment chart
 - Outcome tracking

Practical Training 4.4 Interpretation of laboratory investigation in Agnasayagata Chirakari Pradaha

Teacher's Activities:

1. Identification of Patients:
 - Teacher will identify patients suffering from Agnasayagata Chirakari Pradaha (Chronic Pancreatitis) at the bedside.

- Teacher will recognize and explain key clinical symptoms such as:
 - Upper abdominal pain radiating to the back
 - Chronic digestive disturbances
 - History of recurrent acute pancreatitis episodes
 - Signs of malabsorption and weight loss
- 2. Teacher will demonstrate assessment of Disease Status:
 - Evaluate the Roga Avastha (status of disease) by:
 - Assessing chronicity and frequency of symptoms
 - Identifying Dosha-Dushya Samurchana
 - Evaluating Agni Dushti and Srotorodha (impaired digestion and obstruction of bodily channels)
- 3. Teacher will execute planning of Laboratory Investigations:
 - Select appropriate diagnostic investigations for confirmation and assessment:
 - ERCP (Endoscopic Retrograde Cholangiopancreatography) – to visualize pancreatic and biliary ducts
 - Serum Amylase and Lipase – to evaluate pancreatic enzyme levels
 - Routine blood examinations – including CBC, liver function test, and blood glucose levels
 - Consider Imaging studies like USG abdomen, CT scan, or MRCP where applicable

Scholar's Activities:

1. Scholar will Observe Diagnostic Procedures:
 - Visit the diagnostic laboratory to observe the procedures being performed on patients.
 - Understand the steps and precautions involved in:
 - ERCP
 - Collection and interpretation of blood samples for amylase/lipase
2. Scholar will Interpret and Analyse Reports and confirm with teacher:
 - Critically analyze the results of investigations:
 - Compare findings with clinical features
 - Confirm diagnosis based on lab and imaging support
 - Correlate with Ayurvedic understanding of Agnasayagata Roga
 - Determine the extent of organ damage and guide further management

Practical Training 4.5 Treatment and differential diagnosis of Grahani

Teacher's Activities:

1. Teacher will Identify Patients:

- Suffering from Grahani; based on classical symptoms and clinical evaluation.
- Correlate symptoms with ROME III criteria for IBS to understand the modern parallel.
- 2. Teacher will Categorize Grahani Stages and explain them to students:
 - Categorize stages of Grahani in 3–4 patients exhibiting varying clinical features.
 - Classify based on Dosha-Dushya involvement and chronicity (Amaja/ Niramaja Grahani).
- 3. Teacher will analyse about Samprapti Vighatana:
 - Detect Samprapti and Samprapti Vighatana of each case by examining Dosha, Dushya, Agni, and Srotas.
 - Compare the Ayurvedic diagnosis with modern IBS subtypes (IBS-C, IBS-D, IBS-M, IBS-U).
- 4. Teacher will explain Laboratory & Diagnostic Report Analysis:
 - Analyse relevant investigations (CBC, stool routine, endoscopy if available) to rule out other gastrointestinal diseases.
 - Correlate findings with Ayurvedic parameters of Grahani Roga.

Scholar's Activities:

1. Scholar will review essential part of Classical Texts:
 - Refer recommended classical Ayurvedic texts (e.g., Charaka Samhita, Ashtanga Hridaya, Bhavaprakasha) to identify:
 - Specific types of Grahani,
 - Suitable Chikitsa Krama,
 - Pathya-Apathya, and
 - Aushadha formulations.
2. Scholar will formulate, Prescribe and advice Treatment:
 - Prepare appropriate prescriptions with Rasa Aushadhi, Kwatha, Churna, or Ghrita.
 - Include Pathya-Apathya and Ahara-Vihara recommendations.
3. Scholar will comprehend Patient-specific Treatment Schedule:
 - Design a personalized treatment schedule considering:
 - Stage of disease,
 - Agni bala and Roga bala,
 - Individual Prakriti and Vikriti.
4. Scholar will Observe and prepare SOP:
 - Observe the patient's response to treatment over a fixed period.
 - Record changes in symptoms, Agni, Mala, and overall condition.
 - Prepare a Standard Operating Procedure (SOP) for managing similar cases.
5. Scholar will compile a comprehensive Treatment Module Document including:
 - Case summaries,
 - Diagnosis rationale,
 - Treatment plan,

- Observed outcomes,
- Textual references,
- Inferences for future practice.

Practical Training 4.6 Vishistata Chikitsa of Grahani

Teacher's Activities:

1. Teacher will identify and select a group of patients clinically diagnosed with Grahani.
2. Teacher will Ensure the selected patients represent a variety of clinical presentations (e.g., Vata-dominant, Pitta-dominant, Kapha-dominant Grahani, etc.).
3. Teacher will conduct thorough examination of each patient using:
 - Ayurvedic diagnostic tools: Darshana, Sparshana, Prashna, Nadi Pariksha, Mala Pariksha, Jihwa Pariksha, etc.
 - Modern investigative methods, where relevant (e.g., colonoscopy reports, stool examination, etc.).
4. Teacher will guide scholars about Pattern Identification and :
 - Analyze the findings to identify a common clinical pattern.
 - Categorize patients based on Dosha-Dushya involvement, Samprapti Ghatakas and clinical features.

Scholar's Activities:

1. Scholar will refer classical Ayurvedic literature (Charaka, Sushruta, Ashtanga Hridaya, etc.) for review:
 - Dosha-specific and Dushya-specific treatment guidelines.
 - Correlation with modern understanding (e.g., IBS types).
 - Note any variations in Chikitsa Sutra based on Samprapti Vighatana.
2. Scholar will design Treatment Protocol and Document about :
 - Formulating individualized treatment protocols based on Ayurvedic principles.
 - Providing advice and implementing the treatment under supervision.
 - Observations of outcomes regularly, document responses, and evaluate efficacy of the selected management approach.

Practical Training 4.7 Laboratory Diagnosis of Ahara Poshana Shosana Avaghata (malabsorption syndrome)

Teachers Activities:

1. Teacher will identify the patient of Ahara Poshana Shosana Avaghata (Malabsorption Syndrome) by
 - Observing clinical features such as chronic diarrhea, weight loss, abdominal bloating, nutritional deficiencies (iron, B12, etc.), fatigue and

- Correlate symptoms with Ayurvedic principles like Agnimandya, Anna-Rasa Dhatvagni Dushti, and Rasa Dhatu Kshaya.
- 2. Teacher will judge and explain the status of the Roga by
 - Assessing the Avastha (stage), Dosha-Dushya involvement, Agnibala, Koshtha, and Srotas affected and
 - Identify chronicity, severity, and systemic impact (e.g., anemia, edema, hypoalbuminemia) for
 - Classifying the condition under Grahani, Atisara, or Shosha based on presentation.
- 3. Teacher will plan for selectivity of specific laboratory investigations like
 - Stool examination and culture – for fat globules, parasites, pathogens
 - Colonoscopy – for mucosal changes, inflammation, or biopsy for celiac disease, IBD
 - Additional tests: Serum albumin, total protein, iron studies, vitamin B12, folate levels, and D-xylose test

Scholar's Activities:

1. Scholar will observe the investigations and compare with relevant clinical features
 - Scholar will attend stool sample processing and endoscopy procedure
 - Scholar will correlate findings with signs of Dhatukshaya, Agnimandya, and Rasavaha Srotodushti
 - Scholar will note specific features like mucosal atrophy (celiac), crypt abscesses (IBD), or parasitic infestations
2. Scholar will Interpret and analyse the reports rationally for final diagnosis of the disease (under supervision and guidance of teacher).
 - Scholar will integrate clinical findings with lab and endoscopic results and confirm diagnosis such as celiac disease, tropical sprue, chronic giardiasis, or Crohn's disease
 - Scholar will frame the diagnosis in Ayurvedic context with detailed Dosha-Dushya-Srotas involvement and shall propose treatment strategies involving Deepana, Pachana, Srotoshodhana, and Rasayana therapy

Practical Training 4.8 Radio-imaging and other tests for diagnosis of diseases of Annavaha srotas

Teachers Activities:

1. Teacher will identify patients suffering from disorders of Annavaha Srotas such as Annadrava Shoola, Parinama Shoola, and Amashaya-Grahanigata Vrana (Peptic Ulcer Disease) through bedside clinical observation.
2. Teacher will categorize the identified patients based on classical Ayurvedic Lakshanas and modern clinical features, including Dosha-Dushya involvement, pain pattern, relation with food intake, and associated symptoms.
3. Teacher will select and elaborate Specific Investigations relevant to each condition.
 - USG abdomen or barium meal studies for structural evaluation
 - Routine blood tests and stool examination to assess systemic or associated issues
 - H. pylori testing where needed

Scholar's Activities:

1. Scholar will observe the Investigation Procedures
 - Under the supervision of the concerned teacher, observe how each investigation is conducted in a clinical/laboratory setting.
2. Scholar will Record Observations and Findings and maintain detailed documentation of:
 - Case history and clinical features
 - Type of investigation performed
 - Results of the investigations
 - Interpretation in both Ayurvedic and modern medical contexts

Practical Training 4.9 Interpretation of USG and HRCT in Annavaha Srotas diseases

Teacher's Activities

1. Teacher will briefly Orient on the classical definition, etiology (nidana), samprapti, and lakshana of Parshwashoola and present differential diagnosis from modern perspective (e.g., intercostal neuralgia, pleurisy).
2. Teacher will do Clinical Case Presentation

e.g. Present a case (real or simulated) with typical symptoms of Parshwashoola and discuss the signs and symptoms correlating with classical references (Charaka, Sushruta, Madhava Nidana).
3. Teacher will facilitate Interactive Group Discussion on the basis of Dosha, Dushya, Desha, Kala, Rogi bala etc. Teacher will encourage interpretation of the case using Ayurvedic diagnostic principles like Roga-Rogi Pariksha.
 - Explain different types of Parshwashoola based on Dosha predominance:
 - Vataja Parshwashoola
 - Pittaja Parshwashoola
 - Kaphaja Parshwashoola
 - Sannipataja Parshwashoola
5. Teacher will conduct Treatment Design Workshop and
 - Facilitate treatment planning session:
 - Shodhana Chikitsa – Indications of Virechana, Basti, Nasya.

- Shamana Chikitsa – Herbs and formulations based on dosha dominance.
- Rasayana Therapy – Use of rejuvenatives for long-term management.
- Emphasis on Samprapti Vighatana.

Scholar Activities

1. Scholar will analyse the given case history and identify the classical signs of Parshwashoola and correlate symptoms with doshic involvement.
2. Scholar will present the diagnosed type of Parshwashoola based on clinical features and justify diagnosis with classical references (text citations encouraged).
3. Treatment Plan Design - Scholar will develop a comprehensive Ayurvedic treatment protocol for the case in which scholar will include appropriate Shodhana, Shamana and Rasayana measures with rationale.
4. Chart Preparation
 - Scholar will prepare charts for:
 - Types of Parshwashoola
 - Dosha-wise symptoms
 - Chikitsa Sutra (treatment outline)
5. Peer Review and Discussion
 - Scholars will exchange treatment plans with another group for critique and discussion.
 - All will discuss possible improvements or modifications based on different patient conditions.

Experiential Learning Activity

Experiential-Learning Learning 4.1: Shodhana, Shamana and Rasayana Chikitsa in Annadrava shoola

Teacher's activity

1. Demonstrate the process of identification of patients of Annadrava shoola on bed side

2. Demonstrate the way of diagnosis on the basis of the Dosha - Dushya involvement
3. Guide selectivity of relevant laboratory diagnostic procedure
4. Guide for selectivity of specific treatment schedule of Shamana and Shodhana according to the avastha of Roga and Rogi
5. Guide for selectivity of Aushadha Yoga and procedure with perspective to Dosha-Dushya involvement

Student's activity

1. Identify number of patients presenting features relevant to Annadravashula on bed side
2. Diagnose the patients of Annadravashula on bed side on the basis of clinical features, Samprapti Vighatana and laboratory investigations
3. Refer relevant text book as advised by the teacher to find appropriate procedure and aushadha for the condition
4. Select and prepare a treatment schedule for Shamana and Shodhana separately on the basis of the condition of the patients
5. Administer the schedule, follow up and record the documents
6. Prepare a SOP of the whole procedure
7. Apply the schedule, follow up and document accordingly

Experiential-Learning Learning 4.2: Calculate Shodhana and Shamana Chikitsa in Parinama Shoola

Teacher's activity

1. Demonstrate the process of identification of different categories of patients of Parinama Shoola on bed side
2. Demonstrate the way of diagnosis on the basis of the Dosha - Dushya involvement and clinical presentation
3. Guide selectivity of relevant laboratory diagnostic procedure
4. Guide for selectivity of specific treatment schedule each of Shamana and Shodhana according to the avstha of Roga and Rogi
5. Guide for selectivity of Aushadha Yoga and procedure with perspective to Dosha-Dushya involvement and state of the disease

Student's activity

1. Identify numbers of patients presenting features relevant to Parinama Shoola on bed side
2. Diagnose the patients of Parinama Shoola on bed side on the basis of clinical features and laboratory investigations
3. Refer relevant text book as advised by the teacher to find appropriate procedure and ausadha for the condition
4. Select and prepare a treatment schedule for Shamana and Shodhana separately on the basis of the condition of the patients
5. Administer the schedule, follow up and record the documents
6. Prepare a SOP of the whole procedure
7. Apply the schedule, follow up and document accordingly

Experiential-Learning Learning 4.3: Differential diagnosis on Amashaya-Grahanigata Vrana

Teacher's Activity

1. Identify separate number of cases of Amashaya-Grahanigata Vrana (peptic ulcer diseases)
2. Explain the presenting clinical features of the Amashaya-Grahanigata Vrana
3. Demonstrate other diseases like Amlapitta, Annadrava Shoola, Parinama Shoola having similar kinds of clinical features
4. Highlight salient features of Amashaya-Grahanigata Vrana
5. Correlate with the relevant laboratory investigations to include and exclude other relevant diseases
6. Narrate the complications of diseases
7. Infer the final diagnosis

Students Activity

1. Observe the patients under the guidance of teachers
2. Apply the knowledge imparted by teachers
3. Individually examine the patients of Amashaya-Grahanigata Vrana and other relevant diseases of different grades and presentations
4. Shortlist features of Amashaya-Grahanigata Vrana excluding features of other diseases and correlate with supportive investigation reports
5. Make a case history sheet for interpretation of differential diagnosis and establish final diagnosis
6. Analyse and prepare a document

Experiential-Learning Learning 4.4: Teaching capacity on comparative analysis of Annadrava Shoola, Parinama Shoola and Agnasayagata Chirakari Pradaha

Teacher's Activity

1. Select specific segment of topic under Annavaha Srota with special reference to Annadrava Shoola, Parinama Shoola and Agnasayagata Chirakari Pradaha
2. Provide necessary source of documentations from classical and recent advances
3. Narrate the procedure of preparation of training material and mode of presentation with clinical experiences

Student's Activity

1. Collect documents as advised by the teacher

2. Attend patients suffering with Annavaha Srotas with special reference to Annadrava Shoola, Parinama Shoola and Agnasayagata Chirakari Pradaha at bed side and collect relevant information
3. Refer relevant text book as advised by the teacher to find appropriate procedure and oushadha for the condition
4. Collect information from online or offline library mode regarding collection of information on recent advances of research with RCT (randomized controlled trial) of Ayurveda in Annavaha Srota with special reference to Annadrava Shula, Parinama Shula and Agnasayagata Chirakari Pradaha
5. Prepare the teaching material in PPT or Flipped Classroom manner
6. Microteaching may be conducted

Experiential-Learning Learning 4.5: Dietetics in Grahani

Teacher's Activity

1. Identify separate number of cases of Grahani having different clinical presentation
2. Explain the presenting clinical features of the Grahani in different cases
3. Explain the state of Agni in different cases of Grahani
4. Explain the specificity of selection of diets according to Rasa-Guna-Veerya-Viapaka of specific dietetics
5. Narrate the mode of actions of diets in specific condition of Grahani
6. Explain the procedure of record keeping

Students Activity

1. Observe the patients allotted by teachers
2. Apply the knowledge imparted by teachers
3. Individually examine the patients of Grahani of 3-4 categories
4. Review the texts and shortlist the features
5. Select diets and analyse the Ayurvedic pharmacodynamics according to the involvement of Dosha and Dushya with Samprapti Vinashana
6. Apply on patients
7. Observe, review and record the effects

Experiential-Learning Learning 4.6: Application of Shodhana and Shamana treatment in Grahani

Teacher's activity

1. Demonstrate the process of identification of different patients of Grahani on bed side

2. Demonstrate the way of diagnosis on the basis of the Dosha - Dushya involvement
3. Guide selectivity of relevant laboratory diagnostic procedure
4. Guide for selectivity of specific treatment schedule of Shamana and Sodhana according to the avastha of Roga and Rogi
5. Guide for selectivity of Aushadha Yoga and procedure with perspective to Dosha-Dushya involvement

Student's activity

1. Identify numbers of patients presenting features relevant to Grahani on bed side
2. Diagnose the patients of Grahani on bed side on the basis of clinical features and laboratory investigations
3. Refer relevant text book as advised by the teacher to find appropriate procedure and aushadha for the condition
4. Select and prepare a treatment schedule for Shamana and Shodhana separately on the basis of the condition of the patients
5. Administer the schedule, follow up and record the documents
6. Prepare a SOP of the whole procedure
7. Apply the schedule, follow up and prepare a document accordingly

Experiential-Learning Learning 4.7: Diagnosis of Grahani (irritable bowel syndrome or IBS) on the basis of criteria of conventional procedures

Teacher's Activity

1. Demonstrate the Ayurvedic procedure of diagnosis of Grahani in different conditions according to Dosha-Dushya Vivechana
2. Narrate the techniques for evaluation of Grahani using conventional procedures like Manning, Rome IV, Asian diagnostic criteria and Bristol stool chart
3. Describe the process for keeping the records of each criteria

Student's Activity

1. Identify different patients of Grahani on variations of clinical presentations, Dosha-Dushya vivechana and Samprapti Vighatana
2. Apply the criteria of Manning, Rome IV, Asian diagnostic criteria and Bristol stool chart from case to case and analyse accordingly
3. Analyse reports of same patients with various process in a single and multiple conditions
4. Record the data
5. Evaluate and standardize the record

Experiential-Learning Learning 4.8: Diagnosis and differential diagnosis of Ahara Poshana Shosana Avaghata (malabsorption syndrome)

Teacher's Activity

1. Identify patients of Ahara Poshana Shosana Avaghata (malabsorption syndrome)
2. Explain the presenting clinical features of the Ahara Poshana Shosana Avaghata (malabsorption syndrome) and compare with other relevant diseases
3. Narrate the relevant laboratory investigations to include and exclude other relevant diseases
4. Narrate the complications of diseases
5. Infer the final diagnosis

Student's Activity

1. Observe the patients under the guidance of teachers
2. Apply the knowledge imparted by teachers
3. Individually examine the patients of Ahara Poshana Shosana Avaghata (malabsorption syndrome)
4. Make a case history sheet for interpretation of diagnosis and differential diagnosis
5. Prepare a detailed notes on the topic

Experiential-Learning Learning 4.9: Knowledge of USG and HRCT in Annavaha Srotas diseases

Teacher's Activity

1. Identify patients suffering with different diseases under Annavaha Srotas
2. Explain the presenting clinical features of the diseases under Annavaha Srotas
3. Narrate the procedure and evaluation of USG (ultrasonography) of abdomen and HRCT (high resolution computed tomography) in Annavaha Srotas Diseases
4. Demonstrate the process of analysis by studying the images in consultation with concerned persons of conventional methods

Students Activity

1. Select patients suffering with certain diseases of Ananvahasrota who requires relevant investigations
2. Apply the knowledge imparted by teachers
3. Observe investigations in number of cases
4. Keep the record the findings

5. Interpret reports and correlate with presenting features	
Experiential-Learning Learning 4.10: Demonstration of lectures regarding selectivity of investigations in Annavaha Srotas	
Teacher's Activity 1. Select specific topic of disease under Annavaha Srotas 2. Provide necessary source of documentations from classical and recent advances regarding investigation procedures like gastro-intestinal endoscopy with RUT (rapid urease test), barium meal test, ultrasonography of whole abdomen, ERCP (endoscopic retrograde cholangiopancreatography), etc, 3. Narrate the procedure of preparation of training material and mode of presentation with clinical experiences Student's Activity 1. Collect documents as advised by the teacher 2. Attend patients suffering with various diseases under Annavaha Srotas 3. Refer relevant text book as advised by the teacher to find appropriate procedure 4. Analyse different investigation reports and its implementation on various conditions 5. Prepare the teaching material in PPT or Flipped Classroom manner 6. Microteaching session on the topic will be conducted.	
Modular Assessment	
Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome-Based Assessment: 03 credits x 06 hours x 75 marks • Practical Learning Outcome Assessment: Application of Ayurvedic Principles in Diagnosis and Management of Peptic Ulcer Disease (PUD). [40 marks x 4 hour] Station 1: Identification of Peptic Ulcer Disease (PUD) (30 minutes)	4

Activity: Scholars will be shown 5 images/videos of different GI Endoscopies and asked to identify the disease name (Ayurveda and modern correlation), mention its Dosha dominance, and specify one unique lakshana.

Assessment Method: OSPE (Objective Structured Practical Examination)

Rubrics (Total: 10 marks): Criteria includes Identification (5x1=5 marks), Dosha dominance (5x0.5=2.5 marks) and Key lakshana (5x0.5=2.5 marks)

Station 2: Clinical Examination & Diagnosis (90 minutes)

Activity: One real or standardized patient with a Grahani will be provided to each scholar. They will be instructed to conduct Roga-Rogi pariksha, note symptoms, assess Samprapti ghataka, and present probable diagnosis (Ayurvedic & modern).

Assessment Method: Mini-CEX (Mini Clinical Evaluation Exercise)/ Viva with examiner (observation checklist)

Rubrics (Total: 9 marks): Criteria includes Rogi pariksha (2 marks), Roga Pariksha (2 marks), Samprapti ghataka (3 marks), Differential Diagnosis and Final diagnosis (2 marks)

Station 3: Shamana or Shodhana Decision Making (90 minutes)

Activity: 3 case scenarios/ real cases of Annadrava shoola, Parinama shoola, PUD will be presented. Each student should suggest, whether Shodhana or Samana is appropriate in each case and justify with treatment plan (Shodhan, Shaman chikitsa, Aushadha and Pathya-apathya).

Assessment Method: Written response or oral presentation

Rubrics (Total: 12 marks): Criteria includes Choice of Chikitsa (3x1=3marks), appropriate medicine selection (3x1=3marks), justification (3x1=3marks), Pathya-apathya (3x1=3marks)

Station 4: Pharmacological knowledge of key medicines (30 minutes)

Activity: From a list of any five commonly used drugs in Grahani, choose any three, and mention the ingredients, indications, Anupana, and mode of administration.

Assessment Method: Oral or written response

Rubrics (Total: 9 marks): Criteria includes Ingredients (3x1 =3 marks), Indications (3 x1=3 marks), Anupana if any and Usage (3x1=3 marks)

- Structured viva (15 marks x 1 hour)
- Experiential Learning Outcome Assessment: [20 marks x 1 hour] Eg: Simulate a patient counselling session, to explain the patient on the importance of Pathya-apathya, Dinacharya, Ritucharya, Achara Rasayana, in accordance with their clinical condition e.g. IBS.

Assessment Method: Checklist evaluation (15 marks) – Criteria includes Empathetic communication (5 marks), Content and clarity in explanation (10 marks) and Ensuring patient understanding/ compliance (5 marks).

Or

Any practical in converted form can be taken for assessment. (25 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (25 marks)

Module 5 : Udakavaha Srotodushti Vikaras evum Cikitsa (Water and electrolyte imbalance and its management)

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describe and Diagnose the Udakavaha Srotodushti Vikaras
2. Compare with concomitant diseases of conventional medical science
3. Conduct detailed Clinical examination of the patient with Udakavaha Srotodushti Vikaras
4. Advice, Analyse and interpret appropriate investigations in Udakavaha Srotodushti Vikaras
5. Plan, Execute, and Analyse for ideal Ayurvedic treatment principles of Shamana, Shodhana, Rasayana Chikitsa and Pathyapathya of the diseases under Udakavaha Srotas.
6. Plan for directions of Clinical research of the diseases under Udakavaha Srotas.

Unit 1 Trishna and conventional correlation

- Trishna
- Alteration of serum osmolarity

References: 1,3,52

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teachin g Learning Methods
CO1,CO2,C O3	Describe Nidanpanchaka, Samprapti, Bheda Avastha, Sadhysadhyata and importance of Doṣha involvement in Trishna	1	Lecture	CC	Knows-how	L&PPT ,L
CO1	Perform Roga Rogi Pariksha in a patient presenting with Trishna, identify relevant clinical features, and recommend appropriate investigations based on Ayurvedic diagnostic principles.	2	Practical5.1	PSY- GUD	Shows-how	CBL,D- BED
CO1,CO5	Interpret investigations and formulate differential diagnoses for Trishna	2	Practical5.2	PSY- MEC	Shows-how	D- BED,PBL
CO1	Elaborate the importance of different Pana kalpana in Trishna	1	Lecture	CAP	Knows-how	L&PPT ,BL
CO1	Advice Shodhana, Shamana and Pathyapathya as per the stage of Trishna and Rogi bala	2	Practical5.3	PSY- ADT	Shows-how	CBL
CO1	Illustrate the concept of serum osmolality, its clinical significance, and the method of calculating it	1	Lecture	CC	Knows-how	L&PPT
CO1,CO7	Examine rogvastha and generate treatment protocol in a trishna patient considering Roga avastha and Rogibala	3	Experiential- Learning5.1	PSY- ADT	Does	D-BED
CO1,CO5	Justify the selection of Medicines and procedures in Trishna patient, considering the Avastha of Roga and bala of Rogi through clinical reasoning and evidence based Ayurvedic Principles.	3	Experiential- Learning5.2	AFT-VAL	Does	CD
CO1,CO7	Interpret research data from peer-reviewed journals to justify the selection of drugs and procedures for evidence-based Ayurvedic practice."	2	Experiential- Learning5.3	CE	Does	PAL,JC

CO1,CO2,C O5	Analyze the Samprapti Ghataka and Dosha involvement in Trishna and construct a treatment plan including Ahara, Vihara, and Aushadha.	2	Experiential- Learning5.4	PSY- ORG	Does	PSM,D- BED
Unit 2 Shotha and conventional correlation - Shotha (SP91) - Peripheral oedema, pulmonary oedema, cerebral oedema, lymphedema, angioedema, malnutritional oedema, and DVT References: 1,3,8,14,16						
3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teachin g Learning Methods
CO1,CO2	Discuss and summarize Shotha with reference to Nidanpanchak, Samprapti vighatan, Bheda, Avastha and Upadrava	1	Lecture	CAP	Knows-how	L&PPT
CO1,CO2	Illustrate the Chikitsasutra for Shotha, including Samanya Chikitsa, Vishista Chikitsa (Shodhana, Shamana, Anupana, Rasayana) and Sadhyasadhyata	1	Lecture	CAP	Knows-how	BL,L&PP T
CO1,CO2,C O5	Demonstrate the clinical significance, identify risk factors, recognize potential complications, and differentiate oedema from other causes of swelling through structured clinical assessment	2	Practical5.4	PSY- GUD	Shows-how	CD,D- BED
CO1,CO2,C O5	Classify the types of oedema - peripheral oedema, pulmonary oedema, cerebral oedema, lymphedema, angioedema, malnutritional oedema, and DVT	1	Lecture	CAP	Knows-how	L&PPT
CO1,CO2,C O5	Examine a case of edema by identifying the underlying diagnosis, possible complications, and formulating management principles from both modern and	2	Experiential- Learning5.5	PSY- ORG	Does	CBL

	Ayurvedic perspectives, including Nidana, Samprapti, Bheda, and Chikitsa Siddhanta.					
CO1,CO2,C O5	Demonstrate Roga-Rogi Pareeksha in a patient presenting with Shotha, using classical Ayurvedic examination parameters such as Dashavidha and Dvadashavidha Pareeksha to formulate a preliminary diagnosis and management approach.	2	Practical5.5	PSY- GUD	Shows-how	D-BED
CO1,CO2,C O5,CO7	Demonstrate individualized treatment protocols of Shotha with appropriate Ayurvedic medicines, prescriptions, and Pathya–Apathya based on the specific Avastha (stage) of the Roga and the condition of the Rogi	2	Practical5.6	PSY- GUD	Shows-how	CBL,C_L
CO1,CO2,C O5	Demonstrate the prevention and management strategies for various types of oedema, including dietary, pharmacological, and physical interventions tailored to the underlying cause."	2	Practical5.7	PSY- GUD	Shows-how	CBL,PBL
CO1,CO2,C O8	Identify types of oedema through physical examination and apply a diagnostic approach based on clinical presentation and history.	2	Experiential- Learning5.6	PSY- ORG	Shows-how	D-BED

Unit 3 Water and electrolyte imbalance

- Water and electrolyte imbalance(Jaliyovidyutansha vaishamya)
- Systemic acidosis & alkalosis
- Assessment of electrolyte panel like Alpaksarah (hyponatremia), Alpadahatuh (hypokalemia), Alpabhasvarah (hypophosphatemia), Alpabhrajatuh (hypomagnesemia), Alpasudhah (hypocalcemia), Praksarah (hypernatremia), Pradahatuh (hyperkalemia), Prabhasvarah (hyperphosphatemia), Prabhrajatuh (hypermagnesemia) and Prasudhah (hypercalcemia)

References: 15,16,23,40,42

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teachin g Learning Methods
CO1,CO2,C O3	Describe the mechanisms and variables influencing of water and electrolyte imbalances	1	Lecture	CAN	Knows-how	LRI,L&P PT
CO1,CO2,C O3	Discuss the types of fluid imbalances, clinical features and its management	1	Lecture	CAP	Knows-how	FC
CO1,CO2	Demonstrate clinical skills in managing fluid and electrolyte disturbances through appropriate selection and administration of fluids and electrolytes	2	Practical5.8	PSY- GUD	Shows-how	D-BED
CO1,CO2,C O3,CO5	Diagnose and stabilize patients presenting with acute manifestations of fluid and electrolyte disorders in a clinical or simulated setting	2	Experiential- Learning5.7	PSY- ORG	Does	D-M,D- BED
CO1,CO2,C O3,CO5	Demonstrate different etiologies and clinical manifestations of key electrolyte imbalances and propose context-appropriate management plans.	2	Practical5.9	PSY- GUD	Shows-how	D- M,CBL,C _L
CO1,CO3	Interpret diagnostic tests and laboratory values to identify and evaluate fluid and electrolyte imbalances, and correlate them with clinical presentations for accurate diagnosis and management	2	Experiential- Learning5.8	PSY- ADT	Does	CBL,PBL ,DIS
CO1,CO3	Discuss and differentiate the causes, types and clinical features of systemic acidosis and alkalosis	1	Lecture	CAP	Knows-how	FC
CO1,CO2	Evaluate acid-base disorders through analysis of diagnostic reports and formulate an initial clinical impression with rationale.	2	Experiential- Learning5.9	PSY- ADT	Shows-how	CBL
CO1,CO2,C O3	Assess and distinguish between the different forms of acid-base imbalance using ABG interpretation and clinical correlation, and justify targeted interventions.	2	Practical5.1 0	PSY- GUD	Shows-how	D- BED,CB L

CO1,CO2	Demonstrate the ability to interpret electrolyte values in varied clinical settings and formulate corresponding treatment plans.	2	Practical5.1 1	PSY- GUD	Shows-how	CBL
CO1,CO2	Interpret electrolyte panel findings to identify underlying clinical disorders and justify therapeutic interventions based on the imbalances observed.	2	Experiential- Learning5.1 0	PSY- ORG	Does	CBL

Unit 4 Udararoga and conventional correlation

- Udararoga (SM32)
- Antravarodha (intestinal obstruction)
- Antraccheda (intestinal perforation)
- Jalodara (ascites)
- Yakritplihodara (hepatosplenomegaly)
- Abdominal paracentesis, ascitic fluid analysis, X-ray of abdomen, CECT scan of abdomen

References: 1,3,14

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teachin g Learning Methods
CO1,CO2,C O5	Describe Udara Roga with reference to Nidanpanchak, Samprapti vighatan, Bheda Avastha, Cikitsāsūtra, and Sapekhsya Nidan, sadhyasadyata.	2	Lecture	CAP	Knows-how	L&PPT ,FC
CO1,CO2,C O5	Design a management plan for Udara Roga by applying principles of general and specific treatments and judging the prognosis through Rogi-Roga Pariksha."	2	Practical5.1 2	PSY- ADT	Shows-how	D-BED

CO1,CO2,C O7	Formulate and demonstrate the preparation of an Ayurvedic prescription for Udara Roga, explaining the rationale behind each selected medicine and dietary advice."	2	Practical5.1 3	PSY- MEC	Shows-how	TBL,C_L, W
CO1,CO2,C O5	Justify the rational selection of drugs (Aushadha), procedures (Karma), and Pathya-Apathya (diet-lifestyle regimen) based on the bhedavastha (stage) of Roga and the Rogi bala (strength) by critically analyzing clinical conditions and formulating individualized treatment protocols."	2	Practical5.1 4	PSY- GUD	Shows-how	D-BED
CO1,CO2	Interpret Intestinal obstruction, its incidence, etiological factors and risk factors, pathophysiology, prognosis.	1	Lecture	CAP	Knows-how	L&PPT ,FC
CO1,CO2,C O3,CO7	Assess clinical evaluation, diagnostic interpretation, and acute care skills to manage intestinal obstruction efficiently in emergency scenarios.	2	Experiential- Learning5.1 1	CE	Knows-how	PBL
CO1,CO2,C O5	Demonstrate the clinical signs and symptoms of intestinal perforation and apply diagnostic criteria to differentiate it from other acute abdominal conditions	2	Practical5.1 5	PSY- GUD	Shows-how	CBL
CO1,CO2,C O5	Interpret laboratory and imaging findings to determine the severity, predict prognosis, and guide management in intestinal perforation cases.	2	Experiential- Learning5.1 2	CS	Knows-how	CD
CO1,CO2,C O5	Analyze clinical and imaging findings to accurately diagnose intestinal perforation and justify the chosen resuscitative and management strategies in simulated emergencies.	2	Experiential- Learning5.1 3	PSY- ADT	Does	CBL
CO1,CO2,C O5	Establish the principles and perform the interpretation of abdominal X-rays, and to identify indications, explain techniques, and interpret findings of CECT scans in abdominal pathologies through hands-on practice, image-based case discussions, and diagnostic simulations.	2	Experiential- Learning5.1 4	PSY- ADT	Shows-how	X-Ray

CO1,CO2,C O5	Discuss ascites, including its descriptive studies, etiology, pathophysiology, clinical features, and diagnostic criteria	1	Lecture	CAP	Knows-how	FC,L&PP T
CO1,CO2,C O5	Interpret the laboratory investigations, prognosis, complications, and management strategies for Ascites	3	Experiential- Learning5.1 5	PSY- ORG	Shows-how	D-BED
CO1,CO2,C O5	Perform abdominal paracentesis and illustrate the interpretation of ascitic fluid analysis in various clinical conditions through hands-on and case-based activities."	3	Experiential- Learning5.1 6	PSY- ADT	Does	CBL,D- BED
CO1,CO2,C O5	Describe Hepatosplenomegaly, focusing on its causes, pathophysiology, clinical features, and diagnostic criteria	2	Lecture	CAP	Knows-how	FC
CO1,CO2,C O5	Interpret relevant laboratory investigations, evaluate prognosis, recognize potential complications, and formulate appropriate integrative management strategies for a patient presenting with hepatosplenomegaly	3	Experiential- Learning5.1 7	PSY- MEC	Does	D- BED,LRI

Practical Training Activity

Practical Training 5.1 Diagnosis and application of principles of treatment for Trishna

Activities by Teacher :

1. Orient students to the clinical case and the objectives of the session.
2. Demonstrate Trividha and Dashavidha Pariksha on a real/simulated patient.
3. Explain interpretation of signs and symptoms of Trishnā from an Ayurvedic perspective.
4. Guide the identification of Dosha, Dushya, and Srotas involvement.
5. Illustrate how to correlate classical symptoms with underlying Samprapti.
6. Explain appropriate Ayurvedic investigations (e.g., Mutra Pariksha, Jihva Pariksha, Nadi Pariksha).
7. Facilitate case discussion and reflective questioning.
8. Provide feedback on student performance and clinical reasoning.

9. Summarize the clinical decision-making process.

Activities by Students :

1. Observe teacher demonstration of patient examination and questioning.
2. Individually perform Roga–Rogi Pariksha under supervision.
3. Take structured history including diet, lifestyle, and presenting complaint.
4. Identify clinical features of Trishnā (dryness, burning sensation, thirst type).
5. Analyze Dosha-Dushya-Srotas involvement based on findings.
6. Document findings using a clinical case sheet.
7. Suggest appropriate Ayurvedic diagnostic tools, like Mutra Pariksha, Nadi Pariksha.
8. Discuss differential diagnosis in group discussion.
9. Present their case analysis and justify the choice of investigation.
10. Reflect on learning outcomes and submit a summary report.

Practical Training 5.2 Analysing clinical signs, symptoms and investigation findings of a patient presenting with Trishna.**Teacher Activity**

1. Teacher demonstrates interpretation of investigation reports in a patient with Trishna.
2. Teacher explains diagnostic reasoning for Trishna with differential diagnosis through a case discussion and guide students in correlating Ayurvedic and contemporary findings during bedside clinical teaching.

Scholar's Activity

1. Scholars review and interpret investigation reports of a patient presenting with Trishna.
2. Scholars perform Roga-Rogi Pariksha and document relevant findings.
3. Scholar presents a differential diagnosis list with justification based on both Ayurvedic and contemporary understanding.
4. Scholars can be taken to IPD rounds and make to observe the diagnosis made by the consultant

Practical Training 5.3 Shodhana, Shamana and Pathyapathya recommendation for Trishna**Teacher Activity**

1. Teacher demonstrates clinical decision making in selecting Shodhana or Shamana Chikitsa based on the patient's condition and stage of Trishna.
2. Teacher explains how to assess Rogi Bala and Vyadhi avastha through real or simulated cases
3. Teacher guides students in preparing individualized treatment plans including Pathya Apathya.

Scholar Activity

1. Student assesses rogi bala and stage of trishna in a given patient or case scenario.
2. student prepares a treatment plan incorporating appropriate shodhana, Shamana and pathyapathya regimens
3. Student presents the rationale for the chosen treatment strategy in case presentations or group discussions.

Practical Training 5.4 Demonstration of clinical significance, risk factors, complications, differential diagnosis of oedema.

Teacher Activities:

1. Clinical Case Demonstration
 - Present real/simulated cases of oedema (e.g., pedal oedema, facial puffiness, ascites).
2. Explain Risk Factors and Etiologies
 - Discuss conditions like cardiac failure, nephrotic syndrome, liver cirrhosis, malnutrition.
3. Demonstrate Clinical Examination
 - Show techniques like:
 - Pitting test
 - Localized vs. generalized oedema identification
 - Associated signs (JVP, hepatomegaly, crackles, etc.)
4. Facilitate Differential Diagnosis Discussion
 - Guide students to distinguish oedema from abscess, lipoma, lymphadenopathy, etc.
5. Correlate Modern & Ayurvedic Views
 - Introduce Ayurvedic perspective (Shotha, Jalodara) and correlate Samprapti and Doshic involvement.
6. Ask Reflective Questions
 - Challenge students to reason why oedema presents differently in various systemic diseases.

Student Activities:

1. Perform Detailed History Taking
 - Focus on:

- Onset, duration
- Associated symptoms (dyspnea, oliguria, fatigue)
- Drug history, comorbidities
- 2. Conduct Physical Examination
 - Assess:
 - Site and grade of oedema
 - Systemic signs (lung sounds, heart sounds, abdomen)
- 3. Identify Risk Factors & Probable Causes
 - Based on examination and patient profile
- 4. List Complications
 - For example:
 - Pulmonary oedema
 - Skin breakdown
 - Ascites infection
- 5. Present Differential Diagnosis
 - Create tables comparing different causes (renal, cardiac, hepatic, nutritional)
- 6. Correlate Ayurvedic Principles
 - Explain Dosha-Dushya, Roga-Avastha, and suggest suitable Chikitsa approach
- 7. Submit Case Summary or Reflective Log
 - With findings, interpretation, and reasoning

Practical Training 5.5 Examination of Shotha patient

Teacher Activities:

1. Present a Case of Shotha
 - Provide real or simulated case of a patient with Shotha (e.g. due to Hridaya, Yakrit, or Shotha Roga).
2. Demonstrate Roga Pareeksha Techniques
 - Show how to examine the site, type, color, consistency, and distribution of Shotha (localized/generalized).
3. Explain Rogi Pareeksha Methods
 - Demonstrate Dashavidha Pareeksha (e.g., Prakriti, Vikriti, Agni, Bala, Satva, etc.) and their clinical application.
4. Highlight Dosha-Dushya Sammurchana and Samprapti
 - Correlate findings with pathogenesis and type of Shotha (Vataja, Pittaja, Kaphaja, etc.).
5. Discuss Differential Diagnosis
 - Compare Shotha with conditions like Pandu, Jalodara, etc., to help in differential diagnosis.

6. Give Feedback on Student Performance
 - Observe and correct student technique and interpretation.

Student Activities

1. Perform Roga Pareeksha
 - Examine the Shotha: observe site, palpate for pitting/non-pitting, tenderness, warmth, and symmetry.
2. Conduct Rogi Pareeksha
 - Assess Prakriti, Agni, Bala, Satva, and other Dashavidha parameters.
3. Document Findings Systematically
 - Record Roga-Rogi Pareeksha findings in a clinical format.
4. Analyze Samprapti
 - Identify Dosha-Dushya involved, Srotodushti type, and stage of the disease.
5. Classify Shotha Type
 - Determine whether it's Nija or Agantuja, and Dosha-specific classification.
6. Present a Diagnostic Summary
 - Share findings, differential diagnosis, and tentative treatment approach in group or class discussion.

Practical Training 5.6 Treatment protocols with appropriate Ayurvedic medicines, prescriptions, and Pathya–Apathya based on the specific Avastha (stage) of the Roga and the condition of the Rogi of Shotha

Activities by Teacher:

1. **Case Demonstration**
 - Present a patient with Shotha (real/standardized patient or simulation mannequin).
 - Show examination – palpation for pitting/non-pitting, temperature, skin changes.
2. **Dosha & Avastha Assessment**
 - Demonstrate identification of Ama vs Nirama Lakshan.
 - Correlate with classical references (Charaka, Sushruta).
3. **Prescription Writing**
 - Show proper format for Ayurvedic prescriptions with Aushadha, Matra, Anupana.
4. **Pathya–Apathya Counselling**
 - Demonstrate diet advice with reasoning.

Activities by Students:

1. History Taking & Examination

- Practice eliciting onset, cause, diet history, systemic illness history.

2. Identify Avastha & Dosha Dominance

- Fill diagnostic format (Rogi–Roga Pareeksha).

3. Formulate Individualized Protocol

- Select medicines, Kriyakarmas, diet as per patient condition.

4. Role Play Counselling

- Practice explaining Pathya–Apathya to a patient in simple language.

5. Prescription Writing Drill

- Prepare at least two prescriptions for different Shotha stages.

Practical Training 5.7 Demonstration on prevention and management strategies for different types of oedema

Teacher Activities:

1. Present Real/Simulated Cases

- Provide case scenarios for cardiac, renal, hepatic, and nutritional oedema.

2. Demonstrate Examination Techniques

- Show how to assess pitting/non-pitting oedema, measure limb girth, and grade severity.

1. Explain Cause-Based Management

- Discuss cause-specific treatments:

- Diuretics for cardiac oedema
- Salt/protein correction in nephrotic/hepatic oedema
- Physical therapy for lymphedema

3. Highlight Preventive Measures

- Explain lifestyle, posture, diet, fluid/salt management, and compliance monitoring.

4. Facilitate Student Demonstrations

- Guide students through supervised practicals on assessment and management techniques.

5. Provide Visual Aids

- Use charts, flow diagrams, and videos on oedema types and their management.

Student Activities :

1. Case-Based Bedside Examination
 - Examine oedema, grade it, document findings, and interpret causes.
2. Create Cause-Specific Management Plans
 - Propose evidence-based treatment plans (e.g., fluid restriction for renal oedema).
3. Demonstrate Non-Pharmacological Interventions
 - Practice leg elevation, use of compression stockings, patient counselling.
4. Role-Play Patient Education
 - Explain salt intake limits, medication adherence, and warning signs to a mock patient.
5. Interpret Investigation Results
 - Analyze reports (serum albumin, urine protein, LFT, echocardiogram) to support diagnosis.
6. Peer Feedback & Reflection
 - Present and receive feedback on assessment technique, treatment rationale, and communication.

Practical Training 5.8 Water and Electrolyte imbalance management

Teacher Activities:

1. Set Up IV Fluid Administration Skill Station
 - Prepare IV setups (normal saline, Ringer's lactate, etc.) for demonstration and hands-on student practice.
2. Demonstrate Fluid Selection Based on Case Scenarios
 - Use different clinical situations (e.g., hypovolemia, DKA, hyponatremia) and explain fluid choice, rate, and route.
3. Present Real/Simulated Case Vignettes
 - Guide students through patient case studies with lab values (e.g., serum sodium, potassium, osmolality).
4. Facilitate Decision-Making Flowcharts
 - Help students build visual aids for when to use crystalloids, colloids, or specific electrolyte replacements.
5. Live Demonstration of ORS Preparation and Use
 - Show the correct composition and administration for ORS in dehydration cases.
6. Provide Performance Feedback
 - Observe students during practice and give formative feedback on technique and clinical reasoning.

Student Activities:

1. Hands-On IV Fluid Administration Practice
 - Practice inserting IV lines, setting up fluids, adjusting drip rates using manikins or skill dummies.
2. Case-Based Fluid Prescription Writing
 - Write prescriptions including fluid type, volume, rate, and duration based on patient data.

3. Electrolyte Correction Chart Preparation
 - Create a quick-reference chart for correcting hypo/hyponatremia, kalemia, etc., with dosages and precautions.
4. Simulated Patient Assessment
 - Perform mock clinical exams to identify signs of fluid imbalance (e.g., skin turgor, BP changes, edema).
5. Role-Play Communication Skills
 - Practice explaining fluid/electrolyte therapy plans to a “patient” or team members during simulated rounds.
6. Debrief and Reflection
 - Reflect on what they did correctly or missed during simulations and write action points for improvement.

Practical Training 5.9 Management of electrolyte imbalances

Teacher Activities:

1. Introduce Real/Simulated Case Scenarios
 - Provide clinical vignettes of patients with electrolyte imbalances (e.g., vomiting-induced hypokalemia, renal failure-related hyperkalemia).
2. Demonstrate Interpretation of Lab Reports
 - Walk students through sample electrolyte panels, ABG, urine electrolytes, and correlate with signs/symptoms.
3. Facilitate Group-Based Differential Diagnosis
 - Guide case discussion with prompts to elicit differences in etiology, severity, and approach for each condition.
4. Create Matching Activities or Flow Charts
 - Use matching exercises to pair signs/symptoms with the correct electrolyte disorder.
5. Simulated Emergency Management Sessions
 - Lead drills on how to rapidly respond to dangerous electrolyte disturbances (e.g., IV calcium for hyperkalemia-induced ECG changes).
6. Debrief and Clarify Misconceptions
 - Conduct short review sessions to reinforce key takeaways and correct misunderstandings.

Student Activities:

1. Case Analysis in Small Groups
 - Review multiple patient cases with lab data; identify the electrolyte disorder, underlying cause, and plan management.
2. Symptom-Etiology Correlation Chart
 - Prepare a chart/table mapping clinical symptoms to their likely electrolyte imbalances and underlying causes.
3. Role-Play Clinical Interviews
 - Take patient history and perform simulated examinations relevant to electrolyte disorders (e.g., muscle cramps, arrhythmias).

4. Treatment Planning Exercises
 - Write or discuss treatment plans including fluid/electrolyte correction, monitoring, and dietary advice.
5. Peer Teaching Presentations
 - Present one electrolyte disorder (e.g., hyponatremia) to peers, covering etiology, signs, lab values, and treatment.
6. Quiz/Game-Based Review
 - Participate in interactive formats like “electrolyte jeopardy” or MCQ-based Kahoot sessions for active recall.

Practical Training 5.10 Diagnosis and management approach to systemic acidosis and alkalosis

Activities by the Teacher

1. Brief Interactive Lecture
 - Explain the types of acidosis/alkalosis (metabolic vs respiratory), causes, and compensatory mechanisms.
2. ABG Interpretation Demonstration
 - Show step-by-step method to analyze arterial blood gas reports (pH, pCO₂, HCO₃⁻).
3. Case Presentation
 - Present real or simulated clinical cases of acid-base imbalance (e.g., diabetic ketoacidosis, COPD, vomiting-induced alkalosis).
4. Diagnostic Algorithm Sharing
 - Provide handouts or charts showing differential diagnosis based on ABG and clinical signs.
5. Facilitate Group Discussion
 - Pose questions, guide interpretation, and challenge reasoning.
6. Simulation or Role-play
 - Organize simulation for critical care situations (e.g., emergency management of lactic acidosis).
7. Feedback & Assessment
 - Review students' case interpretations and suggest improvements.

Activities by the Student

1. Interpret ABG Reports
 - Practice analyzing ABG samples from different cases with acid-base disorders.
2. Identify Type of Disorder
 - Classify as metabolic/respiratory, compensated/uncompensated, mixed vs simple disorders.
3. Correlate with Clinical Findings
 - Match lab data with patient symptoms and history.
4. Develop Differential Diagnosis
 - List possible causes (e.g., renal failure, diarrhea, salicylate toxicity).

5. Propose Management Plans
 - Suggest acute and long-term treatment options (fluids, bicarbonate, ventilation support, etc.).
6. Participate in Peer Review
 - Present cases and evaluate each other's interpretations.
7. Create a Quick Reference Tool
 - Develop a chart summarizing acid-base disorders with key diagnostic and treatment points.

Practical Training 5.11 Interpretation of key electrolyte imbalances

Activities by the Teacher

1. Introduce Real/Simulated Lab Reports
 - Provide electrolyte panel printouts (with varied Na^+ , K^+ , Cl^- , HCO_3^- , Ca^{2+} , Mg^{2+} values).
2. Demonstrate Interpretation Method
 - Teach step-wise analysis: identifying abnormalities, linking to pathophysiology and understanding urgency.
3. Explain Clinical Correlation
 - Discuss how specific imbalances manifest (e.g. hypokalemia → muscle weakness, ECG changes).
4. Facilitate Group Problem Solving
 - Guide students through case discussions or mini-problems in small groups.
5. Conduct Mini OSCE/Quiz
 - Test interpretation skills through rapid assessment stations.
6. Give Constructive Feedback
 - Evaluate student analysis and provide corrections or advanced insights.

Activities by the Student

1. Review and Interpret Lab Panels
 - Practice assessing various electrolyte panel reports and drawing diagnostic conclusions.
2. Identify Underlying Conditions
 - Correlate abnormal values with possible clinical conditions (e.g. metabolic acidosis, dehydration, renal failure).
3. Formulate Treatment Plans
 - Suggest initial and follow-up management for observed imbalances.
4. Engage in Group Discussion
 - Present interpretations and defend clinical reasoning among peers.
5. Prepare Quick-Reference Charts
 - Create tables summarizing key electrolytes, normal ranges, clinical signs of imbalance, and treatments.

6. Participate in Case Simulation
 - React to a simulated emergency (e.g. hyperkalemia crisis) and manage accordingly.
7. Reflect on Learning
 - Write a short log on how the exercise improved diagnostic skills.

Practical Training 5.12 Udara roga diagnosis and management

Activities of the Teacher

1. Case Introduction
 - Present a real/simulated case of Udara Roga with clinical findings.
2. Explain Chikitsa Framework
 - Discuss Samanya and Vishista Chikitsa from classical texts (Charaka, Ashtanga Hridaya, etc.).
3. Demonstrate Assessment of Sadhyasadyata
 - Teach students how to evaluate prognosis using Rogi & Roga Bala, Dusyadi Pariksha.
4. Treatment Planning Demonstration
 - Model how to select appropriate Shodhana (e.g., Virechana, Niruha Basti), Shamana drugs, Anupana, and supportive therapies.
5. Interactive Discussion on Variants
 - Facilitate discussion on various types like Jalodara, Yakritodara, Pleehodara, etc., and their specific protocols.
6. Feedback on Student Presentations
 - Provide structured critique on students' treatment plans and prognostic analysis.

Activities of the Student

1. Clinical Case Analysis
 - Examine the presented case and identify type of Udara Roga based on Lakshanas.
2. Design a Chikitsa Protocol
 - Create a complete management plan including:
 - Samanya Chikitsa
 - Shodhana therapy (if indicated)
 - Shamana drugs (with rationale)
 - Anupana and Kala
 - Diet & lifestyle (Pathyapathya)
3. Evaluate Sadhyasadyata
 - Perform Rogi and Roga bala assessment and justify whether the condition is Sadhya, Kashtasadya, or Asadya.

4. Group Discussion / Peer Learning
 - Present their plan and compare with peers to refine the clinical decision-making process.
5. Prescription Drafting
 - Write an ideal Ayurvedic prescription with all standard components.
6. Reflection Activity
 - Write a short reflection on how classical principles guided their protocol formulation.
7. Chart/Flowchart Preparation
 - Develop a visual summary of the chikitsa plan and prognosis markers.

Practical Training 5.13 Treatment protocol preparation for Udara

Activities to be Done by the Teacher

1. Brief Review of Udara Roga Types
 - Explain Samanya Lakshana and classification (like Jalodara, Yakritodara, Pleehodara, etc.).
2. Demonstrate Case-Based Learning
 - Present one or two clinical cases with patient history and examination findings.
3. Discuss Classical References
 - Explain chikitsa sutras from *Charaka*, *Sushruta*, *Ashtanga Hridaya*, etc.
4. Explain Drug Selection Rationale
 - Teach how to choose Shodhana, Shamana, and supportive medicines according to Roga & Rogi bala.
5. Show Prescription Format
 - Guide students in writing a proper Ayurvedic prescription (Anupana, Matra, Kala, Aushadha name).
6. Explain Pathya–Apathya Concepts
 - Discuss classical & practical diet/lifestyle advice with do's and don'ts.
7. Facilitate Group Discussion
 - Moderate students in comparing different treatment plans and prescriptions.

Activities to be Done by Students

1. Analyze Given Case Scenario
 - Read and interpret patient symptoms, clinical findings, and assess type of Udara Roga.
2. Formulate a Treatment Protocol
 - Create a detailed plan: Shodhana, Shamana, and Rasayana (if applicable).
3. Prepare a Model Prescription
 - Include medicine names, dose, Anupana, timings, and rationale for each.

4. List Pathya–Apathya Items
 - Make a diet and lifestyle chart for patients based on classics and patient needs.
5. Present the Case and Justify Plan
 - Orally present treatment and defend choice of drugs and procedures.
6. Peer Review of Prescriptions
 - Exchange prescriptions with peers for feedback and constructive discussion.
7. Reflective Note Writing
 - Write a brief reflection on the treatment protocol and how it applies in real patient settings.

Practical Training 5.14 Selection of drugs and procedures for Udara patient based on different stages

Activities for the Teacher

1. Orientation Lecture: Explain the concept of Bhedavastha, Rogi bala, and their clinical significance. Use clinical examples and classical references (e.g., *Charaka*, *Madhava Nidana*).
2. Case-Based Discussion (CBD) Present 2–3 patient cases in different stages of disease (e.g., Prakopa vs. Bheda) and moderate a discussion on differential treatment approach.
3. Demonstration Demonstrate assessment of Rogi bala, Nadi pariksha, and selection of therapy (e.g., when to choose Vamana or Shamana).
4. Chart/Flow Diagram Explanation Display charts showing drug, procedure, and Pathya selection at each stage (Sanchaya to Bheda).
5. Evaluation Setup Create a rubric-based assessment for student presentations and clinical justification activities.

Activities for the student

1. Clinical Case Analysis Analyze real or simulated cases, identify the Bhedavastha, assess Rogi bala, and propose justified treatment plans
2. Group Activity In small groups, prepare treatment protocols for given bhedavastha stages, justifying Aushadha, Karma, and Pathya-Apathya
3. Role-Play Act as physician-patient in a scenario: assess the patient and explain reasoning for chosen treatments.
4. Seminar/Presentation Prepare a 5–10 min presentation on stage-specific treatment, including classical reference justification.
5. Reflective Writing Write a short clinical reflection or learning log on how understanding bhedavastha guided rational treatment decisions.

Activities for the Teacher

- 1. Symptom Walkthrough** Use a mannequin or standardized patient to demonstrate **classic signs** of intestinal perforation (e.g., sudden pain, guarding, absent bowel sounds, rigidity).
- 2. Clinical Scenario Presentation** Provide **short case vignettes** of various acute abdomen causes (e.g., appendicitis, perforation, pancreatitis, obstruction) for comparison.
- 3. Diagnostic Criteria Teaching** Explain diagnostic criteria for perforation (e.g., X-ray showing free air, rebound tenderness, sepsis markers, peritonitis signs).
- 4. Imaging Demonstration** Show abdominal **X-rays and CT images** indicating free gas under diaphragm and other signs of perforation vs. other pathologies.
- 5. Differential Diagnosis Table** Provide a **comparison table**: perforation vs. obstruction vs. appendicitis vs. pancreatitis based on onset, site, pain type, labs.
- 6. Clinical Reasoning Prompting** Ask guiding questions during student demonstrations to **stimulate diagnostic reasoning** (e.g., “What rules out obstruction here?”).

Activities for the PG Scholar

- 1. Physical Exam Practice** Perform **abdominal examination** on a mannequin/peer/simulator showing clinical signs like guarding, rigidity, and rebound tenderness.
- 2. Symptom Analysis Drill** Identify and **list classical symptoms** of perforation and distinguish them from other causes of acute abdomen.
- 3. Diagnostic Matching** Match **radiological and clinical findings** with diagnoses (e.g., free air → perforation; air-fluid levels → obstruction).

- 4. Case Differentiation Activity** Participate in **group discussion or role-play** where each student presents a case and peers must differentiate the diagnosis.
- 5. Image Spotting Quiz** Take part in a **spot diagnosis round** using X-ray and CT images (identify Rigler's sign, air under diaphragm, bowel gas patterns).
- 6. Summary Chart Preparation** Create a **summary table or flowchart** comparing 3–4 causes of acute abdomen (based on symptoms, signs, imaging, and labs).
- 7. Clinical Reflection Log** Write a short **reflection** on what signs/symptoms led them to suspect perforation in a simulated case and how it differed from others.

Experiential Learning Activity

Experiential-Learning Learning 5.1: Treatment protocol generation of a case of Trishna

Teacher Activity

1. Facilitates clinical exposure or simulation where students interact with a patient or detailed case of Trishna.
2. Demonstrate clinical reasoning by correlating Roga Avastha and Rogi bala in decision making.
3. provides feedback on treatment protocols prepared by students, focusing on individualized Ayurvedic management.

Student activity

1. Assesses the stage of Trishna and evaluates Rogi bala during clinical or simulated patient interaction.
2. generates and presents a detailed treatment plan, including Shodhana, Shamana, Pathyapathya as per assessment.
3. Reflects on clinical decisions through case logbook entries or peer discussions.

Experiential-Learning Learning 5.2: Management plan for patient of Trishna

Teachers Activity

1. Present a real or simulated case of Trishna with varying Roga avastha and Rogi bala.
2. Guide students in analyzing clinical findings using Ayurvedic diagnostic principles.
3. Facilitate discussions on differential diagnosis and individualized treatment planning.
4. Provide literature references to support decision making.

5. Monitor student justification of medicine and procedure selection with rationale.

Student Activity

1. Take patient history and conduct Roga Rogi Parikhsa.
2. Identify the stage of disease and strength of the patient.
3. Propose appropriate Sodhana, Samana and pathyapathya protocols
4. Justify choices using classical Ayurvedic texts and clinical logic.
5. Present findings and treatment plan to peers and mentor with defense of each decision.

Experiential-Learning Learning 5.3: Research updates on Trishna

Teacher Activities:

1. **Orientation on Literature Search**
 - Introduce students to databases like PubMed, AYUSH Research Portal, Scopus, and J-AIM.
2. **Demonstrate Critical Appraisal**
 - Explain how to evaluate research articles using tools like CASP or PRISMA checklists.
3. **Provide Condition-Specific Focus**
 - Assign diseases (e.g., Prameha, Amavata, IBS, Gridhrasi) and guide search criteria.
4. **Conduct Journal Clubs**
 - Moderate student presentations on research papers related to Ayurvedic protocols.
5. **Supervise Protocol Drafting Sessions**
 - Help refine clinical protocols and ensure alignment with classical and evidence-based knowledge.

Student Activities:

1. **Search and Select Articles**
 - Identify relevant indexed journal articles supporting Ayurvedic treatments.
2. **Appraise and Summarize**
 - Critically analyze methodology, outcomes, and relevance of each study.
3. **Extract Validated Treatment Data**
 - Compile drugs, formulations, procedures, dose, duration, and outcomes from studies.
4. **Develop Integrated Protocols**
 - Draft a disease-wise protocol including:
 - Evidence-based Ayurvedic medicines

- Indications and contraindications
- Pathya–Apathya and procedures

5. Presentation and Peer Review

– Present findings and protocols in class with journal references for group critique.

6. Reflection and Documentation

– Maintain a learning journal with insights, limitations, and practical applications.

Experiential-Learning Learning 5.4: Mapping of causes and Ayurvedic guidelines for management of Trishna

Teacher Activities:

1. Case-Based Discussion

– Present varied cases showing Trisna in different clinical contexts (e.g., fever, diabetes, dehydration, pittaja vyadhi).

2. Interactive Chart Mapping

– Guide students to create a chart mapping:

- Dosha involvement
- Nidana (causes)
- Samprapti
- Lakshana
- Chikitsa

3. Demonstrate Diagnostic Thinking

– Walk through Ayurvedic diagnostic reasoning using real/simulated patient profiles.

4. Facilitate Correlation

– Encourage linking modern causes (like electrolyte imbalance) with Ayurvedic interpretations (e.g., pittaja, dhatukshaya, agni dusti).

5. Assign Group Work

– Divide students to develop management protocols (Shamana, Shodhana, Aahara, Pathya) for specific Trisna types.

Student (PG Scholar) Activities:

1. Case Reflection Exercise

– Observe or assess patients with Trisna and record:

- Dosha predominance
- Nidana
- Samprapti
- Bala & Rogibala assessment

2. **Dosha Mapping Activity**

– Classify causes and Trisna types (Vataja, Pittaja, Kaphaja, Sannipataja, Agantuja).

3. **Formulate Management Plan**

– Include:

- Aushadhi (e.g., Usheerasava, Chandanasava)
- Aahara & Vihara recommendations
- Indications for Shodhana (if any)

4. **Clinical Skill Practice**

– Practice Nadi Pariksha, Jihwa Pariksha, and Prashna techniques to evaluate Trisna.

5. **Peer Teaching**

– Present their findings and treatment protocol to peers for critique and discussion.

6. **Feedback & Self-Assessment**

– Fill reflective logbook entries on their diagnostic clarity and understanding of Ayurvedic management.

Experiential-Learning Learning 5.5: Handling case of edema

Teacher Activities:

1. Present a Real or Simulated Case of Edema
 - Include detailed history, clinical signs, lab reports, and Ayurvedic aspects like Nidana and Samprapti.
2. Facilitate Guided Case Discussion
 - Lead students through the process of evaluating the case from both modern and Ayurvedic viewpoints.
3. Demonstrate Clinical Examination Techniques
 - Show pitting test, systemic examination, and Dashavidha Rogi Pareeksha.
4. Encourage Integrative Thinking
 - Ask students to map allopathic diagnoses (like CHF, nephrotic syndrome) to Ayurvedic entities (like Jalodara, Shotha).
5. Provide Feedback
 - Correct misconceptions and enhance their clinical reasoning.
6. Assign Case-Based Tasks or Reflections
 - For example, ask students to compare two types of edema cases from different etiologies.

Student Activities

1. Take Complete History and Perform Examination
 - Include Nidan Panchaka, Prakriti Pareeksha, Dashavidha & Dvadasha Rogi Pareeksha.
2. Analyze Investigations and Lab Reports
 - Electrolytes, urine analysis, serum albumin, imaging, etc.
3. Identify Diagnosis and Complications
 - E.g., edema due to nephrotic syndrome vs. liver cirrhosis with potential complications.
4. Map Ayurvedic Diagnosis
 - Identify Dosha-Dushya involvement, Srotodushti, and Samprapti.
5. Formulate Integrated Management Plan
 - Include Shodhana/Shamana, appropriate herbs, classical formulations, Pathya–Apathya.
6. Present Case Summary with Justification
 - Explain the rationale of the diagnosis and management.
7. Reflect and Discuss
 - Participate in group reflections or viva-type discussions to justify their decisions.

Experiential-Learning Learning 5.6: Discussion at bedside on the gradation, diagnostic approach of oedema.

Teacher Activities:

1. Prepare a Bedside Clinical Case
 - Select real or simulated patients with visible oedema (e.g., renal, cardiac, hepatic causes).
2. Demonstrate Oedema Grading
 - Show how to assess pitting oedema (0 to +4 scale), non-pitting oedema, and location-based differences (pedal, facial, ascitic, etc.).
3. Explain the Diagnostic Flow
 - Discuss differential diagnoses based on site, symmetry, systemic symptoms, and duration.
4. Guide Focused Bedside History-Taking
 - Encourage identifying relevant history (e.g., heart failure, nephrotic syndrome, cirrhosis).
5. Correlate with Labs/Imaging
 - Present lab results (e.g., serum albumin, creatinine, BNP) and imaging to reinforce diagnostic reasoning.
6. Facilitate Peer-Learning
 - Encourage group discussion and interaction around findings.

Student Activities:

1. Perform Physical Examination
 - Practice oedema palpation and grading on real/simulated patients under supervision.
2. Take Targeted History
 - Elicit relevant symptoms and comorbidities (e.g., dyspnea, weight gain, reduced urine output).
3. Identify Pattern and Type
 - Differentiate between localized vs generalized oedema and link it with systemic involvement.
4. Suggest Investigations
 - Propose a panel of investigations (urine protein, LFT, echocardiogram, etc.).
5. Present Bedside Case
 - Present summary findings with provisional diagnosis and rationale.
6. Reflect on Clinical Reasoning
 - Discuss what signs led them to suspect a particular cause and what they might have missed.

Experiential-Learning Learning 5.7: Assessment and emergency management of fluid and electrolyte imbalance

Teacher Activities:

1. Set Up Simulation Stations
 - Create mock emergency scenarios (e.g., cardiac arrest from hyperkalemia, seizure from hyponatremia) with mannequins or standardized patients.
2. Demonstrate Emergency Protocols
 - Show IV correction procedures, ECG interpretation, use of emergency medications (e.g., calcium gluconate, insulin with glucose, saline infusion).
3. Facilitate Group-Based Case Discussions
 - Use real or hypothetical cases with lab reports for guided diagnosis and treatment planning.
4. Provide Diagnostic Worksheets
 - Give structured templates for students to interpret labs and assess severity of imbalances.
5. Monitor and Debrief Simulation Drills
 - Observe student response during simulations and conduct reflective debriefing sessions.
6. Invite Expert Talks / Emergency Physicians
 - Facilitate short workshops by specialists to share real-life critical cases and practical insights.

Student Activities:

1. Participate in Emergency Simulations
 - Actively assess and manage simulated patients with acute fluid-electrolyte disturbances.

2. Interpret Emergency Lab Reports
 - Review and analyze ABG, serum electrolytes, ECG changes related to disturbances (e.g., peaked T-waves in hyperkalemia).
3. Decision-Making Flowchart Creation
 - Create rapid assessment and treatment flowcharts for each condition (e.g., "What to do in acute hyponatremia with seizures").
4. Perform Role Plays
 - Role-play patient, emergency physician, or nurse to practice teamwork and communication during crises.
5. Write Emergency Prescriptions
 - Draft prescriptions including drug name, dose, route, and rationale for emergency correction of imbalances.
6. Reflective Log Book Entry
 - Maintain reflective records of what they learned during simulations or case-handling sessions.

Experiential-Learning Learning 5.8: Interpretation of diagnostic laboratory values

Teacher Activities :

1. Case-Based Introduction
 - Present real or simulated case scenarios with lab reports showing fluid/electrolyte disturbances (e.g., hyponatremia, hyperkalemia, metabolic alkalosis).
2. Diagnostic Lab Walkthrough
 - Display and explain how to read and analyze a complete electrolyte panel and fluid balance sheet.
3. Demonstration Using Sim Charts or ABG Analyzer
 - Use virtual simulation tools or physical kits to mimic patient fluid changes and lab outcomes.
4. Trigger Discussions
 - Ask guided clinical reasoning questions like:
 “What condition could cause these lab values?”
 “Is this patient dehydrated or overloaded?”
5. Create Emergency Simulations
 - Set up mock drills where students receive lab values and must prioritize interventions (e.g., treat hyperkalemia urgently).
6. Provide Feedback and Clarification
 - Debrief after each simulation or group task, correcting misconceptions and emphasizing clinical red flags.

Student Activities

1. Hands-On Interpretation of Lab Data
 - Analyze diagnostic reports with real/simulated Na^+ , K^+ , Cl^- , Ca^{2+} , Mg^{2+} , BUN, creatinine, ABG, urine output data.

2. Group Diagnosis Task
 - Work in small groups to interpret provided cases and identify type of imbalance (e.g., isotonic dehydration, SIADH, DKA).
3. Role-Play as Emergency Physicians
 - Receive evolving lab data in a time-sensitive clinical case and make quick decisions on fluid and drug therapy.
4. Create Diagnostic Flowcharts
 - Summarize interpretation strategies into decision trees for specific electrolyte disorders.
5. Simulated Patient Communication
 - Practice explaining the diagnosis and management plan to a simulated patient or caregiver.
6. Reflection & Peer Feedback
 - Document a reflective journal entry on one case and discuss it in pairs or small groups.

Experiential-Learning Learning 5.9: Assessment of Acidosis and Alkalosis

Teacher Activities

1. Set the Clinical Context
 - Present brief, case-based patient scenarios with relevant ABG and electrolyte reports.
2. Facilitate Hands-On ABG Interpretation
 - Guide the students through real-time analysis using a whiteboard or digital ABG simulator.
3. Discuss Interpretation Framework
 - Introduce a structured step-wise approach:
 - a. pH assessment
 - b. $\text{CO}_2/\text{HCO}_3^-$ comparison
 - c. Anion gap analysis
 - d. Compensation check
4. Encourage Hypothesis Building
 - Ask probing questions:
 - “What’s your clinical impression?”
 - “What does this result suggest about the primary pathology?”
5. Conduct Small Group Workshops
 - Organize students into groups to work through diverse cases and present findings.
6. Provide Immediate Feedback
 - Evaluate responses and correct reasoning errors in interpretation or diagnosis.
7. Summarize Key Takeaways
 - Reinforce learning points, common pitfalls, and real-life application.

Student Activities

1. Review Case Vignettes
 - Read and analyze provided clinical backgrounds and diagnostic lab reports.
2. Interpret ABG Values
 - Systematically identify acid-base status, compensations, and potential mixed disorders.
3. Correlate with Clinical Findings
 - Link lab data with symptoms (e.g., confusion, tachypnea, vomiting).
4. Construct Clinical Impression
 - Formulate a working diagnosis (e.g., "Metabolic acidosis with partial respiratory compensation due to DKA").
5. Present and Defend Reasoning
 - Verbally explain diagnostic interpretation and justify rationale in group or class discussions.
6. Use Flowcharts or Diagnostic Aids
 - Apply acid-base interpretation tools and share charts developed collaboratively.
7. Participate in Simulation or Role Play
 - Act as a clinician receiving and responding to ABG findings in a simulated emergency setting.
8. Reflect on Learning
 - Write a short reflection or answer formative questions on what was learned and where improvement is needed.

Experiential-Learning Learning 5.10: Approach to electrolyte imbalance and its consequences

Activities by the Teacher

1. Case-Based Scenario Presentation
 - Introduce clinical cases with electrolyte abnormalities (e.g., hyponatremia, hyperkalemia).
2. Lab Report Interpretation Demonstration
 - Walk through actual/simulated electrolyte panel reports explaining normal ranges, deviations, and implications.
3. Explain Clinical Correlation
 - Link electrolyte imbalances to symptoms (e.g., confusion in hyponatremia, arrhythmia in hyperkalemia).
4. Decision-Making Flowchart
 - Provide a visual decision-making guide for interpreting and managing electrolyte imbalances.
5. Role Play / Simulation Setup
 - Create simulated patient scenarios requiring quick interpretation and management (e.g., emergency management of hypokalemia).

6. Provide Feedback
 - Observe students' analysis and give structured feedback on diagnostic accuracy and treatment plans.

Activities by the Student

1. Interpret Electrolyte Panel Reports
 - Practice reading and explaining multiple lab results with varying electrolyte disturbances.
2. Diagnose Underlying Conditions
 - Correlate findings with possible causes: renal failure, dehydration, adrenal disorders, etc.
3. Formulate Management Plan
 - Propose treatment protocols (IV fluids, diuretics, electrolyte supplements, etc.) with justification.
4. Participate in Simulation Drills
 - Engage in emergency simulations (e.g., managing a patient with severe hyponatremia).
5. Peer-to-Peer Teaching
 - Present assigned case scenarios to peers and receive constructive feedback.
6. Prepare a Quick-Reference Chart
 - Create a chart/table summarizing symptoms, causes, and management of key electrolyte imbalances.
7. **Reflective Learning Log**
 - Write reflections on how their understanding of electrolyte interpretation impacts clinical judgment.

Experiential-Learning Learning 5.11: Medical management including emergency of a case of intestinal obstruction

Activities for the Teacher

- 1. Interactive Case Introduction** Present **simulated or real cases** of intestinal obstruction (e.g., small bowel, large bowel) with progressive symptoms
- 2. Demonstration of Clinical Skills** Demonstrate **abdominal examination** for obstruction (e.g., distension, visible peristalsis, tympany, bowel sounds).
- 3. Diagnostic Interpretation Session** Explain and review **X-rays (air-fluid levels), ultrasound, and CT findings** characteristic of obstruction

4. Emergency Management Algorithm Teach a **step-wise approach**: NPO status, NG tube insertion, fluid & electrolyte management, and when to refer for surgery.

5. Skill Station Setup Set up **simulation stations** for NG tube insertion, fluid resuscitation, and clinical decision-making.

6. OSCE/Checklist Preparation Design **checklists and scoring rubrics** for student evaluation in simulated emergency scenarios.

Activities for the Student

1. Clinical Examination Practice Practice **abdominal exam techniques**: inspection, auscultation, percussion, palpation in peer or mannequin simulation.

2. Diagnosis Simulation Interpret **radiological and lab findings** to diagnose obstruction type and level.

3. Emergency Management Drill Participate in a **mock emergency**: NG tube insertion, IV fluids, NPO order, electrolyte correction, vitals monitoring.

4. Case Presentation Present a case including **symptoms, examination findings, diagnostics, and management plan**.

5. Group Discussion Discuss complications like **strangulation, perforation, or hypovolemia** and the timeline for surgical referral

6. Logbook / Reflection Entry Write a **clinical reflection or logbook** entry of a simulated or real intestinal obstruction case.

7. Mini Viva or Spotter Quiz Answer spot questions on **X-ray interpretation, differential diagnosis, and emergency protocols**.

Experiential-Learning Learning 5.12: Elucidate the laboratory investigations, prognosis, complications, and management and rehabilitation strategies in patients with intestinal perforation.

Activities for the Teacher

1. **Clinical Case Introduction** Present diverse real or simulated cases of intestinal perforation (e.g., peptic, typhoid, ischemic) including lab results
2. **Lab Interpretation Demo** Explain key lab findings: leukocytosis, electrolyte imbalance, ABG changes, blood cultures, and sepsis markers.
3. **Prognosis Discussion** Introduce scoring systems (e.g., APACHE II, SOFA) and explain how to predict prognosis post-perforation.
4. **Complication Mapping** Use flowcharts or discussion to identify early and late complications (e.g., sepsis, peritonitis, paralytic ileus, adhesion).

5. **Rehabilitation Module** Teach rehabilitation principles: nutritional support, wound care, bowel rest, post-op physiotherapy, and psychosocial support.
6. **Case-based Teaching** Facilitate interactive group discussions on complete management including emergency, surgery, and post-op care.
7. **Evaluation Setup** Design OSCE or case-based assessments focused on integration of lab interpretation and management decisions.

Activities for the PG Scholar

1. **Lab Data Interpretation** Analyze **actual or simulated lab reports** (e.g., WBC, CRP, urea/creatinine, ABG) and interpret their clinical relevance
2. **Prognostic Scoring Exercise** Apply **prognostic tools** like SOFA or qSOFA to assigned case vignettes and predict outcomes.
3. **Complication Case Review** Study and present a case with **complications of perforation** and explain how they were managed.
4. **Management Planning** Develop and present a **stepwise management plan**, including preoperative, operative, and post-op care.
5. **Rehabilitation Planning** Create a **rehabilitation schedule** for a hypothetical post-op patient: nutrition, mobilization, stoma care (if any).
6. **Group Discussion or Debate** Participate in a group discussion on **surgical vs. conservative management** of certain perforations.
7. **Reflective Logbook Entry** Write a **clinical reflection** on a real/simulated perforation case highlighting what was learned about investigations, complications, and care.

Experiential-Learning Learning 5.13: Demonstrate Rapid diagnosis, resuscitation, evaluation, and management of patients with intestinal perforation.

Activities for the Teacher

1. **Simulation Introduction** Explain the clinical features and red flags of intestinal perforation (e.g., sudden severe abdominal pain, guarding, absent bowel sounds).
2. **Emergency Drill Demonstration** Demonstrate the ABCs of resuscitation in perforation cases (e.g., IV line setup, fluid resuscitation, oxygen, monitoring vitals)

3. **Diagnostic Demonstration**Show how to interpret erect abdominal X-ray, ultrasound FAST, and CECT scan to detect pneumoperitoneum and source of perforation.
4. **Algorithm Teaching**Present a step-wise management algorithm (Diagnosis → Resuscitation → Imaging → Surgery/Conservative).
5. **Case-Based Interactive Discussion**Present real or simulated case scenarios and moderate discussions on diagnosis, priorities, and surgical indications.
6. **Surgical Decision-making Demo**Demonstrate criteria for selecting laparotomy vs laparoscopy vs conservative management.

Activities for the PG Scholar

1. **Emergency Simulation Drill**Participate in a mock emergency where the student must perform initial resuscitation, order urgent investigations, and alert surgery team.
2. **Interpretation Practice**Interpret 3–5 radiological images showing free air under diaphragm, gas-fluid levels, or CT findings of perforation.
3. **Clinical Case Role-Play**Act out doctor–patient scenario involving history taking, clinical examination, and emergency planning
4. **Group Case Presentation**Prepare a presentation of a perforation case (e.g., peptic ulcer, typhoid perforation) including work-up, management, and outcome. **Hands-on Skill Practice**Under supervision, practice NG tube insertion, catheterization, IV access, and fluid charting in a simulated patient.
5. **Decision-Making Worksheet**Complete a clinical reasoning worksheet mapping symptoms to probable site of perforation and recommended interventions.
6. **Reflective Clinical Log** - Maintain a logbook entry reflecting on one emergency perforation case: initial suspicion, diagnosis, action taken, and learning points.

Experiential-Learning Learning 5.14: Establish Principles and interpretation of abdominal X-rays. Indications, techniques, and interpretation of CECT scans

Activities for the Teacher

1. **Concept Teaching** -Explain basic radiological principles of X-ray and CT (density, contrast, positioning)
2. **Indication Mapping** -Present a flowchart or mind map of clinical indications for abdominal X-rays vs. CECT (e.g., obstruction, abscess, trauma).
3. **Demonstration of Reading Techniques** -Demonstrate systematic approach to read abdominal X-rays (e.g., gas patterns, calcifications) and CT scans (axial, coronal views, contrast phases).
4. **Image Interpretation Sessions** -Show DICOM images or film prints, ask students to identify organs, pathologies, and artifacts
5. **Case-Based Discussion**Lead case discussions integrating radiology with clinical findings (e.g., perforation, TB abdomen, liver abscess).

6. Problem-Solving Workshop Provide sets of radiology images and ask students to match them with provisional diagnoses and management plans.
7. OSCE/Assessment Design Create radiology interpretation stations for formative assessment using real cases.

Activities for the Student

1. Observation & Note-taking Attend teacher demo and take structured notes on interpretation steps for X-ray and CECT.
2. Systematic Interpretation Practice Practice interpreting abdominal X-rays using a structured checklist (e.g., bowel gas, calcifications, free air)
3. DICOM Viewer Sessions -Use DICOM software or radiology viewer to analyze real or simulated CECT scans.
4. Indication-Case Matching Match clinical cases to appropriate imaging modality (e.g., “Acute abdomen in child → X-ray first, then CECT”).
5. Image Quiz / Spotter Rounds Participate in radiology spotter quiz: identify findings and suggest diagnoses.
6. Case Presentation Present a case including history, imaging findings, interpretation, diagnosis, and suggested management.
7. Reflective Logbook Entry -Maintain a learning log of 5 interpreted X-rays and 2–3 CECT scans, including diagnosis and outcome.

Experiential-Learning Learning 5.15: Management strategies for Ascites

Activities for the Teacher

1. Case-Based Introduction -Present real or simulated patient cases of ascites (e.g., cirrhosis, TB peritonitis, malignancy) and ask students to identify clinical patterns.
2. Demonstration Session Demonstrate how to interpret ascitic fluid reports (e.g., SAAG calculation, cytology, ADA levels). Use lab reports and imaging
3. Complication Mapping Use flowcharts or clinical algorithms to explain possible complications of ascites (e.g., SBP, hepatorenal syndrome).
4. Prognostic Discussion Discuss Child-Pugh and MELD scoring systems, explaining how they impact prognosis and treatment planning
5. Management Plan Workshop - Guide students in designing step-wise treatment plans for different types of ascites (e.g., diuretics, salt restriction, paracentesis, albumin, etc.).
6. Simulation or Bedside Rounds Lead a clinical simulation or real-time ward round, involving history-taking, physical exam, investigations, and fluid interpretation.

Activities for the PG Scholar

1. Lab Interpretation Drill Practice interpreting various ascitic fluid lab reports (SAAG, protein, WBC count, glucose, ADA, LDH) and correlate with diagnosis.
2. Prognosis Evaluation Apply Child-Pugh or MELD scoring to real/simulated cases and discuss likely prognosis and liver transplant eligibility.
3. Complication Identification List possible complications in different scenarios and explain how to monitor and manage them (e.g., antibiotics for SBP, albumin after paracentesis).
4. Management Plan Presentation Prepare and present stepwise management of ascites in different etiologies with justification for each intervention.
5. Simulation Participation Participate in bedside or mannequin simulation, including physical examination for shifting dullness and fluid thrill.
6. Reflective Case Log -Write a reflective clinical case log including patient history, labs, interpretation, management plan, and prognosis analysis.

Experiential-Learning Learning 5.16: Performing paracentesis

Activities for the Teacher

1. Introductory Briefing -Explain the indications, contraindications, and complications of abdominal paracentesis with illustrations.
2. Demonstration (DO) Demonstrate the step-by-step procedure of abdominal paracentesis on a mannequin or simulation model, using real instruments and aseptic technique.
3. Supervised Practice Supervise hands-on practice by students, providing guidance on needle insertion, fluid collection, and positioning.
4. Ascitic Fluid Analysis Chart Teach how to analyze ascitic fluid: gross appearance, SAAG, total protein, cytology, ADA, etc., using clinical cases.
5. Case-based Discussion Present patient scenarios (e.g., cirrhosis, TB, malignancy) and guide discussion on fluid analysis interpretation.
6. Assessment Preparation Prepare OSCE stations or checklists for evaluating psychomotor skills and analysis abilities.

Activities for the PG Scholar

1. Skill Practice Perform abdominal paracentesis on a model or under supervision on a patient, following all steps and precautions
2. Observation & Reflection Observe a live or recorded procedure, and write a reflection or checklist of each critical step.
3. Fluid Sample Handling Practice labeling, preserving, and sending ascitic fluid samples for different lab tests (biochemistry, cytology, culture).
4. Fluid Analysis Interpretation Interpret ascitic fluid reports using SAAG calculation, cell count, protein level, glucose, LDH, ADA, etc., to identify cause (e.g., cirrhosis vs malignancy).

5. Group Presentation -Present a case study with patient history, procedure performed, ascitic fluid analysis, and diagnosis
6. OSCE Participation -Participate in Objective Structured Clinical Examination (OSCE) or viva for demonstration and interpretation.

Experiential-Learning Learning 5.17: Interpretation of lab investigations and management of Hepatosplenomegaly

Activities Done by Teacher :

1. Introduce the clinical case of hepatosplenomegaly through a real patient or virtual simulation.
2. Explain the anatomical and pathological basis of hepatosplenomegaly using visual tools (ultrasound, CT, charts).
3. Demonstrate examination techniques for palpation and percussion of liver and spleen.
4. Guide students through interpretation of lab investigations:
 - CBC, LFT, Viral markers (HBsAg, HCV), Peripheral smear
 - USG abdomen, Bone marrow if indicated
5. Facilitate group discussion on differential diagnosis (e.g., malaria, kala-azar, cirrhosis, hematologic disorders).
6. Discuss prognosis and risk factors for complications like portal hypertension, hypersplenism, liver failure.
7. Encourage clinical reasoning for integrative (Ayurveda + Modern) treatment protocol.
8. Provide feedback on student case presentations and reflections.
9. Assign reflective or case-based learning tasks for follow-up.

Activities Done by Students:

1. Participate in patient examination (if available) or simulated clinical scenario.
2. Collect clinical history and perform physical examination of the abdomen.
3. Identify signs of hepatomegaly and splenomegaly through palpation and percussion.
4. Interpret investigation reports (e.g., LFT pattern, ESR, serology).
5. Analyze Dosha–Dushya–Srotas involvement from Ayurvedic perspective.
6. Create differential diagnosis chart and justify the possible cause.
7. Formulate a personalized treatment plan, including:
 - Aushadha Prayoga (herbo-mineral or classical)
 - Pathya-Apathya (dietary and lifestyle)
 - Rasayana chikitsa if chronic
 - Modern support (antivirals, transfusions, etc.) if needed
8. Engage in group discussion or debate on management strategies.
9. Present case findings in a structured format.
10. Submit a reflective logbook entry documenting their clinical reasoning, learnings, and challenges.

Modular Assessment	
Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 75 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome-Based Assessment: 03 credits x 06 hours x 75 marks Practical Learning Outcome Assessment: Application of Ayurvedic Principles in Diagnosis and Management of Sotha. [40 marks x 4 hour] Station 1: Identification of Sotha(30 minutes) Activity: Scholars will be shown 5 images/videos of different sotha and asked to identify the disease name (Ayurveda and modern correlation), mention its Dosha dominance, and specify one unique lakshana. Assessment Method: OSPE (Objective Structured Practical Examination) Rubrics (Total: 10 marks): Criteria includes Identification (5x1=5 marks), Dosha dominance (5x0.5=2.5 marks) and Key lakshana (5x0.5=2.5 marks) Station 2: Clinical Examination & Diagnosis (90 minutes) Activity: One real or standardized patient with sotha will be provided to each scholar. They will be instructed to conduct Roga-Rogi pariksha, note symptoms, assess Samprapti ghataka, and present probable diagnosis (Ayurvedic & modern). Assessment Method: Mini-CEX (Mini Clinical Evaluation Exercise)/ Viva with examiner (observation checklist) Rubrics (Total: 9 marks): Criteria includes Rogi pariksha (2 marks), Roga Pariksha (2 marks), Samprapti ghataka (3 marks), Differential Diagnosis and Final diagnosis (2 marks) Station 3: Samana or Shodhana Decision Making (90 minutes)	6

Activity: 3 case scenarios/ real cases of different udara roga will be presented. Each student should suggest, whether Shodhana or Samana is appropriate in each case and justify with treatment plan (Antaparimarjana, Bahiparimarjana chikitsa, Aushadha and Pathya-apathya).

Assessment Method: Written response or oral presentation

Rubrics (Total: 12 marks): Criteria includes Choice of Chikitsa (3x1=3marks), appropriate medicine selection (3x1=3marks), justification (3x1=3marks), Pathya-apathya (3x1=3marks)

Station 4: Pharmacological knowledge of key medicines (30 minutes)

Activity: From a list of any five commonly used drugs in sotha, choose any three, and mention the ingredients, indications, Anupana, and mode of administration.

Assessment Method: Oral or written response

Rubrics (Total: 9 marks): Criteria includes Ingredients (3x1 =3 marks), Indications (3 x1=3 marks), Anupana if any and Usage (3x1=3 marks)

- Structured viva (15 marks x 1 hour)
- Experiential Learning Outcome Assessment: [20 marks x 1 hour] Eg: Simulate a patient counselling session, to explain the patient on the importance of Pathya-apathya, Dinacharya, Ritucharya, Achara Rasayana and Daivavyapasraya chikitsa, in accordance with their clinical condition.

Assessment Method: Checklist evaluation (15 marks) – Criteria includes Empathetic communication (5 marks), Content and clarity in explanation (10 marks) and Ensuring patient understanding/ compliance (5 marks).

Similar activity can be repeated for other diseases like

Vrikka Koshika shotha, Vrikkakoshikasayaḥ, Apavrukkatva ,Bastishotha, Vrikka roga, Mootrashmari, Mootraghata, Mootranalika Shotha, Pourusha granthi vridhhi, Pourusha granthi shotha.

Or

Any practical in converted form can be taken for assessment. (40 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (35 marks)

Semester No : 6

Module 6 : Mootravaha Srotodushti vikara evum Chikitsa (Genito-urinary and renal disorders and its management)

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describe and diagnose the Mootravaha Srotodushti Vikāras.
2. Compare with concomitant diseases of conventional medical science
3. Conduct detailed Clinical examination of the patient with Mootravaha Srotodushti Vikāras
4. Advice, analyse and interpret appropriate investigations in Mootravaha Srotodushti Vikāras
5. Plan, execute, and analyse ideal Ayurvedic treatment principles of Shamana, Shodhana, Panchakarma, Rasayana Chikitsa and Pathyapathya of the diseases under Mootravaha Srotas
6. Plan for directions of clinical research of the diseases under Mootravaha Srotas.

Unit 1 Mootrakrichra, Mootraghata and Conventional correlation

- Mootrakrichra (SM82), Mootraghata (SM81)
- Mootranalika Shotha [Urinary tract infections (UTI)]
- Pourusha granthi vridhhi (Benign prostatic hyperplasia),
- Pourusha granthi shotha (Prostitis)
- Investigations in Genitourinary and renal disorders – urinalysis, urine culture and sensitivity, urine cytology,USG,PSA, Uroflowmetry,CBC,TRUS(transrectal ultrasound),ESR.
- DRE(digital rectal examination), Application of international prostate symptom score (IPSS) as diagnostic parameter

References: 1,2,3,8,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teachin g Learning Methods

CO1,CO2,C O6,CO7	Describe different types of mootrakrichchha (Vataja, Pittaja, kaphaja sannipataja,Sukramootrakrichchha ,Raktamootrakrichchha , Asmarija , Upadravajanya etc.) based on Nidana Panchak and Samprapti vinashana.	1	Lecture	CC	Knows-how	L&PPT ,FC,L&G D
CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Examine and formulate a comprehensive treatment algorithm for mootrakricchra based on Ayurvedic principles incorporating appropriate aushadha prayoga, Kriyakrama, Rasayan and Pathyaapathya.	3	Experiential- Learning6.1	PSY- MEC	Does	BL,CBL
CO1,CO2,C O4,CO5	Describe the types of Mootraghata (Vataja, Pittaja ,Kaphaja, sannipataja, Asmarija, Bastikundala, etc.) based on Nidana Panchaka, and comprehend Samprapti vinashana.	1	Lecture	CAN	Knows-how	L&PPT
CO1,CO2,C O4,CO5	Discuss Mootrakrichchha and mootraghata, based on Nidana Panchaka, and discuss the appropriate treatment principles and guidelines .	1	Lecture	CAN	Knows-how	TUT
CO1,CO2,C O4	Analyze the etiopathogenesis and clinical manifestation of Mooranalika Shotha (UTI).	1	Lecture	CAN	Knows-how	FC
CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Assess and formulate a treatment algorithm for Mootratranalika sotha(UTI) based on rationalised selection of Aushadha, Kriyakrama and Pathyaapathya.	2	Experiential- Learning6.2	PSY- ADT	Shows-how	PBL,BS, CBL
CO1,CO2,C O4,CO5,CO8	Illustrate rationalized management algorithm for Pourusha granthi vridhhi (Benign prostatic hyperplasia) encompassing Aushadha Prayoga, Kriyakrama, Rasayana, and PathyaApathya.	2	Experiential- Learning6.3	PSY- ADT	Does	CD
CO1,CO2,C O4,CO5	Perform a thorough clinical examination and demonstrate the ability to recommend appropriate investigations, analyze, and interpret the findings in BPH according to International prostrate symptom score (IPSS).	2	Practical6.1	PSY- MEC	Shows-how	PT,JC,B L,CBL
CO1,CO2,C O4,CO5	Demonstrate the treatment algorithm of Benign Prostatic Hyperplasia (BPH) in Ayurveda based on the	2	Practical6.2	PSY- GUD	Shows-how	C_L,CBL

	principle of Samprapti Vinashana, integrating Dosha-Dushya Sammurchana, Chikitsa Sutra, and individualized management (Shodhana, Shamana and Aushadha Yoga)					
CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Illustrate advanced competency to critically analyze diagnose and formulate evidence based management strategies for Mootrakrichchha, Mootraghata, Mootrasayagata vikara, Pourusha granthi vridhhi (BPH) and Pourusha granthi sotha (Prostatitis) through integrated classroom teaching, clinical correlation and research oriented discussions.	2	Experiential-Learning6.4	PSY-ADT	Does	CD,BS,C BL
CO1,CO2,C O4,CO6,CO7 ,CO8	Assess on clinical encounters involving Mootrasmari to critically analyze patient management, identify gaps in knowledge and skills and formulate strategies for targeted improvement in clinical practice.	2	Experiential-Learning6.5	AFT-CHR	Shows-how	D- BED,Mnt ,DL,BL,B S
CO1,CO2,C O5,CO6,CO7 ,CO8	Analyze the clinical presentation and Ayurvedic Samprapti of Ashukari Vrikka Vikara (AKI), classify it based on Dosha–Dushya–Srotas involvement and formulate tailored treatment strategies through Samprapti Vighatana principles.	3	Experiential-Learning6.6	PSY-SET	Shows-how	PER,BS, FC,CD,P AL

Unit 2 Mootrashmari and conventional correlation

- Mootrashmari (SM8C)
- Urolithiasis, Nephrolithiasis

References: 1,2,3,8,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods

CO1,CO2,C O4,CO5	Discuss the different types of Mootrasmari based on Nidanapanchaka, and comprehend Samprapti vinashana.	1	Lecture	CAN	Shows-how	L&GD
CO1,CO2,C O3,CO4,CO5 ,CO6,CO7,C O8	Formulate a comprehensive treatment protocol for Mootrasmari based on Ayurvedic principles, incorporating appropriate Aushadha prayoga, Kriyakrama, and Pathya-Apathya.	2	Experiential- Learning6.7	AFT-SET	Does	BS
CO1,CO2,C O4,CO5	Describe the pathogenesis and analyze the clinical features of urolithiasis at various stages.	1	Lecture	CAN	Shows-how	L&PPT
CO1,CO2,C O6,CO7,CO8	Demonstrate the application of Ayurvedic criteria for evaluate the type of Mootrashmari and correlate them with conventional diagnostic findings.	2	Practical6.3	PSY- MEC	Shows-how	D-BED
CO1,CO2,C O4,CO5,CO7 ,CO8	Illustrate a comprehensive treatment protocol for Basti Ashmari (Urolithiasis) based on Ayurvedic principles, incorporating appropriate aushadha prayoga, Kriyakrama, and Pathyaapathya.	2	Experiential- Learning6.8	PSY- ADT	Does	BL
CO1,CO2,C O4,CO5	Describe classical Ayurvedic principles in the diagnosis and management of Vasti Asmari (Urolithiasis)and Nephrolithiasis.	1	Lecture	CAN	Knows-how	L,FC
CO1,CO2,C O6,CO7,CO8	Compile and analyze the therapeutic effects of various aushadha and Kriyakrama in the management of different types of Mootrasmari, based on evidence from contemporary research literature.	2	Experiential- Learning6.9	CS	Does	BS
CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Assess and elicit a detailed case history, perform a thorough clinical examination, and analyze as well as interpret relevant investigation reports to differentiate urolithiasis and nephrolithiasis .	2	Practical6.4	CC	Shows-how	RLE,CBL ,BS
CO1,CO2,C O4,CO5,CO6 ,CO8	Distinguish the Ayurvedic diagnostic protocols and correlate them with principles of management for various clinical conditions of urolithiasis and	2	Experiential- Learning6.1 0	PSY- ADT	Does	CD,BS,C BL,DIS

	nephrolithiasis through clinical mapping and applied learning.					
Unit 3 Vrikka rogas and conventional correlation - Vrikka roga - Acute kidney injury, Chronic kidney disease and Chronic kidney disease of uncertain aetiology (CKDu) References: 14,16,41						
3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teachin g Learning Methods
CO1,CO2,C O8	Describe and analyze the distinctive features of Nidana panchaka and Samprapti of Vrikka Roga apart from commonly known Mootravaha Srotas disorders, as per Bhaisajya Ratnavali.	1	Lecture	CAN	Knows-how	L&PPT ,C_L
CO1,CO2,C O4,CO8	Analyze the rationale behind classical Chikitsa Krama for Vrikka Roga with special emphasis on unique formulations and their pharmacological basis.	1	Lecture	CC	Knows-how	L,FC
CO1,CO3,C O4,CO5,CO6 ,CO7,CO8	Apply Chikitsa Siddhanta for Vrikka Roga based on variations in Roga and Rogi Avastha, through clinical reasoning and individualized treatment planning.	3	Experiential- Learning6.1 1	AFT-VAL	Does	BS,CBL, PAL,D,C D
CO1,CO2,C O7,CO8	Describe the application of Shamana and Shodhana Chikitsa in various clinical states of Vrikka Roga.	1	Lecture	CAN	Knows-how	L&PPT
CO1,CO2,C O6,CO7	Describe the use of Rasayana therapy and dietary-lifestyle modifications (Pathyaapathya) in different stages of Vrikka Roga, based on classical Ayurvedic principles.	1	Lecture	CAN	Knows-how	FC

CO1,CO2,C O5,CO6,CO7	Assess the Sadhyaasadhyata Lakshanas of Vrikka Roga and generate an individualized treatment protocol based on the Roga bala and Rogi Bala.	3	Experiential- Learning6.1 2	PSY- ADT	Does	CD,D,IBL ,BS,CBL
CO1,CO2,C O5,CO6,CO7	Demonstrate the application of Ayurvedic diagnostic tools and correlate them with conventional diagnostic investigations to assess different avastha of Vrikka Roga.	3	Practical6.5	PSY- MEC	Shows-how	CBL,CD, D,D-M
CO1,CO2,C O5,CO6,CO7 ,CO8	Examine a detailed case history, perform a thorough clinical examination, and analyze as well as interpret relevant investigation reports to accurately differentiate Chirakari Vrikka Vikara (chronic kidney disease).	3	Practical6.6	PSY- GUD	Shows-how	CD,CBL, C_L,BS, BL
CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Apply the recent updates in the diagnosis and therapy of Chirakari Vrikka Vikara (CKD) and its prognosis on variation of disease state	3	Experiential- Learning6.1 3	AFT-VAL	Does	SIM,BS, TBL,BL
CO1,CO2,C O4,CO5,CO6	Demonstrate the clinical application of Ayurvedic diagnostic methods, including Roga Pareeksha (Dosa Dusya Srotas analysis) and Rogi Pareeksha (Dashavidha and Ashtavidha Pareeksha), to evaluate the condition and progression of Chirakari Vrikka Vikara.	2	Practical6.7	PSY- GUD	Shows-how	TBL,CBL ,BS,D,W
CO1,CO2,C O4,CO6,CO8	Examine clinically the affected Dusyas in Chirakari Vrikka Vikara (CKD) through classical references.	2	Practical6.8	PSY- GUD	Shows-how	CD,CBL, PBL,BL
CO1,CO2,C O4,CO6,CO8	Perform examination and demonstration on early referral of Chirakari Vrikka Vikara (CKD) for quick recovery	2	Practical6.9	PSY- GUD	Shows-how	CBL,D,P AL,BS

CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Assess a detailed case history, perform a thorough clinical examination, interpret relevant investigation reports to accurately differentiate Chirakari Vrikka Vikara(chronic kidney disease)	2	Practical6.1 0	PSY- MEC	Shows-how	BS
CO1,CO2,C O6,CO7,CO8	Describe the diagnostic criteria, enumerate and interpret relevant laboratory investigations, evaluate the prognosis, identify potential complications, and outline the probable Ayurvedic understanding and management approach of Chronic Kidney Disease of Unknown Etiology (CKDu).	1	Lecture	CK	Knows-how	FC
CO1,CO2,C O4,CO5,CO6	Illustrate classical Ayurvedic concepts of Vrikkaroga with contemporary nephrological understanding, and confidently present evidence-based deliberations in seminars and academic forums.	2	Experiential- Learning6.1 4	AFT-SET	Does	BS,C_L, CBL,CD, BL

Unit 4 Renal disorders and its manifestation

- Renal Disorders
- Vrikka Koshika shotha (SM84) (Nephritis)
- Vrikkakoshikasayah (Nephritic syndrome)
- Apavrikkatva (Nephrotic syndrome)
- Bastishotha (Cystitis)

References: 16,41

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teachin g Learning Methods

CO1,CO2,C O4,CO5	Discuss the Samprapti Vighatana of Vrikka Kosika Shotha (Nephritis) by analyzing the manifestation of Rupa (clinical features) in relation to different Avasthas (stages) of Roga and Rogi, and interpret its relevance in formulating stage-wise Ayurvedic management.	1	Lecture	CAN	Knows-how	L&GD
CO1,CO2,C O4,CO5,CO6	Demonstrate the ability to assess the prognosis, apply diagnostic criteria, and formulate appropriate treatment protocols for Vrikka Koshika Sotha (Nephritis) based on Ayurvedic and contemporary clinical approaches	2	Practical6.1 1	PSY- MEC	Shows-how	PT,C_L, PBL,BS, BL
CO1,CO2,C O4,CO6,CO7 ,CO8	Identify risk factors, apply preventive strategies, and implement stage-appropriate Ayurvedic protocols of preventing the onset and progression of Vrikka koshika Sotha (Nephritis)	2	Practical6.1 2	PSY- MEC	Shows-how	PL,PBL, CBL,IBL
CO1,CO2,C O6,CO7,CO8	Assess the clinical indications, demonstrate proper techniques, and identify potential complications of urinary catheterization through hands-on practice and patient-based clinical exposure.	2	Experiential- Learning6.1 5	PSY- ADT	Does	C_L,D- BED,CB L,PBL,T BL
CO1,CO2,C O5,CO6,CO7 ,CO8	Illustrate the prognosis, apply diagnostic criteria, and formulate appropriate treatment protocols for Vrikkakoshika kshaya (Nephritic syndrome) and Apavrukkatva (Nephrotic Syndromes) and Bastisotha (Cystitis) using integrated Ayurvedic and contemporary clinical approaches.	2	Practical6.1 3	PSY- MEC	Shows-how	PL,D- BED,BS, CBL
CO1,CO2,C O5,CO6,CO7	Identify the predisposing factors, preventive strategies, and implement stage-specific Ayurvedic protocols to prevent the onset, recurrence, and progression of Vrukkakosiksayah (Nephritic Syndrome) and Apavrukkatva (Nephrotic Syndromes) and Bastisotha (Cystitis).	2	Practical6.1 4	PSY- MEC	Shows-how	D- BED,CB L,IBL,BS

CO1,CO2,C O5,CO6,CO7	Describe the principles, identify the clinical indications, and interpret the diagnostic relevance of KUB radiographs, intravenous pyelography (IVP), and ultrasonography (USG) in the evaluation of urinary tract disorders.	2	Lecture	CK	Knows-how	FC
CO1,CO2,C O4,CO5,CO6	Illustrate the prognosis, laboratory investigations, and formulate individualized treatment protocols for Vrikkakoshika kshaya (Nephritic Syndrome) through patient-centered clinical exposure and integrative diagnostic reasoning	2	Experiential-Learning6.1 6	PSY- ADT	Does	CBL,C_L ,PAL,PT, BS
CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Differentiate the Laksanas of Apavrukkatva (Nephrotic Syndrome) through Samprapti Vighatana analysis and map stage-specific Ayurvedic treatment protocols based on individualized clinical presentation.	2	Experiential-Learning6.1 7	PSY- ADT	Does	DIS,BS, CD

Practical Training Activity

Practical Training 6.1 Application of International prostate symptom score (IPSS) for Diagnostic Purpose

Teacher Activity:

1. **Case Presentation:** Present a series of BPH clinical cases with varying presentations (mild, moderate, severe IPSS) and durations (acute retention vs. chronic obstruction).
2. **Clinical Scenario Discussion:** Lead a discussion on each case, focusing on patient history (e.g., nocturia, weak stream), physical examination (DRE), and diagnostic context
3. **Diagnostic Test Selection:** Explain the appropriate investigations for each case:
 - o IPSS Scoring: Step-by-step scoring and interpretation
 - o Urinalysis, PSA, USG KUB, Uroflowmetry
4. **Test Result Interpretation:** Guide students to interpret IPSS scores and investigation results; highlight key findings that confirm BPH.
5. **Guiding Questions:** Stimulate discussion through questions like:
 - o What symptoms indicate moderate/severe BPH?
 - o How do you interpret an IPSS score of 20?
 - o What further tests are justified and why?

Scholar Activity:

1. **Case Based Learning:** Students are divided into small groups to work through clinical cases using IPSS tools and diagnostic flowcharts.
2. **Clinical Examination Practice:** Perform abdominal and per rectal examinations under supervision and document findings.
3. **Investigation Recommendation:** Suggest relevant diagnostic tests for assigned cases and justify based on clinical findings.
4. **IPSS Scoring Exercise:** Complete and score IPSS questionnaires for each case and categorize the severity.
5. **Case Presentation & Reflection:** Present their findings and clinical reasoning; reflect on challenges faced during examination and scoring.

Practical Training 6.2 Treatment algorithm of BPH

Activities Done by the Teacher

1. **Case Demonstration:**
 - Presenting a real or simulated BPH patient case with Ayurvedic analysis (Mutragranthi/Vatasthila).
2. **Samprapti Analysis Explanation:**
 - Discussing Dosha-Dushya Sammurchana involved in BPH.
 - Use of charts or models to explain Srotodushti and Rogamarga.
3. **Chikitsa Sutra Discussion:**
 - Explaining the therapeutic principles such as Vatanulomana, Shothahara, Mutrala.
4. **Drug Demonstration:**
 - Showing identification of herbs like Gokshura, Punarnava, Varuna, Shilajatu.
 - Explaining Aushadha Yogas like Chandraprabha Vati and Varunadi Kashaya.
5. **Procedure Demonstration:**
 - Live or simulated demonstration of **Yapana Basti** or **Kshara Basti** preparation and administration steps.
6. **Clinical Examination Guidance:**
 - Teaching per rectal examination (if simulated) and how to correlate signs with Mutravaha Srotas Dushti.
7. **Interactive Discussion:**
 - Conducting group Q&A to clarify doubts related to Samprapti, Basti Karma, and medicine selection.
8. **Prescription Writing Practice:**
 - Demonstrating format of writing individualized Ayurvedic prescription for BPH.

Activities by the Student:

1. **Simulated Case Taking:**
 - Practicing history taking for urinary complaints (frequency, hesitancy, dribbling, nocturia).
 - Recording symptoms and inferring possible Dosha involvement.
2. **Nadi Pariksha & Dashavidha Pariksha Practice:**
 - Performing pulse diagnosis and other clinical assessments relevant to BPH.
3. **Samprapti Mapping Exercise:**
 - Drawing flowcharts to explain the Samprapti of Mutragranthi/Vatasthila.
4. **Basti Kalpana Preparation:**
 - Preparing components of Yapana or Kshara Basti under guidance.
5. **Drug Identification Activity:**
 - Identifying crude drugs like Punarnava, Gokshura, Varuna from a specimen set.
6. **Chart/Model Making:**
 - Creating educational charts: Dosha-Dushya involvement, Chikitsa plan, flow of Samprapti Vinashana.
7. **Prescription Writing Task:**
 - Writing sample Ayurvedic prescriptions for different patient profiles (obese, elderly, diabetic).
8. **Group Presentation:**
 - Presenting assigned topics like "Role of Shamana in BPH", "Basti Chikitsa in Mutragranthi".
9. **Discussion & Reflection:**
 - Participating in case discussions and reflecting on differences in approach (Shodhana vs Shamana).

Practical Training 6.3 Evaluation Criteria for Mootrashmari

Teacher Activity:

1. **Introduces Ayurvedic classification** of Mootrashmari (Vataja, Pittaja, Kaphaja, Sannipataja, Shukraja) with Nidana Panchaka and Lakshana.
2. **Explains Dosha-based symptomatology,**
3. **Demonstrates clinical history-taking format** for Mootrashmari focusing on Doshika features.
4. **Teaches correlation** of Ayurvedic findings with modern diagnostics like:
 - **Ultrasound (USG-KUB)** for site /size /number
 - **Urine R/M** for hematuria, crystals
 - **Pain location** matching anatomical site
5. Displays **case samples / images** of stones and USG reports to show radiological evidence.
6. Conducts **interactive clinical scenario discussions** for Dosha-wise analysis.
7. Guides on **recording observations** and mapping clinical findings in logbooks.

8. Evaluates scholar through **viva, case presentation, and diagnostic correlation exercises.**

Student Activity:

1. **Collects detailed patient history** (Vedana, Muhur-muhur Mutrapravritti, Daha, Sphatika-pravaha) and identifies Dosha involvement.
2. **Performs Nadi Pariksha**, Ashtavidha and Dashavidha Pariksha to assess the dominant Dosha.
3. **Documents clinical features** and classifies the type of Mootrashmari as per classical texts.
4. **Correlates Ayurvedic diagnosis** with modern findings such as:
 - Site of pain and location of stone on USG
 - Burning or bleeding with urine (Pittaja)
 - Mucus or gravel-like deposits (Kaphaja / Vataja)
5. **Records diagnostic data:** USG, Urine R/M, pain score, IPSS (if applicable).
6. **Prepares case report** including both Ayurvedic and modern findings with justification for type of stone.
7. **Presents findings** in a small group or seminar with critical analysis.
8. **Maintains clinical logbook** with proper classification and correlation remarks.

Practical Training 6.4 Compilation of research based articles on guideline preparation for the management of urolithiasis and nephrolithiasis .

Activities to be Done by Teacher:

1. **Demonstrate Case History Taking:**

– Show how to systematically elicit history with emphasis on pain, micturition pattern, diet, previous episodes, etc.

2. **Demonstrate Clinical Examination Techniques:**

– Teach abdominal, renal angle, and bladder examination with correlation to Ayurvedic Ashtavidha Pariksha and Dashavidha Pariksha.

3. **Explain Interpretation of Reports:**

– Guide interpretation of relevant investigations like USG, KUB X-ray, Urine R/M, Serum Creatinine, etc.

4. Supervise Case Presentations:

- Observe and give feedback on student-led case discussions.

5. Correlate Modern & Ayurvedic Diagnosis:

- Facilitate understanding of urolithiasis and nephrolithiasis .

Student Activity:

1. Elicit Complete Case History from Patients:

- Collect history considering both Ayurvedic Nidan Panchaka and modern clinical features.

2. Perform Clinical Examination:

- Carry out inspection, palpation, percussion, auscultation, and specific tests for urinary tract pathology.

3. Analyze Investigation Reports:

- Interpret lab and imaging findings and correlate with clinical signs and Ayurvedic principles.

4. Document and Present Cases:

- Prepare case records and present with differential diagnosis and justification.

5. Formulate a Diagnostic Conclusion:

- Identify the type of urolithiasis and nephrolithiasis . based on clinical and investigative findings.

Practical Training 6.5 Application of diagnostic tools to assess different avastha of Vrikka Roga

Activities Done by Teacher:

1. Demonstrate Ayurvedic Diagnostic Methods

- Teach the application of Nidana Panchaka, Ashtavidha Pareeksha, and Dashavidha Pariksha with clinical examples of Vrikka Roga.

2. Facilitate Dosha–Dushya–Avastha Analysis

- Guide students in identifying Dosha predominance and disease stage using classical parameters.

3. Present Diagnostic Correlation Charts

- Display comparison between Ayurvedic and modern markers (e.g., Mootrapareeksha vs. Urine R/M, Rogibala vs. GFR, etc.).

4. Supervise Bedside Clinical Practicum

- Observe scholars while they apply both Ayurvedic and conventional assessment techniques on patients.

5. Conduct Small Group Tutorials

- Lead focused case-based discussions for comparing Ayurvedic Avasthas with modern staging (e.g., CKD stages).

Student activity:

1. Elicit Detailed Patient History (Roga Rogi Pareeksha)

- Collect history using Nidana Panchaka, including Hetu, Purvarupa, Rupa, Upashaya, and Samprapti.

2. Perform Classical Ayurvedic Examinations

- Practice Ashtavidha and Dashavidha Pariksha on patients (e.g., Nadi Pareeksha, Mutra Pareeksha, Jihva, etc.).

3. Collect and Interpret Modern Reports

- Analyze relevant investigations: Urine R/M, Serum Creatinine, BUN, Ultrasound (USG), eGFR, etc.

4. Correlate Ayurvedic and Modern Findings

- Match signs/symptoms with lab/imaging reports to identify stage (Avastha) of Vrikka Roga.

5. Document and Present Case Findings

- Prepare a clinical case file highlighting diagnostic correlation and present it to faculty for feedback.

Practical Training 6.6 Guideline preparation for clinical examination of Chirakari Vrikka Vikara (chronic kidney disease)

Activities Done by Teacher:

1. Demonstrate Systematic History Taking

Guide students on how to ask relevant questions focusing on chronicity, mootravaha symptoms, dietary habits, comorbidities (e.g., Prameha, Hypertension).

2. Teach Step-wise Clinical Examination

– Demonstrate examination of renal angle, pedal edema, signs of fluid overload, blood pressure, etc., and Ayurvedic parameters like Nadi, Jihva, Mootra, and Mala Pariksha.

3. Explain Interpretation of Investigation Reports

– Discuss findings of **Serum Creatinine, Urea, eGFR, Urine R/M, USG-KUB**, and **Ayurvedic indicators** (Mootrapariksha, Prameha Lakshanas).

4. Facilitate Bedside Clinical Teaching

– Take students to patient cases and ask them to perform and present findings under supervision.

5. Correlate Diagnosis with Ayurvedic Framework

– Assist scholars in mapping Rogabala, Rogi Bala, Dosha-Dushya-Srotas involvement and Avastha of Vrikka Vikara.

Student Activity

1. Elicit Detailed Case History

– Record chief complaints, duration, associated symptoms, personal history, Nidana (diet / lifestyle), and past treatments.

2. Perform Complete Clinical Examination

– Assess general condition, vitals, edema, urinary symptoms, and do Ashtavidha and Dashavidha Pariksha.

3. Collect and Analyze Relevant Investigations

- Interpret laboratory and imaging reports to assess the stage and severity of kidney damage.

4. Prepare and Present Case Sheet

- Create a comprehensive case file with Ayurvedic diagnosis (e.g., Vata-Kaphaja Chirakari Vrikka Vikara) and modern diagnosis (CKD stage-wise).

5. Correlate Clinical and Investigative Findings

- Identify key diagnostic pointers that differentiate CKD from other renal disorders.

6. Formulate Preliminary Chikitsa Siddhanta

- Suggest basic treatment plan considering Rogavastha, Rogibala, and Doshic dominance.

Practical Training 6.7 Detection of Sadhyasadhyatva of Chirakari Vrikka Vikara (CKD)

Activities Done by Teacher:

1. Demonstrate Roga and Rogi Pariksha Techniques

- Show step-by-step application of Ashtavidha Pariksha and Dashavidha Pariksha

2. Explain Doṣa–Duṣya–Srotas Analysis

- Teach identification of involved Dosas, Dusyas and Srotas .

3. Correlate with Clinical Staging of CKD

- Explain how Ayurvedic parameters relate to CKD stages, prognosis, and Chikitsā Sūtra formation.

4. Supervise Scholar-Patient Interaction

- Observe and guide scholars during history taking, clinical examination, and analysis.

5. Discuss Clinical Cases with Reasoning

- Conduct group discussions to reflect on diagnostic reasoning and Ayurvedic interpretation.

Activities Done by Scholar :

1. Take Detailed Clinical History

- a. Elicit signs/symptoms based on Nidāna Pañchaka

2. Perform Rōgi Pariksha

- a. Conduct:
 - b. Ashtavidha Parīkṣā: Nādi, Jihva, Drik, Śabda, Sparsa, Mutra, Mala, Akṛti
 - c. Dashavidha Pariksha: Prakṛti, Vikṛti, Sara, Samhanana, Satva, etc.

3. Analyze Roga Pariksha (Disease-Based)

- a. Identify Doṣa predominance, Duṣya involvement, and affected Srotas using classical Ayurvedic reasoning.

4. Document and Interpret Findings

- a. Prepare a case report correlating Ayurvedic diagnosis with modern CKD stage and prognosis.

5. Present Case and Chikitsa Siddhanta

- a. Explain diagnostic rationale and propose appropriate management principles based on stage and strength.

Practical Training 6.8 Categorization of treatment in Chirakari Vrikka Vikara (CKD)

Activities by Teacher:

1. **Demonstrate clinical examination techniques** to assess Dhatu (Rakta, Māṁsa, Meda, Majjā), Mala (Mutra), and Srotas (Mutravaha, Medovaha, Raktavaha).
2. **Explain classical references** related to Duṣya involvement in CKD using textual sources like **Charaka, Sushruta, Ashtanga Hridaya**.
3. **Present case vignettes** showing various Duṣya involvement in different stages of CKD.
4. **Guide students in structured Roga–Rōgi Pareeksa** highlighting signs of Duṣya involvement.
5. **Facilitate discussion sessions** on comparative analysis of classical descriptions with modern pathophysiology.
6. **Provide worksheets or charts** for mapping Duṣya involvement in patient cases.

Activities by Scholar:

1. **Perform detailed clinical examination** of CKD patients with focus on affected Dusya
2. **Record case histories** and map the findings with classical Duṣya features.
3. **Identify affected Srotas** based on Lakṣana (clinical signs) and laboratory findings.
4. **Present individual case reports** focusing on Dusya correlation supported by classical references.
5. **Analyze laboratory reports** (e.g., urea, creatinine, electrolytes, urine output) and correlate with Mala and Srotas dysfunction.
6. **Engage in peer discussions** to compare different patient presentations and refine Dusya analysis.
7. **Prepare a chart or poster** illustrating Dusya–Dosa–Srotas involvement in CKD.

Practical Training 6.9 Protocol for early referral of Chirakari Vrikka Vikara (CKD)

Activities Done by the Teacher :

1. **Present a real or simulated CKD case** in early stage (creatinine 1.5–2.0 mg/dL, mild proteinuria)
2. **Demonstrate Ayurvedic case-taking** (Dashavidha Pariksha + Srotas examination)
3. **Interpret lab parameters** alongside Ayurvedic clinical features (e.g., Mootraghata, Mootrakricchra lakshanas)
4. **Discuss Chirakari nature** of the disease and principles of early intervention in Vrikka Vikara
5. **Highlight referral criteria:**
 - GFR decline
 - Symptoms of Uremia
 - Electrolyte imbalance
 - Poor response to Ayurvedic Shamana
6. **Provide formats/templates:**
 - Referral notes
 - Rogi -Roga bala assessment forms
7. **Demonstrate inter-system referral** through role-play or recorded video with nephrologist
8. **Discuss limitations and scope** of Ayurveda in different CKD stages
9. **Facilitate critical discussion:** ethics, safety, timing of referral, patient consent

Activities Done by Students:

1. **Take a detail case history** using Ayurvedic and biomedical parameters
2. **Assessment of Roga Avastha and Rogibala** (Sadhya–Asadhyata evaluation)
3. **Evaluate lab reports** (Creatinine, BUN, eGFR, electrolytes, urine protein)
4. **Apply Ayurvedic Nidana Panchaka** to formulate diagnosis
5. **Draft a referral note** with clear reasons, Ayurvedic findings, and urgency
6. **Present case in clinical round** with justification for early referral

7. **Participate in role play** – PG student explaining referral decision to patient/family
8. **Design an integrative treatment plan** (pre-referral supportive Rasayana, Pathya)
9. **Compare delayed vs early referral outcomes** in small group discussion
10. **Submit a reflective write-up:** "Why, When, and How to Refer CKD in Ayurveda"

Practical Training 6.10 Diagnosis of Ajnata Chirakari Vrikka Vikara (CKDu)

Activities Done by Teacher:

1. **Demonstration & Orientation**
 - Demonstrates proper method of eliciting detailed history (including occupational, environmental, and drug exposure).
 - Orients students to CKDu-specific risk factors and epidemiological patterns (e.g., male farmers from endemic areas, low socioeconomic status, non-diabetic, non-hypertensive).
2. **Clinical Skills Teaching**
 - Demonstrates step-by-step renal system examination, including signs of anemia, edema, dehydration, and blood pressure monitoring.
 - Shows how to examine for signs of chronicity (e.g., uremic frost, pallor, pruritus marks, signs of bone disease).
3. **Investigation Interpretation**
 - Explains how to interpret CBC, serum creatinine, eGFR, urine R/M, ACR (albumin creatinine ratio), ultrasound (renal cortical echogenicity, size), and rule out diabetes/hypertension/obstruction.
 - Discusses exclusion criteria to confirm CKDu (normal sugar, BP, no known nephrotoxic drugs).
4. **Case-Based Discussion (CBD)**
 - Leads case presentations of suspected CKDu patients and encourages differential diagnosis.
 - Integrates Ayurvedic understanding—e.g., Dosa–Dusya–Srotas involvement, Nidana, Samprapti mapping.
5. **Bedside Teaching & Feedback**
 - Supervises students while examining patients and provides real-time feedback.
 - Encourages reflective learning and differential diagnosis approach.

Activities Done by Scholar :

1. **History Taking**
 - Elicits comprehensive patient history, including:
 - Occupational/environmental exposure
 - Water source
 - Use of nephrotoxic medications

- Family history and previous illnesses
- Dietary and lifestyle history (Ayurvedic Ahara-Vihara)

2. Clinical Examination

- Performs systemic and renal-focused physical examination.
- Documents findings in a structured format .

3. Investigation Review

- Collects and analyzes investigation reports:
 - CBC, RFT, eGFR
 - Urine protein levels, microalbuminuria
 - Ultrasound of kidneys
 - Blood glucose, BP records
- Rules out diabetic and hypertensive nephropathy.

4. Ayurvedic Correlation

- Correlates clinical findings with Doṣa, Duṣya, Srotas (Mutravaha, Medovaha, Raktavaha), and Vikṛti Vijnāna.
- Maps Samprāpti of Chirakārī Vṛkka Vikāra and differentiates it from other Vṛkka Roga.

5. Documentation and Presentation

- Prepares case sheets and presents cases in clinical rounds.
- Discusses differential diagnosis between CKD and CKDu based on clinical, investigative, and Ayurvedic understanding.

6. Patient Education & Counseling

- Educates patients on water purification, diet modifications, avoidance of nephrotoxins.
- Documents lifestyle and community-level risk factors (useful for research and prevention).

Practical Training 6.11 Protocol for diagnosis and treatment schedule for Vrikka koshika shotha (Nephritis)

Activities Done by the Teacher:

1. Clinical Case Demonstration

- Presents a patient of suspected or diagnosed Nephritis (acute or chronic).
- Guides students in identifying signs and symptoms such as sotha, daha, raktamutratva, oliguria, etc.

2. Ayurvedic & Modern Diagnostic Correlation

- Explains how to apply Ayurvedic diagnostic tools like:
 - Doṣa–Duṣya–Srotas analysis
 - Roga-Rogī Parīkṣā (Dashavidha, Ashtavidha)
- Correlates with modern criteria: urine analysis, serum creatinine, eGFR, proteinuria, hematuria, and renal imaging.

3. Prognosis Assessment Guidance

- Teaches evaluation of Sadhyaasadhya Lakṣaṇa based on Rogi bala, disease chronicity, and organ damage.
- 4. Treatment Planning Demonstration**
 - Demonstrates Ayurvedic protocol formulation:
 - Doṣa śamana, Srotoshodhana, Basti, Virechana
 - Selection of Aushadha like Punarnava, Gokshura, Varuṇa, Chandraprabha Vati
 - Integrates supportive modern nephrology practices (fluid balance, BP control, nephroprotectives).
- 5. Supervised Bedside Training**
 - Supervises PG scholars in clinical examination and documentation.
 - Encourages presentation and discussion of cases in bedside viva format.
- 6. Feedback & Reflective Practice**
 - Provides constructive feedback on students' history-taking, examination, and clinical reasoning.
 - Facilitates reflection sessions to improve future performance.

Activities Done by the Scholar:

- 1. Patient History & Clinical Examination**
 - Elicits detailed history including nidāna, duration, progression, lifestyle, occupational exposure, and associated symptoms.
 - Performs thorough clinical examination focusing on renal signs (e.g., edema, BP, pallor, dehydration).
- 2. Ayurvedic Evaluation**
 - Assesses Doṣa, Duṣya, Srotas, Ama, Rogī bala, Ayu, Agni, Sattva.
 - Documents findings using Dashavidha & Ashtavidha Parīkṣā frameworks.
- 3. Laboratory & Imaging Interpretation**
 - Collects and interprets investigation reports:
 - CBC, serum creatinine, urine R/M, ACR, renal ultrasound.
 - Correlates with Ayurvedic observations (e.g., mutra alpata, raktamutratva, etc.).
- 4. Prognosis Evaluation**
 - Applies principles of Sādhya–Asādhya Lakṣaṇa.
 - Considers Rogi factors like age, Ojas, Agni, chronicity.
- 5. Treatment Protocol Design**
 - Formulates a treatment plan incorporating:
 - Aushadha prayoga (Punarnava, Gokṣura, Varuṇa)
 - Kriyākramas like Basti (Yapana or Niruha), Virechana if indicated
 - Rasāyana for long-term renal support
 - Pathya-Apathya recommendations
- 6. Case Presentation**
 - Prepares and presents case sheets in clinical discussions.

- Justifies diagnostic impressions and treatment protocol based on classical and modern evidence.

7. Documentation & Learning Log

- Maintains clinical documentation and daily reflections.
- Records progress, therapeutic response, and follow-up.

Practical Training 6.12 Preventive protocol for Vrikka koshika sothah (Nephritis)

Activities Done by the Teacher:

1. Clinical Orientation on Risk Factors

- Explains risk factors such as:
 - Recurrent UTIs
 - Unwholesome diet and lifestyle (Ahara–Vihara)
 - Toxin exposure
 - Overuse of certain drugs (NSAIDs, antibiotics)
 - Improper suppression of urges (Vega dharana)

2. Demonstration of Early Screening Methods

- Shows how to detect early signs (Purvarupa) like:
 - Mild lower limb edema
 - Reduced urine output
 - Dull flank pain
 - Mūtra mala dushti

3. Teaching Preventive Protocols

- Demonstrates stage-wise Ayurvedic preventive approaches:
 - Nidana-parivarjana, Pathya-Apathya, Ahara-visesa
 - Use of Mutravirechaka herbs (Punarnava, Gokṣura)
 - Rasāyana support in pre-symptomatic individuals
 - Preventive Basti karma in high-risk Rogis

4. Model Case Discussion

- Presents early-stage or at-risk patients for group assessment.
- Guides formulation of a personalized preventive protocol.

5. Supervised Practice

- Observes scholars performing prakṛti analysis, risk assessment, and protocol planning.
- Provides real-time corrections and feedback.

Activities Done by the Student:

1. Risk Factor Identification

- Collects detailed patient history focused on:
 - Diet, lifestyle, occupation, medication use
 - History of UTIs, diabetes, dehydration
 - Environmental exposure (hard water, agrochemicals)

2. Clinical Examination for Early Signs

- Checks for Pūrvarūpa:
 - Pedal edema, flank discomfort, mild dysuria
 - BP monitoring, mild pallor, dehydration

3. Ayurvedic Evaluation

- Conducts:
 - Doṣa-duṣya-srotas analysis
 - Dashavidha and Ashtavidha Pariksha
 - Ama assessment and Agni bala evaluation

4. Preventive Protocol Planning

- Designs a preventive care plan based on:
 - Doṣa-prakṛti and Vyadhi avastha
 - Herbs: Gokshura, Punarnava, Varuṇa, Chandraprabha Vati
 - Kriyakramas: Basti (Snehana or Niruha), mild Virechana if needed
 - Lifestyle modifications: hydration, Diuretic foods, Pathyaapathya

5. Patient Counseling

- Educates patients about avoiding etiological factors and maintaining kidney health through diet, lifestyle, and Ayurvedic regimens.

6. Documentation & Reflection

- Prepares case reports with preventive strategies.
- Reflects on learning outcomes and receives mentor feedback.

Practical Training 6.13 Diagnosis and treatment protocol of Vrikkakoshika kshaya (Nephritic syndrome), Apavrukkatva (Nephrotic syndrome) and Bastisotha(Cystitis)

Activities Done by the Teacher:

1. Clinical Case Demonstration

- Presents representative cases of:
 - Vrikkakoshika kshaya (Nephritic syndrome)
 - Apavrukkatva (Nephrotic syndrome)
 - Bastisothah (Cystitis)
- Guides PGs to observe key signs: edema, hematuria, burning micturition, oliguria, etc.
- 2. Ayurvedic-Modern Correlation Teaching**
 - Explains classical features from Samhitās and their modern equivalents (e.g., Raktamutratva -Hematuria).
 - Maps Doṣa–Duṣya–Srotas involvement and corresponding lab findings.
- 3. Diagnostic Criteria Orientation**
 - Demonstrates how to interpret:
 - Urine R/M, 24-hour protein, serum creatinine
 - CBC, lipid profile, renal ultrasound
 - Classical Nidāna-Panchaka components
- 4. Prognosis Assessment Guidelines**
 - Discusses Sādhya–Asādhya Lakṣaṇas based on:
 - Chronicity, recurrence, Rogi bala, complications
- 5. Treatment Protocol Demonstration**
 - Shows how to select appropriate Ayurvedic medicines and Kriyākramas:
 - For Apavrukkatva: Rasāyana, Lekhana, Basti
 - For Vrikkakoshika kshaya : Rakta-Pitta hara, shodhana if needed
 - For Bastisothah: Pittahara-Mutravirechaka, Śita virya dravyas
- 6. Supervised Clinical Practice**
 - Guides students in examination, case sheet preparation, and treatment planning.
 - Provides real-time correction and reinforcement of protocol formulation.

• **Activities Done by the Student:**

- 1. Case History Taking & Clinical Examination**
 - Collects complete history including:
 - Nidāna, symptoms, duration, recurrence
 - Dietary, lifestyle, and medication history
 - Performs general and systemic examination: edema, BP, flank tenderness, signs of infection.
- 2. Ayurvedic Assessment**
 - Conducts Roga-Rogi Parikhya:
 - Dosa-dusya sammūrchana, Srotas dusti, Ama status
 - Applies Dashavidha and Aṣṭavidha Pariksha

3. Diagnostic Data Collection & Interpretation

- Orders and interprets investigations:
 - Urine R/M (RBCs, pus cells, protein)
 - 24-hr protein, serum albumin, lipid profile
 - USG for bladder wall thickening or renal size

4. Prognosis Evaluation

- Analyzes factors affecting prognosis:
 - Chronicity, response to previous treatment
 - Strength of Agni, Bala, Satva, and Roga Margavastha

5. Formulation of Integrated Treatment Protocol

- Designs stage-specific treatment combining:
 - Ayurvedic aushadhīs (Punarnava, Gokṣura, Varuṇa, Chandana)
 - Kriyakramas: Basti, Virechana, Rasayana
 - Supportive modern care (fluid management, protein control, infection management)

6. Patient Counseling & Education

- Advises on Pathya-Apathya, hydration, salt restriction, follow-up plan.

7. Case Presentation & Documentation

- Presents case findings and treatment plan to the teacher.
- Documents diagnosis, prognosis, and response to treatment.

Practical Training 6.14 Preventive protocol of Vrukkakosiksayah (Nephritic Syndrome) and Apavrukkatva (Nephrotic Syndromes) and Bastisotha (Cystitis).

Activities Done by the Teacher:

1. Orientation Session on Disease Pathogenesis & Prevention

- Explains Ayurvedic and modern etiopathogenesis of the three conditions.
- Describes the transition from acute to chronic disease and role of Nidāna-parivarjana.

2. Demonstration of Risk Factor Assessment

- Shows how to elicit history of:
 - Recurrent infections, immune compromise, toxin exposure, lifestyle errors.
- Correlates with Dosa–Dusya–Srotas vulnerability.

3. Teaching of Preventive Strategies

- Details condition-wise preventive approaches:
 - Vrukkakosiksayah: Raktapittahara, Srotoshodhana, immune-modulating Rasāyana
 - Apavrukkatva: Lekhana, Ama pachana, Rasāyana for tissue support

- Bastisotha: Pittahara, Mutravirechaka, urogenital hygiene education

4. **Live or Simulated Case Demonstration**

- Presents remission-stage or high-risk patients for scholar-led planning.
- Guides formulation of Ahar-Vihar, Aushadhi, and Kriyakrama based preventive protocols.

5. **Supervised Skill Practice**

- Observes scholars as they:
 - Perform prakrti-based preventive planning
 - Suggest individualized drug regimens
 - Counsel patients on lifestyle and seasonal precautions

6. **Reflection & Feedback Session**

- Conducts discussion on barriers in prevention and patient compliance.
- Provides feedback on scholar performance and case handling.

• **Activities Done by the Scholar:**

1. **History Taking & Risk Factor Identification**

- Collects history of recurrent UTI, edema, proteinuria, diet/lifestyle, immune status.
- Assesses Ahara Vihara, Vega dharaṇa, environmental exposures, and prior medications.

2. **Ayurvedic Clinical Assessment**

- Applies Dosa–Dusya–Srotas analysis.
- Performs Dashavidha-Aṣṭavidha Pareeksha to assess susceptibility.

3. **Design of Preventive Protocols**

- Plans stage-wise interventions:
 - Nidāna-parivarjana, Pathya-Apathya regimen
 - Use of herbs like Punarnava, Gokshura, Chandana, Varuṇa, Guggulu
 - Rasāyana therapy during remission (Amalaki, Ashwagandha)

4. **Diet & Lifestyle Counseling**

- Educates patients about:
 - Low-salt, Kapha–Pitta pacifying diets
 - Fluid intake, hygiene, avoiding suppressing urges
 - Seasonal regimens (Ritucarya) for recurrence prevention

5. **Documentation of Preventive Plan**

- Maintains detailed case sheets with:
 - Baseline symptoms, risk mapping, prescribed preventive care
 - Progress monitoring and follow-up planning

6. **Peer Discussion & Review**

- Presents case summaries and preventive plans in group sessions.
- Engages in discussions on challenges in early intervention and chronic care.

Experiential Learning Activity

Experiential-Learning Learning 6.1: Treatment algorithm development for Mootrakricchra

Teacher Activity

1. Conceptual Overview -
 - Present ayurvedic definitions and types of Mootrakricchra
 - Explain Pathogenesis (samprapti) and Srotas involved
2. Clinical Demonstration:
 - Demonstrate Physical examination, abdominal palpation, bladder assessment
 - Use real/simulated cases to show diagnostic and doshic analysis
3. Case based Group Activity
 - Divide scholars into small groups and assign case scenarios
 - Facilitate treatment planning using Ausadha, kriyakarma and Rasyana
4. Practical application of Specific medicine on the judicious use to be included in addition to the formulation enlisted in the UG Syllabus-
 - Punarnavasava, Yavakshara, Gokshura Churna, Chandraprabha vati, Shwetaparpati
 - Discussion on Panchakarma & Rasayana:
 - Explain indications of Yogavasti or Ksheeravasti or Uttara vasti
 - Discuss Rasayana therapy in Mootrakricchra

Students Activity

1. Integrate teacher feedback on scholar's plan formulation
2. Summary and Feedback:
3. Summarize doshic patterns and treatment logic
4. Provide constructive feedback on each group's clinical reasoning Scholar Activity

Pre-session Preparation:

- Study Ayurvedic texts on Mootrakṛcchra (Charaka, Sushruta, etc.)
- Review anatomy/physiology of Mootravaha Srotas
- Learn common Rasayana and Basti preparations
- Group Case Work:
 - a. Take mock case history, do doshic assessment
 - b. Identify appropriate herbs, formulations, or therapies
 - c. Correlate with modern investigations (urine test, USG findings)
- Hands-on Practice:
 - a. Participate in Aushadha prayoga demo or Panchakarma setup
 - b. Observe/administer Basti (under guidance)
 - c. Practice writing pathya-apathya charts for patients
- Presentation & Reflection:
 - a. Present the case in group with rationale of treatment protocol
 - b. Reflect on errors, feedback, and learning outcomes
 - c. Maintain logbook and follow-up summary

Experiential-Learning Learning 6.2: Protocol for diagnosis and algorithm in Mutranalika shotha

Teacher Activity:

Case Study

1. Introduction and Context Setting: Challenges in diagnosis and treatment Ayurvedic principles in managing mutranalika sotha

2. Case Study Presentation: Provide a patient with Mutranalika shotha key symptoms, diagnostic challenge

Scholar Activity:

1. Case Study Analysis : Each group will look for the components including onset, duration, and symptoms, dietary habits, lifestyle, a advise relevant laboratory tests related to the case
2. Group Discussion : Engage in group discussion on approach towards diagnosis and treatment with emphasis on Rog bheda and Avastha
3. Protocol Development : Develop a treatment protocol, incorporating Aushadha prayoga Rasayana prayoga.
4. Peer Review and Feedback : Present teacher and peers, receiving feedback

Experiential-Learning Learning 6.3: Algorithm development for identification of risk factor and complication detection of Pourusha granthi vridhhi(BPH)

Teachers Activity

1. Deliver interactive sessions on disease pathology (Samprapti), diagnosis, and chikitsa
2. Conduct bedside case demonstration.
3. Supervise Panchakarma procedures (e.g., Basti, Parisheka)
4. Initiate case-based learning (CBL) or problem-solving sessions
5. Predict comon complications in various stages
6. Relate between manifestation of main disease and complications with common risk factors

Students Activity

1. Review classical texts & modern correlation of diseases
2. Take complete patient history and perform physical examination
3. Analyze doshic involvement and samprapti of the condition
4. Assist in or administer Panchakarma procedures under supervision
5. Search for risk factors and complications, if any and note down
6. Prepare report and preserve

Experiential-Learning Learning 6.4: Advanced competency on Mootravaha Srota Vikaras.

Teacher Activity

1. Mentions clinical classification and differential diagnosis of Mootrakrichchha, Mootraghata, Mootrasayagata Vikara (LUTI), Pourusha granthi vridhhi (BPH) and Pourusha granthi sothah (Prostatitis).
2. Demonstrates a rational clinical approach based on Nidana Panchaka, Dosha-Dushya Sammurchana, and Avayava Vikriti.
3. Explains the pharmacological properties (Rasa, Guna, Veerya, Vipaka, Prabhava) and therapeutic classification of commonly used formulations.
4. Illustrates, with examples, the indications, dosage, frequency, duration, and method of administration of key formulations like Chandraprabha Vati, Varunadi Kwatha, Gokshuradi Guggulu, Punarnavadi Mandura, etc. including the formulations mentioned in UG syllabus
5. Guides scholars in observing clinical signs and symptoms and in therapeutic decision-making.
6. Provides access to classical references (Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya, etc.) and modern diagnostic tools (IPSS, TRUS, Urinalysis).
7. Facilitates interactive case-based discussions, journal reviews, and clinical scenario analysis.
8. Evaluates scholar performance through clinical skill assessments, logbook entries, case presentations, and assignments.

Student Activity

1. Compiles a list of commonly used Ayurvedic medicines for Mutravaha disorders and classifies them under Shamana and Shodhana categories.
2. Performs detailed clinical examination, history taking, and records findings systematically.
3. Applies Ayurvedic diagnostic principles (e.g., Dashavidha Pariksha, Ashtavidha Pariksha) to analyze clinical conditions.
4. Interprets investigation reports (CBC, PSA, Urine R/M, USG, IPSS scoring) in correlation with Ayurvedic diagnosis.
5. Prepares and presents clinical case reports including Nidana, Samprapti, Chikitsa Sutra, and Yukti.
6. Assists in administration of therapeutic procedures like Basti, Uttarabasti, and Kshara Karma (if applicable).
7. Participates in group discussions, literature reviews, and journal clubs related to urogenital disorders.

8. Documents learning outcomes and patient progress in a clinical logbook and prepares for research or publication or Flipped Classroom manner
9. Deliver lecture to the UG students on the topic.

Experiential-Learning Learning 6.5: Posts-therapeutic Module of Mootravaha Srotas

Activities Done by Teacher:

1. **Facilitate Clinical Case Discussions**

- Present real or simulated cases of Mootrasmari for group analysis.

2. **Guide Reflective Practice Sessions**

- Encourage scholars to reflect on recent clinical exposures, challenges, and outcomes.

3. **Conduct Clinical Skill Audits**

- Observe and provide feedback on history taking, diagnosis, and treatment planning.

4. **Organize Group Brainstorming**

- Lead group activities to identify knowledge and practice gaps.

5. **Supervise Formative Assessments**

- Use checklists, OSCEs, or quizzes to assess clinical reasoning.

Activities Done by Student:

1. **Maintain Reflective Clinical Logbooks**

- Document clinical encounters with insights and learnings.

2. **Participate in Case-Based Learning**

- Actively discuss diagnosis and Ayurvedic management of Mootrasuari.

3. Identify Learning Gaps

- Self-evaluate areas of uncertainty or difficulty in clinical decision-making.

4. Present Case Reviews

- Prepare presentations on observed or managed cases with critical analysis.

5. Develop Improvement Plans

- Propose individualized strategies to strengthen weak areas (e.g., revising Nidan Panchaka, sharpening diagnostic skills, exploring new Samprapti-based interventions).

Experiential-Learning Learning 6.6: Protocol on Ashukari Vrikka Vikara and its Management

Activities Done by Teacher:

- 1. Facilitate Case-Based Discussions on AKI (Ashukari Vrikka Vikara)**
 - Present real/simulated cases showing varied doshic involvement and Rogi Bala for interactive diagnosis.
- 2. Demonstrate Clinical Mapping of Samprapti**
 - Guide learners in preparing Dosha-Dushya-Srotas Samprapti charts with Kriyakala stages.
- 3. Explain Samprapti Vighatana Principles**
 - Teach how to plan treatment by identifying and breaking specific points in the disease pathway.
- 4. Organize Group Activities on Classification**
 - Lead scholars in categorizing AKI (Prerenal, Intrarenal, Postrenal) and mapping to Ayurvedic equivalents.
- 5. Supervise Protocol Formulation Exercises**
 - Assist scholars in designing chikitsa krama (Shamana, Shodhana, Rasayana) based on patient state.

Activities Done by Scholar :

- 1. Analyze Clinical Cases of AKI (Vrikka Vikara)**
 - Collect case details, identify presenting symptoms, and assess Dosha-Dushya-Srotas involvement.
- 2. Prepare Samprapti Charts**
 - Draw classical Samprapti (pathogenesis) diagrams and map modern findings with Ayurvedic reasoning.

3. **Classify the Condition Based on Samprapti**

– Differentiate types of Ashukari Vrikka Vikara (Vataja, Pittaja, etc.) based on progression and symptoms.

4. **Formulate Treatment Plan (Samprapti Vighatana)**

– Propose a treatment strategy focusing on interrupting the disease process—choosing appropriate Aushadhi, Kriyākramas, and Pathya.

5. **Present Clinical Reasoning with Justification**

– Present the entire case with logical reasoning for diagnosis, classification, and chikitsa siddhanta in class.

6. **Participate in Reflective Feedback Sessions**

– Evaluate their own and peers' approaches to refine clinical decision-making and theoretical clarity.

Experiential-Learning Learning 6.7: Protocol Development for Special Treatment in Mootrashmari.

Teacher Activity:

1. Mentions types and causes of Mootrashmari with Nidana Panchaka and Bheda based on classical texts.
2. Demonstrates clinical assessment and Ayurvedic diagnostic tools: Ashtavidha and Dashavidha Pariksha.
3. Explains formulations and their Rasa, Guna, Veerya, Vipaka, Prabhava.
4. Varunadi kwatha, Gokhuradi Guggulu, Gokhura churna, Apamarga khyara, Chandraprava Vati,
5. Demonstrates Basti & Uttarabasti preparation and administration, including patient positioning and precautions.
6. Guides scholars in interpretation of lab reports (Urine R/M, USG, Crystals).
7. Conducts case-based discussions and correlates Ayurvedic and contemporary mootrashmari management.
8. Facilitates discussion on Pathya-apathya with classical and contemporary dietary advice.
9. Evaluates scholars' performance through case presentations, clinical observations, and viva.

Student Activity:

1. Reviews classical references from Brihatrayi and Laghutrayi on Mutrashmari Samprapti and Chikitsa.
2. Performs complete clinical examination and history taking, recording pain, dysuria, haematuria, etc.
3. Documents and interprets reports: Urine microscopy, USG KUB, blood tests.
4. Prepares individualized treatment plans using Shamana and Shodhana therapy.
5. Assists in Basti or Uttarabasti administration, noting clinical response.
6. Educates patients on Pathya–Apathya including daily water intake, avoidance of stone-forming food.
7. Participates in seminars, clinical discussions, journal reviews, and case documentation.
8. Maintains a clinical logbook with patient profile, treatment given, and outcome observed.
9. Apply the schedule, follow up and document accordingly.

Experiential-Learning Learning 6.8: Protocol development for diagnosis and treatment of Vasti Ashmari (Urolithiasis)

Teacher Activity:

1. **Explains classical concept** of Vasti Ashmari including Nidana Panchaka, Doshika classification, and types of stones.
2. **Demonstrates clinical examination** and relevant Ashtavidha and Dashavidha Pariksha with emphasis on urinary features.
3. **Teaches identification** of classical herbs and formulations used in Ashmari Chikitsa.
4. **Demonstrates Panchakarma procedures** like Basti preparation, administration technique, and care.
5. **Correlates clinical symptoms** with USG findings and other modern diagnostics.
6. **Guides case-based learning** and formulation of individualized management plans.
7. **Facilitates seminars and case presentations**, promoting evidence-based reasoning.
8. **Evaluates scholars' skills** in clinical observation, prescription planning, and communication.

Scholar Activity:

1. **Performs clinical history-taking** with Ayurvedic framework (e.g., Vedana, Daha, Mootrapravritti).
2. **Conducts Dosha assessment** and classifies Ashmari (Vataja, Pittaja, Kaphaja).
3. **Documents and interprets investigations:** Urine R/M, USG KUB, and other relevant tests.
4. **Prepares treatment protocol** integrating Shamana, Shodhana, and Pathya-Apathya.
5. **Assists in administration** of Basti, Uttarabasti, and Virechana under supervision.
6. **Counsels patients on Pathyaapathya**, preparing diet and lifestyle handouts.
7. **Presents clinical cases** with correlation between Ayurvedic and modern diagnostic findings.
8. **Maintains clinical logbook**, recording treatment plans, follow-up, and patient outcomes.

Experiential-Learning Learning 6.9: Protocol for general Ayurvedic Treatment in Mootrashmari

Teacher Activity:

1. **Introduces classical texts and commentaries** related to Ashmari Chikitsa (e.g., Sushruta, Charaka, Ashtanga Hridaya).
2. **Explains Dosha-wise classification** of Mootrasmari (Vataja, Pittaja, Kaphaja) and corresponding line of treatment.
3. **Mentors literature review methodology**, focusing on peer-reviewed Ayurvedic journals, clinical trial reports, and pharmacological reviews.
4. **Demonstrates data extraction methods** from research articles (effect size, intervention duration, dosage).
5. **Guides students in evaluating clinical efficacy** of drugs like Pashanabheda, Gokshura, Varuna, etc.
6. **Explains study design interpretation** (RCTs, observational studies, case series) relevant to Ashmari treatment.
7. **Facilitates group discussions and critical appraisal** of published studies.

8. **Evaluates scholar presentations and reports** based on critical analysis, depth of synthesis, and application to clinical practice.

Scholar Activity:

1. **Identifies and reviews classical references** for Ashmari management and compiles Aushadha-Kriyakrama mapping for each type (Vataja, Pittaja, Kaphaja).
2. **Searches and selects contemporary research articles** (PubMed, AYU Journal, J-AIM, Ancient Science of Life, etc.) related to Ayurvedic treatments in urolithiasis.
3. **Analyzes therapeutic outcomes** (e.g., stone size reduction, pain relief, recurrence prevention, improvement in USG findings) of individual herbs or combinations.
4. **Prepares tabulated data** comparing traditional descriptions with modern evidence
5. **Critically appraises clinical trial data:** methodology, sample size, follow-up, results, and limitations.
6. **Correlates findings** with classical pharmacodynamics (Rasa, Guna, Virya, Vipaka, Prabhava).
7. **Presents synthesized reports** in seminars or departmental meetings.
8. **Documents research review summary** in logbook or journal club. register.

Experiential-Learning Learning 6.10: Protocol Development on Diagnosis and Mapping of Treatment of urolithiasis and nephrolithiasis through Ayurveda

Activities Done by Teacher:

1. **Facilitate Clinical Case Mapping Sessions**
 - Guide students in mapping Nidana Panchaka, Dosha-Dushya Sammurchana, and Rogavastha with clinical features.
2. **Demonstrate Diagnostic Protocols**
 - Explain classical diagnostic tools like Ashtavidha, Dashavidha, and Upashaya-Anupashaya in real patient settings.
3. **Supervise Integrated Management Planning**
 - Help scholars frame individualized Chikitsa Siddhanta based on diagnostic findings.
4. **Provide Feedback on Diagnostic Reasoning**

- Review and refine scholars' interpretations and treatment planning.

5. Coordinate Interdisciplinary Clinical Meetings

- Include modern diagnostic tools (USG, urine tests) and show how to integrate with Ayurvedic diagnosis.

Activities Done by Scholar:

1. Perform Ayurvedic Diagnostic Assessment

- Conduct detailed evaluation using Rogibala, Rogabala, Nidana Panchaka, and Pariksha techniques.

2. Map Clinical Findings with Ayurvedic Diagnosis

- Correlate signs and symptoms with classical descriptions of different types of Mutrashmari.

3. Plan Management Based on Chikitsa Siddhanta

- Identify proper Aushadha, Panchakarma, and Pathya-Apathya protocols.

4. Engage in Case Reflection and Discussion

- Participate in clinical audits and reflective sessions to analyze diagnostic and therapeutic decisions.

5. Document Diagnostic-Management Protocols

- Create structured clinical maps showing correlation between diagnosis and management.

Experiential-Learning Learning 6.11: Justifications on Chikitsa Siddhanta in Vrikka Roga

Activities Done by Teacher:

1. Facilitate Case-Based Learning (CBL):

- Present diverse clinical scenarios of Vrikka Roga with variation in Roga–Rogi Avastha for analysis.

2. Guide Clinical Reasoning Workshops:

- Mentor scholars to assess Rogabala, Rogibala, Vyadhi Avastha and formulate appropriate Chikitsa Siddhanta.

3. Supervise Classical Text Correlation:

- Instruct students to extract and apply relevant references from Bhaisajya Ratnavali.

4. Organize Reflection Sessions:

- Conduct guided reflection to evaluate students' decision-making and justification for treatment protocols.

5. Provide Feedback and Validation:

- Evaluate treatment plans and suggest improvements based on clinical logic and classical validation.

Activities Done by Scholar:

1. Conduct Case Analysis:

- Analyze real or simulated patient data with emphasis on Rogi–Roga Avastha and determine treatment goals.

2. Formulate Individualized Chikitsa Siddhanta:

- Justify choice of Shodhana, Shamana, Aushadha, and Pathya using textual references.

3. Present Case Reflections:

- Present case studies with treatment rationale linked to Bhaisajya Ratnavali guidelines.

4. Maintain Reflective Learning Logs:

- Document diagnostic reasoning, applied Chikitsa Siddhanta, and outcomes in logbooks.

5. Peer Discussion and Review:

- Engage in small-group discussions to compare and improve treatment approaches based on clinical reasoning.

Experiential-Learning Learning 6.12: Diagnostic protocol development for Vrikka Roga

Activities Done by Teacher:

1. **Facilitate Prognostic Case Discussions**
 - Present varied clinical scenarios of Vrikka Roga with different prognostic markers for analysis.
2. **Demonstrate Prognostic Assessment Methods**
 - Teach assessment of Rogabala, Rogibala, Vyadhi Avastha, and signs of Sadhya-Asadhyata as per Ayurvedic texts.
3. **Guide Protocol Development Workshops**
 - Assist scholars in developing treatment plans (Samana/Shodhana/Rasayana) tailored to the prognosis and stage of the disease.
4. **Supervise Textual Mapping Activities**
 - Help scholars reference Bhaisajya Ratnavali, Charaka, Sushruta, and Madhava Nidana for relevant Lakshanas and management.
5. **Conduct Reflection and Feedback Sessions**
 - Provide constructive feedback on decision-making and reasoning applied in protocol formulation.

Activities Done by Scholar:

1. **Assess Prognosis in Clinical Cases**
 - Identify Sadhya-Asadhyata Lakshanas in patients through examination and text-based correlation.
2. **Document Rogi–Roga Avastha**
 - Record clinical features considering Rogibala, Vyadhi Bala, Doshic involvement, and Kriyakala.
3. **Formulate Personalized Treatment Protocols**
 - Design therapeutic approaches considering disease stage (acute/chronic/complicated) and patient strength.
4. **Present Case Reflections**
 - Present complete case profiles with prognosis assessment and rationale for selected Chikitsa Siddhanta.
5. **Engage in Peer Review and Group Critique**
 - Review and discuss peers' case presentations to refine understanding of prognostic variability and protocol planning.

Experiential-Learning Learning 6.13: Recent Updates of Diagnosis and Ayurvedic Management of Chirakari Vrikka Vikara (CKD)

Activities Done by Teacher:

1. Facilitate Literature Review Sessions

– Assign current research papers, guidelines (e.g., KDIGO, API, AYUSH), and integrative management articles for critical appraisal.

2. Conduct Expert-led Case Discussions

– Guide discussion on recent diagnostic tools (e.g., eGFR estimation, Cystatin C, urinary biomarkers) and how they relate to Ayurvedic Rogapariksha.

3. Demonstrate Use of Clinical Decision Tools

– Introduce staging systems (e.g., CKD 1–5), Ayurvedic Avastha mapping, and tools to assess prognosis (Rogabala–Rogibala).

4. Mentor Integrative Management Planning

– Help scholars design Ayurvedic treatment plans that incorporate or complement modern nephrology care, including diet, Rasayana, and renal-safe formulations.

5. Evaluate Student Presentations on Prognosis

– Provide feedback on case-based reasoning about stage-wise prognosis using both Ayurvedic and biomedical indicators.

Activities Done by Scholar :

1. Conduct Critical Appraisal of Literature

– Review and present key takeaways from recent research and clinical guidelines on CKD diagnosis and management.

2. Prepare Comparative Diagnostic Charts

– Contrast Ayurvedic diagnostic tools (e.g., Nadi, Mootrapariksha) with modern parameters (e.g., serum creatinine, eGFR, ultrasound findings).

3. **Analyze Stage-wise Prognosis**

– Evaluate patient prognosis by applying both modern CKD staging and Ayurvedic Sadhya–Asadhyata Lakshanas based on Rogi-Roga Avastha.

4. **Design Integrative Treatment Protocols**

Develop personalized Chikitsa Krama incorporating Ayurvedic formulations, Rasayana therapy, Pathya-Apathya, and relevant modern interventions.

5. **Present Case Reflections**

Present real or simulated cases highlighting diagnostic approach, stage-wise prognosis, and updated therapeutic strategies.

6. **Maintain Reflective Clinical Logs**

– Document each case with justification for diagnosis, prognosis, and treatment, referencing both classical texts and recent updates.

Experiential-Learning Learning 6.14: Capacity building on Vrikkaroga

Activities Done by Teacher :

1. **Orientation & Topic Framing**

- Guides scholars in selecting focused seminar topics integrating Vrikkaroga and modern nephrological conditions (e.g., CKD, CKDu, UTI, Glomerulonephritis).
- Suggests classical references and latest research articles.

2. **Critical Appraisal Training**

- Teaches how to review classical and contemporary literature critically.
- Demonstrates methods of textual comparison and evidence-based reasoning.

3. **Presentation Skills Coaching**

- Trains students in scientific presentation techniques.
- Provides templates and feedback on visual content (PPTs, charts, tables).

4. **Mock Seminars & Feedback**

- Organizes pre-seminar rehearsals with peer review.
- Provides constructive feedback on clarity, time management, and referencing.

5. **Integration Support**

- Encourages correlation of Doṣa–Duṣya–Srotas with modern anatomy and pathology.
- Highlights Ayurvedic terminology adaptation for interdisciplinary communication.

6. **Assessment & Reflection**

- Conducts post-presentation reflection sessions.
- Assesses content depth, originality, and clinical relevance.

Activities Done by Scholar :

1. **Topic Selection & Research**

- Selects seminar topic with clear Ayurvedic-modern correlation
- Reviews Samhitā, Nighaṇṭu, commentaries, and modern journals (PubMed, AYU, J-AIM).

2. **Content Development**

- Prepares seminar paper integrating classical references, case studies, clinical experiences, and research data.
- Maps Nidana, Samprapti, Sadhya-Asadhya Laksana, and Cikitsa with modern diagnostics and management protocols.

3. **Peer Interaction**

- Engages in group discussions, peer reviews, and academic debates.
- Participates in interdisciplinary learning sessions with modern medicine experts.

4. **Seminar Presentation**

- Delivers well-structured PowerPoint seminar with clarity and scientific rigor.
- Uses comparative charts, conceptual maps, and case vignettes.

5. **Self-Reflection & Improvement**

- Reflects on feedback from teacher and peers.
- Revises content and delivery style for future capacity building.

6. **Documentation**

- Submits written seminar report with references.
- Maintains a logbook or portfolio of presentations and academic contributions.

Experiential-Learning Learning 6.15: Techniques on urinary catheterization

Activities Done by the Teacher:

1. **Clinical Demonstration on Simulation dummy or Patient**

- Demonstrates aseptic urinary catheterization on a male and female mannequin.
- If appropriate, supervises the procedure on real patients under strict protocol.

2. **Indication-Based Case Discussion**

- Presents different case scenarios (e.g., acute retention, post-op, neurogenic bladder) and leads discussion on when catheterization is warranted.
- 3. Technique Breakdown & Protocol Teaching**
 - Explains catheter types (Foley, Nelaton, Suprapubic), sizes, insertion techniques.
 - Demonstrates hand hygiene, sterilization, draping, insertion, balloon inflation, securing, and drainage bag care.
- 4. Complication Awareness**
 - Describes early and late complications such as:
 - UTI (CAUTI)
 - Urethral trauma
 - Encrustation and blockage
 - Paraphimosis
 - Highlights prevention and early recognition strategies.
- 5. Supervised Hands-On Practice**
 - Supervises students performing catheterization under guidance.
 - Offers immediate feedback on technique, asepsis, and communication with the patient.
- 6. Debriefing & Reflective Learning**
 - Conducts reflection sessions after procedures.
 - Encourages students to identify errors, difficulties, and learning points.

Activities Done by the Student :

- 1. Case-Based Indication Analysis**
 - Identifies clinical indications for catheterization in different hospital cases.
 - Records patient-specific risk-benefit evaluation before the procedure.
- 2. Hands-On Catheterization Practice**
 - Performs urinary catheterization on mannequins and selected patients under supervision.
 - Follows aseptic protocol strictly and documents procedure details.
- 3. Equipment Familiarization**
 - Identifies and prepares necessary items:
 - Catheter (appropriate size), syringe, antiseptic, gloves, drapes, drainage bag.
 - Practices setting up a sterile tray independently.
- 4. Complication Monitoring**
 - Observes catheterized patients for signs of infection, trauma, leakage, and block.
 - Learns to troubleshoot minor complications under supervision.
- 5. Documentation & Reporting**
 - Records catheterization in patient notes (indication, type, size, output).

- Reports findings and concerns during clinical rounds.
- 6. Reflection & Peer Discussion**
 - Participates in group discussions on procedural experiences.
 - Reflects on confidence level, patient communication, and learning improvements.

Experiential-Learning Learning 6.16: Standardization of diagnosis and treatment of Vrikkakoshika kshaya (Nephritic syndrome)

Activities Done by the Teacher:

- 1. Clinical Bedside Orientation**
 - Introduces real or simulated patients with features of Nephritic syndrome (e.g., hematuria, edema, hypertension).
 - Guides history-taking focused on Nidana, duration, and recurrence.
- 2. Teaching Prognostic Assessment**
 - Explains how to assess prognosis using Ayurvedic parameters:
 - Roga bala, Rogibala, chronicity, doshic predominance.
 - Correlates with modern prognostic markers like serum creatinine, BP, and kidney function trend.
- 3. Investigation Interpretation Training**
 - Interprets lab data (urine R/M, ASO titer, creatinine, CBC).
 - Links findings with Ayurvedic concepts such as Raktamutratva, Mutravasata, Ama indicators.
- 4. Protocol Development Demonstration**
 - Guides the formulation of treatment based on:
 - Disease stage and Dosa–Dusya–Srotas involvement.
 - Selection of appropriate Aushadha, Kriyakramas (e.g., Basti, Virechana), and dietary regimen.
- 5. Facilitated Clinical Discussion**
 - Moderates case-based group discussions.
 - Encourages comparison between patient cases and classical references.
- 6. Reflection & Feedback**
 - Provides individualized feedback on clinical reasoning, diagnostic interpretation, and therapeutic planning.

Activities Done by the Student:

- 1. Case History Elicitation**
 - Takes a detailed, structured history emphasizing:
 - Triggers (e.g., infections), lifestyle, chronicity.
 - Ayurvedic nidanas and clinical features.
- 2. Clinical Examination**

- Performs general and system-specific examination.
- Records findings like pedal edema, BP, pallor, flank pain.
- 3. Ayurvedic Assessment**
 - Applies Dosa–Dusya–Srotas theory and Dashavidha–Astavidha Pareeksha
 - Determines disease stage, chronicity, Agni bala, and Ojas.
- 4. Laboratory Investigation Review**
 - Collects and analyzes patient investigations:
 - Urine routine (RBCs, proteinuria), serum creatinine, ASO titer, ultrasound.
 - Correlates with Ayurvedic observations (Raktamutratva, Ama laksana).
- 5. Prognosis Determination**
 - Evaluates prognosis using:
 - Classical Ayurvedic principles of Sadhya–Asadhya laksanas.
 - Clinical course, organ involvement, lab trends.
- 6. Treatment Protocol Formulation**
 - Designs personalized treatment including:
 - Aushadhi: Punarnava, Gokṣura, Varuṇa, Chandraprabha Vati.
 - Kriyakramas: Basti (as per stage), Virechana (if indicated).
 - Pathya-Apathya: Diet restrictions, hydration, lifestyle.
- 7. Case Presentation & Peer Learning**
 - Presents case to peers and teacher for discussion.
 - Receives feedback and participates in reflective discussion.

Experiential-Learning Learning 6.17: Diagnosis and mapping of treatment protocol of Apavrukkatva (Nephrotic syndrome)

Activities Done by the Teacher:

- 1. Clinical Exposure to Apavrukkatva Cases**
 - Presents real or simulated patients with symptoms of Nephrotic syndrome (e.g., generalized edema, hypoalbuminemia).
- 2. Samprāpti Charting Workshop**
 - Guides scholars in drawing the Samprapti (pathogenesis) of Apavrukkatva:
 - Involvement of Kapha, Medas, ama, Vata avaraṇa, Srotodushti (especially Mutravaha and Medovaha srotas).
 - Encourages linking Samprāpti to clinical expression and Laksanas.
- 3. Treatment Mapping Demonstration**
 - Explains how to choose stage-appropriate Ayurvedic protocols based on:
 - Dosa-Dusya status
 - Chronicity of the disease

- Agni, Bala, and Vyādhi avasthā

4. **Model Case Analysis**

- Walks through clinical case examples showing disease progression and therapeutic intervention points.
- Discusses comparative clinical outcomes from Ayurvedic and modern perspectives.

5. **Feedback and Correction**

- Observes scholar presentations and provides individualized feedback on:
 - Laksana differentiation accuracy
 - Samprapti logic
 - Appropriateness of treatment mapping

Activities Done by the Scholar :

1. **Clinical Case Evaluation**

- Elicits patient history focusing on:
 - Onset of edema, urinary changes, weight gain, fatigue
 - Diet, lifestyle, previous illnesses or medications

2. **Ayurvedic Laksana Identification**

- Identifies classical signs like:
 - Dīnabhāva, Śoṭha, Ama laksana, Mutra alpata, Avilamutrata
- Applies Ashtavidha and Dashavidha Pareeksha to assess the internal milieu.

3. **Samprapti Vighatana Analysis**

- Constructs a detailed Samprapti chart highlighting:
 - Kapha-Medo dushti, Ama utpatti, Vata avarana, Srotorodha
- Analyzes how these lead to the development of Laksanas and disease progression.

4. **Mapping of Ayurvedic Treatment Protocol**

- Designs a treatment plan including:
 - **Ama pachana:** Trikatu, Pippali, Sunthi
 - **Lekhana:** Guggulu yoga, Varuṇa
 - **Mutravirechaka:** Punarnava, Gokshura, Chandraprabha Vati
 - **Basti karma:** Lekhana Basti, Matra Basti in chronic/recurrent stages
 - **Rasāyana:** After symptom control for dhatu support

5. **Case Documentation and Presentation**

- Prepares detailed case sheets linking:
 - Clinical features → Samprapti → Protocol
 - Monitors progress and proposes treatment modifications
- Presents findings to peer group and teacher for discussion

6. Reflection and Feedback Integration ○ Reflects on challenges in diagnosis and treatment mapping. ○ Integrates mentor feedback into improved case handling.	
Modular Assessment	
Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 75 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome-Based Assessment: 02 credits x 04 hours x 50 marks • Practical Learning Outcome Assessment: Application of Ayurvedic Principles in Diagnosis and Management of Mootrakrichra [25 marks x 2 hour] Instructions: The instructor shall provide real/ simulated case or case scenario of Mootrakrichra to each scholar. The scholars will be instructed to : ○ Analyze the case using Roga-Rogi Pariksha and Nidana Panchaka. ○ Evaluate Samprapti ghataka, determine Roganirnaya and Sadhyasadhyata. ○ Advice and Interpret lab investigations in line with clinical presentation. ○ Propose a treatment plan incorporating appropriate Aushadha, Kriyākramas, and Pathya-Apathya. ○ Justify chikitsā siddhānta with classical reasoning. Assessment Method: Mini-CEX / OSCE – Rubric-Based Evaluation (Clinical Evaluation [History & Examination]) Investigations (Lab & Radiological), Understanding Samprapti, Sadhyasadhyata & Roga Nirnaya, Propose the Chikitsa Plan, Justification with respect to classical reference, Communication & Presentation Skills) • Structured viva (10 marks x 1 hour) • Experiential Learning Outcome Assessment: [15 marks x 1 hour] Eg: What were the most frequent Ayurvedic signs and symptoms you observed in patients with Mootrakrichra? What part of the clinical reasoning or decision-making process did you find most challenging while dealing with Mootrakrichra?	6

similar activity can be repeated for other diseases like Mootraghata,Mootranalika Shotha [Urinary tract infections (UTI)],Pourusha granthi vridhhi (Benign prostatic hyperplasia),Pourusha granthi shotha (Prostitis),Vrikka Koshika shotha (Nephritis),Vrikkakoshikasayah (Nephritic syndrome),Apavrukkatva (Nephrotic syndrome),Bastishotha ,Vrikka Roga,Mootrashmari Or Any practical in converted form can be taken for assessment. (25 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (25 marks)	
Module 7 : Purishavaha Srotodushti vikaras evum Chikitsa (Intestinal and colorectal disorders with worm infestations and its management)	
Module Learning Objectives (At the end of the module, the students should be able to) 1. Describe and Diagnose the Purishavaha srotodushti Vikaras along with the knowledge of recent updates. 2. Conduct detailed clinical examination of the patient with Purishavaha srotodushti Vikaras. 3. Advice, analyse and interpret appropriate investigations in Purishavaha srotodushti Vikaras. 4. Plan, execute and analyse for ideal Ayurvedic treatment principles of Shamana, Shodhana, Rasayana Chikitsa and Pathyapathya of the diseases under Purishavaha srotas. 5. Plan for directions of clinical research of the diseases under Purishavaha srotas. 6. Develop deep understanding of toxic substances and their effects on the human body. 7. Deal with medico-legal cases of poisoning.	
Unit 1 Purishavaha srotodushti vikara • Atisara (SM37) (Diarrhoea) , Pravahika (SM38)(Amoebic and bacillary dysentery), Udavarta • Antrashotha (Gastroenteritis) • Inflammatory bowel disease, Raktatisara (SM37) (Ulcerative colitis and Crohn's disease under IBD) References: 1,2,3,8,16,51	

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teachin g Learning Methods
CO1,CO2,C O4,CO5	Differentiate Purishavaha Pradosaja Vyadhi such as Atisara, Pravahika, Udaravarta , Antrasotha based on Nidāna Pañchaka and sadhyasadyata	1	Lecture	CAP	Knows-how	FC
CO1,CO2,C O4,CO5,CO6	Perform comprehensive Roga-Rogi pariksha and demonstrate the ability to formulate an individualized treatment plan for Pravahika, with due consideration to its bheda and Roga-rogi bala	2	Practical7.1	PSY- GUD	Shows-how	PT,SIM, PBL,CBL ,TBL
CO1,CO2,C O4,CO5,CO6	Assess and formulate a comprehensive management protocol encompassing Aushada Prayoga, Kriyakrama, and Pathyapathya, meticulously tailored to the specific type and clinical severity of Pravahika.	2	Experiential- Learning7.1	PSY- ADT	Does	D,BS,CB L,C_L
CO1,CO2,C O4,CO5,CO6	Describe the comprehensive management protocol for various types Atisara, encompassing Shamana, Shodhana, Rasāyana, and relevant Pathya-Apathya.	1	Lecture	CC	Knows-how	L&GD
CO1,CO2,C O4,CO5,CO6	Illustrate therapeutic effects of various Aushadha and Kriyakrama in the management of different types of Atisara, based on evidence from contemporary research literature	2	Experiential- Learning7.2	CS	Does	BS,PER, JC,PAL

CO1,CO2,C O4,CO5,CO6 ,CO7	Assess and formulate a comprehensive treatment protocol for a patient with Diarrhoea, incorporating appropriate Aushadha prayoga, Kriyakrama, and Pathya-Apathya.	2	Experiential- Learning7.3	PSY- ADT	Does	D- BED,D-M
CO1,CO2,C O4,CO5,CO6 ,CO7	Demonstrate the ability to advise on and interpret appropriate diagnostic tests and imaging studies based on the clinical presentation of Dysentery(Amoebic/Bacillary)	2	Practical7.2	PSY- MEC	Shows-how	PBL,D- BED,CB L,PSM,P T
CO1,CO2,C O4,CO5,CO6 ,CO7	Describe the etiology, pathophysiology, clinical features, diagnostic approaches of IBD and critically compare the management principles of Ulcerative Colitis and Crohn's Disease within the framework of Ayurvedic and contemporary medical systems.	1	Lecture	CC	Knows-how	L&PPT ,FC
CO1,CO2,C O4,CO5,CO6 ,CO7	Identify the effectiveness of various medicines and treatment procedures for IBD, based on evidence from research articles, and compile the findings into a comprehensive report.	2	Experiential- Learning7.4	AFT- REC	Does	PSM,BS, PT
CO1,CO2,C O4,CO5,CO6	Illustrate a rationalized management protocol for Udarvarta incorporating Aushadha Prayoga, Kriyakrama, Rasayana, and Pathya-Apathya.	2	Experiential- Learning7.5	PSY- ADT	Does	BL,D
CO1,CO2,C O4,CO5,CO6	Describe the Shodhana, Shamana, Pathyapathya, and Sadhyasadyata for Udavarta	1	Lecture	CS	Knows-how	L&GD,L& PPT ,CD
CO1,CO2,C O4,CO5,CO6 ,CO7	Assess and Analyze the clinical features of Udavarta through patient interaction, analyze the underlying Samprapti and Dosa-Dusya involvement.	2	Experiential- Learning7.6	PSY- ADT	Does	IBL,PBL, D-BED
CO1,CO2,C O4,CO5,CO6	Examine, Formulate and interpret the clinical features of Raktatisara (ulcerative colitis/crohns disease) through patient interaction, analyze the underlying Samprapti and Dosha–Dusya involvement, and formulate an individualized treatment protocol incorporating	2	Experiential- Learning7.7	PSY- ADT	Does	W,TBL,C BL,PBL, PER

	Aushadha Prayoga, Kriyakrama, and Pathya–Apathya based on Roga Avastha and Rogi Bala.					
Unit 2 Purishaja Krimi Vikara evum chikitsa - Purishaja krimi vikara - Intestinal helminthiasis References: 1,16						
3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teachin g Learning Methods
CO1,CO2,C O4,CO5,CO6	Identify the clinical features of Purishaja Krimi Vikara through patient interaction, analyze the Dosha–Dushya–Srotas involvement and Samprapti, and formulate an individualized treatment protocol incorporating Krimighna Aushadha, Kriyakrama, Rasayana, and Pathya–Apathya.	2	Experiential-Learning7.8	PSY-ADT	Does	BS,PAL, DL,TBL
CO1,CO2,C O4,CO5,CO6	Discuss the principles of Samanya Krimi Chikitsa Sutra including Krimi Apakarshana, Prakruti Vighata, and Nidana Anupasevana, and illustrate their clinical relevance in Ayurvedic parasitic disease management	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2,C O4,CO5,CO6 ,CO7	Demonstrate the application of Shodhana and Shamana procedures in the management of Purishaja Krimi Vikara (Intestinal worm infestation), including appropriate selection of Panchakarma therapies, Krimighna Aushadha, and supportive Pathya practices based on Roga Avastha and Rogi Bala.	2	Practical7.3	PSY-MEC	Shows-how	D- M,PBL,D - BED,PrB L

CO1,CO2,C O4,CO5,CO6 ,CO7	Illustrate mode of selection and application of Rasayana Chikitsa in post-treated cases of Purishaja Krimi Vikara by assessing Roga Avastha, Rogi Bala, Agni status and integrate appropriate Rasayana formulations to restore gut function, immunity, and strength.	3	Practical7.4	PSY- GUD	Knows-how	DL,CBL, D
CO1,CO2,C O4,CO5,CO6	Describe the causative organisms, aetiology, clinical manifestations and pathophysiology of Intestinal Helminthiasis and explain their relevance to disease progression and clinical management.	1	Lecture	CC	Knows-how	FC
CO1,CO2,C O4,CO5,CO6	Analyze the effectiveness of various medicines and treatment procedures for intestinal Helminthiasis based on evidence from research articles and compile the findings into a comprehensive report	3	Experiential- Learning7.9	PSY- ADT	Shows-how	DL,CD,R LE,JC,D- M

Unit 3 Diagnostic techniques of Purishavaha Srotodushti Vikara (Intestinal and colorectal disorders)

- Colonoscopy, Sigmoidoscopy
- Stool examination

References: 51

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teachin g Learning Methods
CO1,CO2,C O4,CO5,CO6 ,CO7	Conduct a basic diagnostic algorithm that integrates colonoscopic findings with Ayurvedic assessment of Purishavaha Srotas and clinical presentations	2	Practical7.5	PSY- MEC	Shows-how	SIM,PT, PBL,CBL ,D-BED
CO1,CO2,C O4,CO5,CO6	Describe the fundamental techniques of colonoscopy and explain its clinical applications in diagnosing lower	1	Lecture	CS	Knows-how	FC

	gastrointestinal tract disorders, including its relevance to the assessment of Purishavaha Srotas.					
CO1,CO2,C O4,CO5,CO6	Demonstrate a hands-on training process of colonoscopy by observing procedural techniques, evaluating safety protocols, and recognizing key anatomical landmarks relevant to diagnosis and intervention	3	Practical7.6	PSY- MEC	Shows-how	CD,PT,P SM,D- BED,SD L
CO1,CO2,C O4,CO5,CO6 ,CO7	Illustrate stool examination findings for assessing gastrointestinal health and identifying pathogenic organisms by correlating laboratory results with clinical features and Ayurvedic parameters such as Mala Pariksha and Dosha involvement	2	Experiential- Learning7.1 0	PSY- ADT	Shows-how	DL,DIS,C BL,LRI
CO1,CO2,C O4,CO5,CO6 ,CO7	Demonstrate integrative assessment approach that combines colonoscopy findings with Ayurvedic diagnostic criteria with variations of patients of Purishavaha Srotas	2	Experiential- Learning7.1 1	PSY- MEC	Does	D,PSM,S IM,CD

Unit 4 Viruddha and Asatmya Ahara Janya Vikara (food poisoning)

- Viruddha and Asatmya Ahara Janya Vikara (Food poisoning)
- Classification, causative agents, prodromal signs and symptoms and aggravating factors of food poisoning
- Learning the role of public health services in food poisoning outbreaks

References: 1,3,14,51

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teachin g Learning Methods

CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Compile evidence-based research on Ayurvedic medicines and treatment protocols used in the management of Viruddha and Asatmya Ahara Janya Vikara (Food poisoning) , and synthesize findings to inform individualized, stage-wise clinical application	3	Experiential-Learning7.1 2	CE	Shows-how	PBL,D- M,D- BED,TBL ,IBL
CO1,CO2,C O4,CO5,CO6 ,CO7	Describe food poisoning —based on its aetiology, epidemiology, pathogenesis, and recommended investigations.	1	Lecture	CS	Knows-how	L&GD
CO1,CO2,C O4,CO5,CO6 ,CO7	Describe the etiopathogenesis of Viruddha and Asatmya Ahara Janya Vikara (food poisoning) and explain the principles of Ayurvedic management in relation to variations in Roga and Rogi Avastha	1	Lecture	CAP	Knows-how	L
CO1,CO2,C O4,CO5,CO6	Describe the post-therapeutic Ayurvedic preventive measures for Viruddha and Asatmya Ahara Janya Vikara (food poisoning), including dietary regulations, Agni deepana, Rasayana therapy, and lifestyle modifications to prevent recurrence and restore gut health.	1	Lecture	CC	Knows-how	L
CO1,CO2,C O4,CO5,CO6 ,CO7	Demonstrate the ability to advise on and interpret appropriate diagnostic tests to identify common pathogenic bacteria such as Salmonella, E. coli, Staphylococcus aureus, and Clostridium perfringens responsible for foodborne illnesses, and correlate their clinical manifestations	3	Practical7.7	PSY- GUD	Shows-how	D- BED,DL, PBL,BS, CBL
CO1,CO2,C O4,CO5,CO6 ,CO7,CO8	Evaluate patient history and dietary patterns to classify the underlying cause of disease as Viruddha Ahara, Asatmya Ahara, or microbial intoxication, and outline preliminary management strategies based on Ayurvedic principles	2	Practical7.8	PSY- MEC	Shows-how	BS,C_L, BL
CO1,CO2,C O4,CO5,CO6 ,CO7	Demonstrate the complications arising from Asatmya Ahara janya vikar (food poisoning) through patient case examination, correlate them with Ayurvedic	1	Practical7.9	PSY- GUD	Shows-how	BS,BL,C D

	pathophysiological concepts, and formulate supportive management strategies based on Rogi and Roga Avastha					

Practical Training Activity

Practical Training 7.1 Demonstration of the chikitsa sutra of Pravahika

Activities by the Teacher:

1. **Case-based Discussion:**
 - Present real or simulated clinical cases of Pravahika at different stages (acute/chronic).
 - Guide students through stepwise application of Nidana Panchaka and Samprapti analysis.
2. **Demonstration of Rogi Pareeskhyā:**
 - Demonstrate Astavidha and Dasavidha Pariskhyā with emphasis on Bala Pareeksha, Ahara Shakti, and Vyayama Shakti.
3. **Chikitsa Sutra Mapping Exercise:**
 - Explain the Chikitsa Sutra of Pravahika (e.g., Grahi–Deepana–Pachana–Vatanulomana–Stambhana sequential logic).
 - Show how to correlate it with stages of Samprapti Vighatana.
4. **Facilitated Group Work:**
 - Moderate small groups to formulate individualized treatment plans using classical and contemporary formulations.
5. **Feedback and Reflection Session:**
 - Provide structured feedback and encourage reflective discussion on diagnostic and treatment rationale.

Activities by the Scholar

1. **Clinical Case Analysis:**
 - Present detailed analysis of a patient case using Nidana Panchaka and map the Samprapti stepwise.
2. **Rogi Pareeksha Practicum:**
 - Perform Astavidha and Dasavidha Pariskhyā, document findings, and interpret their clinical significance in Roga bala and Rogi bala.
3. **Samprapti Vighatana Explanation:**
 - Explain how each step of the Samprapti can be reversed using specific Aushadha, Ahara, and Vihara.
4. **Chikitsa Sutra Application:**
 - Formulate an individualized treatment protocol based on classical references and patient profile.
5. **Peer Review & Group Discussion:**
 - Engage in collaborative learning by reviewing peers' case approaches and offering suggestions.
6. **Reflective Documentation:**

- Maintain a reflective logbook outlining the rationale of treatment decisions and outcomes.

Practical Training 7.2 Appraise the treatment procedures of Dysentery(Amoebic/Bacillary)

Activities by the Teacher :

1. Diagnostic Orientation Session:

- Introduce the diagnostic work-up of dysentery—emphasizing the clinical differences between amoebic and bacillary dysentery.
- Explain indications, sensitivity, specificity, and limitations of various tests.

2. Demonstration of Sample Collection:

- Demonstrate correct stool sample collection techniques and transport methods for microbiological and parasitological examination.

3. Laboratory Walk through / Slide Demo:

- Show stained stool smears (wet mount, iodine preparation, trichrome staining) and teach identification of *Entamoeba histolytica*, RBCs, pus cells, etc.

4. Imaging Interpretation Session:

- Present relevant imaging studies (e.g., abdominal USG or sigmoidoscopy reports in severe or chronic dysentery) and teach how to interpret them.

5. Case-Based Discussion:

- Use clinical vignettes for guided interpretation of reports (e.g., CBC, ESR, stool microscopy, antigen detection, colonoscopy findings).

6. Evaluation via OSCE or Mini-CEX:

- Conduct focused practical assessments on diagnostic reasoning and interpretation.

Activities by the PG Scholar :

1. History-Driven Diagnostic Planning:

- Based on presenting complaints, suggest and justify specific investigations (e.g., stool microscopy, ELISA, culture, CBC, CRP).

2. Stool Report Interpretation:

- Examine and interpret real patient reports for features suggestive of amoebic (trophozoites, fewer RBCs) vs bacillary (abundant neutrophils, RBCs, no parasites) dysentery.

3. Correlation of Lab & Clinical Findings:

- Integrate test findings with patient symptoms, duration, and severity to establish a working diagnosis.

4. Imaging Case Review:

- Review imaging reports (e.g., USG, proctoscopy) and relate findings to complications like colitis, liver abscess, or mucosal ulceration.

5. Diagnostic Summary Writing:

- Prepare a diagnostic summary for at least one patient with dysentery, covering test indications, results, and inference.

6. Peer Presentation & Defense:

- Present diagnostic approach in group rounds or tutorials and answer peer/teacher queries on rationale.

7. Reflective Note on Diagnostic Reasoning:

- Document a reflection on key lessons learned in interpreting dysentery-related diagnostics and potential pitfalls.

Practical Training 7.3 Demonstrate the treatment protocols of Purishaja Krimi

Activities by the Teacher :

1. Clinical Demonstration:

- Perform or supervise Shodhana procedures such as Virechana or Basti in relevant patients.
- Show preparation steps, contraindications and post-procedure care.

2. Aushadha Display & Explanation:

- Exhibit Krimighna Aushadha like Vidangadi Churna, Krimimudgar Rasa, Palasha beeja churna, khadiradi kashaya, Nirgundidyadi kashaya
- Explain their classical references, dosages, Anupana, and indications.

3. Case-Based Discussion:

- Present patient cases of Krimi Vikara and guide students through:
 - Dosha–Dushya–Srotas assessment,
 - Indications for Shodhana vs Shamana,
 - Pathya–Apathya counseling.

4. Practical Skill's Supervision:

- Observe and assess students performing relevant steps of the procedures providing real-time feedback on technique and patient handling.

5. Diet and Lifestyle Counseling Demonstration:

- Role-play or instruct how to counsel a patient about Pathya (e.g. Laghu, Tikta, Krimighna ahara) and avoidance of Nidana.

Activities by the Scholar :

1. Patient Evaluation:
 - Conduct clinical history taking and Ashtavidha–Dashavidha Pariksha to assess disease type, chronicity and Rogi Bala.
2. Procedure Assistance or Performance:
 - Assist in or demonstrate Shodhana (e.g., Virechana / Basti) under supervision.
 - Ensure correct dravya selection, dose and observation of samyak lakshana.
3. Aushadha Preparation and Administration:
 - Prepare and explain the method of administration of Shamana drugs like Krimighna lepa, Aragvadhadi Kvatha, etc.
4. Treatment Planning:
 - Develop an individualized treatment plan combining Shodhana, Shamana, and Pathya–Apathya based on the case.
5. Patient Counseling:
 - Educate patients on diet, hygiene, handwashing, and follow-up to prevent reinfestation.
6. Case Presentation:
 - Present the case in a clinical forum, justifying selection of procedure and medications with classical and practical reasoning.
7. Documentation and Reflection:
 - Record treatment protocols, patient outcomes, and learning insights in a clinical logbook or reflection journal.

Practical Training 7.4 Appraise the importance of Rasayan in Purishaja krimi Chikitsa

Activities by the Teacher :

1. Case Demonstration:
 - Present a post-treated Krimi Vikara patient and demonstrate clinical evaluation of Roga Avastha, Agni and Bala.
2. Rasayana Selection Teaching:
 - Teach the indications, formulations and timing of specific Rasayana drugs (e.g., Pippali Rasayana, Drakshadi Leha, Chyavanaprasha) in convalescent Krimi cases.
3. Classical Reference Discussion:
 - Explain references from texts (e.g., Charaka, Bhavaprakasha) regarding use of Rasayana after Krimi Chikitsa.
4. Formulation Handling Session:
 - Demonstrate preparation and administration methods of Rasayana yogas and their anupana based on Doshika considerations.
5. Supervised Clinical Planning:
 - Guide students in forming patient-specific Rasayana plans and review their protocol drafts.
6. Feedback and Reflective Discussion:

- Provide structured feedback and initiate a group reflection on the outcomes and relevance of Rasayana therapy in recovery phases.

Activities by the Scholar :

- 1. Patient Assessment:**
 - Evaluate Agni, Bala, Roga Avastha, and Satmya status in post-treated Krimi patients using classical pareeksha methods.
- 2. Rasayana Identification & Planning:**
 - Select appropriate Rasayana formulations based on patient condition (e.g., mild weakness: Pippali Rasayana; poor gut tone: Bilvadi Rasayana).
- 3. Dosage & Anupana Determination:**
 - Decide on proper dosage, anupana and timing (morning/evening) with justification from classical sources and patient needs.
- 4. Counseling the Patient:**
 - Educate patients about the purpose, duration, dietary precautions and expected outcomes of Rasayana therapy.
- 5. Clinical Documentation:**
 - Record the patient's status before and after Rasayana administration noting changes in strength, digestion and vitality.
- 6. Case Presentation:**
 - Present the case and treatment plan in class rounds, defending Rasayana selection and integration within the post-treatment protocol.
- 7. Reflective Log Entry:**
 - Write a reflection on the role of Rasayana in Krimi recovery, clinical outcomes observed and learning points.

Practical Training 7.5 Application of colonoscopy for Diagnostic Purpose

Activities by the Teacher :

- 1. Orientation on Colonoscopic Evaluation:**
 - Introduce common colonoscopic findings (e.g. ulceration, inflammation, polyps, mucosal lesions) and correlate them with Ayurvedic perspectives such as Guda Dushti, Purishavaha Srotas Vikruti and Doshic patterns.
 - Demonstrate Dashavidha and Ashtavidha Rogi–Roga Pariskha with special attention to:
 - Malaja Pariksha (examination of stool),
 - Abdominal palpation (Udara Pareeksha),
 - Tongue diagnosis and Agni Pareeksha.
- 2. Case-Based Discussion:**

- Present real or simulated cases with colonoscopy reports and facilitate a discussion on Ayurvedic interpretation, doshic correlation and differential diagnosis.
- 3. **Algorithm Template Presentation:**
 - Provide a blank diagnostic algorithm framework and guide students to fill in step-by-step based on clinical inputs from both systems.
- 4. **Supervision & Review:**
 - Review student-created algorithms, correct misconceptions, and offer refinement suggestions.
- 5. **Encourage Interdisciplinary Thought:**
 - Facilitate reflection on how modern diagnostics can enhance Ayurvedic diagnostic accuracy and decision-making.

Activities by the Scholar :

1. **Review Colonoscopy Reports:**
 - Interpret colonoscopic findings such as mucosal edema, ulceration, bleeding points, or inflammatory changes.
2. **Conduct Ayurvedic Assessment:**
 - Perform complete Roga–Rogi Pariskha for the patient, focusing on:
 - Purisha (stool) characteristics,
 - Agni status,
 - Tridosha predominance,
 - Srotodushti Lakshanas.
3. **Map Dosha–Dushya–Srotas Correlation:**
 - Analyze and document which Doshas and Dushyas are involved and how they relate to the modern pathological findings.
4. **Formulate Integrated Diagnostic Algorithm:**
 - Create a step-wise diagnostic chart that begins with:
 - Symptomatology,
 - Ayurvedic Pareeksha,
 - Colonoscopy interpretation,
 - Final Ayurvedic diagnosis with modern insight.
5. **Present Diagnostic Logic:**
 - Share and explain the algorithm with peers and teacher, defending the reasoning behind each step.
6. **Compile Diagnostic Record:**
 - Document the full process and create a case report including:
 - History, investigations, Ayurvedic analysis, colonoscopy findings, diagnostic conclusion.
7. **Reflective Summary:**

- Write a reflection on how integrating colonoscopy enhances Ayurvedic diagnosis of Purishavaha Srotas disorders and where limitations exist.

Practical Training 7.6 Hands on training process of colonoscopy

Activities by the Teacher :

- 1. Pre-Procedure Orientation:**
 - Explain the purpose, indications, contraindications, and steps of colonoscopy.
 - Describe patient preparation (e.g., bowel cleansing, fasting), sedation protocols, and informed consent.
- 2. Demonstration of Procedure:**
 - Perform or supervise a colonoscopy on a patient or mannequin, showing:
 - Insertion technique,
 - Navigation through anatomical regions (rectum to cecum),
 - Interpretation of visual findings.
- 3. Safety Protocol Emphasis:**
 - Explain infection control measures, sterilization, patient monitoring, and emergency preparedness.
 - Discuss complications and how to prevent/manage them.
- 4. Anatomical Teaching:**
 - Use models, videos, or real-time procedure views to point out:
 - Rectum, sigmoid colon, descending/transverse/ascending colon, ileocecal valve, etc.
- 5. Guided Observation Sheet:**
 - Provide a checklist for students to fill during the procedure, including anatomical structures observed and safety measures followed.
- 6. Q&A and Debrief:**
 - Facilitate a discussion session on the observation, findings, and their relevance in diagnosis (e.g., ulcerative colitis, Crohn's disease, polyps).

Activities by the Student :

- 1. Attend Orientation Session:**
 - Understand the preparation, goals, and risks associated with colonoscopy.
- 2. Observe the Procedure:**
 - Watch a live colonoscopy (on patient/simulator), noting:
 - Insertion technique,
 - Handling of scope,

- Visual identification of normal and abnormal findings.
- 3. **Complete Observation Checklist:**
 - Use the structured form to document
 - Anatomical landmarks reached,
 - Mucosal appearance,
 - Application of safety and aseptic measures.
- 4. **Evaluate Safety Practices:**
 - Note practices like hand hygiene, instrument handling, patient monitoring, oxygen administration, and documentation.
- 5. **Participate in Case Discussion:**
 - Engage in post-procedure analysis:
 - Correlate colonoscopic findings with Ayurvedic assessment of Purishavaha Srotas Vikara if applicable.
- 6. **Reflective Write-up:**
 - Prepare a brief report or journal entry summarizing
 - Learnings,
 - Importance of safety in endoscopic procedures,
 - Challenges and clinical implications.

Practical Training 7.7 Planning and treating the patients affected from food poisoning

Teacher Activities:

1. **Case Simulation/Presentation:**
 - Present case histories with diverse dietary backgrounds (e.g., milk + sour fruit, late-night heavy meals, unhygienic food).
2. **Concept Clarification:**
 - Explain Ayurvedic concepts of Viruddha Ahara, Asatmya Ahara, and their clinical relevance.
 - Discuss how microbial food intoxication is understood and interpreted in Ayurveda.
3. **Clinical Demonstration:**
 - Guide through a live or simulated patient history-taking session.
4. **Diagnostic Reasoning Model:**
 - Demonstrate how to correlate symptoms with dietary history to arrive at a probable diagnosis.
5. **Facilitate Group Discussion:**
 - Conduct a discussion comparing Ayurvedic reasoning with modern microbiological perspectives.

Student Activities:

1. **History Taking Practice:**

- Collect detailed dietary and clinical history from assigned patient or simulation.

2. **Diet Analysis:**

- Identify and document potential Viruddha Ahara, Asatmya combinations, or contaminated food intake.

3. **Classification Exercise:**

- Categorize the cause under Ayurvedic and microbial headings with justification.

4. **Group Work:**

- Collaborate in small groups to develop preliminary Ayurvedic treatment strategies (e.g., Deepana-Pachana, Shodhana, Pathya).

5. **Oral/Poster Presentation:**

- Present a summarized analysis of one patient's history, diagnosis and line of management.

6. **Reflection & Feedback:**

- Reflect on diagnostic challenges and receive peer/teacher feedback.

Practical Training 7.8 formulate supportive management of Asatmya Ahara janya vikara (food poisoning)

Activities by the Teacher :

1. Case-Based Teaching Session:

2. Present clinical cases of patients with complications due to Asatmya Ahara (e.g., chronic dyspepsia, diarrhea, malabsorption, skin rashes).

3. Highlight classical references and Ayurvedic understanding of complications like Ama janya vikara, Agni mandya, Pittadhikeya vikrti, etc.

4. Clinical Demonstration:

5. Guide students during patient interaction (OPD/IPD/simulated), focusing on Asatmyata Lakshna and complication assessment.

6. Integration Workshop:

7. Facilitate discussion on correlating complications with Dosa-Dusya-Srotas involvement and Samprapti.

8. Management Planning Activity:

9. Encourage scholars to suggest supportive chikitsa, including Dipana Pachana, Rasayana, ahara niyama, and Nidana parivarjana.

10. Review & Feedback:

11. Provide feedback on student presentations and management proposals.

Activities Done by Students

1. Take simulated case history & identify Nidana.

2. Perform Ashtavidha and Dashavidha Pariksha.

3. Prepare Deepana-Pachana Yoga (e.g., Hingvashtaka Churna).
4. Create flowchart: Asatmya Ahara Ama Vikara.
5. Identify raw drugs used in management.
6. Write sample prescription based on Roga-Rogi Avastha.
7. Participate in group presentation on food poisoning.
8. Reflect and give conclusion on Samprapti Vinashana approach.

Practical Training 7.9 Interpret appropriate diagnostic tests to identify common pathogenic bacteria

Activities by the Teacher :

1. **Orientation Session:**
 - Explain the clinical significance and epidemiology of foodborne pathogens.
 - Describe the link between incompatible food (Viruddha Ahara), Asatmya ahara and bacterial infections.
2. **Demonstration of Sample Collection:**
 - Demonstrate safe stool sample collection, transport, and storage procedures.
3. **Introduction to Diagnostic Tests:**
 - Explain and, if possible, demonstrate or show video-based walkthroughs of:
 - Stool culture techniques.
 - Selective media (e.g., MacConkey agar, XLD agar).
 - Biochemical tests for pathogen confirmation.
 - Rapid antigen/ELISA tests.
4. **Case-Based Learning:**
 - Present clinical scenarios of food poisoning due to each bacterium.
 - Ask students to interpret test reports and correlate with symptoms.
5. **Feedback and Assessment:**
 - Evaluate student performance in advising tests, interpreting results, and drawing clinical-Ayurvedic correlations.

Activities by the Scholar :

1. **Participate in Demonstration:**
 - Attend live or simulated sessions on sample collection and diagnostic procedures.
2. **Advise Appropriate Tests:**
 - Based on patient symptoms, recommend suitable microbiological investigations for identifying foodborne pathogens.
3. **Interpret Diagnostic Reports:**

- Analyze lab findings (culture reports, Gram staining, biochemical test outcomes) to identify the causative organism.
- 4. **Clinical Correlation:**
 - Match pathogen-specific symptoms with:
 - Modern pathophysiology.
 - Ayurvedic signs of Viruddha/Asatmya Ahara-induced disorders.
- 5. **Case-Based Presentation:**
 - Present a patient case, including test findings and interpretative correlation with Ayurvedic diagnosis and pathogenesis.
- 6. **Documentation:**
 - Prepare a reflective logbook entry on:
 - Diagnostic reasoning process.
 - Clinical-Ayurvedic integration.
 - Key learnings and challenges.
- 7. **Peer Discussion:**
 - Participate in group discussions to compare interpretations and broaden diagnostic perspectives.

Experiential Learning Activity

Experiential-Learning Learning 7.1: Protocol development for management of Pravahika

Activities by the Teacher:

1. **Case-Based Clinical Teaching:**
 - Present actual patient cases of Pravahika with varied doshic predominance (Vataja, Pittaja, Kaphaja, Sannipataja).
 - Guide students to assess clinical severity and plan stepwise management.
2. **Chikitsa Sutra Mapping Session:**
 - Explain classical Chikitsa Sutras relevant to Pravahika and how to apply them contextually (e.g., Grahi, Deepana, Stambhana logic).
3. **Drug and Procedure Demonstration:**
 - Demonstrate relevant Aushadha Prayoga (e.g., Kutajarishta, jatiphaladya churna, jaharmohra bhasma, kutajavaleha, Mustakadi Churna) and Kriyakramas (e.g., Piccha Basti, Mridu Virechana) in actual or simulated settings.
4. **Supervised Clinical Decision-Making:**
 - Review and give feedback on scholar's individualized treatment plans.
 - Discuss rationale behind selected Pathya–Apathya based on patient condition.
5. **Integrative Evidence-Based Session:**

- Share Ayurvedic research evidence and modern comparative understanding for severe cases (e.g. Ulcerative colitis presenting as Pravahika).

Activities by the Scholar :

1. Detailed Case Evaluation:

- Elicit case history and examine the patient using Dashavidha and Ashtavidha Pareeksha to determine type and severity of Pravahika.

2. Dosha-Dusya-Srotas Assessment:

- Analyze clinical presentation to identify predominant Dosha, involved Dushya, and affected Srotas.

3. Protocol Formulation Exercise:

- Draft a comprehensive management plan including:
 - Aushadha Prayoga (internal medications),
 - Kriyakramas (Panchakarma if applicable),
 - Pathya–Apathya (customized dietary and lifestyle guidelines).

4. Treatment Implementation

- Administer or assist in drug administration or Panchakarma procedures under supervision.

5. Rationale Presentation & Peer Discussion:

- Present the treatment protocol in small groups or ward rounds, justifying each component of the plan.

6. Response Monitoring & Modification:

- Monitor clinical response and modify the plan as per Vyadhi Avastha and Rogi Bala.

7. Clinical Reflection Documentation:

- Write a reflective note on challenges in tailoring the treatment, outcomes observed, and personal clinical learning.

Experiential-Learning Learning 7.2: Treatment protocol of Udavarta

Teacher's Activities:

1. Explain clinical relevance of Udavarta using real case example.
2. Demonstrate case history-taking focused on Apana Vata functions
3. Guide students in choosing appropriate Aushadha
4. Display classical references (Charaka/Sushruta) in simplified form
5. Supervise procedural demo (e.g., Abhyanga, Svedana model)
6. Facilitate group work on management planning
7. Evaluate student presentations and provide feedback

8. Encourage reflective discussion on treatment selection
9. Provide simulated patients or role-play scenarios

Student's Activities:

1. Interact with patient (or standardized case) to assess Udavarta signs
2. Analyze Dosha-Dushya-Samprapti
3. Propose individualized treatment plan (Aushadha + Kriyakrama)
4. Prepare Samprapti Ghataka and management chart
5. Participate in mock Abhyanga/Svedana demonstrations
6. Suggest Rasayana based on patient type and chronicity
7. Record Pathya-Apathya advice in case sheet
8. Present case and management protocol to group
9. Reflect on learning outcomes and practical challenges

Experiential-Learning Learning 7.3: Analyze the clinical features of Udavarta

Activities done by Teacher:

1. Demonstration: Demonstrate clinical case-taking of a Udavarta patient (real or standardized patient).
2. Clinical reasoning: Facilitate group discussions on differential diagnosis (e.g., IBS, colitis, constipation)
3. Interactive lecture : Explain the pathophysiology and Doshic involvement in Udavarta.
4. Visual Aids :Use charts, samprapti ghataka diagrams, and classical references from Charaka/Sushruta.
5. Guidance: Supervise student-patient interaction, correct approach, and data interpretation.
6. Reflection facilitation: Encourage students to reflect on patient feedback and symptom correlation.

Activities done by Students:

1. Patient interaction : Take detailed history including bowel habits, diet, stress, menstruation (if applicable)
2. Dosha assessment: Identify dominant dosha and possible vitiation based on classical lakshanas.
3. Samprapti charting: Create a visual samprapti flow (from nidana to vyadhi) based on the case
4. Case documentation : Record symptoms, Nidana, and Doshic analysis in a structured format.
5. Peer discussion: Discuss in small groups to validate and refine understanding.
6. Feedback collection : Collect feedback from the patient regarding lifestyle and habits.

7. Presentation-: Present the case in front of peers and get feedback from the teacher.

Experiential-Learning Learning 7.4: Protocol development for the management of Atisara

Activities by the Teacher :

1. **Research Orientation Session:**

- Introduce scholars to research databases (AYUSH Portal, PubMed, DHARA, etc.) and guide literature search on Atisara.
- Explain methodology for analyzing clinical trials, case reports, and pharmacological studies.

2. **Thematic Literature Discussion:**

- Organize group sessions where specific herbs/formulations (e.g., Kutaja, Musta, Bilva / jirakadyarishta, Dhanyapanchaka kasaya churna, Balachaturbhadra churna, Dadimastaka Churna, Jatiphaladya Churna, Kutjaghana Vati, Lasunadi Vati, Panchmrta Parpati, Sankha Vati) and Kriyakramas (e.g., Piccha Basti, Mridu Virechana) are discussed with reference to their mode of action and clinical utility.

3. **Critical Appraisal Training:**

- Teach students how to critically appraise research articles using standard tools (e.g., CONSORT, PRISMA, Jadad scale).

4. **Case Integration Workshop:**

- Demonstrate how to integrate evidence-based findings into practical case management protocols for different types of Atisara (Vataja, Pittaja, Kaphaja, Sannipataja, Amaja, etc.).

5. **Feedback on Research Compilation:**

- Review students' compiled data and provide feedback on clarity, clinical relevance, and research credibility.

Activities by the Scholar :

1. **Literature Search & Compilation:**

- Search and compile recent studies, clinical trials, and pharmacological reviews related to Aushadha and Kriyakramas used in Atisara.

2. **Data Extraction and Tabulation:**

- Prepare tables summarizing each therapy's:
 - Drug name (Ayurvedic and botanical),
 - Indication (type of Atisara),
 - Dosage/formulation,
 - Outcomes observed,
 - Research source.

3. **Analysis & Comparative Review:**

- Analyze and compare the therapeutic effects of various treatments across different types of Atisara, noting strengths and limitations.

4. Application to Clinical Practice:

- Use evidence to justify treatment decisions for actual or simulated patient cases encountered during postings.

5. Presentation and Peer Review:

- Present findings in clinical seminars or departmental journal clubs and receive feedback from peers and faculty.

6. Research Reflection Note:

- Write a brief reflective summary on the process of applying research to clinical practice, including challenges faced and takeaways.

7. Drafting a Review or Case Report (Optional):

- Work under teacher guidance to write a short review article or evidence-supported case report for possible publication or departmental record.

Experiential-Learning Learning 7.5: Formulate an individualized treatment protocol for Raktatisara (ulcerative colitis / Crohns disease)

Teacher Activities:

1. Introduce clinical scenario: Present a real or simulated case of Raktatisara
2. Demonstrate patient history-taking focusing on stool pattern, dietary triggers, chronicity
3. Explain Samprapti using chart/diagram
4. Facilitate group analysis of case (Dosha-Dushya, Srotas)
5. Discuss Avasthik Chikitsa (Ama/Nirama, Rogi Bala-based treatment)
6. Guide herbal identification and formulation selection
7. Provide demo/visual of Piccha Basti / Parisheka in lab/simulation
8. Assign group work: Prepare individualized protocol
9. Evaluate presentations and give feedback

Student Activities:

1. Interact with the patient (real/simulated) and collect data
2. Identify clinical features of Raktatisara and grade severity
3. Prepare Samprapti Ghataka chart from case history
4. Analyze Rogi Bala and Roga Avastha
5. Choose suitable Aushadha (Ama/Nirama) and procedural therapies
6. Create a personalized treatment plan (including Rasayana and Pathya)
7. Present findings and justification in peer group

8. Participate in demo activities (herbal decoction, basti oil prep, etc.)
9. Write a reflection on what they learned and its practical relevance

Experiential-Learning Learning 7.6: Protocol development for treatment of Diarrhoea

Activities by the Teacher (Mentor/Guide):

1. **Clinical Demonstration of Case Handling:**
 - Present real/simulated diarrhoea cases (acute/chronic, doshic types) and walk students through the steps of Ayurvedic diagnosis and chikitsā planning.
2. **Teaching of Chikitsa Sutra Application:**
 - Explain the rationale behind selecting Aushadha (e.g., Kutaja, Musta, Bilva), Panchakarma interventions (Piccha Basti, Mridu Virechana), and Pathya recommendations based on Dosa and Roga Avastha.
3. **Supervision of Case Workups:**
 - Assign clinical cases to PGs and supervise history-taking, Dosa–Dusya assessment, and management planning.
4. **Discussion on Pathya–Apathya:**
 - Conduct sessions on dietetics and lifestyle recommendations tailored for different types of diarrhoea
5. **Evaluation & Feedback:**
 - Provide constructive feedback on the student's treatment protocols with reference to classical texts and clinical outcomes.

Activities by the PG Scholar :

1. **Case History and Roga–Rogi Pareeksha:**
 - Perform detailed patient evaluation using **Astavidha and Dasavidha Pareeksha** to assess the type, severity, and patient constitution.
2. **Samprāpti Analysis:**
 - Identify the Dosa-Dusya-Srotas involved, and determine the Samprapti (pathogenesis) stage.
3. **Aushadha Prayoga Selection:**
 - Choose suitable Ayurvedic medicines (e.g., Kutajghan Vati, Bilvadi Gutika, Nagaramustādi Kvatha) based on dosha predominance and chronicity.
4. **Kriyakrama Planning:**
 - Propose appropriate therapeutic procedures such as:
 - Piccha Basti for chronic diarrhoea,
 - Mridu Virechana for pittaja involvement,
 - Deepana-Pachana in ama-related cases.
5. **Pathya–Apathya Charting:**

- Prepare and counsel the patient on a suitable diet and lifestyle regimen aligned with the Ayurvedic management of diarrhoea.

6. Presentation of Protocol:

- Present the complete treatment plan in ward rounds or clinical discussions, justifying each component with classical and/or evidence-based references.

7. Monitoring and Follow-Up:

- Document patient response to treatment and modify the protocol as needed during follow-up.

8. Reflective Clinical Log:

- Write a reflection on clinical decision-making, treatment outcome, and learnings from patient interaction.

Experiential-Learning Learning 7.7: Analyze the effectiveness of various medicines and treatment procedures for IBD, based on evidence from research articles.

Activities by the Teacher :

1. Research Methodology Orientation:

- Conduct sessions on how to search, select, and critically analyze clinical research articles, systematic reviews, and case studies related to IBD (Ulcerative colitis & Crohn's disease).

2. Resource Sharing & Database Training:

- Provide access to digital libraries (e.g., PubMed, AYUSH Portal, DHARA) and guide students in using filters and keywords effectively.

3. Critical Appraisal Workshops:

- Teach students how to assess the quality of studies using tools like CONSORT for clinical trials, PRISMA for reviews, and Jadad Score for article reliability.

4. Comparative Analysis Session:

- Discuss how different Ayurvedic and integrative interventions (Aushadha, Basti, Rasayana, Pathya) perform across IBD cases.

5. Feedback on Draft Reports:

- Review and provide constructive feedback on students' compiled research summaries and help improve scientific writing.

6. Facilitated Journal Club/Presentation:

- Organize scholar-led presentations of selected research papers and promote discussion on clinical relevance and limitations.

Activities by the Scholar :

1. Literature Search and Selection:

- Identify and collect Ayurvedic and contemporary research articles on pharmacological agents, Panchakarma, and integrated management of IBD.

2. **Extraction and Tabulation of Key Data:**

- Create tables summarizing:
- Name of drug/procedure
- Study type (RCT, case series, etc.)
- Dosage/duration
- Patient outcome
- Side effects or safety data

3. **Effectiveness Analysis:**

- Compare and analyze outcomes of classical and modern treatments in terms of symptom control, recurrence, mucosal healing, and patient-reported outcomes.

4. **Integration of Evidence into Practice:**

- Reflect on how findings may apply to clinical cases encountered during postings and suggest modifications to standard protocols.

5. **Report Writing:**

- Compile the analyzed data into a structured report, including:
- Introduction
- Methods (search strategy)
- Summary of findings
- Critical discussion
- Conclusion and recommendations

6. **Group Presentation / Journal Club:**

- Present findings to peers and faculty, defending the quality of evidence and clinical relevance of chosen therapies.

7. **Reflective Summary:**

- Write a reflection on the strengths and limitations of evidence-based practice in Ayurvedic IBD management.

Experiential-Learning Learning 7.8: identification, interpretation and formulation of individualized treatment protocol for Purishaja krimi

Activities by the Teacher :

1. Clinical Demonstration:

- Present a real/simulated case of Purishaja Krimi Vikara with common symptoms like pruritus ani, abdominal pain, diarrhoea, nausea, etc.
- Highlight signs of Dosha involvement (especially Kapha-Vata).

2. Demonstrate the methods
 - Demonstrate how to conduct Dashavidha and Ashtavidha Pariskhya in suspected worm infestations.
 - Discuss stool examination findings (macroscopic & microscopic).
3. Samprapti Mapping Session:
 - Guide PG students in constructing the Samprapti of various Krimi types using classical references and clinical reasoning.
4. Drug and Panchakarma Discussion:
 - Explain the rational use of Krimighna Aushadha (e.g., Vidanga, Krimimudgar Rasa), and relevant Kriyakarma (e.g. Basti, Virechana).
5. Dietary Guidelines Review:
 - Conduct an interactive discussion on Pathya-Apathya in Krimi Rogas, especially use of anti-parasitic diets.
6. Assessment & Feedback:
 - Review scholars case reports and management plans; give constructive feedback based on classical texts and observed outcomes.

Activities by the PG Scholar:

1. Patient Interaction & Clinical Evaluation:
 - Elicit detailed history of symptoms (e.g., itching, bloating, stool abnormalities), and perform Roga–Rogi Pareeksha.
2. Dosha–Dushya–Srotas Analysis:
 - Identify predominant Dosha, involved Dushyas (e.g. Rasa, Rakta, Mamsa) and affected Srotas (Annavaha, Purishavaha).
3. Stool Examination & Interpretation:
 - Collect stool samples for lab testing and interpret reports (e.g. presence of ova, worms, pus cells).
4. Treatment Protocol Formulation:
 - Draft an individualized treatment plan including:
 - Krimighna Aushadha (e.g., Vidangadi Churna, Palasha Beeja),
 - Kriyakarma (e.g., Virechana, Basti in chronic cases),
 - Rasayana for gut restoration (e.g., Pippali Rasayana),
 - Pathya–Apathya (e.g., bitter herbs, light diet, avoidance of sweets).
5. Clinical Case Presentation:
 - Present findings and proposed treatment strategy in a ward discussion or clinical conference.
6. Treatment Implementation (Supervised):
 - Administer or assist in drug therapy and Panchakarma procedures under teacher supervision.
7. Monitoring & Follow-Up:
 - Record progress, symptom relief and recurrence (if any), and update the protocol accordingly.
8. Reflective Log Entry:

- Maintain a clinical reflection on diagnosis, therapeutic response, and key learning takeaways from the case.

Experiential-Learning Learning 7.9: Interpret the treatment protocol of Intestinal Helminthiasis

Activities by the Teacher :

1. Research Methodology Orientation:

- Conduct a session on how to search, evaluate, and extract key data from scientific studies (Ayurvedic and modern) related to helminthiasis.

2. Database Training:

- Guide scholars in accessing and using research databases like PubMed, AYUSH Portal, DHARA, and Google Scholar with relevant filters and keywords.

3. Article Selection and Appraisal Workshop:

- Teach how to critically appraise study design, sample size, outcomes, and limitations using tools like CONSORT, STROBE, or PRISMA checklists.

4. Comparative Analysis Facilitation:

- Encourage group discussions comparing Ayurvedic interventions (e.g., Vidanga, Krimimudgar Rasa, Ayaskriti, Usirasava, kumaryasava, Dantyarista, Saptavimsatikta gugulu) with conventional anthelmintics (e.g., Albendazole, Mebendazole).

5. Supervision of Report Compilation:

- Review scholars' drafts, offer feedback on structure, referencing, and clinical interpretation.

6. Presentation Facilitation:

- Organize a journal club or seminar where scholars present their findings and conclusions.

Activities by the Scholar :

1. Literature Search and Selection:

- Identify and select research papers, clinical trials, and case studies on Ayurvedic and modern treatments of intestinal helminthiasis.

2. Data Extraction and Tabulation:

- Create comparison tables summarizing:
 - Drug/procedure name
 - Study design
 - Dosage/duration
 - Outcome measures (e.g., egg count reduction, symptom relief)
 - Adverse effects or safety data

3. Effectiveness Analysis:

- Compare the clinical outcomes of classical formulations and procedures (e.g., Virechana, Krimighna Yoga) with standard pharmacological interventions.
- 4. Integration into Clinical Practice:**
 - Discuss how evidence supports or refines current treatment protocols used in Ayurvedic management of Purisaja Krimi Vikara.
- 5. Comprehensive Report Compilation:**
 - Draft a report including:
 - Introduction and rationale
 - Summary of evidence
 - Comparative discussion
 - Conclusion and clinical recommendations
- 6. Case Reflection (if applicable):**
 - Reflect on how findings may influence treatment of patients encountered during postings.
- 7. Presentation and Peer Review:**
 - Present the compiled data in a seminar or group session, answer peer questions, and refine the report based on feedback.

Experiential-Learning Learning 7.10: Interpretation of Stool examination with clinical features and Ayurvedic parameters such as Mala Pariksha and Dosha involvement

Activities by the Teacher :

- 1. Orientation Session:**
 - Explain the importance of stool examination in diagnosing GI disorders.
 - Discuss types of stool tests (macroscopic, microscopic, culture, antigen, ova/cyst detection).
- 2. Live or Simulated Lab Demonstration:**
 - Demonstrate how stool samples are collected, preserved and examined under the microscope.
- 3. Clinical Case Integration:**
 - Present a real or simulated case of gastrointestinal illness and guide students through interpreting stool reports alongside Ayurvedic Mala pareeksha.
- 4. Ayurveda–Modern Correlation Teaching:**
 - Explain how characteristics observed in Mala (like color, consistency, smell, froth, mucous, blood) correspond with Dosha imbalance and potential infections.
- 5. Group Discussion & Feedback:**
 - Facilitate case-based discussions and review interpretations done by students.

Activities by the Scholar :

1. **Stool Sample Collection & Processing Observation:**
 - Observe or assist in the collection, labeling, and laboratory processing of stool samples.
2. **Macroscopic & Microscopic Examination:**
 - Identify features like:
 - Consistency (loose, formed),
 - Colour (pale, dark, red),
 - Microscopic elements (ova, cysts, pus cells, RBCs, fat globules).
3. **Clinical Data Correlation:**
 - Correlate lab findings with patient symptoms (e.g., abdominal pain, diarrhoea, itching) and Ayurvedic Doshic signs (e.g. Kapha dominance in mucous stool).
4. **Perform Mala Pareeskha:**
 - Assess the stool using Ayurvedic diagnostic parameters (e.g., Ruksha–Snigdha, Picchila, Gandha, Varna) and relate them to pathogenesis.
5. **Case Analysis and Presentation:**
 - Present findings from stool examination and Ayurvedic assessment in a structured format with diagnosis and treatment suggestions.
6. **Reflective Documentation:**
 - Maintain a clinical logbook with:
 - Observed findings,
 - Diagnostic reasoning,
 - Lessons learned from the integrated assessment.

Experiential-Learning Learning 7.11: integrative assessment approach of Purishavaha Srotas Vikara

Teacher Activities:

1. **Case Introduction:**
 - Present real or simulated case studies with colonoscopy reports (e.g., colitis, polyps, IBS, ulcerative colitis).
2. **Bridge Lecture:**

- Explain colonoscopy findings and correlate them with Ayurvedic entities (like Sanga, Vimarga Gamana, Atipravritti, etc.).
- 3. **Demonstration:**
 - Show colonoscopy videos/images and facilitate interpretation.
- 4. **Comparative Discussion:**
 - Guide discussion comparing findings with Ayurvedic diagnostic criteria with variations of patients of Purishavaha Srotas
- 5. **Facilitate Clinical Reasoning:**
 - Help students identify how integrative diagnosis refines management strategies (Shodhana vs. Shamana, Ahara adjustments).
- 6. **Feedback Session:**
 - Provide personalized feedback on interpretation skills and reasoning pathways.

Student Activities:

1. **Case History & Report Analysis:**
 - Analyze given colonoscopy reports and match them with symptoms and signs of Purishavaha Srotodushti.
2. **Ayurvedic Mapping:**
 - Classify each case under appropriate Srotodushti types (e.g., Sanga, Atipravritti, etc.) using Ayurvedic logic.
3. **Group Presentation:**
 - Collaboratively present one integrative diagnosis and management protocol.
4. **Chart Making:**
 - Create a comparative chart of colonoscopy findings vs. Ayurvedic features.
5. **Role Play:**
 - Participate in simulated patient consultations integrating both modern and Ayurvedic assessments.
6. **Reflection Journal:**
 - Write short reflective notes on what was learned about blending diagnostics from both systems.

Experiential-Learning Learning 7.12: Diagnosis and mapping of treatment protocol of Viruddha and Asatmya Ahara Janya Vikara (Food poisoning)

Activities by the Teacher :

1. **Orientation on Research Literacy:**

- Conduct a session on how to search, select, and appraise research papers (clinical trials, case reports, review articles) related to Viruddha and Asatmya Ahara Janya Vikara (Food poisoning)
- 2. **Database Training:**
 - Guide students on using **PubMed**, **DHARA**, **AYUSH Portal**, and **Google Scholar** for sourcing relevant Ayurvedic evidence.
- 3. **Critical Appraisal Workshop:**
 - Teach students how to evaluate study design, sample size, statistical significance, and Ayurvedic parameters using appraisal tools (e.g., STROBE, CARE guidelines).
- 4. **Supervised Literature Review:**
 - Supervise the process of reviewing and summarizing relevant classical references and contemporary studies.
- 5. **Case Correlation and Reflection:**
 - Discuss hypothetical or real patient cases and facilitate applying research findings to different stages of Viruddha and Asatmya Ahara Janya Vikara (Food poisoning) .
- 6. **Feedback and Review:**
 - Provide structured feedback on student-compiled reports and guide improvement in interpretation and clinical relevance.

Activities by the Scholar :

1. **Literature Search and Compilation:**
 - Search and collect evidence-based studies and classical references on herbs (e.g., Bilva, Vatsanabha, Shankha Vati), formulations (e.g., Ajamodadi Curna, Jeerakadi Yavagu), and procedures (e.g., **Langhana**, **Pachana**).
2. **Critical Evaluation:**
 - Analyze methodology, outcomes, dosage patterns, safety profile, and Ayurvedic rationale behind the interventions.
3. **Data Tabulation:**
4. Create a comparison table of:
 - Classical references
 - Formulations used
 - Dosha targeting
 - Evidence strength
 - Stage of disease (e.g., Aamavastha, Pakvavastha).
5. **Integrative Case Analysis:**
 - Apply findings to a model patient case by formulating a stage-wise treatment plan, considering Roga–Rogi Bala, Agni, and Vikriti.
6. **Report Writing:**
 - Prepare a comprehensive report summarizing compiled evidence, key observations, and practical recommendations for clinical application.

7. Presentation and Peer Discussion:

- Present findings in a group seminar or experiential workshop, engage in peer review, and modify the report accordingly.

8. Reflective Learning Log:

- Document the learning process, challenges faced, and personal insights on integrating research into Ayurvedic practice.

Modular Assessment

Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome-Based Assessment: 02 credits x 04 hours x 50 marks • Practical Learning Outcome Assessment: Apply Ayurvedic principles of diagnosis and management—based on Roga and Rogi Pariksha—in the assessment and management of a case of Atisara [25 marks x 2 hour] Instructions: The instructor shall provide real/ simulated case or case scenario of Atisara to each scholar. The scholars will be instructed to : Perform a clinical evaluation based on Ayurvedic principles. Suggest appropriate investigations with justification. Identify the type of Atisara and explain the Samprapti (pathogenesis). Frame a chikitsa plan, including: Aushadha (internal and external)	4

Kriyakrama (if any) Pathya-Apathya Justify their treatment based on classical references. Assessment Method: Mini-CEX / OSCE – Rubric-Based Evaluation (Clinical Evaluation [History & Examination]) Investigations (Lab & Radiological), Understanding Samprapti, Sadhyasadyata & Roga Nirnaya, Propose the Chikitsa Plan, Justification with respect to classical reference, Communication & Presentation Skills) Structured viva (10 marks x 1 hour) Experiential Learning Outcome Assessment: [15 marks x 1 hour] Eg: What are the challenges encountered while managing different types of Atisara? How did you solve it? similar activity can be repeated for other diseases like Pravahika , Udavarta,Antrashotha ,Raktatisara, .Purishaja krimi vikara. Or Any practical in converted form can be taken for assessment. (25 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (25 marks)	

Paper No : 2(Rasa, Rakta, Mamsa, Medovaha srotodushti vikara chikitsa)

Semester No : 3

Module 8 : Rasapradoshaja Vikara- Jvara evum Atisantapa (Hyperthermia)

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Establish a diagnosis of Jvara evum Atisantapa (Hyperthermia) with knowledge of recent updates
2. Conduct a detailed clinical examination of the patient with Jvara evum Atisantapa (Hyperthermia).
3. Advise, analyze and interpret appropriate investigations in Jvara evum Atisantapa (Hyperthermia).
4. Plan, execute and analyze patient care in Jvara evum Atisantapa (Hyperthermia) adhered to the principles of Shamana, Shodhana, Panchakarma, Rasayana chikitsa and Pathyapathya with critical care management

Unit 1 Jvara

1. Jvara Bheda (SP 51)- Nava/Jeerna, Soumya/ Agneya, Sama/Vishama, Prakrita/ Vaikrita, Shareerika/ Manasika, Antarvegi/ Bahirvegi, Dahadi/Sheetadi, Bahya/Abhyantara, Ama/Pachyamana/Nirama, Dhatugatajvara and Punaravartaka jvara
2. Nija jvara (SP 52, SP 53, SP 54, SP 5Y, SP 5Z) – Ekadoshaja, Dvidoshaja, Samasannipata, Vishamasannipata, Vatabalasaka, Pralepaka.
3. Agantu Jvara (SP 59) – Abhighataja, Abhishangaja, Abhicharaja, Abhishapaja Jvara.
4. Vishama Jvara (SP 57) – Santata, Satata, Anyedyushka, Tritiyaka, Chaturtaka, Chaturtakaviparyaya
5. Nirantara Jvara (Continuous), Vyatyasta jvara (Intermittent), Alpavisargi jvara (Remittent) and Pratyavarti jvara (Relapsing), Sankramaka jvara (Infectious Fevers) and Asamkramaka jvara (Noninfectious Fevers), Short-term Fever (Acute Fever)/ Long-term Fever (Persistent Fever) and Agyata jvara (SP 5Z) (FUO - Fever of Unknown Origin)
6. Investigations in Fever – Peripheral Smear, Polymerase Chain Reaction, Complete Blood Count, Erythrocyte Sedimentation Rate, C reactive protein, Liver Function Test, Renal Function Test, Urine Routine, Blood and Urine Culture, Serological tests, Molecular tests, Nucleic Acid Amplification Test (NAATs), Filial Test strip (FTS), Direct Fluorescent antibody (DFA) test, Widal test, Mantoux test, Chest X-ray.

References: 1,2,3,4,7,9,15,16,40,41,42,45,54

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential	3C Notional learning Hours	3D Lecture/ Practical Training/	3E Domain/ Sub Domain	3F Level (Does/Show s	3G Teaching Learning Methods

	learning) session, the students should be able to)		Experiential Learning		how/Knows how/Know)	
CO1,CO2	Describe the different types of Jwara (Nava/Jeerna, Sama/Vishama, Prakrita/ Vaikrita, Dahadi/Seetadi, Sareerika/Manasika, Antarvegi/Bahirvegi, Bahya/Abhyantara, Ama/Pachyamana/Nirama, Nija/Agantu, etc.) based on Nidana Panchaka, and comprehend Jwara Samprapti within the context of Prakriti Sama samaveta and Vikruti Vishama samaveta principles.	1	Lecture	CC	Knows-how	L&PPT ,L&GD,FC
CO1,CO2,CO3	Describe Vishama jwara, Dhatugata jwara and Punaravartaka jwara, based on Nidana Panchaka, and discuss the appropriate treatment principles and guidelines (Ayurveda Standard treatment guidelines - National Ayush Mission).	1	Lecture	CAP	Knows-how	L&PPT ,L&GD
CO1,CO3	Describe the contemporary method of classification of fever - Continuous/Intermittent/Remittent/Relapsing types of fever, Infectious/Non-Infectious fevers, Short-term Fever (Acute Fever)/Long-term Fever (Persistent Fever) and FUO (Fever of Unknown Origin).	1	Lecture	CAP	Knows-how	L&GD
CO1,CO2,CO5	Discuss the management of Nava/Jeerna, Sama/Vishama, Saama/Nirama, Nija/Agantuja, Prakrita/Vaikrita, Dahadi/Sheetadi, and Bahya/Abhyantara bheda of Jwara based on the principles of Daivavyapashraya, Yuktivyapashraya, and Satvavajaya Chikitsa. (Also refer to the Ayurveda Standard Treatment Guidelines - National Ayush Mission)	1	Lecture	CAP	Knows-how	L&GD

CO1,CO5	Describe the management of Dhatugata jwara and Punaravartaka jwara based on Roga avastha and Rogi Bala. (Also refer to the Ayurveda Standard Treatment Guidelines - National Ayush Mission)	1	Lecture	CAP	Knows-how	L&GD,L&PPT
CO1,CO2,CO3,CO4	Demonstrate the ability to advise on and interpret appropriate diagnostic tests and imaging studies based on the clinical presentation of Fever.	2	Practical8.1	PSY-MEC	Shows-how	CBL,D-BED,D,PL
CO1,CO2,CO3,CO4	Demonstrate Roga rogi pareeksha and plan appropriate treatment considering Jvarabheda and roga rogi bala.	2	Practical8.2	PSY-MEC	Shows-how	D,CBL,DIS
CO1,CO2,CO3	Construct a comprehensive treatment protocol for Fever of Unknown Origin (FUO) based on Ayurvedic principles, incorporating appropriate Aushadha prayoga, Kriyakrama, and Pathya-Apathya.	2	Experiential - Learning8.1	PSY-ADT	Does	PL,SIM,DIS,CBL
CO1,CO2,CO3,CO4,CO5,CO7	Construct a treatment Protocol for Jvara Rogi based on rationalised selection of Aushadha, Kriyakrama and Pathyapathya.	3	Experiential - Learning8.2	PSY-ADT	Does	CBL,DIS,SDL,D-BED
CO1,CO2,CO3,CO4,CO5,CO7	Examine the Samyak, Ayoga and Atiyoga lakshanas seen in Jvara patient with respect to the upakramas and manage them properly.	2	Experiential - Learning8.3	PSY-ADT	Does	CBL
CO1,CO2,CO5,CO7	Create a treatment protocol for Jvara and analyse its effectiveness in an immunocompromised patient.	3	Experiential - Learning8.4	PSY-ADT	Does	CBL
CO1,CO3,CO4,CO7	Manage potential complications or Upadrava vyadhi associated with Jvara.	2	Experiential - Learning8.5	PSY-ADT	Does	CBL
Unit 2 Sankramaka Roga – Infectious fevers						

1. Vata-shlaishmika jvara (Influenza), Avian Flu, Varaha jvara(Swine Flu), Korona (Covid 19), H1N1, Ebola virus, Nipah virus, Sandhiga sannipata jvara (Chikungunya), Dandaka jvara (Dengue fever and subtypes), Rabies, Poliomyelitis, Karnamoola shotha (Mumps)
2. Antrika jvara (Enteric fever - Typhoid), Leptospirosis, Granthika sannipata jvara(Plague), Dhanurvaata(Tetanus), Beejanu jvara (Anthrax), Peeta jvara (Yellow fever),
3. Shwasanaka jvara(Pneumonia), Mastishka avarana shotha(Meningitis), Mastishka shotha(Encephalitis)

References: 1,2,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,CO5	Describe infectious fevers—including Influenza, Avian Flu, COVID-19, H1N1, Ebola virus, Nipah virus, Enteric fever, Chikungunya, Dengue fever and its subtypes—based on their aetiology, epidemiology, pathogenesis, and recommended investigations.	1	Lecture	CAN	Knows-how	L,FC,L&P PT
CO1,CO2,CO5	Interpret infectious fevers—including Leptospirosis, Kala-azar, Plague, Rabies, Poliomyelitis, Mumps, Tetanus, Anthrax, Yellow Fever, Meningitis, and Encephalitis—based on their aetiology, epidemiology, pathogenesis, and relevant investigations.	1	Lecture	CAN	Knows-how	L,FC,L&P PT
CO1,CO2,CO3, CO4	Assess detailed case history, perform a thorough clinical examination, and analyze and interpret relevant investigation reports to differentiate fevers of infective origin accurately.	2	Practical8.3	PSY-MEC	Shows-how	D- BED,LRI, RP,DIS,C BL

CO1,CO2,CO3,CO4	Apply Ayurvedic principles of diagnosis—based on Roga and Rogi Pariksha—in the assessment and management of a case of infectious fever.	2	Practical8.4	PSY-MEC	Shows-how	D-BED,CBL,DIS,SIM
CO1,CO2,CO3,CO4,CO5,CO7	Construct a rationalized management protocol for infectious fevers, incorporating Aushadha Prayoga, Kriyakrama, Rasayana, and Pathya-Apathya.	3	Experiential - Learning8.6	PSY-ADT	Does	D-BED,CBL,PAL,DIS
CO5,CO6,CO7,CO8	Conduct evidence-based research on Ayurvedic medicines and treatment protocols used for managing fevers of infectious origin.	2	Experiential - Learning8.7	CE	Does	JC,Mnt,DIS,SDL,PER

Unit 3 Sankramaka Roga - Pidakajanya Jvara (Infectious fever with rash) This unit provide comprehensive knowledge about Pidakajanya Jwara and management

1. Romantika (Measles)
2. Masurika (Smallpox)
3. Laghumasurika (Chickenpox/ Shingles)
4. Sheetala, Scrub Typhus
5. Monkeypox

References: 7,15,41,42,45

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,CO5	Describe Pidakajanya Jwara (infectious fevers with rash)—including Sheetala, Masoorika, Mantharajwara, Smallpox, Chickenpox/Shingles, Monkeypox, and Measles—based on their aetiology, epidemiology, pathogenesis, and relevant investigations.	1	Lecture	CAN	Knows-how	L&PPT,FC

CO1,CO2,CO3,CO4	Assess a detailed case history, perform a thorough clinical examination, and analyze as well as interpret relevant investigation reports to differentiate infectious fevers presenting with rash.	2	Practical8.5	PSY-MEC	Shows-how	LRI,SIM,CD,CBL,D
CO1,CO2,CO3,CO4	Assess a case of infectious fever with rash by applying Ayurvedic principles of diagnosis based on Roga and Rogi Pariksha.	2	Practical8.6	PSY-MEC	Shows-how	DIS,D,CBL,SIM
CO1,CO2,CO3,CO4,CO5	Construct a rationalized management protocol for infectious fevers with rash, incorporating Aushadha Prayoga, Kriyakrama, Rasayana, and Pathya-Apathya.	3	Experiential - Learning8.8	PSY-ADT	Does	SIM,DIS,CBL,PER
CO5,CO6,CO7,CO8	Assess the effectiveness of various medicines and treatment procedures for infectious fevers with rash, based on evidence from research articles, and compile the findings into a comprehensive report.	2	Experiential - Learning8.9	CE	Does	TBL,JC,DIS

Unit 4 Sankramaka jvara - Fevers of Parasitic origin

1. Vishama jvara (Malaria)
2. Krshnajvara (Kala Azar)
3. Shleepada (Filariasis - SM 01)
4. Visceral leishmaniasis
5. Giardiasis.

References: 1,2,3,7,9,15,16,41,45

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods

CO1,CO2,CO5	Discuss fevers of parasitic origin—including Malaria, Filariasis, Visceral Leishmaniasis, Giardiasis, and Sleepada—based on their aetiology, epidemiology, pathogenesis, and relevant investigations.	1	Lecture	CAN	Knows-how	FC,L&PPT
CO1,CO2,CO3,CO4	Illustrate a detailed case history, perform a comprehensive clinical examination, and critically analyze relevant investigation reports to differentiate parasitic fevers.	2	Practical8.7	PSY-MEC	Shows-how	CBL,DIS,CD,D,SIM
CO1,CO2,CO3,CO4	Assess a case of parasitic fever by applying Ayurvedic diagnostic principle based on Roga and Rogi Pariksha.	2	Practical8.8	PSY-MEC	Shows-how	PER,DIS,D,CBL
CO1,CO2,CO3,CO4,CO5,CO7	Conduct a rationalized management protocol for parasitic fever encompassing Aushadha Prayoga, Kriyakrama, Rasayana, and Pathya-Apathya.	2	Experiential - Learning8.10	CS	Does	SIM,CBL,DIS

Unit 5 Atisantapa (hyperthermia)

1. Atisantapa (Hyperthermia)
2. Tivra santapa (Malignant Hyperthermia)
3. Vataushnyaghatah (Heat stroke), Atapashrantih (Heat exhaustion) and Tapaghata (Sunburn).

References: 1,2,3,4,9,40,41

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,CO5	Describe Atisantapa (Hyperthermia), Tivra Santapa (Malignant Hyperthermia), Vataushnyaghatah (Heat Stroke), Atapashrantih	1	Lecture	CAP	Knows-how	L&PPT

	(Heat Exhaustion), and Tapaghata (Sunburn), and discuss general principles of management.					
CO1,CO2,CO3, CO4	Perform a thorough clinical examination and demonstrate the ability to recommend appropriate investigations, analyze, and interpret the findings in the context of hyperthermia, heat stroke, heat exhaustion, and sunburn.	2	Practical8.9	PSY-MEC	Shows-how	DIS,CBL, D,SIM,LRI
CO1,CO2,CO3, CO4	Create an Ayurvedic diagnostic protocol for Atisantapa (Hyperthermia), Tivra Santapa (Malignant Hyperthermia), Vataushnyaghatah (Heat Stroke), Atapashrantih (Heat Exhaustion), and Tapaghata (Sunburn) based on Roga and Rogi Pariksha principles.	2	Practical8.10	PSY-MEC	Shows-how	PER,D-BED,SIM, CBL,DIS
CO1,CO2,CO3, CO5	Create a comprehensive management protocol for Atisantapa (Hyperthermia), Tivra Santapa (Malignant Hyperthermia), Vataushnyaghatah (Heat Stroke), Atapashrantih (Heat Exhaustion), and Tapaghata (Sunburn), incorporating Aushadha Prayoga, Kriyakrama, and Pathyapathya.	2	Experiential - Learning8.11	CS	Does	CBL,PER, DIS

Practical Training Activity

Practical Training 8.1 Diagnostic tools for Fever.

Teacher Activity:

1. Case Presentation: Present a series of cases (O.P/I.P, recorded cases or Case scenarios) with different causes of fever (e.g., viral, bacterial, parasitic) and varying durations (acute, subacute, chronic).
2. Clinical Scenario Discussion: Lead a discussion on the clinical approach to each case, highlighting key factors that influence the choice of diagnostic tests (e.g., patient history, physical examination findings, epidemiological context).
3. Diagnostic Test Selection: Explain the rationale behind selecting specific diagnostic tests for each case, including: Temperature charts (analyse patterns - continuous, intermittent, crisis and lysis, step ladder, etc.)
4. Laboratory tests (e.g., CBC, blood cultures, serology)
5. Imaging studies (e.g., chest X-ray, ultrasound, CT scan).

6. Test Result Interpretation: Interpret temperature charts, sample test results for each case, highlighting key findings and their implications for diagnosis and management.

Scholar Activity:

1. Case-Based Learning: Scholars will be divided into small groups and assigned a case to work through.
2. Diagnostic Test Selection Exercise: Each group, after clinical examination, will suggest and justify the appropriate diagnostic tests suitable for their assigned case.
3. Test Result Interpretation Exercise: Scholars will be provided with sample test results for their case, and they will interpret the findings and discuss implications for diagnosis and management.
4. Peer Discussion and Feedback: Scholars will discuss their approaches and findings with peers, receiving feedback and learning from one another.

Practical Training 8.2 Treatment plan in Jvara rogi.

Teacher activity:

1. Case Presentations: The teacher will present different cases of fever (O.P/I.P/case scenarios/ simulated cases), including Nija/Agantu/Sama/Vishama/Saama/Nirama/Sareerika/Manasika/ Dhatugata/Punaravartaka, etc.
2. Examination and Diagnosis: The teacher will guide the scholars in examining each case, considering factors like Jvarabheda, Roga Rogi Bala, Dosha avastha, etc.
3. Treatment Planning: Based on the diagnosis, the teacher will plan appropriate treatment, including: Pathyapathya, Dravya-Adravya chikitsa, Kriyakrama, Rasayana if necessary
4. Practical application of Specific medicines: The teacher will provide insight on the judicious use of the following medicines: Drakshadi Kashaya, Jvarahara Gana (Ch.Su. 4/16), Vettumaran gulika, Tribhuvan kirti Rasa, Ananda Bhairava Rasa, Samshamani vati/ Guluchi-Ghana vati, Arogyavardhini vati, Suryaprabha gulika, Vilwadi gulika
Rasayana - Hareetaki, Amalaki, Guloochi, Chyavanaprasha

Scholar Activity:

1. Case Analysis: Scholars will be divided into small groups. Each group will receive distinct cases. They will examine the case, conduct roga-rogi Pariksha, determine the Jvara bheda and the underlying dosha avastha, and develop a suitable treatment plan
 2. Discussion and Q&A: Scholars will refer to Ayurveda Standard treatment Guidelines and will participate in a discussion, asking questions and clarifying doubts about the cases and treatment plans. The teacher will conclude the session by addressing the doubts and providing suggestions.
 3. Practical Application: Scholars will practice examining and diagnosing similar cases, applying the principles learned during the session.
- The scholars will memorize the specific medicines explained by the teacher.

Practical Training 8.3 Case diagnosis - Fever of Infective origin.

Teacher Activities:

1. Preparation - Select 2–3 relevant real/simulated/case scenarios of fever cases (e.g., typhoid, dengue, malaria). Prepare case sheets, investigation reports, and role play guidelines.
2. Session Execution -
 - a. Briefing: Explain objectives, review fever types, and diagnostic approach.
 - b. Group Facilitation:
 - i. Supervise scholars eliciting history, performing exams, and analyzing reports.
 - ii. Prompt differential diagnosis discussions.
3. Post-Session
 - a. Debrief: Discuss group findings and reinforce key differentiators.

Scholar Activities:

1. Pre-Session - Review types of infectious fevers, clinical features, and basic lab test interpretation.
2. In-Session
 - a. History Taking: Elicit complete history focusing on fever onset, pattern, and exposures.
 - b. Clinical Exam: Check vitals, hydration, organomegaly, and lymph nodes.
 - c. Investigation Analysis: Correlate clinical features with labs (CBC, Widal, NS1, etc.).
 - d. Diagnosis: Formulate and justify differential diagnosis.
3. Post-Session - Reflect on learning, submit diagnostic summary/report, and engage in peer feedback.

Practical Training 8.4 Ayurveda management of Infectious fever

Teacher Activities:

1. Pre-Session Preparation:
 - a. Select Clinical Cases: Choose real/simulated/ case scenarios of infectious fever cases.
 - b. Design Tools: Assessment rubrics for case interpretation and protocol formulation.
2. During the Session:
 - a. Introductory Briefing - Recap Jvara Nidanapanchaka and diagnostic principles (Roga-Rogi pariksha). Orient students on expected outcomes and structure of the session.
 - b. Group Work Facilitation - Guide groups as they elicit detailed history (including Jvara Poorvarupa, Lakshana), Perform Rogi Pariksha (Ashtasthana, Dasavidha, etc.), analyze Vikruti Gyan (including investigations and differential diagnosis), Jvara avastha and formulate individualized treatment plans (Aushadha, Kriyakrama, Pathya-apathya).
3. Post-Session:

- a. Case Discussions- Allow groups to present diagnosis and management plan. Encourage critical comparison and refinement.
- b. Feedback & Correction- Provide constructive input on diagnostic logic and therapeutic rationale.

Scholar Activities:

1. Preparatory Reading:
 - a. Review Jvara Nidanapanchaka, Pariksha Vidhi, and Chikitsa Sthana.
 - b. Understand principles of Saama–Niraama differentiation.
 - c. Familiarize with common Aushadha and Kriyakrama for Jvara.
2. During the Session:
 - a. Case handling in Groups: History taking, identify Nidanapanchaka including Samprapti ghatakas, presence of co-morbidities, etc.
 - b. Rogi Pariksha: Perform Trividha, Ashtavidha and Dashavidha pariksha.
 - c. Clinical Reasoning: Analyze Saama/Niraama, Srotodushti lakshanas. Record Roga bala, Rogi bala, Sadhyasadhyata. Analyze relevant investigations.
 - d. Management Formulation: Suggest appropriate Aushadha, Kriyakrama, Rasayana, and Pathya-Apathya. Justify based on Pariksha and disease stage.
3. Post-Session:
 - a. Presentation & Discussion: Share findings and reasoning. Defend diagnosis and treatment strategy.
 - b. Self-Reflection & Peer Review: Reflect on diagnostic challenges. Provide peer feedback.
 - c. Submit Case Report/Worksheet - Document Pariksha, diagnosis, and proposed management protocol.

Practical Training 8.5 Clinical Examination - Pidaka Janya Jvara

Teacher Activity:

1. Planning and preparation: Select 2–3 representative cases (either real or simulated) of fevers with rash (e.g., measles, chickenpox, typhoid, scrub typhus). Arrange patient or simulation model with visible signs (e.g., photos of rashes, charts). Prepare copies of relevant investigation reports: CBC, ESR, LFT, serological tests, etc.
2. Case Demonstration: Demonstrate model case (real/simulated) showing how to take a detailed history and examine patient. Emphasize how to observe skin manifestations and fever patterns.
3. Supervision of Student Activity: Divide students into small groups and assign each a case. Observe each group as they perform case history elicitation and examination. Provide real-time feedback and guide differential diagnosis. |
4. Facilitate Interpretation: Distribute investigation reports to student groups. Guide them through analysis and integration with clinical findings.
5. Group Discussion & Feedback : Facilitate presentations by each group summarizing their findings and diagnosis. Highlight correct approaches and clarify errors or misconceptions.

Student Activity:

1. Pre-session preparation: Revise concepts of Fever with eruptions. Familiarize with case history formats, clinical examination and

interpretation of investigations.]

2. Participation in Demonstration: Observe the teacher's demonstration. Note key methods of questioning and inspection/palpation for rashes and fever-related signs.

3. Group-Based Case Work: In groups, elicit detailed case history from assigned case (real/simulated). Perform physical examination focusing on rash characteristics (type, site, onset), fever pattern, and systemic signs. Record findings in case sheet format.

4. Analysis & Interpretation: Study provided reports (lab and clinical). Compare differential diagnoses (e.g., measles vs chickenpox vs scrub typhus).

5. Presentation & Discussion: Present findings to class/teacher with justification. Participate in group discussion and peer review. Receive and reflect on teacher feedback.

6. Post-Session Reflection: Summarize learning in a short write-up or diagnostic chart. Identify areas for improvement in clinical skills and reasoning.

Practical Training 8.6 Ayurvedic diagnosis of Pidaka Janya Jvara (infectious fever with rash)

Teacher Activity:

1. Pre-Session Preparation

a. Select Clinical Cases: Choose real/simulated/ case scenarios of infectious fever cases with rash. Review relevant Ayurvedic concepts- Jvara Roga Lakshana, Twak Vikara, and Roga-Rogi Pariksha.

2. During the Session

a. Introductory Briefing - Recap Jwara Nidanapanchaka and diagnostic principles (Roga-Rogi pariksha). Explain the application of Nidana Panchaka in infectious fevers with rash.

b. Group Work Facilitation - Guide groups as they elicit detailed history (including Jvara Poorvarupa, Lakshana), perform Rogi pariksha (Ashtasthana, Dasavidha, etc.), analyze Vikruti Gyan (including investigations and differential diagnosis), and Jvara avastha.

3. Post-Session

a. Case Discussions- Allow groups to present the diagnosis. Helps students map out the Samprapti. Encourage critical comparison and refinement.

b. Feedback & Correction- Provide constructive input on diagnostic logic.

Scholar Activities:

1. Preparatory Reading:

a. Revise Ayurvedic diagnostic methods: Nidana Panchaka, Ashtavidha Pariksha, and Twak Vikara classification.

b. Review the Ayurvedic understanding of Jvara and fevers with rash.

c. Understand principles of Saama–Niraama differentiation.

2. During the Session

a. Case handling in Groups: History taking, identifying Nidanapanchaka including Samprapti ghatakas, presence of co-morbidities, etc.

b. Rogi Pariksha: Perform Trividha, Ashtavidha and Dashavidha pariksha.

c. Clinical Reasoning: Analyze Saama/Niraama, Srotodushti lakshanas, Kriyakala stage, etc. Record Roga bala, Rogi bala, Sadhyasadhyata, etc.

3. Post-Session

- a. Presentation & Discussion: Share findings and reasoning. Defend the diagnosis and explanation on Samprapti ghatakas.
- b. Self-Reflection & Peer Review:
- c. Reflect on diagnostic challenges.
- d. Provide peer feedback.
- e. Submit Case Report/Worksheet - Document Pariksha, diagnosis, and basis of diagnostic reasoning.

Practical Training 8.7 Clinical Examination - Sankramaka Jvara (Parasitic Fevers)

Teacher Activity:

1. Pre-session preparation:
 - a. Select representative case scenarios (real patients, simulated cases, or case vignettes).
 - b. Provide relevant investigation reports (e.g., peripheral smear, serology, stool microscopy, antigen tests).
2. Orientation:
 - a. Introduce session objectives and clinical significance of parasitic fevers.
 - b. Brief students on history-taking structure and red-flag symptoms (e.g., travel history, nocturnal symptoms, vector exposure).
3. Demonstration:
 - a. Demonstrate focused history-taking and physical examination on a sample case.
 - b. Emphasize examination techniques: spleen/liver palpation, lymph node assessment, rash and edema identification.
4. Facilitate Hands-On Practice:
 - a. Divide students into small groups; assign each a case.
 - b. Guide students during history taking, examination, and interpretation of diagnostic reports.
 - c. Provide individual feedback during the process.
5. Discussion & Conclusion:
 - a. Lead a comparative discussion on different parasitic fevers presented.
 - b. Encourage students to summarize findings and explain diagnostic rationale.
 - c. Clarify doubts and highlight learning points.

Scholar Activity:

1. Pre-session preparation:
 - a. Review clinical features and common causes of parasitic fevers.
 - b. Revise diagnostic tools: Blood smear, rapid diagnostic tests, stool/urine analysis, and ultrasound if relevant.
2. Group Case Work:
 - a. Elicit a comprehensive case history focusing on onset, travel, sanitation, food intake, nocturnal symptoms, and systemic features.
 - b. Conduct systematic clinical examination, focusing on fever patterns, hepatosplenomegaly, lymphadenopathy, skin lesions, edema,

etc.

c. Record findings using structured formats. on history-taking structure and red-flag symptoms (e.g., travel history, nocturnal symptoms, vector exposure).

3. Analysis and Interpretation:

- a. Analyze investigation reports: blood counts (eosinophilia, anemia), thick/thin smears, stool/urine results, imaging reports.
- b. Correlate findings with possible differential diagnoses.
- c. Identify the likely parasitic etiology.

4. Presentation & Reflection :

- a. Present findings to the class or teacher.
- b. Defend diagnosis and reasoning process.
- c. Reflect on gaps in clinical reasoning and areas for improvement.

Practical Training 8.8 Ayurvedic diagnosis of Fever of Parasitic origin

Teacher Activities:

1. Pre-session Preparation:

- a. Select or prepare clinical case(s) of parasitic fever (e.g., Malaria, Amoebiasis, Kala-azar).
- b. Prepare checklists or formats for Roga and Rogi Pariksha documentation.
- c. Arrange for either simulated patients or real clinical cases in OPD/IPD.

2. Introductory Orientation:

- a. Brief on the relevance of Ayurvedic diagnostic tools in parasitic fevers.
- b. Recap the key principles of:
 - i) Roga Pariksha: Nidana Panchaka, Dosha-Dushya Sammurchana, Srotodushti.
 - ii) Rogi Pariksha: Dashavidha and Ashtavidha Pariksha.

3. Demonstration:

- a. Demonstrate a step-by-step Ayurvedic clinical examination of a case.
- b. Highlight interpretive aspects (e.g., pulse, tongue, mala, prakriti, sara, samhanana, etc.).

4. Guided Student Practice:

- a. Supervise as scholars examine assigned cases or role-play patients using Roga- Rogi pariksha methods.
- b. Ensure scholars ask appropriate history and record findings accurately.

5. Discussion & Feedback:

- a. Conduct a debriefing session where scholars present findings and formulate Ayurvedic diagnosis.
- b. Guide them in correlating clinical features with Samprapti ghataka and dosha avastha.

Scholar Activities:

1. Pre-session Preparation:

- a. Revise principles of Roga and Rogi Pariksha from classical texts.

- b. Review clinical features of common parasitic fevers and their Ayurvedic interpretation.
- 2. History Taking & Examination
 - a. Elicit a detailed clinical history including onset, pattern, aggravating/relieving factors.
 - b. Perform Dashavidha and Ashtavidha Rogi Pariksha.
- 3. Ayurvedic Diagnosis
 - a. Analyze findings to identify Dosha-Dushya involvement, Ama lakshana (if present), Srotodushti, Vyadhi avastha, etc.
 - b. Formulate Ayurvedic diagnosis (Vyadhi Nidana and Samprapti).
- 4. Presentation & Interpretation:
 - a. Present their case findings in group/plenary session.
 - b. Discuss diagnostic reasoning with reference to classical Ayurveda.
- 5. Reflection & Report Submission:
 - a. Reflect on strengths and gaps in their diagnostic approach.
 - b. Submit completed Roga-Rogi Pariksha format and diagnostic summary.

Practical Training 8.9 Ayurvedic diagnose of Hyperthermia and Heat Stroke

Teacher Activity:

- 1. Introduction:
 - a. Brief lecture on Ayurvedic understanding of Atisantapa (Hyperthermia), Tivra Santapa (Malignant Hyperthermia), Vataushnyaghatah (Heat Stroke), Atapashrantih (Heat Exhaustion), and Tapaghata (Sunburn) with emphasis on Roga Pariksha and Rogi Pariksha.
- 2. Demonstration:
 - a. Use a case vignette or a real/ simulated patient with symptoms of heat-related illness.
 - b. Demonstrate step-by-step Ayurvedic diagnostic methods: Nidanapanchaka, Dashavidha Pariksha, Trividha Pariksha, Ashtavidha Pariksha, etc.
- 3. Guided Group Activity :
 - a. Divide students into small groups .
 - b. Assign each group a specific condition (e.g., Atisantapa, Vataushnyaghatah).
 - c. Guide the scholars to work with history taking, examinations and clinical diagnosis based on Roga-Rogi pariksha.
- 4. Facilitation & Mentoring :
 - a. Monitor student group discussions.
 - b. Guide in differentiating features of each condition.
 - c. Clarify diagnostic confusion and correct any misconceptions.
- 5. Feedback and Synthesis :
 - a. Facilitate group presentations on their diagnostic protocols.

- b. Provide feedback on accuracy, classical alignment, and clinical relevance.
- c. Summarize key diagnostic differentials between conditions.

Scholar Activity:

1. Pre-Session Preparation:
 - a. Review the descriptions of Santapajanya Vikaras from available literature.
2. Group Work :
 - a. Analyze the assigned case scenario.
 - b. Apply Roga-Rogi pariksha to elicit Nidanapanchaka, Samprapti ghataka, Rogavastha, Rogibala, etc.
 - c. Create a flowchart/stepwise protocol for Ayurvedic diagnosis.
3. Discussion & Presentation:
 - a. Present diagnostic findings and justifications.
4. Reflection & Feedback :
 - a. Reflect on the clarity and applicability of the diagnostic protocol.
 - b. Integrate teacher feedback and suggest improvements.

Practical Training 8.10 Clinical Examination - Hyperthermia and Heat Stroke

Teacher Activity:

1. Introduction & Briefing:
 - a. Provide a concise overview of clinical features of Hyperthermia, Heat Stroke, Heat Exhaustion, and Sunburn.
 - b. Discuss key differentiating points and complications.
 - c. Explain the purpose of integrating clinical and investigative findings.
2. Clinical Demonstration :
 - a. Demonstrate general physical examination: vitals, hydration status, neurological exam (GCS), and skin findings.
 - b. Use real/simulated patients or manikins with condition-specific presentations.
 - c. Highlight red flag signs and signs of systemic involvement.
3. Case-Based Group Activity :
 - a. Divide scholars into small groups.
 - b. Assign one case per group (e.g., hyperthermia vs heat stroke).
 - c. Provide a real case/ detailed clinical scenario (case sheet + vitals + basic lab results)
4. Discussion on Investigation:
 - a. Facilitate discussion on what investigations to order: CBC, serum electrolytes, renal/liver function tests, creatine kinase, ABG, ECG, urinalysis, skin biopsy (for severe sunburn).
 - b. Integrate teacher feedback and suggest improvements.
 - c. Explain rationale for each investigation and expected changes in various heat disorders.
 - d. Guide students through sample lab reports.

e. Demonstrate how to interpret values in clinical context: e.g., hyponatremia in heat exhaustion, high creatinine in heat stroke, elevated CK in rhabdomyolysis.

5. Summary and Feedback:

- a. Summarize examination patterns and key diagnostics.
- b. Provide feedback on each group's approach and reasoning.

Scholar Activity:

1. Pre-session Review:

- a. Review basic physiology of thermoregulation and pathophysiology of heat-related disorders.
- b. Study normal ranges for common labs (Na⁺, K⁺, CK, LFT, and RFT).

2. Group Case Work:

- a. Analyze assigned case history.
- b. Perform mock clinical examination steps (if using a manikin or simulated patient) or clinical examinations on a real patient.
- c. Recommend investigations and justify choices.

3. Report Interpretation:

- a. Interpret provided lab data.
- b. Correlate with clinical findings to reach a provisional diagnosis.

4. Presentation & Discussion:

- a. Present group findings (clinical signs, probable diagnosis, and investigation with justification).
- b. Participate in peer review and discussion.

5. Reflection: Submit a reflective summary: E.g., "What key clinical features and investigations help differentiate heat stroke from heat exhaustion?"

Experiential Learning Activity

Experiential-Learning Learning 8.1: Treatment Protocol for FUO

Teacher Activity:

1. Introduction and Context Setting: Introduce the topic of FUO and its challenges in diagnosis and treatment. Discuss the importance of Ayurvedic principles in managing FUO. Divide students into small groups.

2. Case Study Presentation: Provide a real or simulated case scenario of a patient with Fever of Unknown Origin (FUO) for each group, highlighting key symptoms, diagnostic challenges, and treatment complexities.

Scholar Activity:

1. Case Study Analysis: Each group will record detailed patient history, including onset, duration, and characteristics of fever, associated symptoms, dietary habits, lifestyle, and previous treatments. They will advise relevant laboratory tests to rule out known causes of fever, such as infections, autoimmune disorders, or malignancies.

2. Group Discussion: Engage in group discussions to apply Ayurvedic principles to the case study, considering the involved doshas, Agni, Ama, Roga avastha, Rogi bala and potential treatment approaches.
3. Protocol Development: Develop a comprehensive treatment protocol for FUO, incorporating Aushadha prayoga, Kriyakrama, Pathya-Apathya and Rasayana prayoga.
4. Peer Review and Feedback: Present their developed protocols to the teacher and peers, receiving feedback and suggestions for improvement.

Experiential-Learning Learning 8.2: Treatment protocol for Jvara Rogi.

Teacher Activity:

1. Design & Planning - Identify and frame varied clinical cases of Jvara (Vataja, Pittaja, Sannipata, Vishama Jwara, etc.). Define learning objectives clearly and align them with classical and contemporary principles.
2. Content Delivery - Facilitate case-based learning and conduct short lectures or discussions on samprapti and dosha avastha, principles of applying Aushadha, Kriyakrama, and Pathyapathya, role of Rogi/Roga Bala, Kala, Desha in treatment planning, etc.
3. Guidance & Facilitation - Supervise scholar group discussions and presentations, moderate reflective sessions and debriefs.

Scholar Activity:

1. Preparation- Review concepts of Jvara, its management, mode of action and indications of key formulations and Kriyakrama.
2. Case Analysis - Analyze real/simulated Jvara cases focusing on Dosha, Dushya, Samprapti, Rogi bala, Roga bala and stage-wise treatment needs
3. Protocol Formulation - Select and justify appropriate Aushadha (based on dosha, stage, bala), Kriyakrama (Langhana, Pachana, Svedana, Vamana/Virechana), Pathyapathya (diet, lifestyle, contraindications)
4. Presentation & Peer Learning - Present treatment plans in group settings, engage in peer review and critique.
5. Reflection & Application - Maintain a clinical reflection journal, apply concepts during supervised clinical exposure, and reflect on decision-making and outcomes in real-time settings.

Experiential-Learning Learning 8.3: Managing Ayoga-Atiyoga lakshana of Kriyakrama in Jvara

Step 1: Patient Selection and Data Collection:

- a. Scholars will identify patients with Jvara who have received Ayurvedic treatment (langhana, pachana, sodhana, etc.) from O.P./ I.P./ pre-recorded case files.
- b. They will collect demographic data, medical history, fever duration, treatment details, and outcome data and record laboratory results (e.g., blood tests, imaging studies)

Step 2: Analyse Samyak/Atiyoga/Ayoga lakshanas of treatment:

- a. Scholars will examine individual cases and collect details regarding samyak, atiyoga and ayoga lakshanas of

langhana/pachana/sodhana chikitsa.

- b. They will determine the factors associated with Atiyoga/ Ayoga lakshanas (diet, co-morbidities, other medications, etc.)

Step 3: Management of Atiyoga/ Ayoga lakshana:

- a. Scholars will discuss with peers and teachers to set up a management plan for the identified atiyoga/ ayoga lakshana.
- b. They will monitor patient response to the management.
- c. Scholars will record their findings and present them before the teacher and peers.
- d. The teacher facilitates discussion and provides suggestions and recommendations.

Step 4: Presentation and discussion:

- a. Scholars will record their findings and present them before the teacher and peers.
- b. The teacher facilitates discussion and provides suggestions and recommendations.
- c. The scholars then document the case findings in the case record.

Experiential-Learning Learning 8.4: Managing Jvara in immunocompromised patients.

Step 1: Patient Selection and Data Collection:

- a. Scholars will identify immunocompromised patients (patients with underlying medical conditions like cancer, diabetes, HIV/AIDS, undergone organ transplants, chemotherapy, are on immunosuppressive medications, etc.) with Jvara who have received Ayurvedic treatment (langhana, pachana, sodhana, etc.) from O.P./ I.P./ pre-recorded case files.
- b. They will collect demographic data, medical history, fever duration, treatment details, and outcome data and record laboratory results (e.g., blood tests, imaging studies)

Step 2: Management of the patient:

- a. Scholars will evaluate the patient's bala and immune status after performing a comprehensive roga rogi pariksha.
- b. Scholars will discuss the treatment protocol to be implemented, including samana, sodhana, Rasayana and pathyapathya.
- c. The finalised treatment protocol will be presented to the teacher.
- d. The teacher provides suggestions, and the treatment will be administered to the patient after obtaining consent.
- e. The scholars will be encouraged to monitor the patient's progress and adjust the treatment protocol as needed.

Step 3: Debriefing and discussion:

- a. The scholars reflect on their experiences and discuss the challenges and successes they encountered.
- b. The teacher facilitates a discussion on the effectiveness of the treatment protocol in immunocompromised patients and potential modifications for future cases.
- c. The scholars record their reflections in the portfolio.

Experiential-Learning Learning 8.5: Management of Jvara Upadrava vikara

Teacher activity:

- a. The teacher introduces Jvara upadrava (Dasa upadrava - Vireka, Vitgraha, Trit, Swasa, Kasa, Angaruk, Vami, Hikka, Moorchha, Aruchi) and other potential complications associated with fever.
- b. The teacher divides the scholars into small groups and provides Jvara cases from O.P./I.P. or patient profiles/ case scenarios.

Scholar activity:

- a. Each group perform roga-rogi pariksha and identifies upadrava vikaras in the given case,
- b. After group discussion, a treatment protocol adhering to the principles of sodhana, samana, rasayana and pathyapathya will be created.
- c. The treatment protocol will be presented to the teacher and peers.
- d. The teacher provides suggestions, and the treatment will be administered to the patient after obtaining consent.
- e. The scholars will be encouraged to monitor the patient's progress and adjust the treatment protocol as needed.

Debriefing and discussion:

- a. The scholars reflect on their experiences and discuss the challenges and successes they encountered.
- b. The teacher facilitates a discussion on the effectiveness of the treatment protocol in patients with Jvaropadrava and potential modifications for future cases.
- c. The scholars record their reflections in the portfolio.

Experiential-Learning Learning 8.6: Management of Infectious fevers

Teacher Activity

1. Design & Planning - Identify and frame varied clinical cases of Infectious fevers (Viral, bacterial, etc.). Define learning objectives clearly and align them with classical and contemporary principles.
2. Content Delivery - Facilitate case-based learning and conduct short lectures or discussions on investigations, samprapti and dosha avastha, principles of applying Aushadha, Kriyakrama, and Pathyapathya, role of Rogi/Roga Bala, Kala, Desha in treatment planning, etc.
3. Guidance & Facilitation - Supervise student group discussions and presentations, moderate reflective sessions and debriefs.

Scholar Activity:

1. Preparation- Review concepts of Infectious fevers, their management, mode of action and indications of key formulations and Kriyakrama.
2. Case Analysis - Analyze real/simulated cases focusing on investigations, Dosha, Dushya, Samprapti, Roga bala, Roga bala and stage-wise treatment needs
3. Protocol Formulation - Select and justify appropriate Aushadha (based on dosha, stage, bala), Kriyakrama (Langhana, Pachana, Svedana, Vamana/Virechana), Pathyapathya (diet, lifestyle, contraindications)
4. Presentation & Peer Learning - Present treatment plans in group settings, engage in peer review and critique.

5. Reflection & Application - Maintain a clinical reflection journal, apply concepts during supervised clinical exposure, and reflect on decision-making and outcomes in real-time settings.

Experiential-Learning Learning 8.7: Compilation - Research findings on Fever management

Teacher Activities:

1. Session Orientation - Explain the scope and importance of evidence-based evaluation in Ayurvedic management of infectious fevers (e.g., Influenza, Covid-19, Dengue, etc.).
2. Resource Curation and Access Facilitation:
 - a. Provide access to curated databases (PubMed, Scopus, Web of Science, AYUSH Research Portal, DHARA, etc.).
 - b. Guide students in formulating search strategies using appropriate keywords (e.g., "Guduchi and Jwara", "Ayurveda and Covid-19", etc.).
 - c. Critical Appraisal Training - Demonstrate how to read, interpret, and critically evaluate research papers using standardized tools (e.g., CONSORT for Ayurvedic studies, CASP checklists).
3. Group Supervision & Discussion:
 - a. Facilitate small-group work to analyze studies and identify strengths, gaps, and limitations.
 - b. Conduct group discussions on the comparison of findings and their relevance to classical principles.
4. Review & Feedback:
 - a. Evaluate the compiled report or presentation submitted by students.
 - b. Provide feedback on scientific rigour, Ayurvedic integration, and clarity of interpretation.

Scholar Activities:

1. Research Article Identification - Search for and select at least three peer-reviewed articles on Ayurvedic medicines/interventions used in managing infectious fevers.
2. Study Evaluation & Data Extraction:
 - a. Read selected studies thoroughly.
 - b. Extract data related to intervention type, dosage, duration, outcomes, safety, and comparison with classical descriptions.
3. Critical Analysis & Synthesis:
 - a. Evaluate methodological quality and Ayurvedic soundness of each study.
 - b. Compare and contrast classical treatment approaches with evidence from research.
4. Report Compilation - Compile findings into a structured report or presentation, including a summary of each study, critical evaluation, relevance to clinical practice and suggestions for further research.
5. Group Presentation - Present key findings and collective conclusions to faculty and peers.
6. Peer Review & Reflection:
 - a. Participate in reviewing peer groups' reports and presentations.
 - b. Submit an individual reflective note on how evidence-based integration enhances Ayurvedic practice.

Experiential-Learning Learning 8.8: Management of Pidaka janya Jvara

Teacher Activities:

1. Orientation Session:
 - a. Introduce the clinical importance and Ayurvedic perspective of fevers with rash (e.g., Romantika, Masurika, etc.).
 - b. Highlight differential diagnosis and prognosis as per literature.
2. Case-Based Learning Setup:
 - a. Provide one or more anonymized real or simulated clinical cases of infectious fevers with rash.
 - b. Guide students to identify key presenting features, Samprapti ghataka, and probable Nidanas.
3. Facilitated Discussions on:
 - a. Comprehending eruptive fevers with respect to Ayurvedic classical descriptions.
 - b. Therapeutic rationale behind Shamana vs. Shodhana approaches, Rasayana usage, and dietary guidelines.
 - c. Rational selection and combination of herbs/mineral drugs.
4. Supervision of Protocol Design:
 - a. Support students in framing a step-wise, evidence-based protocol integrating Aushadha, Kriyakrama (e.g., Abhyanga, Swedana), Rasayana, and Pathya-Apathya.
5. Feedback and Reflection:
 - a. Conduct a peer-review and self-reflection session.
 - b. Provide constructive feedback on the logic, clarity, and textual support of protocols developed by students.

Scholar Activities:

1. Case Study Analysis - Examine the clinical case: take history, identify classical features, and propose an Ayurvedic diagnosis (Roga-Rogi Pariksha).
2. Classical Literature Review - Explore Ayurvedic samhitas to extract chikitsa sutras and correlate with clinical conditions.
3. Group Discussion & Brainstorming - Work in groups to critically discuss probable Samprapti (pathogenesis), Doshic dominance, and treatment principles.
4. Designing a Management Protocol: Develop a structured management protocol including Aushadha Prayoga, Kriyakrama, Rasayana therapy (if needed) and Pathya-Apathya.
5. Presentation & Peer Feedback:
 - a. Present their protocol to peers and faculty.
 - b. Engage in critical appraisal and refinement of the protocol.
6. Reflective Learning - Submit a reflective note that highlights their learning outcomes and potential application in clinical practice.

Experiential-Learning Learning 8.9: Scientific Advances in Management of Pidaka Janya Jvara

Teacher Activities:

1. Pre-session Preparation:

- a. Curate a list of relevant (Pubmed, Scopus or Web of Science indexed) and recent (last 5–10 years) Ayurvedic and integrative research articles on infectious fevers with rash (e.g., viral exanthems, measles, scrub typhus, etc.).
- b. Prepare guidance notes on evaluating research quality (study type, methodology, outcomes, limitations).
2. Provide a brief overview of:
 - a. Common infectious fevers with rash from Ayurvedic and modern perspectives.
 - b. Importance of evidence-based Ayurveda in clinical decision-making.
 - c. Key parameters for evaluating effectiveness (symptom relief, duration, adverse effects, recurrence, etc.).
3. Group Division & Guidance:
 - a. Divide scholars into small working groups.
 - b. Assign or allow selection of 3–5 articles per group, ensuring diversity of interventions and study types.
4. Guide students on how to extract and compare data on:
 - a. Aushadha used (single herbs, formulations)
 - b. Kriyakrama or Panchakarma procedures
 - c. Outcome measures and clinical endpoints
5. Monitoring & Mentoring:
 - a. Facilitate group work by mentoring their review process.
 - b. Support critical appraisal of studies using evidence grading (e.g., strength of recommendation, level of evidence).
6. Review & Feedback:
 - a. Review the compiled reports for clarity, accuracy, and depth.
 - b. Provide structured feedback on analytical thinking and evidence interpretation.
7. Consolidation & Knowledge Sharing:
 - a. Conduct a presentation session where groups share their findings.
 - b. Highlight key insights and encourage discussion on translational relevance in clinical practice.

Scholar Activities:

1. Pre-session Reading:
 - a. Review background on common infectious fevers with rash and their Ayurvedic management.
 - b. Familiarize with basic principles of clinical research and evidence analysis.
2. Group Literature Review:
 - a. Identify and analyze selected research articles on Aushadha Prayoga, Kriyakrama/Panchakarma, Combined or integrative therapies.
 - b. Extract data on patient population, interventions, outcomes, safety, and conclusions.
3. Critical Appraisal:
 - a. Evaluate the strength of evidence, sample size, study design (RCTs, case reports, observational), and limitations.
 - b. Compare traditional approaches with modern findings where applicable.
4. Report Compilation

a. Organize findings into a well-structured comprehensive report including Summary of each article, Comparative effectiveness analysis, Graphs/tables (if needed), and final conclusions and recommendations for clinical practice.

5. Presentation & Discussion:

- a. Present key findings and interpretations during the interactive session.
- b. Participate in peer discussion and reflect on how evidence informs Ayurvedic practice.

6. Submission & Reflection:

- a. Submit final report with citations.
- b. Reflect on how research can refine their clinical decision-making and Ayurvedic understanding.

Experiential-Learning Learning 8.10: Management of Sankramaka Jvara - Parasitic Fever.

Teacher Activities:

1.Pre-session Preparation:

- a. Identify key classical references and recent research on parasitic fevers (e.g., Malaria, Kala-azar, Filariasis).
- b. Prepare case scenarios (real or simulated) reflecting different types of parasitic fevers.
- c. Design evaluation rubrics for protocol development and clinical reasoning.

2.Provide a short lecture covering:

- a. Nidana Panchaka of parasitic fevers.
- b. Ayurvedic Samprapti Vighatana approach.
- c. Principles of Chikitsa including Aushadha, Kriyakrama, Rasayana, and Pathya-Apathya.

3.Group Facilitation:

- a. Divide scholars into small groups (3–5 per group).
- b. Guide discussions, clarify doubts, and offer resources.
- c. Ensure integration of classical and contemporary understanding in discussions.

4.Interactive Reflection:

- a. Conduct a plenary session where groups present their protocols.
- b. Encourage peer critique and provide constructive feedback.

Scholar Activities:

1.Pre-session Reading - Review assigned materials on parasitic fevers, classical references, and recent evidence-based Ayurvedic interventions.

2.Group Case Analysis:

- a. Analyze the given parasitic fever case scenario using Roga and Rogi Pariksha.
- b. Identify dosha predominance, srotodushti, and samprapti ghatakas.

3.Protocol Development - Collaboratively develop a detailed management protocol that includes Aushadha Prayoga, Kriyakrama, Rasayana and Pathya-Apathya.

4.Presentation & Justification:

- a. Present their management protocol to peers and faculty.
 - b. Justify treatment choices using Ayurvedic principles and available evidence.
5. Reflection & Documentation:
- a. Participate in reflective discussion on challenges and learning during protocol formulation.
 - b. Submit a written report of their group protocol with references.

Experiential-Learning Learning 8.11: Management - Hyperthermia/ Heatstroke

Teacher Activity:

1. Pre-Session Preparation Teacher Activity:
 - a. Identify and prepare brief clinical vignettes or real case summaries representing Atisantapa (Hyperthermia), Tivra Santapa (Malignant Hyperthermia), Vataushnyaghatah (Heat Stroke), Atapashrantih (Heat Exhaustion), and Tapaghata (Sunburn).
 - b. Compile relevant references from classical Ayurvedic texts and recent evidence-based research.
2. Case-Based Group Discussion:
 - a. Divide scholars into small groups (each assigned a specific condition).
 - b. Provide each group with a case vignette for detailed discussion.
 - c. Facilitate guided questioning around diagnosis, prognosis, and management priorities.
3. Presentation and Peer Feedback:
 - a. Moderate group presentations of their formulated protocols.
 - b. Encourage critical feedback and discussion.
4. Post-Session Reflection:
 - a. Summarize key takeaways and address knowledge gaps.

Scholar Activity:

1. Pre-Session Preparation:
 - a. Pre-read assigned topics: Santapajanya Vikaras from Charaka Samhita, Ashtanga Hridaya, and recent journal articles.
 - b. Come prepared with initial ideas on classical and contemporary management approaches.
2. Case-Based Group Discussion:
 - a. Analyze the case using Ayurvedic diagnostic principles (Roga-Rogi Pariksha).
 - b. Identify Samprapti Ghatakas, Srotodushti, and Dosha involvement.
 - c. Propose treatment protocol: Aushadha Prayoga, Kriyakrama, and Pathyapathya.
3. Presentation and Peer Feedback:
 - a. Present the management protocol for their assigned condition.
 - b. Evaluate other groups' plans based on Ayurvedic logic, feasibility, and innovation.
4. Post-Session Reflection:
 - a. Submit a brief reflection on the experiential learning and challenges faced.
 - b. Prepare a personalized management chart for future clinical application.

Modular Assessment	
Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome-Based Assessment: 02 credits x 04 hours x 50 marks Practical Learning Outcome Assessment: Apply Ayurvedic principles of diagnosis and management—based on Roga and Rogi Pariksha—in the assessment and management of a case of infectious fever. [25 marks x 2 hour] Instructions: The instructor shall provide real/ simulated case or case scenario of an infectious fever to each scholar. The scholars will be instructed to : Perform a clinical evaluation based on Ayurvedic principles. Suggest appropriate investigations with justification. Identify the type of Jvara and explain the Samprapti (pathogenesis). Frame a chikitsa plan, including: Aushadha (internal and external), Kriyakrama (if any), Pathya-Apathya. Justify their treatment based on classical references. Assessment Method: Mini-CEX / OSCE – Rubric-Based Evaluation (Clinical Evaluation [History & Examination]) Investigations (Lab & Radiological), Understanding Samprapti, Sadhyasadyata & Roga Nirnaya, Propose the Chikitsa Plan, Justification with respect to classical reference, Communication & Presentation Skills) Structured viva (10 marks x 1 hour) Experiential Learning Outcome Assessment: [15 marks x 1 hour] Eg: What are the challenges encountered while managing different types of Jvara? How did you solve it? Or Any practical in converted form can be taken for assessment. (25 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (25 marks)	4
Module 9 : Rasapradoshaja vikara- Pandu	
Module Learning Objectives (At the end of the module, the students should be able to) 1. Describe and diagnose Pandu, its types and Anaemia with recent updates. 2. Conduct detailed clinical examination of the patient with Pandu and Anaemia. 3. Advice, analyze and interpret appropriate investigations in Pandu and Anaemia. 4. Plan, execute and analyze patient care in Pandu and Anaemia adhered to the principles of Shamana, Shodhana, Panchakarma, Rasayana Chikitsa and Pathyapathya along with critical care management	

Unit 1 Pandu

- Pandu (SL 80) and its types.
- Anaemia – Epidemiology, Classification, Clinical features and Complications.
- Investigations – Complete Blood Count (Hemoglobin, Hematocrit, Mean Corpuscular Volume, Mean Corpuscular Hemoglobin and Mean Corpuscular Hemoglobin Concentration), Reticulocyte count, Iron profile (Serum Iron, Ferritin and TIBC), Peripheral Blood Smear, Serum Creatinine, Thyroid function Test, Coagulation Screen (Activated Partial Thromboplastin Time (APTT), Prothrombin time (PT) and International normalized ratio (INR) and Thrombin Time), Liver Function Test, Hemoglobin electrophoresis, Hemolysis panel (Haptoglobin, lactate dehydrogenase (LDH) and Indirect Bilirubin), Macrocytosis Profile (Vitamin B-12, folate, Methylmalonic acid and homocysteine), Urine Routine, USG abdomen, Bone marrow analysis.

References: 1,2,3,4,7,9,10,13,15,16,40,41,42,45,54

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experienti al Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,CO5	Describe Pandu and its types with respect to Nidanapanchaka and Sadyasadyata.	1	Lecture	CAN	Knows-how	FC,L&PP T
CO1,CO2,CO5	Discuss in detail the epidemiology, etiopathogenesis, classification, and potential complications associated with Anaemia.	1	Lecture	CC	Knows-how	FC
CO1,CO2,CO5	Describe the comprehensive management protocol for various types and stages of Pandu, encompassing Shamana, Shodhana, Rasāyana, and relevant Pathya-Apathya.	1	Lecture	CAN	Knows-how	L&PPT
CO1,CO2,CO3, CO4	Demonstrate the ability to recommend and interpret appropriate diagnostic investigations based on comprehensive history taking and clinical examination in a patient presenting with Anaemia.	2	Practical9.1	PSY-MEC	Shows-how	DIS,D,PL, CBL

CO1,CO2,CO3,CO4	Perform comprehensive Roga-Rogi pariksha and demonstrate the ability to formulate an individualized treatment plan for Pandu roga, with due consideration to its bheda and Roga-rogi bala.	2	Practical9.2	PSY-ADT	Shows-how	SIM,CBL,DIS
CO1,CO2,CO3,CO4,CO5	Assess for a comprehensive management protocol encompassing Aushada Prayoga, Kriyakrama, and Pathyapathya, meticulously tailored to the specific type and clinical severity of Pandu.	2	Experiential - Learning9.1	CS	Does	DIS,CBL,PER
CO1,CO2,CO3,CO4,CO5,CO7	Monitor the patient's response to Pandu therapy and adjust the treatment plan based on Roga avastha, Rogi bala and laboratory findings.	3	Experiential - Learning9.2	PSY-ADT	Does	TBL,DIS,SIM,CBL
CO1,CO2,CO3,CO4,CO5	Reflect on clinical encounters involving Pandu roga to identify gaps in knowledge and skills for targeted improvement.	3	Experiential - Learning9.3	CE	Does	PAL,TBL,C_L,DIS,PL
CO5,CO6,CO7,CO8	Compile and analyze the therapeutic effects of various Aushadha and Kriyakrama in the management of different types of Pandu Vikara, based on evidence from contemporary research literature.	3	Experiential - Learning9.4	CE	Does	DIS,PER,LS

Unit 2 Pandu Vikara - Hypoproliferative anemia (Anemia of Central Origin)

- Kalauhapandu (Iron deficiency anaemia)
- Anyavyadhi Janya Pandu (Anemia of Chronic disease and Inflammation)
- Vrikkaroga Janya Pandu (Anemia of Renal disease)
- Vishajanya Pandu (Exposure to toxins or drugs)
- Anemia due to endocrine abnormality
- Anemia secondary to hematologic malignancies
- Majja Pandu (anemia due to bone marrow failure syndromes)
- Myelophthisic anemia

References: 15,16,40,41,42,45

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experienti al Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,CO5	Describe the following types of hypoproliferative anaemia based on their aetiopathogenesis, diagnostic workup, prognostic implications, and evidence-based management strategies: 1. Kalauhapandu (Iron Deficiency Anaemia) 2. Anyavyadhi Janya Pandu (Anaemia of Chronic Disease and Inflammation) 3. Vrikkaroga Janya Pandu (Anaemia of Renal Disease) 4. Vishajanya Pandu (Anaemia due to exposure to toxins or drugs) 5. Anaemia due to endocrine abnormalities 6. Anaemia secondary to hematologic malignancies 7. Majja Pandu (Anaemia due to bone marrow failure syndromes) 8. Myelophthisic Anaemia	1	Lecture	CAP	Knows-how	FC
CO1,CO2,CO5	Discuss the treatment protocol for Iron deficiency anaemia, aligned with the principles of Shodhana, Shamana, and Rasayana.	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2,CO5	Discuss the management for 'Anaemia of Chronic disease and Inflammation' and other types of hypoproliferative anaemia, aligned with the principles of Shodhana, Shamana, and Rasayana.	1	Lecture	CAP	Knows-how	L&PPT

CO1,CO2,CO3,CO4	Elicit a comprehensive clinical history and demonstrate the ability to recommend and interpret appropriate investigations to differentiate the causes of hypoproliferative anaemia.	2	Practical9.3	PSY-MEC	Shows-how	SIM,D-BED,CBL,DIS,SDL
CO1,CO2,CO3,CO4	Apply Ayurvedic principles of diagnosis and management in the clinical evaluation and treatment of a patient with hypoproliferative anaemia.	2	Practical9.4	PSY-MEC	Shows-how	DIS,SIM,D-BED,PER,SDL
CO1,CO2,CO3,CO4	Demonstrate comprehensive knowledge of the indications, contraindications, and dosing protocols of various Aushadha, including Rasayana therapies, employed in the management of hypoproliferative anaemia.	2	Practical9.5	PSY-MEC	Shows-how	RP,D,CBL,DIS,DA
CO1,CO2,CO3,CO4,CO5,CO7	Formulate a comprehensive treatment protocol for a patient with hypoproliferative anaemia, incorporating appropriate Aushadha prayoga, Kriyakrama, and Pathya-Apathya.	3	Experiential - Learning9.5	PSY-ADT	Does	DIS,CBL,TBL,RLE
CO1,CO2,CO3,CO4,CO5	Monitor therapeutic response and adjust the treatment of hypoproliferative anaemia according to the Avastha Bheda of Roga and Rogi, in conjunction with laboratory findings.	3	Experiential - Learning9.6	PSY-ADT	Does	CBL,PAL,SDL,DIS

Unit 3 Pandu Vikara - Anemia due to Maturation defect/ disorder

- Cytoplasmic defects –Dushta Pandu (Thalassemia), Valayi Pandu (Sideroblastic anemia), Kalauha Pandu (Iron deficiency anemia)
- Nuclear defects – Folate deficiency, Vit B12 deficiency, Drug toxicity, Myelodysplasia, Refractory anemia

References: 15,16,40,41,42,45

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential	3C Notional learning Hours	3D Lecture/ Practical Training/	3E Domain/ Sub Domain	3F Level (Does/Shows	3G Teaching Learning Methods

	learning) session, the students should be able to)		Experiential Learning		how/Knows how/Know)	
CO1,CO2,CO5	Describe anaemia due to maturation defects— 1. Cytoplasmic defects: Dushta Pandu (Thalassemia), Valayi Pandu (Sideroblastic anaemia), Kalauha Pandu (Iron deficiency anaemia) 2. Nuclear defects: Folate deficiency, Vitamin B12 deficiency, drug-induced toxicity, myelodysplasia, and refractory anaemia—based on their aetiopathogenesis, diagnostic workup, prognostic implications, and evidence-based management strategies.	1	Lecture	CAP	Knows-how	L&PPT
CO1,CO2,CO5	Discuss the management for 'Anaemia due to Maturation defect, aligned with the principles of Shodhana, Shamana, and Rasayana.	1	Lecture	CAP	Knows-how	L&PPT
CO1,CO2,CO3, CO4	Elicit a comprehensive clinical history and demonstrate the ability to recommend and interpret appropriate investigations to differentiate the causes of Anaemia due to maturation defects.	2	Practical9.6	PSY-MEC	Shows-how	CD,PER, CBL,DIS
CO1,CO2,CO3, CO4	Apply Ayurvedic principles of diagnosis and management in the clinical evaluation and treatment of a patient with Anaemia due to Maturation defect.	2	Practical9.7	PSY-MEC	Shows-how	LRI
CO1,CO2,CO3, CO4,CO5,CO7	Prepare a comprehensive treatment protocol for a patient with Anaemia due to Maturation defect, incorporating appropriate Aushadha prayoga, Kriyakrama, and Pathya-Apathya.	2	Experiential - Learning9.7	CS	Does	CBL
CO1,CO2,CO3, CO4,CO5,CO7	Analyse the therapeutic response and adjust the treatment of Anaemia due to Maturation defect, according to the Avastha Bheda of Roga and Rogi, in conjunction with laboratory findings.	2	Experiential - Learning9.8	CE	Does	CBL

Unit 4 Pandu Vikara - Anemia due to Hemolysis/ Hemorrhage

- Intrinsic causes and extrinsic causes - Hereditary spherocytosis, Rudhikavarnika vikara (Hemoglobinopathies), Datrapandu (Sickle cell anemia), Dushtapandu (Thalassemia and Congenital dyserythropoietic anemia), Acquired and Autoimmune hemolytic anemia.
- Intravascular hemolysis and Extravascular hemolysis

References: 15,40,41,42,45

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experienti al Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,CO5	Discuss the aetiopathogenesis, diagnostic workup, prognostic implications, and evidence-based management strategies of Anaemia due to hemolysis and hemorrhage, including conditions such as hereditary spherocytosis, Rudhikavarnika Vikara (hemoglobinopathies), Datrapandu (sickle cell anaemia), thalassemia, congenital dyserythropoietic anaemia, acquired and autoimmune hemolytic anaemia, and anaemia resulting from intravascular and extravascular hemolysis.	1	Lecture	CAP	Knows-how	FC
CO1,CO2,CO5	Discuss a comprehensive management protocol for Anaemia due to Hemolysis/ hemorrhage incorporating principles of Shodhana, Shamana, Rasayana and Pathyapathya.	1	Lecture	CAP	Knows-how	L&PPT
CO1,CO2,CO3, CO4	Elicit a comprehensive clinical history and demonstrate the ability to recommend and interpret appropriate investigations to differentiate the causes of Anaemia due to Hemolysis/hemorrhage.	2	Practical9.8	PSY-MEC	Shows-how	PER,CBL, DIS,LRI,S IM

CO1,CO2,CO3,CO4	Apply Ayurvedic principles of diagnosis and management in the clinical evaluation and treatment of a patient with Anaemia due to Hemolysis/ haemorrhage.	2	Practical9.9	PSY-MEC	Shows-how	SIM,DIS,CBL,LRI
CO1,CO2,CO3,CO4	Demonstrate comprehensive knowledge of the indications, contraindications, and dosing protocols of various Aushadha, including Rasayana therapies, employed in the management of Anaemia due to Hemolysis/ haemorrhage.	2	Practical9.10	PSY-MEC	Shows-how	CBL,PL,DA,TBL,DIS
CO1,CO2,CO3,CO4,CO5,CO7	Create a comprehensive treatment protocol for a patient with Anaemia due to Hemolysis/ haemorrhage, incorporating appropriate Aushadha prayoga, Kriyakrama, and Pathya-Apathya.	3	Experiential - Learning9.9	PSY-ADT	Does	PER,DIS,SIM,CBL
CO1,CO2,CO3,CO4,CO5,CO7	Identify therapeutic response and adjust the treatment of Anaemia due to Hemolysis/ Haemorrhage, according to the Avastha Bheda of Roga and Rogi, in conjunction with laboratory findings.	2	Experiential - Learning9.10	CE	Does	SIM,PER,CBL,DIS

Practical Training Activity

Practical Training 9.1 Clinical Examination - Anaemia

Teacher Activities

1. Introductory Lecture - Overview of anaemia types, clinical features, and diagnostic approach.
2. Case-Based Learning (CBL) Sessions - Present simulated or real anaemia cases for group discussion.
3. Demonstration - Show how to perform targeted history taking and clinical examination in anaemia.
4. Diagnostic Tools Orientation - Explain common investigations (CBC, peripheral smear, iron studies, etc.).
5. Facilitate Small Group Activities - Guide groups in forming investigation plans based on case data.
6. Feedback Sessions - Provide feedback on scholar's performance in clinical reasoning and investigation interpretation.

Scholar Activities:

1. Self-Directed Learning - Study classification, aetiology, and workup of anaemia.

2. Participate in Case-Based Discussions - Practice reasoning through symptoms to suggest investigations.
3. Perform History Taking and Clinical Examination - Focused on anaemia signs like pallor, koilonychia, splenomegaly, etc.
4. Formulate Investigation Plan - Justify the selection of tests for diagnosis and differential exclusion.
5. Interpret Laboratory Reports - Analyze CBC, iron studies, B12/folate levels, etc.
6. Group Presentation - Present diagnostic rationale and findings of assigned cases.
7. Reflective Practice - Write short reflections on diagnostic challenges and decision-making process.

Practical Training 9.2 Treatment plan in Pandu

Teacher Activities:

1. Facilitate Case-Based Learning - Present real/simulated cases of different Pandu bhedas for group analysis.
2. Guide Clinical Examination Practice - Supervise students during patient examination to identify signs and symptoms.
3. Teach Treatment Planning Framework - Explain principles of Chikitsa Siddhanta, Aushadha Yojana, Kriyakrama, and Pathya-Apathya
4. Lead discussion on Prayoga vidhi of important Aushadha Yoga in addition to those mentioned in Undergraduate syllabus, like Dhatri Lauha, Vidangadi Lauha, Ayaskrti, Draksharishta, MahaKalyanaka Ghrita, and Swarnamakshika Bhasma.

Scholar Activities:

1. Perform Roga-Rogi Pariksha - Apply Dashavidha, Astavidha, and other relevant parikshas in Pandu patients.
2. Record Clinical Findings - Document Nidana, Lakshana, Bala, Avastha, and Bheda of Pandu roga.
3. Case Analysis and Diagnosis - Identify the type of Pandu
4. Formulate Treatment Plan - Design individualized Chikitsa using Aushadha, Kriyakrama, and Pathya-Apathya.
5. Maintain Learning Logbook - Record activities, reflections, and key learning points from each session.

Practical Training 9.3 Differential diagnosis of Anaemia due to Hypoproliferative disorder

Teacher Activities:

1. Introductory Session - Explain classification and pathophysiology of hypoproliferative anaemia (e.g., Iron deficiency, ACD, Renal anaemia, Marrow failure).
 2. History-Taking Demonstration - Model focused history relevant to fatigue, bleeding, nutritional deficiencies, chronic disease, renal symptoms, and drug/toxin exposure.
 3. Case-Based Discussions - Facilitate case comparisons with different underlying causes (e.g., IDA vs ACD vs Renal vs Marrow failure).
- Investigation Interpretation Workshop - Teach interpretation of CBC, reticulocyte count, serum ferritin, TIBC, ESR/CRP, renal function, bone marrow reports, etc.
4. Provide Clinical Cases for Practice - Supply simulated or real patient profiles for student analysis.

Scholar Activities:

1. Self-Learning and Literature Review - Study the diagnostic algorithm of hypoproliferative anaemia types.
2. Perform Comprehensive History-Taking - Practice eliciting history focusing on diet, chronic illnesses, bleeding, menstrual history, renal symptoms, drug use, etc.
3. Develop Differential Diagnoses - Based on clinical history and symptom patterns.
4. Plan Appropriate Investigations - Choose and justify tests to differentiate IDA, ACD, renal anaemia, and marrow failure.
5. Interpret Diagnostic Results - Analyse given lab reports to arrive at a probable diagnosis.
6. Participate in Peer Discussions - Discuss reasoning and investigation choices in small groups.
7. Case Presentation or Reflection - Present a case or submit a reflection explaining how the history and investigations led to the differentiation of cause.

Practical Training 9.4 Ayurvedic management of Anaemia due to Hypoproliferative disorders

Teacher Activities:

1. Conceptual Orientation - Brief lecture linking hypoproliferative anaemia with relevant Ayurvedic entities (e.g., Kalauhapandu, Anyavyadhi janya Pandu, Majja Kshaya, Rasa-Rakta Dushti).
2. Facilitate Clinical Case Discussions - Provide real/simulated cases/ case profiles of different types of hypoproliferative anaemia with Ayurvedic correlation.
3. Teach Ayurvedic Diagnostic Reasoning - Guide students to derive Nidana Panchaka and Bheda of Pandu from history and examination findings.
4. Model Treatment Planning - Explain individualized Chikitsa using Aushadha, Kriyakrama, and Pathya-Apathya.
5. Supervise Clinical Skills Practice - Oversee student-patient interactions and ensure correct diagnostic formulation and treatment planning.

Scholar Activities:

1. Study Ayurvedic Concepts of Pandu Roga - Focus on types, Nidana, Samprapti, Lakshana, and Dosha-Dushya involvement in hypoproliferative anaemia.
2. Elicit Clinical History- Integrate modern and Ayurvedic history-taking relevant to Pandu.
3. Perform Roga-Rogi Pariksha - Apply principles of Roga-Rogi Pariksha in patient evaluation.
4. Ayurvedic Diagnosis Formation - Identify Pandu Bheda and determine Dosha-Dushya-Srotas involvement.
5. Formulate Individualized Treatment Plan -Select appropriate Aushadha, Kriyakrama, and Pathya-Apathya.
6. Participate in Case Presentation/Discussion - Present and defend their diagnostic and treatment approach in group settings.
7. Logbook/Reflection Entry - Document learnings, case summaries, and self-reflection on clinical reasoning.

Practical Training 9.5 Aushadha prayoga in hypoproliferative anaemia.

Teacher Activities:

1. Introductory Orientation - Brief lecture on classification of hypoproliferative anaemia and its Ayurvedic correlation with Pandu.

2. Detailed Drug Discussion - Present selected Aushadha (e.g., Mandura Bhasma, Punarnava Mandura, Navayasa Lauha, Drakshadi Kwatha, Amalaki Rasayana) with focus on indications, contraindications, Anupana, Matra and duration of use. Discuss Rasayana drugs (e.g., Yogaraja Rasayana, Amalaki, etc.) in the context of Dhatu Kshaya and Ojas enhancement.

3. Facilitate Group Discussion/Quiz - Encourage interactive learning through case-based quizzes or group comparison of Aushadha choices.

4. Supervise Case-based Prescription Writing - Guide students to write individualized prescriptions considering Bala, Avastha, Agni, and Upadrava.

Scholar Activities:

1. Review of Aushadha & Rasayana - Study commonly used classical formulations and Rasayana drugs used in Pandu and related conditions.

2. Drug Profiling - Prepare individual drug monographs covering name, formulation, Rasa-Panchaka, Indications, Contraindications, Matra, and Prayoga Kala.

3. Case-based Application - Choose appropriate Aushadha and Rasayana for given patient scenarios based on Dosha-Dushya Avastha and Rogi Bala.

4. Prescription Writing Exercise - Draft complete prescriptions with correct Anupana, Matra, and Pathya-Apathya.

5. Participate in Role-play - Simulate drug explanation and patient counselling, including precautions and expected outcomes.

6. Maintain Drug Logbook/Reflection - Record and reflect on Aushadha selection and Rasayana integration in clinical practice.

Practical Training 9.6 Diagnosing Pandu Vikara due to Maturation defect.

Teacher Activities:

1. Clinical Briefing & Objective Explanation:

- Provide an overview of anaemia types, with a focus on maturation defects (e.g., megaloblastic anaemia, sideroblastic anaemia).
- Outline session goals: history-taking, investigation selection, and interpretation.

2. Case Scenario Presentation:

- Introduce simulated or real patient cases with signs/symptoms of anaemia (e.g., fatigue, pallor, glossitis, neuropathy).
- Guide students in identifying key differentiating features.

3. Demonstration:

- Model how to elicit a relevant clinical history:
- Dietary habits (e.g., Vitamin B12/folate intake)
- Drug history (e.g., anticonvulsants, methotrexate)
- Chronic illnesses or gastrointestinal symptoms
- Demonstrate how to correlate symptoms with probable pathophysiology.

4. Investigations and Interpretation:

- Explain rational test selection: CBC, peripheral smear, serum B12/folate, LDH, methylmalonic acid, bone marrow findings.
- Discuss distinguishing patterns between cytoplasmic and nuclear maturation defects.

5. Assessment & Feedback:

- a. Observe student performance during simulated encounters.
- b. Provide feedback on history-taking technique, investigation choice, and diagnostic reasoning.

Scholar Activities:

1. Patient History taking:

- a. Take a comprehensive clinical history from a standardized or simulated patient, focusing on symptoms of anaemia, risk factors for B12/folate deficiency, medication and dietary history

2. Problem Identification:

- a. Identify probable cause of anaemia based on history.
- b. Formulate differential diagnoses (e.g., nutritional deficiency, myelodysplasia).

3. Investigation Planning:

- a. Recommend appropriate laboratory investigations with justification.
- b. Prepare a logical sequence of tests to confirm or rule out maturation defect-related anaemia.

4. Data Interpretation:

- a. Analyze CBC reports, peripheral smear findings, and biochemical markers.
- b. Differentiate between cytoplasmic and nuclear maturation defects.

5. Clinical Reasoning Presentation - Present the case findings and defend the diagnostic process and investigation rationale in small-group discussions.

Practical Training 9.7 Interpret investigations in Pandu Vikara due to Maturation defect

Teacher Activities:

1. Session Orientation & Clinical Context Setting:

- a. Introduce the concept of Pandu Roga and its correlation with anaemia due to maturation defects (e.g., megaloblastic anaemia).
- b. Discuss the role of Rasavaha srotodushti, Rasa and Rakta dhatwagni mandhya, Rasa and Rakta dhatu kshaya, in the manifestation of anaemia due to maturation defects.
- c. Explain the importance of applying Roga-Rogi Pariksha, Dosha analysis, and Vyadhi Samprapti.

2. Presentation of Clinical Case:

- a. Present a real/simulated patient case with signs and symptoms suggestive of maturation defect-type anaemia.
- b. Encourage scholars to conduct Roga-Rogi Pariksha and identify Ayurvedic diagnostic equivalents and causative factors.

3. Guided Protocol Development:

- a. Assist students in developing a treatment plan integrating Aushadha Prayoga: (Deepana-Pachana, Rasayana, Pandughna dravyas), Rasayana (Amalaki, Mandura preparations, etc.), and Pathya-Apathya.

4. Monitoring & Feedback:

- a. Observe scholar's performance during practical examination and treatment planning.
- b. Provide targeted feedback on diagnostic clarity, integration of Ayurvedic principles, and rationale of therapy.

Scholar Activities:

1. Clinical History Taking & Pariksha:
 - a. Elicit a complete Ayurvedic case history, focusing on Nidanapanchaka, Agni status, Ahara-Vihara, Previous treatments, etc.
 - b. Perform Ashtavidha and Dashavidha Pariksha to determine Dosha, Dhatu and Dhatvagni status.
2. Ayurvedic Diagnosis Formation: Formulate a diagnosis such as Rasa Dhatu Kshaya janya Pandu, Agnimandya janya Pandu, or Pandu with Rasavaha/Raktavaha Srotodushti.
3. Designing Treatment Protocol - Select appropriate Aushadha, Kriyakrama and Pathya apathya based on Roga avastha and Rogi bala. Suggest Rasayana if required.
4. Case Presentation & Rationale Defense:
 - a. Present findings and protocol to peers and faculty.
 - b. Defend treatment rationale using classical references.
5. Documentation:
 - a. Submit a case sheet with Ayurvedic diagnosis, investigation interpretation, and treatment plan.

Practical Training 9.8 Case taking in Pandu Vikara due to Hemolysis

Teacher Activity:

1. Pre-Session Design & Preparation:
 - a. Prepare a simulated or real case scenario (with history, physical findings, and partial investigations).
 - b. Compile evidence-based guidelines and Ayurvedic references relevant to anaemia types.
2. Case Introduction & Contextualization:
 - a. Present a structured clinical case with symptoms like fatigue, pallor, jaundice, and a history of bleeding.
 - b. Prompt discussion on provisional diagnosis and differential causes.
3. History Taking Demonstration:
 - a. Demonstrate focused clinical history-taking highlighting onset and duration of symptoms, dietary and drug history, family history (e.g., hereditary hemolytic anaemia), history of blood loss (e.g., GI bleeding, menorrhagia, trauma)
4. Facilitate Clinical Reasoning:
 - a. Guide students in identifying red flags and diagnostic clues for hemolysis (e.g., jaundice, dark urine) versus haemorrhage (e.g., melena, acute blood loss).
 - b. Encourage critical questioning and hypothesis formation.
5. Investigation Planning Session: Discuss the indications, interpretation, and rationale for ordering CBC with Reticulocyte Count, Peripheral Blood Smear, Serum Bilirubin (direct & indirect), Lactate Dehydrogenase (LDH), Haptoglobin, Coombs Test (Direct Antiglobulin Test), Iron Studies (Serum Iron, Ferritin, TIBC), Stool Occult Blood Test / Endoscopy for chronic bleeding.
6. Interpretation Workshop:

- a. Present anonymized investigation results.
- b. Train scholars to correlate findings with types of anaemia and pathophysiology (e.g., elevated LDH and indirect bilirubin in hemolysis).
- 7. Debrief and Feedback: Offer individualized feedback on clinical reasoning and interpretation accuracy.

Scholar Activity:

1. Pre-Session Preparation - Review textbook material on anaemia classification (morphological and etiological).
2. History Taking Practice - Take a comprehensive clinical history from simulated or real patients provided by the teacher.
3. Identify Diagnostic Differentiators:
 - a. Distinguish features such as:
 - i. Hemolysis: jaundice, splenomegaly, dark urine, fatigue, reticulocytosis
 - ii. Haemorrhage: acute hypotension, tachycardia, postural symptoms, overt bleeding signs
4. Rational Test Selection:
 - a. Recommend investigations based on suspected cause.
 - b. Justify each test (clinical utility, cost-effectiveness, relevance).
5. Laboratory Report Interpretation:

Analyse values:

 - i. Elevated Reticulocyte count (hemolysis or recovery phase of haemorrhage)
 - ii. Elevated LDH, decreased Haptoglobin level, elevated Indirect bilirubin(hemolysis)
 - iii. Microcytic hypochromic anemia and low ferritin (chronic blood loss)
6. Case Presentation and Differential Diagnosis - Present case findings, investigations, and differential diagnosis.
7. Peer Feedback & Reflective Practice:
 - a. Engage in peer critique during group presentations.
 - b. Write a reflective summary focusing on diagnostic decision-making skills learned.

Practical Training 9.9 Aushadha prayoga in anaemia due to Hemolysis/ Hemorrhage.

Teacher Activities:

1. Brief Theoretical Orientation - Provide an overview of hemolytic and haemorrhagic anaemia from Ayurvedic and modern perspectives.
2. Demonstrate Medicine Profiling – Present key formulations like Draksharishta, Punarnavadi Mandura, Lauh Bhasma, Abhraka Bhasma, Chyawanprasha, Mandura Vatakam, etc.
3. Discuss: Indications based on Dosha, Dushya, Srotas, Contraindications, Dosing protocols, Anupana, Kala, and Matra
4. Clinical Case Discussion - Present a sample case of hemolytic anaemia (e.g., autoimmune hemolytic anaemia) or chronic blood loss (e.g., menorrhagia). Ask students to identify appropriate Aushadha and Rasayana.

Scholar Activities:

1. Group-Based Medicine Review - Each group studies a set of 2–3 drugs: describes their ingredients, actions, dosage, indications, contraindications, and Rasayana relevance. Present their findings briefly to the class.
2. Case-Based Formulation Selection - Analyze the given case by conducting Roga-Rogi Pariksha. Select and justify a treatment plan including: Aushadha, Rasyana prayoga, Dosage schedule and duration
3. Peer Presentation or Viva - Share treatment plan and explain rationale behind drug and Rasayana selection. Address contraindications and modifications based on Roga avastha, Rogi bala and Agni.

Practical Training 9.10 Application of Ayurvedic principles in the management of Pandu Vikara due to Hemolysis.

Teacher Activity:

1. Pre-Session Preparation:
 - a. Define session objectives aligned with core competencies (diagnostic reasoning, Ayurvedic clinical skills, integrative management).Select or develop a clinically relevant case scenario (real or simulated) with findings such as pallor, jaundice, splenomegaly, fatigue, low Hb, increased LDH, and indirect bilirubin.
2. Introductory Briefing: Present the clinical case with redacted lab findings and history.
3. Outline session goals: Integration of Ayurvedic Roga-Rogi Pariksha with biomedical assessment.
4. Demonstration & Discussion:
 - a. Demonstrate Ayurvedic diagnostic methods – Nidanapanchaka, Dashavidha Pariksha, Trividha Pariksha, Ashtavidha Pariksha, Shroto Pariksha, etc.
 - b. Highlight pathophysiological correlation: Possible correlation of Hemolytic anaemia with respect to Pitta-pradhana Pandu and Haemorrhagic anaemia with respect to Rakta Kshaya Janya Pandu.
5. Interactive Interpretation:
 - a. Guide students in interpreting modern investigations - CBC, reticulocyte count, serum bilirubin, Coombs test, peripheral smear.
 - b. Lead discussion on Samprapti Vighatana and Sadhyasadyata using Ayurvedic principles of diagnosis.
6. Evidence-Based Ayurvedic Management:
 - a. Facilitate preparation of a rational Ayurvedic treatment plan according to Dosha avastha, Roga-Rogi bala, etc.
 - b. Discuss on Chikitsa Sutra: Rakta Vardhana, Pitta Shamana, Rasayana, Srotoshodhana. Eg: Dadimadi Ghritha, Punarnavadi Mandura, Navayasa Lauha, Drakshadi Kwatha, Kumaryasava.
 - c. Introduce critical appraisal of available clinical research on these drugs.
7. Feedback & Debrief: Provide feedback on students' clinical reasoning, diagnostic integration, and treatment logic.

Scholar Activity:

1. Pre-Reading and Literature Review:
 - a. Review classical Ayurvedic concepts of Pandu Roga, Rakta Pitta, and Rakta Kshaya.
 - b. Study current understanding of hemolytic and haemorrhagic anaemias in biomedical literature.

2. Clinical Case Work-up in the given case (real or simulated case/ case scenario):
 - a. Perform comprehensive history taking emphasizing bleeding episodes, icterus, diet, medications, and chronic illness.
 - b. Conduct a thorough Roga-Rogi Pariksha and record findings systematically.
3. Investigation Interpretation - Work up the investigations, including Reticulocyte count, Coombs test, LDH, bilirubin fractions, and iron studies.
4. Clinical Reasoning & Diagnosis:
 - a. Identify the Ayurvedic diagnosis based on Roga-Rogi Pariksha and ascertain Sadhyasadyata.
 - b. Integrate with the biomedical diagnosis for a complete clinical picture.
5. Treatment Planning:
 - a. Prepare a personalised Ayurvedic management protocol including Aushadha prayoga, Pathya apathya, Rasayana (if needed) and Kriyakrama.
 - b. Justify choices based on Ayurvedic rationale and available evidence.
6. Presentation & Peer Feedback:
 - a. Present diagnostic approach and management strategy to peers and faculty.
 - b. Respond to critical questioning and integrate feedback.
7. Reflective Learning:
 - a. Submit a brief reflection on the clinical application of Ayurvedic principles in haematological disorders.
 - b. Identify areas needing further study or clarification.

Experiential Learning Activity

Experiential-Learning Learning 9.1: Management of Pandu Rogi

Teacher Activity:

1. Case Scenario Deployment - Present multiple differentiated patient cases of Pandu with varying Dosha dominances, clinical severities, and lab profiles.
2. Facilitate Structured Experiential Tasks:
 - a. Guide group activities: support decision-making, prompt refinement of logic.
 - b. Moderate Presentation & Discussion:
 - i. Supervise group case presentations.
 - ii. Offer corrective feedback on diagnosis and management.

Scholar Activity:

1. Clinical Case Analysis & Dosha-based Classification
 - a. Analyze assigned patient case(s) for:

- i. Symptoms: e.g., Haridra Varna, Daurbalya, Shrama, Bhrama, Aruchi, etc.
 - ii. Lab findings (Hb%, MCV, Ferritin, Reticulocyte Count).
 - iii. Clinical history: chronicity, associated complaints, nutritional background.
 - iv. Roga –Rogi Pariksha
 - v. Identify specific type of Pandu (e.g., Pittaja, Vataja) and ascertain Sadhyasadyatha.
2. Formulation of a Tailored Treatment Protocol:
- a. Aushadha Prayoga : Scholars must select and justify medications based on Deepana–Pachana/ Shamana/ Rasayana/Anupana depending on Roga avastha and Rogi bala.
 - b. Kriyakrama: Scholars must select and justify appropriate Panchakarma/ Kriyakrama.
 - c. Pathya-Apathya: Scholars will suggest Pathya Apathya based on the clinical condition.
3. Scientific Justification and Evidence Integration:
- a. Correlate management plan with descriptions in Classical Ayurvedic literature and evidence based research findings.
 - b. Gain skills in justifying protocols with both textual authority and contemporary clinical research.
4. Group Presentation & Protocol Defense:
- a. Present complete protocol- Diagnosis, Samprapti, Chikitsa Sutra, Drug & Panchakarma Planning and Pathya Plan
 - b. Justify each step based on Dosha involvement, Roga avastha and Rogi bala.
 - c. Understand the interplay of treatment planning and evidence-based reasoning.
5. Reflection and Peer Feedback:
- a. Reflect on - What new perspectives were gained? Where mistakes were made and corrected?

Experiential-Learning Learning 9.2: Monitoring Pandu management.

Teacher Activity:

1. Case Simulation Setup:
 - a. Provide each group of scholars a simulated patient case/ real case/ case scenario with:
 - Clinical data at 3–4 time points (before, during, after treatment)
 - Serial laboratory reports
 - Treatment history (Aushadha, Kriyakrama, Pathya)
2. Facilitate Clinical Reasoning- Prompt students with scenario questions like:
 - “What stage of Pandu is the patient in now?”
 - “Is there clinical or biochemical improvement?”
 - “Does the current Aushadha suit the new Avastha?”
 - “Should we modify Kriyakrama or Pathya?”
3. Monitor Group Analysis: Circulate between groups, assess their diagnostic logic, and intervene when misinterpretations or gaps arise.

4. Debrief & Feedback: Moderate group presentations, offer constructive feedback, and summarize key learning points regarding dynamic Ayurvedic therapy planning.

Scholar Activity:

1. Analyze the Therapeutic Response Over Time:
 - a. Review the patient's serial symptom updates and lab reports (e.g., Hb rise from 7.2 to 8.5 and to 9.0 g/dL; persistent fatigue; reduced pallor).
 - b. Identify patterns of improvement, stagnation, or worsening.
2. Assess Roga Avastha and Rogi Bala: Conduct a thorough Roga –Rogi Pariksha and ascertain Samprapti ghatakas, Roga avastha and Rogi bala.
3. Modify the Treatment Protocol:
 - a. Evaluate the current treatment protocol and based on response assessment, determine whether to:
 - i. Continue current line of treatment
 - ii. Add/modify Aushadha
 - iii. Introduce or hold Kriyakrama
 - iv. Revise Pathya–Apathya plan based on changes in Agni, Bala, etc.
4. Correlate Classical and Contemporary Evidence- Match chosen interventions with Ayurvedic textual support and evidence-based research studies.
5. Prepare and Present Clinical Rationale- Prepare a brief report or case sheet covering:
 - a. Initial vs. current condition (clinical + lab)
 - b. Roga–Rogi Avastha shift
 - c. Adjusted treatment plan with rationale
 - d. Prognosis and follow-up suggestion
6. Reflect and Document Learning Gaps- Write a brief portfolio reflection on:
 - a. What new insights were gained?
 - b. What diagnostic or therapeutic errors were noticed?
 - c. How to improve dynamic clinical reasoning?

Experiential-Learning Learning 9.3: Reflection on clinical encounters in Pandu roga

Teacher Activity:

1. Set Reflective Framework:
 - a. Introduce models of reflection (e.g., Gibbs' Reflective Cycle, Kolb's Experiential Learning Cycle).
 - b. Guide learners to explore:
 - i. What happened? (Describe)

- ii. Why did it happen? (Analyze)
- iii. What was missing or done well? (Evaluate)
- iv. How will I improve? (Plan)
- 2. Clinical Case Trigger Presentation:
 - a. Share 1–2 real/simulated/recorded cases of Pandu Roga with incomplete/mismanaged outcomes.
 - b. Include: clinical features, diagnostic process, lab findings, Ayurvedic evaluation, treatment plan, and outcome (including errors or limitations).
- 3. Facilitate Small Group Discussion:
 - a. Encourage discussion among students about what could have been improved.
 - b. Prompt with questions:
 - i. Was the diagnosis complete?
 - ii. Were investigations appropriate?
 - iii. Was the Dosha Avastha considered?
 - iv. Were Pathya–Apathya correctly advised?
 - v. Were any classical principles overlooked?
- 4. Guide Self-Assessment and Peer Review- Help learners assess their competencies in Ayurvedic diagnostic formulation, Aushadha selection, Panchakarma decision-making, Communication with patients, etc.
- 5. Facilitate Debriefing Session - Organize a group reflection forum where students share insights and commit to specific improvement goals. Provide constructive feedback and highlight best practices.

Scholar Activity:

- 1. Clinical Reflection and Self-Assessment:
 - a. Review one or more clinical encounters with patients of Pandu Roga that they have observed, managed, or studied.
 - b. Use a reflective framework (e.g., Gibbs') to describe the patient interaction, analyze diagnostic clarity and reasoning, and evaluate therapeutic decisions and outcomes.
- 2. Identify Knowledge and Skill Gaps:
 - a. List specific areas where there was:
 - i. Inadequate understanding (e.g., selection of Mandura formulations).
 - ii. Incorrect application (e.g., Kriyakrama timing or eligibility).
 - iii. Lack of confidence (e.g., patient counselling on Pathya–Apathya).
 - Example: "I realised I was unsure how to identify whether Virechana was appropriate in Pittaja Pandu with Ama."
- 3. Formulate a Targeted Improvement Plan:
 - a. Set at least 2–3 SMART goals based on identified gaps.
 - For example: "By the end of this week, I will revise Pandu Chikitsa Adhyaya from Charaka Samhita."/ "I will conduct a role-play patient counselling session focusing on Pathya–Apathya."
- 4. Peer Sharing and Collaborative Learning:

- a. Share key learning points and improvement goals with peers in a structured group.
 - b. Exchange feedback and suggestions for how to overcome common barriers.
5. Maintain a Reflective Learning Log:
- a. Document case summaries, key errors and what was learned, action steps, ongoing self-assessment of improvement.

Experiential-Learning Learning 9.4: Evidence Based medicine - Pandu

Teacher Activity:

1. Set the Framework:
 - a. Define the scope: Comparative evaluation of Ayurvedic interventions (Aushadha and Kriyakrama) across types of Pandu Vikara using classical and research evidence.
 - b. Clarify types of evidence: Randomized trials, observational studies, pharmacological analyses, clinical case series.
2. Resource Facilitation- Provide access to PubMed/ Scopus/ Web of Science-indexed research articles, AYUSH research databases, CCRAS clinical trials, and peer-reviewed Ayurvedic journals.
3. Guide Literature Review & Critical Appraisal- Instruct students on:
 - a. How to frame search keywords (e.g., "Punarnavadi Mandura AND anaemia", "Pandu AND Rasayana AND clinical trial").
 - b. How to read and evaluate research articles (PICO, outcome measures, sample size, significance).
4. Moderate Group Presentations- Each group presents:
 - a. Summary of Aushadha and Kriyakrama used.
 - b. Evidence from classical texts and modern research.
 - c. Interpretation of clinical effectiveness.
 - d. Comparative findings across different types of Pandu.
5. Conduct Reflective Debrief- Facilitate discussion on:
 - a. Strengths/limitations of current research.
 - b. Gaps between textual guidance and published evidence.
 - c. Directions for future clinical inquiry.

Scholar Activity:

1. Literature Review & Evidence Compilation:
 - a. Search contemporary research for clinical trials, case reports, and pharmacological studies on Ayurvedic treatments relevant to Pandu roga.
 - b. Use keywords such as:
 - i. "Mandura Bhasma in iron deficiency anemia"
 - ii. "Punarnavadi Mandura clinical efficacy"
 - c. Record key data: study design, sample size, intervention, outcome, conclusions.
 - d. Use Excel or literature review matrix template to organize data.
2. Synthesis of Classical & Contemporary Evidence:

- a. Analyse compiled data to match textual indications with modern evidence.
- b. Highlight pharmacological mechanisms (e.g., Rasayana, hematinic, Agnideepana effects).
- c. Assess outcome metrics like increase in Hb%, symptom relief, or quality of life.
- 3. Comparative Efficacy Analysis:
 - a. Compare and contrast findings across Pandu types:
 - b. Which Aushadha work better for Pitta-dominant cases?
 - c. What works best in mild vs. severe forms?
- 4. Group Presentation of Findings:
 - a. Create a presentation (PPT or poster) covering: Type of Pandu Vikara, Chikitsa Sutra (with references), Evidence-based interventions and outcomes, Analysis and interpretation, Limitations and future scope.
- 5. Reflective Self-Assessment:
 - a. Document in learning log:
 - i. What was learned from the research process?
 - ii. What knowledge gaps were filled?
 - iii. What still needs exploration?
 - iv. How can this be applied in clinical practice?

Experiential-Learning Learning 9.5: Treatment protocol for Pandu Rogi due to hypoproliferative disorder.

Teacher Activity:

- 1. Set the Context:
 - a. Begin with a real or simulated case presentation of a patient with hypoproliferative anaemia (e.g., normocytic normochromic anaemia with low reticulocyte count).
- 2. Design an Experiential Learning Environment:
 - a. Divide scholars into small working groups.
 - b. Provide clinical data sets, reference Ayurvedic texts, and access to research articles.
- 3. Facilitate & Guide:
 - a. Prompt inquiry through clinical questions and encourage evidence-based reasoning.
 - b. Clarify doubts and mentor students during group activities.

Scholar Activities:

- 1. Clinical Immersion & Experience Acquisition:
 - a. Learning Task: Interpret a simulated or real-life case history of hypoproliferative anaemia.
 - b. Extract clinical findings: low haemoglobin, reduced reticulocyte count, fatigue, pallor.
 - c. Learning from Experience: Engage with clinical ambiguity and apply deductive reasoning. Realize the complexity of diagnosis

involving both modern pathology and Ayurvedic Samprapti.

2. Ayurvedic Diagnosis Development:

a. Learning Task: Correlate modern diagnosis with Pandu Roga and identify Dosha (Pitta-Vata predominance), Dushya (Rasa, Rakta, and Ojas), Srotas (Rasavaha, Raktavaha Dushti), Agni (Jatharagni and Dhatwagni Mandya) through Roga-Rogi Pariksha.

3. Learning from Experience:

- a. Experience the challenge of translating lab parameters into Ayurvedic diagnostic frameworks.
- b. Strengthen clinical reasoning by triangulating Dosha–Dushya–Agni–Srotas interactions.

4. Protocol Formulation:

- a. Aushadha Prayoga (Internal Medications): Scholars must select and justify medications based on Deepana–Pachana/ Shamana/ Rasayana/Anupana depending on Dosha status.
- b. Kriyakrama: Scholars must select and justify appropriate Panchakarma/ Kriyakrama based on Rogavastha and Rogibala.
- c. Pathya-Apathya: Scholars will suggest Pathya Apathya based on the clinical condition.

5. Learning from Experience:

- a. Scholars work through iterations of planning → peer discussion → refinement.
- b. Learn to balance classical principles with clinical applicability and patient compliance.

6. Presentation and Peer Review:

- a. Learning Task: Present the final treatment protocol in group format. Answer questions from peers and justify choices based on Samprapti ghataka, Roga Rogi bala, etc.
- b. Learning from Experience: Develop critical thinking, defend decisions, and integrate feedback constructively.

7. Reflective Writing & Self-Evaluation:

- a. Learning Task: Each scholar writes a reflection on what was learned, challenges faced and how understanding of treatment planning evolved.

Experiential-Learning Learning 9.6: Avasthanusari Chikitsa in Pandu rogi due to hypo proliferative disorder.

Teacher Activity:

1. Clinical Case Simulation:

- a. Provide anonymized patient profiles undergoing treatment for hypoproliferative anaemia or simulated cases/ case scenarios.
- b. Include sequential lab findings (Hb%, MCV, reticulocyte count, ferritin, ESR), and clinical symptoms across multiple timelines.

2. Design Guided Learning Pathways:

- a. Assign small groups, each with a patient scenario.
- b. Supply them with classical Ayurvedic references (e.g., Charaka Samhita, Ashtanga Hrudaya, Bhaishajya Ratnavali, Yogaratnakara) and relevant clinical research articles.

3. Facilitate Decision-Making Exercises:

- a. Engage students in interpreting shifting lab and symptom patterns.
- b. Ask guiding questions: Is the treatment effective at this point? What Avastha is the Roga in now? What should be added or withdrawn from therapy?

4. Supervise Peer Discussions and Presentations:
 - a. Ensure scientific grounding of their reasoning.
 - b. Correct misconceptions and guide decision refinement.

Scholar Activity:

1. Case Immersion and Therapeutic Monitoring:
 - a. Receive a case file with baseline and follow-up data (e.g., Hb: 7.2 to 8.5 and to 8.6 g/dL; MCV: 85 to 84 fl).
 - b. Track clinical progress alongside symptom changes (e.g., pallor reduction, fatigue scale, appetite).
 - c. Learn clinical interpretation of lab parameters (e.g., increase in Hb level with no symptom relief = suspect Agnimandya or Srotorodha).
 - d. Use clinical parameters to assess Roga avastha and Rogi bala.
 - e. Correlate improvements or stagnation with Avastha Bheda of Pandu Roga.
 - f. Gain skills in dynamic diagnosis—noticing when a disease shifts stage.
 - g. Internalize the principle of tailoring treatment according to both disease and patient constitution.

2. Adjust the Treatment Protocol

Scientifically.

a.

Based on monitored findings and Avastha analysis, decide:

- i. Whether to continue, escalate, or de-escalate current medicines.
 - ii. Whether to introduce Kriyakrama like Virechana, or Rasayana therapy.
 - iii. Whether Pathya-Apathya needs modification.
- b. Experience real-world clinical reasoning, learning to adapt protocols based on feedback loops (eg: symptoms + lab findings + Dosha avastha).

3. Present Dynamic Case Analysis:

- a. Present:
 - i. Evolution of patient status over time.
 - ii. Staged analysis of different Avastha.
 - iii. Evidence based justification for each treatment adjustment.
 - iv. Outcome metrics (symptom relief, Hb rise, etc.).
- b. Gain skills in communicating clinical decision-making.

Experiential-Learning Learning 9.7: Rationale of management in Pandu Vikara of Maturation defect.

Teacher Activity:

1. Session Planning and Clinical Framework Design:
 - a. Select appropriate clinical cases (real/simulated) covering different stages of response to treatment of Anaemia due to Maturation

defect (e.g., folate or B12 deficiency, myelodysplasia).

b. Incorporate Ayurvedic framework: Roga-Rogi Pariksha, Assessment of Vyadhibala, Rogabala, etc.

c. Lab Parameters - Assessment of MCV, blood smear, serum B12/folate, LDH, homocysteine, methylmalonic acid.

2. Supervised Case-Based Group Work:

a. Facilitate scholar groups to assess the disease stage (Avastha), current treatment response, and modify the protocol accordingly.

b. Emphasize Ayurvedic rationale behind changes.

3. Debrief and Reflective Feedback:

a. Encourage presentations integrating Ayurvedic and modern parameters.

b. Provide feedback on clinical acumen and Ayurvedic reasoning.

Scholar Activity:

1. Pre-Session Preparation - Review texts on Pandu Roga, Anaemia and its types including clinical presentation, diagnosis and management of Anaemia due to Maturation defect.

2. Patient Evaluation Using Ayurvedic Tools:

a. Perform comprehensive Roga-Rogi Pariksha

b. Scientifically document the case in standard format.

c. Evaluate the stage of disease and status of the patient.

d. Analyze lab results in parallel.

3. Treatment Reassessment and Adjustment:

a. Analyze the treatment given with respect to Ayurvedic principles of management

b. Recommend shifting treatment according to observed response:

i. From Pachana/deepana to Shamana/ Shodhana to Rakta Vardhana to Rasayana

ii. Modify dosage or Anupana based on Agni, Satmya, Rogibala

4. Group Collaboration and Presentation:

a. Discuss findings with peers

b. Present adjusted treatment plan with Ayurvedic and scientific rationale

5. Reflective Practice:

a. Write a short reflection on challenges in therapeutic decision-making.

Experiential-Learning Learning 9.8: Management of Pandu Vikara of Maturation defect

Teacher Activity:

1. Pre-Session Planning and Objective Framing:

a. Define the learning competencies: formulation of personalized and comprehensive Ayurvedic treatment.

b. Design patient case scenarios of anaemia due to maturation defects (e.g., B12/folate deficiency, myelodysplastic syndromes).

c. Include clinical signs (fatigue, glossitis, neuropathy), detailed history and lab findings (e.g., Elevated MCV, reduced B12 level, hypersegmented neutrophils, reduced reticulocyte count).

2. Theoretical Framework Review:

- a. Reinforce principles of Pandu Roga, Rakta Kshaya, Dhatwagnimandhya, etc.
- b. Discuss Dosha-Dushya, Srotas involved (especially Raktavaha, Rasavaha).

3. Facilitate Discussions on:

- a. Choosing appropriate Aushadha Prayoga based on Dosha-Avastha, chronicity, and Rogibala.
- b. Planning Kriyakrama like Mridu Virechana when indicated.
- c. Rasayana prayoga in appropriate stages.
- d. Commonly prescribed formulations and procedures.
- e. Pathya and Apathya

4. Group Presentation Facilitation and Feedback:

- a. Monitor group work in formulating full treatment protocols.
- b. Provide feedback on:
 - i. Accuracy of Dosha analysis
 - ii. Appropriateness of formulations and procedures
 - iii. Justification using classical and modern rationale

Scholar Activity:

1. Pre-Session Study:

- a. Review relevant Ayurvedic texts on Pandu Roga, Rakta Kshaya.
- b. Understand modern causes and pathophysiology of Anaemia due to Maturation defect.

2. Case-Based Evaluation:

- a. Analyze the presented case to determine:
 - i. Dominant Dosha, affected Dhatus, Srotas, and Agni status.
 - ii. Type of anaemia based on modern lab parameters and Ayurvedic diagnosis.
 - iii. Rogabala, Rogibala, Kala, Desha, Vyadhi Avastha, etc.

3. Design of Treatment Protocol:

- a. Aushadha Prayoga: Select and rationalize internal medicines (e.g.): Chitrakadi vati, Navayasa Lauha, etc. Rasayana like Amalaki Rasayana, Dhatri Lauha, Pippali, etc.
- b. Kriyakrama: Identify procedural needs based on Srotodushti or Ama like Mridu Virechana.
- c. Pathya-Apathya: Formulate appropriate dietary guidelines and daily activities.

4. Presentation and Clinical Justification:

- a. Present treatment protocol with - Ayurvedic diagnosis, Justification for each component (Aushadha, Kriyakrama, Pathya) using Chikitsa Sutras and research evidence

5. Documentation and Reflection:

- a. Submit a structured report comprising clinical findings, a detailed treatment protocol, and corresponding rationale with appropriate

references.

- b. Write a reflective note on how Ayurvedic diagnosis guided personalized therapy.

Experiential-Learning Learning 9.9: Monitor Chikitsa of Pandu Vikara due to Hemolysis.

Teacher Activity:

1. Session Planning and Clinical Framework Design:
 - a. Select appropriate clinical cases (real/simulated) covering different stages of response to treatment.
 - b. Incorporate Ayurvedic framework: Roga-Rogi Pariksha, Assessment of Vyadhibala, Rogabala, etc.
2. Lab Parameter Correlation with Ayurvedic Diagnosis:

Discuss how modern parameters relate to Ayurvedic entities:

 - i. Reduced Haemoglobin level = Rasa-Rakta Dhatu Kshaya
 - ii. Elevated Reticulocyte = Excessive Rakta Nashana
 - iii. Elevated LDH, Increased Bilirubin = Pitta vrudhi Lakshana
 - iv. Reduced Ferritin = Rasa-Rakta Dhatu Kshaya/ Alpata
3. Supervised Case-Based Group Work:
 - a. Facilitate scholar groups to assess the disease stage (Avastha), current treatment response, and modify the protocol accordingly.
 - b. Emphasize Ayurvedic rationale behind changes.
4. Debrief and Reflective Feedback:
 - a. Encourage presentations integrating Ayurvedic and modern parameters.
 - b. Provide structured feedback on clinical acumen and Ayurvedic reasoning.

Scholar Activity:

1. Pre-Session Preparation - Review texts on Pandu Roga, Anaemia and its types including clinical presentation, diagnosis and management.
2. Patient Evaluation Using Ayurvedic Tools:
 - a. Perform comprehensive Roga-Rogi Pariksha
 - b. Scientifically document the case in standard format.
 - c. Evaluate the stage of disease and status of the patient.
 - d. Analyze lab results in parallel.
3. Treatment Reassessment and Adjustment:
 - a. Analyze the treatment given with respect to Ayurvedic principles of management.
 - b. Recommend shifting treatment according to observed response:
 - c. From Pachana/deepana to Shamana/ Shodhana to Rakta Vardhana to Rasayana.
 - d. Modify dosage or Anupana based on Agni, Satmya, Rogibala.
4. Group Collaboration and Presentation:
 - a. Discuss findings with peers.

b. Present adjusted treatment plan with Ayurvedic and scientific rationale.

5. Reflective Practice:

Write a short reflection:

- i. How does Avastha Bheda guide treatment?
- ii. Integration of lab markers with Ayurvedic assessment.
- iii. Challenges in therapeutic decision-making.

Experiential-Learning Learning 9.10: Management of Pandu vikara due to Hemolysis

Teacher Activity:

1. Pre-Session Planning and Objective Framing:

- a. Define the learning competencies: formulation of personalized and comprehensive Ayurvedic treatment.
- b. Prepare case scenarios reflecting haemolytic and haemorrhagic anaemia.
- c. Provide lab data (e.g., CBC, LDH, bilirubin, iron studies) for student interpretation.

2. Theoretical Framework Review:

- a. Reinforce principles of Pandu Roga, Rakta Kshaya.
- b. Discuss Dosha-Dushya, Srotas involved (especially Raktavaha, Rasavaha), and Dhatwagni (esp. Raktagni, Rasagni) imbalance if any.

3. Facilitate Discussions on:

- a. Choosing appropriate Aushadha Prayoga based on Dosha-Avastha, chronicity, and Rogibala.\
- b. Planning Kriyakrama like Mridu Virechana when indicated.
- c. Rasayana prayoga in appropriate stages.
- d. Commonly prescribed formulations and procedures.
- e. Pathya and Apathya

4. Group Presentation Facilitation and Feedback:

- a. Monitor group work in formulating full treatment protocols.
- b. Provide feedback on:
 - i. Accuracy of Dosha analysis.
 - ii. Appropriateness of formulations and procedures.
 - iii. Justification using classical and modern rationale.

Scholar Activity:

1. Pre-Session Study:

- a. Review relevant Ayurvedic texts on Pandu Roga, Rakta Kshaya
- b. Understand modern causes and pathophysiology of haemolytic and haemorrhagic anaemia.

2. Case-Based Evaluation:

- a. Analyze the presented case to determine:

- i. Dominant Dosha, affected Dhatus, Srotas, and Agni status.
- ii. Type of anaemia based on modern lab parameters and Ayurvedic diagnosis.
- iii. Rogabala, Rogibala, Kala, Desha, Vyadhi Avastha, etc.
- 3. Design of Treatment Protocol:
 - a. Aushadha Prayoga: Select and rationalize internal medicines (e.g.): Punarnavadi Mandura, Navayasa Lauha, Drakshadi Kwatha, Kumaryasava, Yashada Bhasma or Mandura Bhasma in suitable cases. Rasayana like Amalaki, Guduchi, Pippali, Ayapatra Pippali, etc.
 - b. Kriyakrama: Identify procedural needs based on Srotodushti or Ama like Mridu Virechana with Trivrit or Avipattikara Churna
 - c. Pathya-Apathya: Formulate appropriate dietary guidelines and daily activities.
- 4. Presentation and Clinical Justification:
 - a. Present treatment protocol with - Ayurvedic diagnosis, Justification for each component (Aushadha, Kriyakrama, Pathya) using Chikitsa Sutras and research evidence.
- 5. Documentation and Reflection:
 - a. Submit a structured report comprising clinical findings, a detailed treatment protocol, and corresponding rationale with appropriate references.
 - b. Write a reflective note on how Ayurvedic diagnosis guided personalized therapy.

Modular Assessment

Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome-Based Assessment: 02 credits x 04 hours x 50 marks Practical Learning Outcome Assessment: Comprehensive Roga–Rogi pariksha and individualized Chikitsa Yojana in the Management of Pandu Roga. [25 marks x 2 hour] Instructions: The instructor shall provide real/ simulated case or case scenario of Pandu to each scholar. The scholars will be instructed to: Perform a clinical evaluation based on Ayurveda and contemporary principles. Suggest appropriate investigations with justification. Identify the type of Pandu and explain the Samprapti (pathogenesis). Frame a chikitsa plan, including: Aushadha (internal and external), Kriyakrama (if any), Pathya-Apathya. Justify their treatment based on classical references. Assessment Method: Mini-CEX / OSCE – Rubric-Based Evaluation (Clinical Evaluation [History & Examination]) Investigations (Lab & Radiological), Understanding Samprapti, Sadhyasadyata & Roga Nirnaya, Propose the Chikitsa Plan, Justification with respect to classical reference, Communication & Presentation Skills) Structured viva (10 marks x 1 hour)	4

Experiential Learning Outcome Assessment: [15 marks x 1 hour] Eg: Reflect on the learning outcomes from any Pandu case, including any challenges in applying classical knowledge in real-world settings? Or Any practical in converted form can be taken for assessment. (25 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (25 marks)						
Semester No : 4						
Module 10 : Raktapradoshaja Vikara – Raktapitta & Yakrit pleeha roga						
Module Learning Objectives (At the end of the module, the students should be able to) 1. Describe and diagnose Raktapitta and Yakrit pleeha roga along with the knowledge of recent updates 2. Conduct detailed clinical examination of the patient with Raktapitta/ Yakrit pleeha roga. 3. Advice, analyze and interpret appropriate investigations in Raktapitta and Yakrit pleeha roga. 4. Plan, execute and analyze patient care in Raktapitta and Yakrit pleeha roga adhered to the principles of Shamana, Shodhana, Panchakarma, Rasayana chikitsa and Pathyapathya along with critical care management						
Unit 1 Raktapitta 1. Raktapitta (SL 81) and its types. 2. Bleeding and Coagulation disorders (SL 81, SL 8Y, SL 8Z) -Raktaviratasravah (Haemophilia A & B), Von Willebrand disease, Senile Purpura, Henoch Schonlein Purpura, Deep vein thrombosis, Thrombocytopenia (ITP, TTP), Hemolytic Uremic Syndrome (HUS), Disseminated Intravenous Coagulation (DIC). 3. Investigations – Complete Blood Count with Platelet count, Activated Partial Thromboplastin Time (aPTT), Prothrombin Time , International normalized ratio (INR), Bleeding time, Liver Function Test, Urine Routine, Stool for occult blood, Von Willebrand factor (VWF) tests, Clotting Factor VIII test, Bethesda test, Genetic testing. References: 1,2,3,4,7,9,10,12,13,15,16,40,41,42,45,54						
3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teaching Learning Methods

CO1,CO2,CO5	Differentiate the Avastha and bheda of Raktapitta by critically analyzing the components of Nidana panchaka and assessing the Sadhyasadyata.	1	Lecture	CAN	Knows-how	L&GD
CO1,CO2,CO5	Describe the epidemiology, etiopathogenesis, clinical features, investigations and complications of Bleeding and Coagulation disorders- including Raktaviratasravah (Haemophilia A & B), Von Willebrand disease, Senile Purpura, Henoch Schonlein Purpura, Deep vein thrombosis, Thrombocytopenia (ITP, TTP), Hemolytic Uremic Syndrome (HUS) and Disseminated Intravenous Coagulation (DIC).	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2,CO5	Describe the treatment protocol for Raktapitta, incorporating Shamana, Shodhana, and Rasayana Chikitsa, along with Pathya-Apathya, tailored to its various types and stages.	1	Lecture	CAP	Knows-how	FC
CO1,CO2,CO5	Discuss Ayurvedic principles of Roga nirnaya and Chikitsa in the management of various bleeding and coagulation disorders.	1	Lecture	CAP	Knows-how	L&PPT
CO1,CO2,CO3, CO4	Demonstrate a comprehensive clinical history and demonstrate the ability to recommend and interpret appropriate investigations for the diagnosis of various bleeding and coagulation disorders.	2	Practical10.1	PSY-MEC	Shows-how	PAL,D,LR I,RP
CO1,CO2,CO3, CO4	Assess patients with bleeding and coagulation disorders and apply Ayurvedic principles of diagnosis and management in its clinical evaluation and management.	2	Practical10.2	PSY-MEC	Shows-how	SIM,DIS, CBL,PER
CO1,CO2,CO3, CO4	Demonstrate comprehensive knowledge of the indications, contraindications, and dosing protocols of various Aushadha and kriyakrama	2	Practical10.3	PSY-MEC	Shows-how	DA,DIS

	employed in the management of bleeding and coagulation disorders.					
CO1,CO2,CO3,CO4,CO5,CO7	Assess and formulate a comprehensive management protocol encompassing Aushada Prayoga, Kriyakrama, and Pathyapathya, tailored to the specific type and clinical severity of Raktapitta (Bleeding and coagulation disorders).	3	Experiential - Learning10.1	PSY-ADT	Does	SIM,CBL,DIS
CO1,CO2,CO3,CO4,CO5,CO7	Monitor the patient's response to Raktapitta therapy and modify the treatment plan based on the Roga Avastha, Rogi Bala, and relevant investigative findings.	3	Experiential - Learning10.2	PSY-ADT	Does	DIS,CBL,PER,SIM
CO1,CO2,CO3,CO4,CO5,CO7	Identify the therapeutic effects of various Aushadha and Kriyakrama in the management of different types of Raktapitta (Bleeding and coagulation disorders), based on evidence from contemporary research literature.	3	Experiential - Learning10.3	CS	Does	PER,LS,JC,DIS,TBL

Unit 2 Yakrit Roga

1. Kamala (SM 41), Kumbhakamala (SM 41), Halimaka (SM 41), Yakritvidradi (SM 40)
2. Hepatobiliary disorders (SM43, SM 4Y) – Yakrut shotha (Acute and Chronic hepatitis), Portal Hypertension, Jaundice/ Hyperbilirubinemia (Prehepatic, Hepatic and Post hepatic Jaundice), Pittashmari (Cholelithiasis), Pittashaya Shotha (Cholecystitis), Fatty Liver disease (Madyaatirek janya yakrut vikara [Alcohol Fatty Liver Disease], Madya etar karna janya yakrut vikara [Non-Alcohol Fatty Liver Disease - NAFLD, and nonalcoholic steatohepatitis-NASH), MAFLD (Metabolic dysfunction-associated fatty liver disease), Yakrit Vidradhi (Liver abscess), Hepatic hemangioma, Yakrit arbuda (Hepatocellular carcinoma), Fibrosis and Yakrit kathinyam (Cirrhosis of liver).
3. Investigations: Blood [Liver Function Test, Tumor Markers (AFP –L3, DCP, HSP70, HSP 27], Urine Routine, Radiological [Ultra Sonography, Computed tomography , Magnetic resonance imaging (MRI) & Magnetic Resonance Cholangiopancreatography (MRCP), Percutaneous transhepatic cholangiography (PTC) & Percutaneous transhepatic biliary drainage (PTBD), Mesenteric angiography, Positron emission tomography (PET scan), Endoscopic retrograde cholangiopancreatography- ERCP, endoscopic ultrasound- EUS], Biopsy.

References: 1,2,3,4,7,9,10,12,13,15,16,40,41,42,45,51,54

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experienti al Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,CO5	Differentiate types of Kamala (Koshtashrita and Sakhashrita), Kumbhakamala, Halimaka and Yakritvidradi based on Nidanapanchaka and Sadyasadyata.	1	Lecture	CAN	Knows-how	L&GD
CO1,CO2	Discuss the aetiopathogenesis, clinical presentation, diagnostic workup, and prognostic implications of acute hepatobiliary disorders, including pre-hepatic, hepatic, and post-hepatic jaundice; acute hepatitis; hepatomegaly; liver abscess; and acute cholecystitis.	1	Lecture	CC	Knows-how	FC
CO1,CO2	Describe Chronic hepatobiliary disorders—such as chronic hepatitis, fatty liver disease (AFLD, NAFLD, MAFLD and NASH), hepatic hemangioma, liver fibrosis and cirrhosis, hepatocellular carcinoma (HCC), and chronic cholecystitis—based on their clinical presentation, aetiopathogenesis, diagnostic investigations, staging, and prognosis.	1	Lecture	CC	Knows-how	FC
CO1,CO2,CO5	Describe the treatment principles—Shamana, Shodhana, Rasayana, and Pathya-Apathya—with respect to Koshtashrita and Sakhashrita kamala, Kumbhakamala, Halimaka, and Yakrut vidradi.	1	Lecture	CAP	Knows-how	L&PPT
CO1,CO2,CO5	Discuss Ayurvedic principles of diagnosis and management of acute and chronic hepatobiliary disorders.	1	Lecture	CC	Knows-how	L&GD

CO1,CO2,CO3,CO4	Elicit a comprehensive clinical history and demonstrate the ability to recommend and interpret appropriate investigations for the diagnosis of Yakrut Roga (acute and chronic hepatobiliary disorders).	3	Practical10.4	PSY-MEC	Shows-how	PBL,DIS,CD,LRI
CO1,CO2,CO3,CO4	Apply Ayurvedic principles of diagnosis and management in the clinical evaluation and treatment of patients presenting with acute hepatobiliary disorders.	3	Practical10.5	PSY-MEC	Shows-how	CBL,DIS,CD,LRI,SIM
CO1,CO2,CO3,CO4	Assess for applying Ayurvedic principles of diagnosis and management in the clinical evaluation and treatment of patients presenting with chronic hepatobiliary disorders.	2	Practical10.6	PSY-MEC	Shows-how	DIS,CBL,SIM,D-BED
CO1,CO2,CO3,CO4	Demonstrate comprehensive knowledge of the indications, contraindications, and dosing protocols of various Aushadha—including Rasayana therapies—and Kriyakrama used in the management of acute and chronic hepatobiliary disorders.	2	Practical10.7	PSY-MEC	Shows-how	CBL,PER,DA,DIS
CO1,CO2,CO3,CO4,CO5,CO7	Manage by designing a comprehensive treatment protocol for patients with acute hepatobiliary disorder, incorporating appropriate Aushadha prayoga, Kriyakrama, and Pathya-Apathya.	3	Experiential - Learning10.4	PSY-ADT	Does	SIM,CBL,DIS,PER
CO1,CO2,CO3,CO4,CO5,CO7	Create a comprehensive treatment protocol for patients with chronic hepatobiliary disorder, integrating appropriate Aushadha prayoga, Kriyakrama, and Pathya-Apathya.	3	Experiential - Learning10.5	PSY-ADT	Does	PER,CBL,DIS,SIM
CO5,CO6,CO7,CO8	Monitor the patient's therapeutic response in Yakrit Roga and appropriately modify the treatment plan based on the Roga Avastha, Rogi Bala, and relevant investigative findings.	3	Experiential - Learning10.6	PSY-ADT	Does	SIM,PBL,DIS,CBL

CO1,CO2,CO5, CO6,CO7,CO8	Compile the analysis of the therapeutic effects of various Aushadha and Kriyakrama in the management of different types of Yakrut roga, based on evidence from contemporary research literature.	3	Experiential - Learning10. 7	CS	Does	JC,TPW, DIS,BS,L S
Unit 3 Pleea Roga 1. Pleea dosha, Pleea vidradi (SM 44) 2. Spleen disorders – Pleea vridhi (Splenomegaly), Splenic infarction, Felty's syndrome, Hemangioma of Spleen. 3. Investigations: Blood [Complete Blood Count, Tumor Markers (CA19-9, CA 125,CA 50, CEA)], Radiological [USG, CT, MRI], Bone marrow Biopsy. References: 1,2,3,4,9,10,16,42,51						
3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,CO5	Discuss the Nidana panchaka and Chikitsa of Pleea vidradi, and describe the aetiopathogenesis, diagnostic investigations, staging, and prognosis of Pleea Roga, including conditions such as splenomegaly, splenic infarction, Felty's syndrome, splenic hemangioma, and splenic abscess.	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2,CO3, CO4	Interpret appropriate diagnostic investigations based on comprehensive history taking and clinical examination in patients presenting with Pleea roga.	2	Practical10. 8	PSY-MEC	Shows-how	D-BED
CO1,CO2,CO3, CO4	Assess for Ayurvedic principles of diagnosis and management in the clinical evaluation and treatment of patients with splenic disorders.	2	Practical10. 9	PSY-MEC	Shows-how	CBL,DIS, PER

CO1,CO2,CO3, CO4,CO5,CO7	Construct a comprehensive treatment protocol for patients with Pleeha roga (splenic disorders), incorporating appropriate Aushadha prayoga, Kriyakrama, and Pathya-Apathya.	2	Experiential - Learning10.8	PSY-ADT	Does	DIS,CBL, PER,SIM
CO1,CO2,CO3, CO4,CO5,CO7	Identify the therapeutic effects of various Aushadha and Kriyakrama in the management of different Pleeha roga (Splenic disorders), based on evidence from contemporary research literature.	3	Experiential - Learning10.9	CE	Does	LS,PrBL,J C,DIS,PE R

Practical Training Activity

Practical Training 10.1 Case taking in Bleeding and Coagulation disorders

Teacher Activities:

1. Provide an introductory briefing on the pathophysiology and clinical relevance of common bleeding and coagulation disorders.
2. Demonstrate the method of eliciting a comprehensive clinical history specific to bleeding tendencies (e.g., duration, frequency, site, family history, drug history).
3. Present case scenarios to illustrate varied presentations of bleeding disorders.
4. Explain the principles and interpretation of relevant investigations: CBC, PT, aPTT, BT, CT, Platelet count, D-dimer, and Factor assays.
5. Conduct a demonstration session on how to analyze lab reports and correlate with clinical findings.
6. Facilitate group discussion and critical analysis of different cases.
7. Provide feedback on student performance during simulated and clinical case-taking sessions.

Scholar Activities:

1. Participate in the interactive lecture and clarify concepts related to bleeding and coagulation disorders.
2. Practice eliciting clinical history through simulated patient encounters and peer-to-peer role play.
3. Identify key signs and symptoms from history relevant to bleeding disorders.
4. Recommend a suitable panel of investigations based on provisional diagnosis.
5. Interpret mock and real investigation reports with guidance from the teacher.
6. Document the findings in a structured format and present the clinical case to peers.
7. Reflect on their learning through feedback and improve clinical reasoning skills.

Practical Training 10.2 Practical session on management of bleeding and coagulation disorders

Teacher Activities:

1. Deliver a detailed explanation of Ayurvedic concepts related to bleeding and coagulation disorders (Raktapitta, Rakta Kshaya, Raktasrava) with classical references.
2. Demonstrate the process of Roga and Rogi Pariksha, including Trividha, Ashtavidha and Dashavidha Pariksha.
3. Present clinical cases and facilitate discussion on Dosha predominance, Dushya involvement, Srotas analysis, Sadhyasahyata, etc.
4. Explain the rationale behind choosing specific Ayurvedic formulations (e.g., Drakshadi Kashaya, Kamadugha Rasa, Bolbadh Ras, Durvadi Taila) and Panchakarma procedures, if applicable.
5. Illustrate the process of documenting Ayurvedic diagnosis and integrating supportive laboratory findings for comprehensive case evaluation.
6. Monitor and guide student interactions during patient evaluation or case simulation.
7. Provide feedback on case analysis and documentation.

Scholar Activities:

1. Attend and actively engage in theoretical discussions on Ayurvedic concepts of Raktapitta and related conditions.
2. Participate in clinical case simulations or direct patient interaction under supervision.
3. Conduct Ayurvedic assessment using Trividha, Ashtavidha and Dashavidha Pariksha tools.
4. Identify Dosha, Dushya, Srotas, and Sthana involved in the clinical presentation.
5. Propose an appropriate line of management using Yukti-based treatment, including Aushadha, Kriyakrama, and Pathya-Apathya.
6. Document the case in both Ayurvedic and modern terminologies, correlating classical understanding with laboratory findings.
7. Present case findings and participate in peer discussion and review sessions.

Practical Training 10.3 Practical session on Aushadha prayoga in bleeding and coagulation disorders.

Teacher Activities:

1. Introduce the Ayurvedic classification of bleeding disorders and correlate with modern conditions such as Haemophilia, Von Willebrand disease, and DIC.
2. Provide a detailed pharmacological overview of selected Aushadha - in addition to those mentioned in Undergraduate syllabus- including Kamadudha Rasa, Bolbadh Ras, Mukta Pishti, Durvadi Ghrita, Dhatryadi Ghrita, Usirasava and others.
3. Explain the therapeutic actions, indications, contraindications, and dosage of each drug based on classical and contemporary sources.
4. Demonstrate preparation techniques and administration methods of relevant Kriyakrama like Seka, Pichu, Pralepa, or Raktasthambhana procedures.
5. Present patient case examples to illustrate the rational selection and combination of Aushadha and Kriyakrama.
6. Facilitate group discussion and critical appraisal of treatment protocols.

Scholar Activities:

1. Review classical references and modern interpretations of drugs used in Raktapitta and Raktasrava management.

2. Participate in discussions on indication-specific selection of Aushadha and external therapies.
3. Observe and practice the preparation and administration of selected formulations and Kriyakrama under supervision.
4. Analyze case scenarios and identify appropriate treatment strategies, including dose calculations.
5. Compare and contrast different formulations and procedures in terms of safety, efficacy, and contraindications.
6. Prepare structured drug monographs including Rasapanchaka, Matra, Anupana, and Upayoga Kala.
7. Present group assignments on clinical application of Aushadha and Kriyakrama protocols with peer review.

Practical Training 10.4 Practical session on interpreting Investigations in Yakrit roga

Teacher Activities:

1. Introduce the clinical spectrum of Yakrut Roga including acute conditions (e.g., Yakrut Shotha, Kamala) and chronic presentations (e.g., Kumbha Kamala, Yakrutodara).
2. Explain Ayurvedic diagnostic principles, focusing on Roga-Rogi Pariksha, Dosha-Dushya Sammurchana, Srotas involved, and Udbhava Sthana for Yakrut disorders.
3. Demonstrate history-taking methodology, emphasizing symptoms like Haridra Netra, Daha, Vibandha, Mandagni, Mala Pariksha, etc.
4. Present and explain relevant investigations, such as:
 - a. Liver Function Tests (LFT)
 - b. Hepatitis viral markers (HBsAg, Anti-HCV)
 - c. Prothrombin Time (PT/INR)
 - d. Abdominal Ultrasonography
 - e. Imaging (if relevant)
5. Correlate Ayurvedic clinical features with modern signs and laboratory findings.
6. Provide clinical case examples and supervise scholar interactions with real/simulated patients.

Scholar Activities:

1. Attend and actively participate in lectures and demonstrations on Yakrut Roga from both Ayurvedic and modern perspectives.
2. Practice eliciting clinical history through:
 - a. Peer role plays
 - b. Simulated patient encounters
 - c. Observed case demonstrations
3. Identify key presenting complaints, addressing chronicity, progression, associated symptoms, and family/social history.
4. Recommend relevant investigations based on clinical presentation and justify their diagnostic value.
5. Interpret reports of LFT, viral markers, and imaging with faculty assistance.
6. Correlate findings with Ayurvedic diagnostic constructs such as Dosha, Dushya, Srotas, and Samprapti.
7. Document and present cases, integrating Ayurvedic diagnosis and investigative findings, followed by peer and teacher review discussions.

Practical Training 10.5 Practical session on diagnosing and managing acute hepatobiliary disorders.

Teacher Activities:

1. Explain the Ayurvedic concepts of Yakrut Roga in acute settings—Kamala, Halimaka, Yakrut Shotha—with reference to classical texts.
2. Demonstrate the diagnostic framework, including Trividha, Ashtavidha and Dashavidha Pariksha, and evaluation of Roga Bala, Rogi Bala and Sadhyasadyata.
3. Discuss the involvement of Doshas and Dushyas in acute presentations (predominantly Pitta Dosha, Rakta and Rasa Dhatus) and pathogenesis (Samprapti/ Samprapti ghatakas, including Agni, Ama, Koshta, etc.).
4. Present clinical cases to guide assessment, dosha identification, and decision-making in the selection of therapeutic measures.
5. Describe and justify Ayurvedic treatments, including:
 - a. Internal medications (e.g., Arogyavardhini Vati, Triphala Kwatha, Bhumyamalaki Churna, Guduchi Swarasa)
 - b. External therapies (e.g., Parisheka, Mridu Virechana)
 - c. Dietary and lifestyle regulations (Pathya-Apathya)
6. Facilitate demonstration sessions, encouraging learners to interact with simulated or real patient cases.
7. Provide feedback on clinical evaluation, diagnosis formulation, and rational prescription planning.

Scholar Activities:

1. Participate in the introductory session and understand Ayurvedic viewpoints on acute hepatobiliary pathology.
2. Conduct comprehensive patient evaluations, applying Roga-Rogi Pariksha with guidance.
3. Identify key symptoms such as Haridra Netra, Pita Twak, Arochaka, Jvara, Udarashoola, and correlate them with Ayurvedic diagnostic principles.
4. Assess the dominance of Dosha and suggest likely Samprapti and Srotodushti involved.
5. Propose an appropriate line of management including:
 - a. Ayurvedic formulations and their rationale
 - b. Indications for Langhana, Mridu Shodhana, or Raktaprasadaka therapies
 - c. Customised Pathya-Apathya plans
6. Engage in hands-on practice in preparing and administering selected formulations or therapies.
7. Document and present case summaries using an integrated Ayurvedic format and receive feedback through discussion sessions.

Practical Training 10.6 Practical session on diagnosing and managing chronic hepatobiliary disorders.

Teacher Activities:

1. Explain chronic hepatobiliary conditions from an Ayurvedic perspective using classical references (e.g., Kamala, Kumbha Kamala).
2. Illustrate the use of diagnostic tools, including Trividha, Ashtavidha and Dashavidha Pariksha, with emphasis on chronicity markers.
3. Discuss the Dosha-Dushya-Srotas-Samprapti involved in chronic Yakrut Roga, with focus on Pitta, Kapha, Rakta, Rasa, Mamsa, and Ojo Dushti.

4. Provide case-based learning opportunities for recognizing signs of hepatic decompensation, ascites, fatigue, indigestion, and chronic jaundice.

5. Describe the therapeutic approach in chronic conditions:

- a. Internal medications (e.g., Bhumyamalaki Churna, Arogyavardhini Vati, Triphala Guggulu, Guduchi Rasayana)
- b. Rasayana therapies
- c. Panchakarma procedures like Virechana, Nasya (where indicated)
- d. Pathya-Apathya strategies for long-term management

Scholar Activities:

1. Participate in orientation sessions on chronic hepatobiliary disorders and their Ayurvedic interpretation.
2. Apply Ayurvedic diagnostic methods, including Roga-Rogi Pariksha (e.g., Nadi Pariksha, Mala-Mutra Pariksha, Jihva Pariksha) in clinical or simulated settings.
3. Identify features of chronicity, such as chronic fatigue, anorexia, abdominal fullness, Udaravridhi, Netra-Pitavta, etc.
4. Analyze the Dosha predominance and Dushya involvement, including Samprapti Ghataka.
5. Recommend appropriate line of treatment, selecting:
 - a. Dosha Pratyani, Vyadhi Pratyani and Ubhaya Pratyani medicines/ specific formulations.
 - b. Indications for Shamana, Shodhana, and Rasayana therapy
 - c. Long-term dietary/lifestyle modifications (Pathya-Apathya)
6. Document and present case reports with detailed Ayurvedic assessment and treatment rationale, followed by discussion and review.

Practical Training 10.7 Practical session on Aushadha prayoga in Hepatobiliary disorders

Teacher Activities:

1. Introduce hepatobiliary disorders and explain their classification as per Ayurveda—acute (Kamala, Yakrut Shotha, etc.) vs. chronic (Kamala, Kumbha Kamala, etc.).
2. Present selected Aushadha, including Bhumyamalaki Churna, Guduchi Rasayana, Triphala Guggulu, Triphala Ghrita, Pancagavya Ghrita
3. Explain their indications, mode of action (Rasapanchaka, Karma), contraindications, and dosing protocols based on Rogi Bala, Avastha, and Kala.
4. Describe Panchakarma and Kriyakrama therapies relevant to Yakrut Roga: Mridu Virechana, Nasya/ Basti, Parisheka and Lepa
5. Demonstrate or supervise formulation preparation, dose calculation, and selection of Anupana.
6. Provide clinical case examples, including herbal/ herbomineral combinations and Rasayana regimens suited for long-term hepatic care.
7. Facilitate group activities, discussions, and provide constructive feedback on therapeutic planning.

Scholar Activities:

1. Review classical and contemporary texts to understand therapeutic rationale for hepatobiliary disorders.
2. Participate in discussions on drug selection and protocol development, including Rasayana chikitsa for chronic liver conditions.
3. Prepare drug monographs, highlighting - Name, Part used, Dosage, Anupana, Indications, Contraindications, Rasapanchaka, and Yogya Kala.
4. Analyze case studies and select appropriate combinations of Aushadha and Kriyakrama.
5. Engage in simulated practice of drug preparation, dose calculation, and therapeutic planning.
6. Recommend specific therapies based on clinical stage, chronicity, and patient profile (Rogi Bala).
7. Document and present treatment plans integrating acute and chronic care with justified use of Rasayana and Panchakarma approaches.

Practical Training 10.8 Case taking in Pleeha roga

Teacher Activities:

1. Explain the Ayurvedic concepts of Pleeha Roga, including types and their Samprapti.
2. Demonstrate the method of clinical history taking, highlighting key symptoms such as Pleeha vridhhi (splenomegaly), Udarashoola, Agnimandya, Pandu Lakshana, Bhrama, etc.
3. Guide scholars through clinical examination, focusing on abdominal palpation, percussion, and systemic signs of splenic dysfunction.
4. Discuss and explain relevant investigations, such as Complete Blood Count (CBC), Peripheral Blood Smear, Liver Function Test (LFT), Ultrasonography (USG) abdomen, CT abdomen (if applicable), Reticulocyte count and Bone marrow aspiration (if indicated).
5. Provide case demonstrations and supervise the scholar's clinical skill application in simulated or real scenarios.
6. Offer feedback on history taking, diagnostic reasoning, and interpretation accuracy.

Scholar Activities:

1. Participate in the theoretical session on Pleeha Roga and its clinical relevance from both Ayurvedic and modern standpoints.
2. Practice comprehensive history taking, including assessment of presenting complaints, past history, dietary habits, and family history.
3. Perform clinical examination, especially abdominal palpation for splenomegaly and associated systemic signs under supervision.
4. Recommend appropriate diagnostic tests for patients with suspected Pleeha Roga.
5. Interpret laboratory and imaging reports, including:
 - a. Anemia patterns
 - b. Reticuloendothelial activity
 - c. Evidence of hypersplenism or underlying systemic pathology
6. Document case history and investigation findings.
7. Present case summaries with justified selection of investigations and propose next steps in clinical evaluation or referral if needed.

Practical Training 10.9 Practical session on management of Pleeha roga

Teacher Activities:

1. Introduce Ayurvedic concepts of Pleeha Roga, based on references from Charaka, Sushruta, and other classical texts.
2. Explain the pathogenesis (Samprapti) of Pleeha Roga, including, Dosha involvement, Dushya (Rasa, Rakta, Mamsa), Srotas (Raktavaha, Rasavaha, Annavaha)
3. Discuss differential diagnosis, such as distinguishing Pleeha vridhhi from Yakrut vridhhi, and acute vs. chronic spleen involvement.
4. Demonstrate Ayurvedic methods of examination, including Trividha, Ashtavidha and Dashavidha Pariksha
5. Present case-based scenarios for discussion and reasoning.
6. Explain the Ayurvedic line of treatment, including:
 - a. Internal medications (e.g., Pleeha Chikitsa yogas like Rohitakarishtha, Punarnavasava, Guda pippali, Shatpala Ghrita, Pippalyadi ghrita, Punarnava Mandura, Triphala Guggulu, Arka lavana, Dhatri lauha, etc.)
 - b. Panchakarma procedures (e.g., Virechana, Basti if indicated)
 - c. Dietary guidance (Pathya-Apathya)
 - d. Use of Rasayana for long-term support
7. Supervise case documentation, discussions, and provide feedback.

Scholar Activities:

1. Attend and engage in discussions on Ayurvedic understanding of splenic disorders.
2. Perform a comprehensive clinical evaluation using Roga-Rogi Pariksha, including symptom mapping, Nadi Pariksha, and physical examination of the abdomen.
3. Identify the predominant Dosha and Dushya, formulate Samprapti, and localize the Srotodushti.
4. Develop a diagnosis and propose a Chikitsa Sutra based on Dosha Avastha, Bala, and Kala.
5. Recommend appropriate Ayurvedic therapies, selecting:
 - a. Suitable herbal/mineral formulations
 - b. Panchakarma (if applicable)
 - c. Lifestyle and dietary interventions
6. Document and present case studies, correlating Ayurvedic diagnosis and management with observed clinical progress.

Experiential Learning Activity

Experiential-Learning Learning 10.1: Management of Raktapitta

Teacher Activities:

1. Introduce Raktapitta as per Ayurveda, covering Nidana (etiology), Samprapti (pathogenesis), Bheda (types: Urdhwaga, Adhoga, Tiryak), Lakshana (signs), and Sadhya-Asadhyata (prognosis).
2. Provide case vignettes/ real cases/ case scenarios representing a spectrum of Raktapitta severity (mild, moderate, and severe cases involving Urdhwaga, Adhoga and Ubhayamargaga presentations).

3. Explain pharmacodynamics and clinical application of classical Ayurvedic medicines such as Kamadugha Ras, Bolbadh Ras, Mukta Pishti, Drakshadi Kwatha, Durvadi Taila, etc.
4. Discuss on Kriyakrama/ procedures, including Parisheka, Lepa, Pichu, Mridu Virechana, Vamana, Nasya, etc.
5. Explain the rationale for Pathya-Apathya, incorporating both classical Ayurvedic dietary guidelines and modern clinical considerations.
6. Supervise scholar group activity, assisting in case analysis, protocol planning, and therapy justification.

Scholar Activities:

1. Literature Review and Conceptual Understanding:
 - a. Study classical Ayurvedic texts describing Raktapitta Chikitsa and understand disease classification, prognosis, and treatment protocols.
 - b. Refer to modern haematological disorders (e.g., haemophilia, thrombocytopenia, DIC) for clinical correlation.
2. Clinical Case Analysis:
 - a. Analyze case vignettes in small groups based on symptoms, Dosha predominance, bleeding site, chronicity, and systemic involvement.
 - b. Identify the Samprapti Ghatakas (Dosha, Dushya, Srotas, Udbhava Sthana, Vyaktibhavasthana).
3. Protocol Formulation:
 - a. Select appropriate Aushadha (formulations and single drugs), including Rasayana if applicable.
 - b. Decide on suitable Kriyakrama and procedural therapies based on route, site, and severity.
 - c. Customize dietary and lifestyle advice (Pathya-Apathya) according to Dosha involvement and patient condition.
4. Dosage and Scheduling:
 - a. Calculate appropriate Matra, Anupana, Aushadha Kala, and treatment duration based on Rogi Bala and Roga Avastha.
 - b. Prepare structured prescription formats and flowcharts.
5. Therapeutic Simulation & Practice- Practice mock counselling for patient education regarding Pathya, medicine schedule, and follow-up care.
6. Presentation and Peer Review:
 - a. Present the protocol to peers and faculty, explaining the logic behind every step of the treatment plan.
 - b. Engage in critical peer feedback and respond to questions on differential diagnosis, medicine selection, and expected complications.
7. Documentation and Reflection:
 - a. Document the case in Ayurvedic format with integrated diagnosis, treatment plan, expected outcomes, and monitoring plan.
 - b. Reflect on the learning process and identify areas for improvement in clinical decision-making and Ayurvedic understanding.

Experiential-Learning Learning 10.2: Rationale of treatment in Raktapitta

Teacher Activities:

1. Present the clinical framework for monitoring therapeutic response in Raktapitta, both from classical and contemporary

perspectives.

2. Explain the assessment of Roga Avastha, including Avastha Bheda (Acute/Chronic, Shodhaniya or Sthambhaniya), Dosha predominance, and Upashaya-Anupashaya reactions.

3. Demonstrate documentation techniques for serial case monitoring, such as treatment logs, observation charts, and outcome recording formats.

4. Provide simulated or real patient cases, where therapy requires reassessment and titration based on changing clinical parameters.

5. Supervise scholar group work, provide guidance during protocol revisions, and evaluate the scientific justification of modifications proposed.

Scholar Activities :

1. Clinical Observation and Initial Evaluation:

a. Monitor ongoing cases of Raktapitta (real or simulated) by collecting vital parameters, symptom progression, and feedback on symptomatic relief.

b. Reassess Roga Avastha using Ayurvedic parameters like Dosha Vriddhi/Kshaya, symptom intensity, Upashaya-Anupashaya, etc.

2. Assess Rogi Bala in Practice- Conduct a structured analysis of patient strength, including:

a. Agni Bala – through appetite, digestion, bowel regularity

b. Deha Bala – stamina, fatigue, pallor, etc.

c. Satva Bala – emotional resilience, anxiety/fear

d. Grade each on a mild/moderate/severe scale and integrate findings into the decision-making process.

3. Interpret Investigation Results:

a. Analyze laboratory findings (CBC, LFT, coagulation profile) and correlate with Ayurvedic understanding of Rakta Kshaya, Rakta Dushti, and Pitta Vriddhi.

b. Identify red flags (e.g., persistent low platelets, hematuria, tachycardia) requiring escalation or shift in treatment modality.

4. Modify Treatment Protocols:

a. Decide whether to continue, reduce, intensify, or taper Aushadha based on:

i. Avastha of the disease (e.g., shifting from Shodhana to Shamana)

ii. Response to Upashaya or signs of Anupashaya

iii. Lab or clinical findings suggesting improvement/deterioration

b. Propose revised doses, Anupana, or substitution of medicines based on Dosha Gati and drug response.

5. Integration of Pathya-Apathya - Modify dietary and lifestyle recommendations aligned with the evolving clinical picture (e.g., shifting from Pitta-shamana diet to Rasayana-supportive diet).

6. Document Treatment Modifications:

a. Maintain detailed progress notes in a case file format, including reasons for any protocol change.

b. Chart a day-wise observation and intervention sheet with clinical indicators and lab values.

7. Present Clinical Reasoning:

a. Participate in a structured case presentation to justify treatment modifications based on Roga Avastha assessment, Rogi Bala

interpretation, Lab investigation trends, Ayurvedic pathophysiology and classical references.

8. Reflection and Feedback:

- a. Write a short reflective note on challenges faced in decision-making.
- b. Discuss what Ayurvedic principles helped guide their reasoning, and how their clinical thinking evolved through the activity.

Experiential-Learning Learning 10.3: Recent evidence based management of Raktapitta (Bleeding and Coagulation disorders).

Teacher Activities:

1. Provide a curated list of classical formulations and procedures used in Raktapitta management, e.g.:Kamadugha Ras, Drakshadi Kwatha, Lodhra Churna, Bolbadh Ras, Parisheka, Pradeha, Virechana, and Nasya.
2. Guide scholars in literature search strategies, including:
 - a. Use of Ayurvedic research databases (DHARA, AYUSH Research Portal)
 - b. PubMed/Scopus/Web of Science for contemporary studies
 - c. Thesis/dissertation repositories of Ayurvedic institutions
3. Demonstrate critical appraisal techniques—how to analyze methodology, sample size, outcome measures, and relevance to Ayurvedic practice.
4. Supervise scholar presentations on compiled findings and assist in drawing clinical conclusions.

Scholar Activities:

1. Review Classical Ayurvedic Literature:
 - a. Study the textual references from Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya, etc. regarding Raktapitta.
 - b. Extract therapeutic indications and Rasapanchaka of key drugs/formulations and kriyakramas used.
2. Conduct a Structured Literature Search (Group activity):
 - a. Identify at least 5–7 recent research studies or clinical trials related to:
 - i. Ayurvedic drugs/formulas for bleeding disorders
 - ii. Panchakarma or kriyakrama techniques in hemorrhagic conditions
 - b. Use AYUSH portals, PubMed, or institutional libraries.
3. Organize the Data into Evidence Tables:
 - a. Include fields like: Name of drug/procedure, source of research, methodology, type of Raktapitta treated, outcome, and conclusions.
 - b. Mention classical references alongside modern evidence for integrated understanding.
4. Analyze Therapeutic Efficacy:
 - a. Evaluate which drugs showed statistically or clinically significant outcomes.
 - b. Assess side effects, limitations, and implications in different types/severity of Raktapitta.
 - c. Classify which interventions are more suitable for Urdhwaga, Adhoga, or Ubhayagata Raktapitta.
5. Compare Classical and Contemporary Understanding:
 - a. Highlight how ancient knowledge aligns or differs from modern clinical interpretations of bleeding disorders.

- b. Identify gaps in existing research that need exploration.
- 6. Prepare and Deliver a Presentation:
 - a. Compile all data and analyses into a well-structured report
 - b. Present findings in group format (via PowerPoint or poster).
 - c. Clearly state which therapies have the strongest evidence and how they can be rationally applied in practice.
 - d. Respond to peer and teacher questions on pharmacological, clinical, and textual aspects.

Experiential-Learning Learning 10.4: Advancement in Yakrut roga Aushadha Prayoga

Teacher Activity:

1. Provide an overview of the classification of Yakrut Roga as per Ayurvedic and contemporary biomedical systems, highlighting types such as Kamala, Kumbha Kamala Halimaka and Yakrit Granthi.
2. Introduce the scope of integrating classical Ayurvedic principles with contemporary research methodology for evaluating therapeutic efficacy.
3. Supply curated research articles, clinical case studies, and review papers related to Ayurvedic interventions in liver disorders from indexed journals.
4. Guide scholars in identifying valid, relevant, and methodologically sound sources of clinical data related to Aushadha Prayoga and Kriyakrama.
5. Facilitate group discussions and brainstorming sessions on methodological parameters such as outcome measures, sample size, dosage regimens, and safety assessments.
6. Provide a framework for compiling evidence (narrative synthesis, tabulated summaries, or flow diagrams) and guide critical appraisal of literature.

Scholar Activity:

1. Review the foundational Ayurvedic understanding of various Yakrut Rogas, including their Samprapti, Dosha-Dushya involvement, and treatment objectives.
2. Identify specific types of Yakrut Roga and choose suitable Ayurvedic formulations and Kriyakrama documented in classical texts.
3. Conduct a structured literature search using reliable academic databases (such as PubMed, Scopus, Web of Science, AYUSH Research Portal, DHARA, etc.) to compile studies related to Ayurvedic treatment of liver diseases.
4. Screen and select clinical trials, case studies, retrospective analyses, or pharmacological evaluations of drugs and procedures like:
 - a. Arogyavardhini Vati, Kalmeghasava, Phalatrikadi Kashaya, Bhumi Amla, Katuki, etc.
 - b. Panchakarma interventions like Virechana, Basti, or Nasya, applicable in Yakrit Roga.
5. Compare and contrast the therapeutic roles of different Aushadha and Kriyakrama across Yakrut Roga variants.
6. Critically interpret the evidence in the context of Ayurvedic pathophysiology and clinical applicability.
7. Prepare a comprehensive analytical summary highlighting the efficacy, safety, limitations, and potential scope of each intervention.
8. Correlate findings with classical references and formulate evidence-informed suggestions for clinical practice.
9. Prepare a presentation/report integrating all findings and interpretations, and present it for peer and teacher review.

Experiential-Learning Learning 10.5: Management of acute hepatobiliary disorders

Teacher Activity:

1. Guide scholars in understanding the Ayurvedic interpretation of acute hepatobiliary disorders based on Dosha-Dushya Sammurchana and Srotas involvement.
2. Provide key references from classical texts (Charaka Samhita, Ashtanga Hridaya, etc.) and contemporary clinical and Standard Treatment guidelines.
3. Curate and present real or simulated patient case scenarios with clinical findings.
4. Facilitate small-group discussions and ensure the logical flow in formulating diagnosis and management plans.
5. Supervise the selection of Aushadha Prayoga and Kriyakrama as per the clinical condition and ensure their alignment with Ayurvedic principles.
6. Critically evaluate the scholar's presentation and provide feedback on therapeutic rationale, safety, and clinical applicability.
7. Encourage reflective discussion on evidence-based incorporation of classical principles in clinical hepatobiliary cases.

Scholar Activity:

1. Analyze the patient case scenario provided, identifying the Ayurvedic diagnosis based on Lakshana, Nidana, and Dosha-Dushya assessment.
2. Categorize the condition into appropriate Samprapti types (e.g., Pittaja, Pittakaphaja, Yakritvikara) and identify the Avastha (Sama/Nirama, etc.).
3. Formulate a comprehensive treatment protocol by integrating the following elements:
 - a. Aushadha Prayoga:
 - Select appropriate herbal and herbo-mineral formulations with references and justifications.
 - Include the rationale for drug selection (Deepana-Pachana, Shodhana, Shamana, Yakrit-Uttejaka, Raktashodhaka, etc.).
 - Mention dose, Anupana, duration, and method of administration.
 - Include safety aspects and anticipated outcomes.
 - b. Kriyakrama:
 - Propose suitable Panchakarma or Upakarma procedures based on the condition (e.g., Virechana in Pitta-dominant conditions).
 - Include pre-procedure (Purvakarma), main procedure (Pradhana Karma), and post-procedure (Paschat Karma) plan.
 - Justify selection based on clinical presentation and Samprapti.
 - Outline monitoring methods during Kriyakrama.
 - c. Pathya-Apathya:
 - Recommend a disease-specific diet and lifestyle regimen.
 - Include Do's and Don'ts with a seasonal/ Desha-Kala-specific orientation.
 - Consider patient preferences, comorbidities, and Agni bala.
4. Correlate Ayurvedic protocols with contemporary hepatobiliary pathology (e.g., Hepatitis, Cholecystitis) and discuss the scope and limitations of Ayurvedic interventions.

5. Prepare a structured presentation of the proposed protocol, supported by textual references, clinical logic, and therapeutic evidence.
6. Participate in a peer review session and engage in constructive feedback and refinement of protocols.
7. Submit a reflective report summarizing the learning outcome, clinical insights, and personal observation regarding protocol development.

Experiential-Learning Learning 10.6: Management of Chronic hepatobiliary disorders.

Teacher Activity:

1. Present clinical background on chronic hepatobiliary disorders with emphasis on Yakrit Vikara such as Kamala (chronic hepatitis), Yakritodara (hepatomegaly), and Yakrit Granthi (hepatic cystic/space-occupying lesions).
2. Provide Ayurvedic interpretation of chronic hepatobiliary pathology focusing on Dosha-Dushya involvement and long-standing Samprapti.
3. Share classical references from Charaka Samhita, Ashtanga Hridaya, and contemporary clinical case studies for evidence-based learning.
4. Distribute detailed clinical case records (real/simulated) to stimulate analysis and individualized protocol planning.
5. Facilitate structured discussion around therapeutic objectives, priorities, and long-term strategies in chronic hepatobiliary care.
6. Guide the selection of appropriate Aushadha Prayoga and Kriyakrama while ensuring alignment with Ayurvedic pharmacodynamics and disease stages.
7. Evaluate scholar-prepared protocols for logical coherence, classical justification, patient safety, and practical feasibility.
8. Provide constructive feedback, highlighting areas of clinical innovation and traditional authenticity.

Scholar Activity:

1. Carefully examine the case scenario provided and identify key diagnostic cues through Ayurvedic principles such as Dosha predominance, Dushya involvement, Srotas affected, and duration of the illness.
2. Formulate a detailed Ayurvedic diagnosis of the chronic hepatobiliary condition using Nidana Panchaka and assess the Rogi Bala, Roga Bala, and chronicity factors.
3. Design a complete treatment protocol incorporating the following core components:
 - a. Aushadha Prayoga:
 - i. Select appropriate formulations (single drugs or compound preparations) tailored for chronic hepatobiliary conditions such as Yakritodara, Kamala, or Yakrit Granthi.
 - ii. Justify drug selection using Ayurvedic principles of Rasa, Guna, Veerya, Vipaka, and Prabhava.
 - iii. Provide details on dosage, Anupana, timing, duration of use, and any specific administration instructions.
 - iv. Ensure drug safety in chronic use and compatibility with concurrent therapies, if any.
 - b. Kriyakrama:
 - i. Recommend Shodhana or Shamana therapies as per the chronic stage and systemic involvement (e.g., mild Virechana in Pitta-dominance, Nasya in Urdhwajatrugata involvement).
 - ii. Outline the procedure of Purvakarma, Pradhanakarma, and Paschatkarma relevant to selected therapies.

- iii. Describe the anticipated outcomes, monitoring parameters, and supportive measures during and after the procedures.
- c. Pathya-Apathya:
 - i. Design a diet and lifestyle plan customized to the patient's condition, Dosha status, Agnibala, and chronicity.
 - ii. Recommend Pathya dravyas (e.g., Laaja tarpana, Yavagu, Mudga Yusha) and Apathya to be strictly avoided (e.g., Guru Ahara, Vidahi dravyas, Vega dharana).
 - iii. Integrate principles of Dinacharya, Ritucharya, and Sadvrutta for long-term hepatobiliary health maintenance.
- 4. Correlate clinical data (e.g., liver function tests, ultrasound findings, patient history) with the Ayurvedic diagnosis and therapeutic plan.
- 5. Present the treatment protocol in a structured format, supported by classical quotations, clinical rationale, and expected outcome timeline.
- 6. Participate in peer review and critically evaluate protocols proposed by fellow scholars.
- 7. Modify the protocol based on feedback from faculty and peers to improve therapeutic precision and relevance.
- 8. Submit a reflective report describing individual learning, application of Ayurvedic principles in a chronic care model, and clinical decision-making challenges encountered during protocol formulation.

Experiential-Learning Learning 10.7: Monitoring and adjusting the management of Yakrit roga.

Teacher Activity:

- 1. Present a chronic or acute-on-chronic case of Yakrit Roga (such as Koshtashrita/ Shakhashrita Kamala, Kumbha Kamala or Halimaka) with clinical data, including baseline investigations.
- 2. Guide scholars in reviewing and interpreting serial follow-up findings, including laboratory reports, clinical symptoms, and patient-reported outcomes.
- 3. Provide classical Ayurvedic criteria for assessing therapeutic response, such as Dosha Shamana, Agni Bala, Mala Pravrutti, and Dhatu Saamya.
- 4. Facilitate discussion on how to evaluate Roga Avastha (Ama/Nirama, Sthanasamshraya, Vyakti, Bheda), and how it influences therapeutic planning.
- 5. Encourage comparative analysis of treatment response between individuals of varying Rogi Bala (based on Sharirika and Manasika Prakriti, Vyadhi Kshamatva, and Vyayama Shakti).
- 6. Supervise scholars in preparing and presenting dynamic treatment plans that evolve based on clinical monitoring.
- 7. Provide feedback on clinical reasoning, evidence interpretation, and rational modification of therapy.

Scholar Activity:

- 1. Analyze the provided patient case and assess the current stage of Roga Avastha using classical tools—examine presence or absence of Ama, involvement of Dhatus and Srotas, and the chronicity of the disorder.
- 2. Identify changes in signs and symptoms that reflect improvement, stagnation, or deterioration in Yakrit Roga (e.g., reduction in Panduta, Haridra-netrata, or Udara Shula).
- 3. Review recent investigative findings such as liver function tests (SGOT, SGPT, bilirubin levels), imaging studies, and

haematological parameters to quantify response to therapy.

4. Correlate clinical improvement with changes in Dosha status and Samprapti Vighatana as per Ayurvedic understanding.
5. Assess Rogi Bala (both physical and mental strength) periodically using Ayurvedic criteria (Prakriti, Sara, Samhanana, Satmya, Satva, Ahara Shakti, Vyayama Shakti).
6. Based on the analysis, make logical and evidence-informed modifications to the treatment protocol, including:
 - a. Alteration of Aushadha Prayoga: Adjusting dosage, substituting formulations, or shifting from Shamana to Shodhana therapy or vice versa.
 - b. Modification of Kriyakrama: Initiating, intensifying, or tapering Panchakarma procedures depending on condition.
 - c. Revisions in Pathya-Apathya: Introducing specific Pathya Ahara, stopping incompatible foods, or adjusting lifestyle guidelines based on patient's current status and season (Ritu).
7. Justify each modification with references from classical texts and current patient findings, explaining the expected outcomes of such changes.
8. Prepare and submit a dynamic treatment progression report that includes timelines, intervention stages, patient feedback, and clinical improvement mapping.
9. Present the findings and protocol changes in a clinical discussion format, allowing peer review and feedback assimilation.
10. Submit a reflective narrative detailing the personal insights gained through monitoring the case, analyzing real-time data, and applying classical principles to dynamic clinical situations.

Experiential-Learning Learning 10.8: Management of Pleeha roga

Teacher Activity:

1. Provide clinical insights into the Ayurvedic concept of Pleeha Roga, including its etiology, pathogenesis (Samprapti), and types described in classical texts like Charaka Samhita and Sushruta Samhita.
2. Introduce real or simulated case scenarios of splenic disorders such as Pleeha Vriddhi, Pleeha Vidradhi, or Pandu with associated splenic enlargement.
3. Guide learners in understanding the differential diagnosis of Pleeha Roga with modern conditions such as splenomegaly, hypersplenism, or hemolytic-related disorders.
4. Provide reference materials and textual evidence for selecting appropriate Aushadha, Kriyakrama, and Pathya-Apathya relevant to Pleeha Roga.
5. Facilitate interactive clinical discussions to promote individualized treatment planning based on Dosha-Dushya Sammurchana and Roga-Rogi Bala.
6. Supervise scholar presentations and critique their diagnostic reasoning, drug selection, therapeutic procedures, and clinical justification.
7. Provide feedback on classical alignment, clinical feasibility, safety aspects, and therapeutic innovation in the formulated protocol.
8. Encourage incorporation of traditional formulations with supportive modern correlations, especially in chronic or systemic splenic disorders.

Scholar Activity:

1. Analyze the presented case of Pleeha Roga by identifying Nidana (etiological factors), Dosha predominance, Dhatu and Srotas involvement, and the status of Agni and Srotorodha.
2. Arrive at a precise Ayurvedic diagnosis by applying Nidana Panchaka and correlate with biomedical findings such as spleen size, haemogram changes, or imaging results.
3. Prepare a comprehensive treatment protocol by systematically integrating the following elements:
 - a. Aushadha Prayoga:
 - i. Select classical herbal and herbo-mineral formulations such as Punarnava Mandura, Yakrit Plihari Lauh, Arogyavardhini ras, Rohitakarishtha, Pippali Rasayana, etc.
 - ii. Justify the choice of formulations with reference to Rasa, Guna, Veerya, Vipaka, and Dosha-Vyadhi compatibility.
 - iii. Mention precise dose, Anupana, method of administration, duration of therapy, and considerations for chronic use.
 - iv. Ensure safety and efficacy considerations, especially in cases of co-morbid conditions like Pandu, Udara, or Raktapitta.
 - b. Kriyakrama:
 - i. Propose appropriate Panchakarma or allied procedures based on Dosha status and disease chronicity—such as Virechana for Pittanubandha conditions.
 - ii. Detail the procedure stages: Purvakarma (Snehana, Swedana), Pradhanakarma (e.g., administration of Basti), and Paschatkarma (Samsarjana Krama).
 - iii. Include rationale for procedure selection, expected outcomes, and monitoring during the intervention.
 - c. Pathya-Apathya- Recommend a tailored diet and lifestyle plan that supports the management of splenic disorders and prevents recurrence.
4. Correlate the Ayurvedic protocol with contemporary medical understanding of spleen-related pathology, ensuring an integrative approach to care.
5. Prepare a detailed report and/or presentation justifying each component of the treatment protocol with classical and clinical references.
6. Present the protocol in group sessions, respond to peer and teacher queries, and refine the treatment strategy based on critical input.

Experiential-Learning Learning 10.9: Advancement in Pleeha roga Aushadha prayoga

Teacher Activity:

1. Provide an overview of classical Ayurvedic descriptions of Pleeha Roga, including Pleeha Vriddhi, Pleeha Vidradhi, and related conditions.
2. Highlight clinical manifestations of splenic disorders and correlate them with contemporary diagnoses such as splenomegaly, hypersplenism, or hemolytic anaemia.
3. Introduce the scope of research-based analysis by explaining how Ayurvedic interventions (Aushadha and Kriyakrama) have been studied and documented in modern research.
4. Share a curated list of research articles, clinical trials, and published case studies on Ayurvedic management of Pleeha Roga and

related disorders.

5. Guide scholars on how to perform structured searches using platforms like PubMed, Scopus, AYUSH Research Portal, DHARA, etc.
6. Explain how to extract relevant data on therapeutic efficacy, dosage, treatment duration, outcome measures, and study limitations.
7. Facilitate group discussions on critically appraising research studies based on their methodology, patient population, intervention, and outcomes.
8. Provide mentorship in preparing a comprehensive, evidence-supported analytical report.

Scholar Activity:

1. Study the classical background of Pleeha Roga, focusing on Samprapti, types, Dosha-Dushya involvement, affected Srotas, and clinical manifestations as per Ayurvedic texts.
2. Identify classical formulations and procedures mentioned in the context of splenic disorders, such as:
 - a. Aushadha Prayoga: Punarnava Mandura, Yakrut Plihari Lauh, Triphala Guggulu, etc.
 - b. Kriyakrama: Niruha Basti, Virechana Karma, Raktamokshana, etc. in chronic Pleeha conditions.
3. Conduct a comprehensive literature search using reliable academic databases and Ayurvedic portals to locate studies evaluating the therapeutic effects of these interventions.
4. Collect and compile data from selected research sources, including details such as:
 - a. Type and stage of Pleeha Roga addressed
 - b. Formulation or procedure used
 - c. Sample size and patient demographics
 - d. Outcome measures (e.g., reduction in spleen size, hemoglobin improvement, reduction in symptoms)
 - e. Treatment duration, dosage, and safety profile
5. Create an analytical summary comparing various therapeutic interventions across different types of Pleeha Roga.
6. Critically evaluate the studies by assessing methodology, clinical significance, statistical validity, and limitations.
7. Draw comparisons between classical Ayurvedic expectations of therapeutic action (e.g., Pleeha-Hara, Raktashodhaka, Agnivardhaka effects) and the outcomes reported in the literature.
8. Synthesize the compiled evidence to prepare a consolidated report detailing which interventions are most effective for different splenic disorders.
9. Justify conclusions using both classical references and research data, highlighting areas with strong evidence as well as gaps needing further exploration.
10. Present the findings through a structured oral or written presentation and participate in peer feedback sessions.

Modular Assessment

Assessment

Hour

Instructions: Conduct a structured modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome-Based Assessment: 02 credits x 04 hours x 50 marks Practical Learning Outcome Assessment: Application of Ayurvedic Principles in Diagnosis and Management of Kamala. [25 marks x 2 hour] Instructions: The instructor shall provide real/ simulated case or case scenario of Kamala to each scholar. The scholars will be instructed to : Analyze the case using Roga-Rogi Pariksha and Nidana Panchaka. Evaluate Samprapti ghataka, determine Roganirnaya and Sadhyasadyata. Advice and Interpret lab investigations in line with clinical presentation. Propose a treatment plan incorporating appropriate Aushadha, Kriyākramas, and Pathya-Apathya. Justify chikitsā siddhānta with classical reasoning. Assessment Method: Mini-CEX / OSCE – Rubric-Based Evaluation (Clinical Evaluation [History & Examination]) Investigations (Lab & Radiological), Understanding Samprapti, Sadhyasadyata & Roga Nirnaya, Propose the Chikitsa Plan, Justification with respect to classical reference, Communication & Presentation Skills) Structured viva (10 marks x 1 hour) Experiential Learning Outcome Assessment: [15 marks x 1 hour] Eg: What were the most frequent Ayurvedic signs and symptoms you observed in patients with Kamala? What part of the clinical reasoning or decision-making process did you find most challenging while dealing with Kamala rogi? Or Any practical in converted form can be taken for assessment. (25 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (25 marks)	4
Module 11 : Raktapradoshaja vikara – Tvak roga	
Module Learning Objectives (At the end of the module, the students should be able to) 1. Describe and diagnose Tvak roga, hair and cosmetic issues. 2. Conduct detailed clinical examination of the patient with Tvak roga, hair and cosmetic issues. 3. Advice, analyze and interpret appropriate investigations in Tvak roga, hair and cosmetic issues. 4. Plan, execute and analyze patient care in Tvak roga, hair and cosmetic issues adhered to the principles of Shamana, Shodhana, Panchakarma, Rasayana chikitsa and Pathyapathya	
Unit 1 Twak Vikara (SN 40 -SN9Z, SN 60- SN 6Z)	

1. Kushtha
2. Shvitra
3. Visarpa
4. Sheetapitta, Udarda, Kota, Utkota (SN 4K, SN 4L)
5. Kshudraroga

References: 1,2,3,4,7,9,10,13

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experienti al Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,CO5	Differentiate Mahakushtha, Kshudrakushtha, and Shvitra based on Nidanapanchaka, and discuss their Sadyasadyata along with the principles of management.	1	Lecture	CAN	Knows-how	L&PPT
CO1,CO2,CO5	Differentiate Visarpa and its subtypes, Sheetapitta, Udarda, Kota and Utkota, based on Nidanapanchaka, and discuss their Sadyasadyata (prognosis) along with the principles of management.	1	Lecture	CAN	Knows-how	L&PPT
CO1,CO2,CO5	Describe the Nidanapanchaka and management of the following Kshudra Rogas — Yavaprakhya (SN5Y), Andhalaji (SN5Y), Vivritta (SN5Y), Kacchapika (SN9Y), Indravridha, Gardabhi, Jalagardabha (SM0Y), Irivellika (SN5Y), Gandhanama (SN5Y), Kaksha (SN4T), Visphotaka (SN4P), Agnirohini, Vidarika (SP9Y), Sharkararbuda (SP71), Pama (SN46), Vicharchika (SN43), Rakasa (SN40), Padadari, Alasa (SN48), Masurika, Tilkalaka (SN4E), Masaka (SN4H), Nyaccha (SN5Y), Vyanga	1	Lecture	CC	Knows-how	L&GD

	(SN4G), and Nilika (SN41) — and explain the principles of their management.					
CO1,CO2,CO5	Describe the Nidanapanchaka and management of the following Kshudra Rogas — Ajagallika (SN5Y), Valmika (SN5Y), Panasika, Pashanagardabha (SM1D), Chippa, Kunakha (SN6Y), Anushayi (SP9Y), Kadara (SN9Y), Indralupta (SN90), Darunaka (SN91), Arumshika (SN70), Palitya, Yuvanpidika (SN4V), Padminikantaka (SN5Y), Jatumani (SN4F), Charmakeela, Parivaritika (SN0A), Avapatika, Niruddhaprakasha (SN0A), Sannirudhaguda (SM5Y), Ahiputana (SN5Y), Vrishanakacchu (SN40), Gudabhramsha (SM55) — and explain the principles of their management.	1	Lecture	CC	Knows-how	L&GD
CO1,CO2,CO3, CO4	Perform Roga-Rogi Pariksha in a patient presenting with Tvak Roga, and demonstrate the ability to arrive at an appropriate Ayurvedic diagnosis and formulate a suitable treatment plan.	3	Practical11.1	PSY-MEC	Shows-how	CD,SIM,CBL,D
CO1,CO2,CO3, CO4,CO5,CO7	Assess and identify the role of Daivavyapasraya, Yuktivyapasraya (Sodhana, Samana, Rasayana, and Pathya-Apathya) and Satvavajaya Chikitsa in Tvak vikara.	3	Experiential - Learning11.1	PSY-ADT	Does	CBL,PER, DIS
CO5,CO6,CO7, CO8	Examine and identify the indications, contraindications, and dosage schedules of important internal and external medicines used in the management of Tvak Vikara.	3	Experiential - Learning11.2	PSY-ADT	Does	DIS,PER

Unit 2 Twak roga - Infections and Infestations

1. Infections – Bacterial - [Pittaparpatika (Impetigo), Folliculitis, Vivrita (Furunculosis), Pidaka (Carbuncle), Koshika shotha (Cellulitis), Visarpa (Erysipelas), Galit Kushtha (Leprosy)], Viral [Charmakila (Warts), Molluscum contagiosum, Herpes Simplex Virus (HSV), Herpes Zoster Virus (HZV)], Fungal/Yeast [Dadru (Dermatophytosis, Candidiasis), Chippa (Onychomycosis)]
2. Infestations – Pama (Scabies - SN 46), Yuka, Pipilika/ Liksha (Pediculosis), Cutaneous larva migrans

3. Investigations – Skin biopsy, Tzanck smear, KOH preparation, Diascopy, Wood's light, Patch tests, CBC (Neutrophilia, Eosinophilia and Lymphocytosis), Liver Function Test, Renal Function Test, Anti neutrophil cytoplasmic antibodies (ANCA), Anti nuclear antibodies (ANA) profile

References: 1,2,3,4,7,8,9,10,15,16,40,42,43,45

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experienti al Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2	Differentiate various types of Tvak Roga caused by infections and infestations — including bacterial [Pittaparpatika (Impetigo), Folliculitis, Vivrita (Furunculosis), Pidaka (Carbuncle), Koshika Shotha (Cellulitis), Visarpa (Erysipelas), Galita Kushtha (Leprosy)]; viral [Charmakila (Warts), Molluscum Contagiosum (Ajagallika), Herpes Simplex Virus (HSV), Herpes Zoster Virus (HZV)]; fungal/yeast [Dadru (Dermatophytosis, Candidiasis), Chippa (Onychomycosis)]; and parasitic infestations [Pama (Scabies), Yuka, Pipilika/Liksha (Body lice, Head lice, Nits)] — based on their aetiopathogenesis, clinical features, examination findings, and necessary investigations.	1	Lecture	CAN	Knows-how	FC
CO1,CO2	Discuss the Ayurvedic principles of diagnosis (Roga-Rogi Pariksha) in Tvak Roga caused by infections and infestations, with emphasis on Dosha-Dushya Sammurchana, Nidanapanchaka, and Samprapti Ghataka.	1	Lecture	CAN	Knows-how	L&PPT
CO1,CO2,CO5	Discuss the application of Ayurvedic principles of management in Tvak Roga caused by infections and infestations, focusing on Daivavyapashrya,	1	Lecture	CAP	Knows-how	L&GD

	Yuktivyapashraya (Shodhana, Shamana, Krimighna Chikitsa, Rasayana and Pathya-Apathya) and Satvavajaya chikitsa.					
CO1,CO2,CO3, CO4	Examine, prescribe and interpret appropriate investigations in diagnosing Tvak roga due to infection.	2	Practical11.2	PSY-MEC	Shows-how	SIM,PBL, LRI,D,CD
CO1,CO2,CO3, CO4	Clinically evaluate Tvak Roga due to infections by applying Ayurvedic principles of diagnosis and management, incorporating comprehensive knowledge of the indications, contraindications, and dosing protocols of various Aushadha and Kriyakrama.	2	Practical11.3	PSY-GUD	Shows-how	CBL,PBL, D
CO1,CO2,CO3, CO4,CO5	Identify a comprehensive treatment protocol for patients with Tvak vikara due to Infection, incorporating appropriate Aushadha prayoga, Kriyakrama, and Pathya-Apathya.	3	Experiential - Learning11.3	PSY-ADT	Does	DIS,CBL, SDL,PER
CO1,CO2,CO3, CO4,CO5,CO7	Assess clinical history and demonstrate the ability to recommend and interpret appropriate investigations for the diagnosis of Tvak roga due to infestation.	3	Practical11.4	PSY-GUD	Shows-how	D-BED,CD
CO1,CO2,CO3, CO4	Clinically evaluate Tvak Roga due to infestations by applying Ayurvedic principles of diagnosis and management, incorporating comprehensive knowledge of the indications, contraindications, and dosing protocols of various Aushadha and Kriyakrama.	2	Practical11.5	PSY-GUD	Shows-how	CBL,DIS
CO1,CO2,CO3, CO4	Assess and create a comprehensive treatment protocol for patients with Tvak vikara due to Infestation, incorporating appropriate Aushadha prayoga, Kriyakrama, and Pathya-Apathya.	2	Experiential - Learning11.4	PSY-ADT	Does	PER,CBL, DIS

CO1,CO2,CO3, CO4,CO5,CO7	Compile and analyze the therapeutic effects of various Aushadha and Kriyakrama in the management of different types of Tvak vikara due to infections and infestations, based on evidence from contemporary research literature.	3	Experiential - Learning11. 5	CS	Does	LS,SDL,T BL

Unit 3 Twak Roga due to inflammation

1. Yuvanapidika (Acne Vulgaris), Hidradenitis suppurativa, Seborrhoeic dermatitis, Stasis dermatitis.
2. Shalkayukta twak vikara (Papulosquamous disorders) - Psoriasis (SN 4A) and subtypes [Ekakushtha, Kitibha, Sidhma, Vipadika]
3. Shewalikabha twak vikara (Lichen planus, Pityriasis Rosae)
4. Anurjatajanya twak vikara (Allergic skin disorders) - Vicharchika [Eczema- Atopic dermatitis, Contact dermatitis], Urticaria [SN 4K], Wheal disorder [SN 4L]

References: 1,2,3,7,8,10,13,15,16,40,42,43,45

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2	Describe various types of Tvak roga caused by inflammatory mechanisms—including Yuvanapidika (Acne vulgaris), Hidradenitis suppurativa, Seborrhoeic dermatitis, and Stasis dermatitis; Shalkayukta Twak Vikara (papulosquamous disorders) such as Psoriasis, Shewalikabha Tvak Vikara (Lichen planus, Pityriasis rosea); and Anurjatajanya Tvak Vikara (allergic skin disorders) including Vicharchika [Eczema—Atopic and Contact dermatitis], Urticaria, and Wheal disorder —based on their aetiopathogenesis, clinical features, examination findings, and relevant investigations.	1	Lecture	CAN	Knows-how	L&PPT ,FC,L

CO1,CO2,CO3	Discuss the Ayurvedic principles of diagnosis in Tvak roga due to Inflammation, with emphasis on Dosha-Dushya Sammurchana, Nidanapanchaka, and Samprapti Ghataka.	1	Lecture	CAN	Knows-how	L&PPT
CO1,CO2,CO5	Discuss the application of Ayurvedic principles of management in Tvak Roga of inflammatory origin, based on Dosha-Dushya involvement, Shodhana and Shamana therapies, and supportive measures including Rasayana and Pathya-Apathya.	1	Lecture	CAP	Knows-how	L&GD
CO1,CO2,CO3, CO4	Elicit a comprehensive clinical history and demonstrate the ability to recommend and interpret appropriate investigations for the diagnosis of Twak roga due to Inflammation.	3	Practical11.6	PSY-MEC	Shows-how	D,SIM,CD
CO1,CO2,CO3, CO4	Clinically evaluate Twak roga due to Inflammation by applying Ayurvedic principles of diagnosis and management, incorporating comprehensive knowledge of the indications, contraindications, and dosing protocols of various Aushadha and Kriyakrama.	3	Practical11.7	PSY-MEC	Shows-how	D-BED,D,C D,SIM
CO1,CO2,CO3, CO4,CO5,CO7	Assess by formulating a comprehensive treatment protocol for patients with Tvak vikara due to inflammation, incorporating appropriate Aushadha prayoga, Kriyakrama, and Pathya-Apathya.	3	Experiential - Learning11.6	PSY-ADT	Does	DIS,LS,C BL,SDL
CO1,CO2,CO3, CO4,CO5	Monitor the patient's therapeutic response in Tvak Vikara of inflammatory origin and appropriately modify the treatment plan based on Roga Avastha and the Rogi Bala.	3	Experiential - Learning11.7	PSY-ADT	Does	SIM,PBL, CBL

Unit 4 Twak roga - Pigmentation disorders and Keratinization disorders

1. Hypopigmentation – Shvitra(Vitiligo (SN 4D), Leucoderma, Piebaldism, Idiopathic guttate hypomelanosis)

2. Hyperpigmentation - Seborrheic keratosis, Café au lait macule, Melasma (SN 4G), lichen planus pigmentosa
3. Keratinization disorders - Ichthyosis (SN 4B), Keratosis pilaris, Palmoplantar Keratoderma.

References: 1,2,3,7,8,15,16,41,43

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experienti al Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2	Describe Tvak roga due to hypopigmentation disorders—including Shvitra (Vitiligo, Leucoderma, Piebaldism, Idiopathic Guttate Hypomelanosis); hyperpigmentation disorders—including Seborrheic Keratosis, Café-au-lait macules, Melasma, and Lichen Planus Pigmentosa; and keratinization disorders—including Ichthyosis, Keratosis Pilaris, and Palmoplantar Keratoderma—based on their aetiopathogenesis, clinical features, examination findings, and relevant investigations.	1	Lecture	CAN	Knows-how	FC
CO1,CO2,CO3, CO4	Demonstrate clinical history taking, recommend and interpret appropriate investigations for the diagnosis of Tvak roga due to Pigmentation disorders and Keratinization disorders.	2	Practical11. 8	PSY-MEC	Shows-how	D,PBL,CD ,SIM
CO1,CO2,CO3, CO4	Manage by diagnosing Tvak Roga due to pigmentation disorders and keratinization disorders by incorporating comprehensive knowledge of the indications, contraindications, and dosing protocols of various Aushadha and Kriyakrama.	2	Practical11. 9	PSY-MEC	Shows-how	SIM,DIS, D,CBL
CO1,CO2,CO3, CO4,CO5,CO7	Identify a comprehensive treatment protocol for patients with Tvak roga due to Pigmentation	2	Experiential -	PSY-ADT	Does	PER,CBL, TBL,DIS

	disorders, incorporating appropriate Aushadha prayoga, Kriyakrama, and Pathya-Apathya.		Learning11.8			
CO1,CO2,CO3,CO4,CO5,CO7	Create a comprehensive treatment protocol for patients with Tvak roga due to Keratinization disorders, incorporating appropriate Aushadha prayoga, Kriyakrama, and Pathya-Apathya.	2	Experiential - Learning11.9	PSY-ADT	Does	DIS,SIM, CBL,PBL

Unit 5 Hair and Cosmetic issues

1. Hair problems (SN 70 -SN 7Z) - Palitya (Grey hair), Kesha Shatana (Hair loss -Alopecia Areata/ Alopecia totalis), Hair damage, Excess Hair growth.
2. Cosmetic issues - wrinkles, sagging skin, dark spots, eye bags, dryness, excess oils etc.

References: 1,2,3,4,7,8,9,12,13,15,16,40,42,43

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,CO5	Discuss the aetiopathogenesis of various hair disorders, such as premature greying, hair loss (Alopecia Areata/Alopecia Totalis), hair damage, and excessive hair growth, and discuss the principles of diagnosis and management according to Ayurveda.	1	Lecture	CAP	Knows-how	L&PPT, DIS, L&G D
CO1,CO2,CO5	Discuss the Ayurvedic principles of diagnosis and management, considering the aetiopathogenesis involved in cosmetic concerns such as wrinkles, sagging skin, dark spots, under-eye bags, dryness, and excessive oiliness.	1	Lecture	CAP	Knows-how	L&PPT

CO1,CO2,CO3,CO4	Demonstrate Roga-Rogi Pariksha in a patient presenting with a hair disorder and arrive at an appropriate Ayurvedic diagnosis.	2	Practical11.10	PSY-MEC	Shows-how	D,DIS,CD,SIM
CO1,CO2,CO3,CO4,CO5,CO7	Assess for creating a comprehensive treatment protocol for a patient diagnosed with a hair disorder, incorporating the principles of Shodhana, Shamana, Rasayana, and Pathya-Apathya.	2	Experiential - Learning11.10	PSY-ADT	Does	TPW,CBL,PER,DIS
CO1,CO2,CO3,CO4	Demonstrate Roga-Rogi Pariksha in a patient presenting with a cosmetic concern and arrive at an appropriate Ayurvedic diagnosis.	2	Practical11.11	PSY-MEC	Shows-how	D,DIS,PER,CD
CO1,CO2,CO3,CO4,CO5	Create a comprehensive treatment protocol for a patient with a cosmetic concern, incorporating the principles of Shamana, Shodhana, Rasayana, and Pathya-Apathya.	2	Experiential - Learning11.11	PSY-ADT	Does	CBL

Unit 6 Autoimmune disorders w.s.r to Raktavahasrotas

- Sphotaka (Pemphigus Vulgaris [SN 4P], P.Foliaceus), Visphotaka(Bullous Pemphigoid), Prati-raksijah (SLE), Scleroderma, Systemic inflammatory Vasculitis, Sjogren's Syndrome, Temporal arteritis, Dermatomyositis

References: 1,2,3,4,7,8,9,13,16,41,42,43

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2	Describe the clinical features, aetiopathogenesis, investigations, and complications of autoimmune disorders associated with the skin, such as Pemphigus vulgaris, Pemphigus foliaceus, Bullous pemphigoid, Systemic Lupus	1	Lecture	CC	Knows-how	FC

	Erythematosus (SLE), Scleroderma, Systemic inflammatory vasculitis, Sjögren's syndrome, Temporal arteritis, and Dermatomyositis.					
CO1,CO2,CO3	Discuss the Ayurvedic principles of diagnosis and management of autoimmune disorders affecting the Raktavaha Srotas, such as Pemphigus vulgaris, Pemphigus foliaceus, Bullous pemphigoid, Systemic Lupus Erythematosus (SLE), Scleroderma, Systemic inflammatory vasculitis, Sjögren's syndrome, Temporal arteritis, and Dermatomyositis.	1	Lecture	CAP	Knows-how	L&GD
CO1,CO2,CO3, CO4	Illustrate disorders affecting the Raktavaha Srotas illustrating comprehensive clinical history taking, physical examination, and interpretation of appropriate investigations.	2	Practical11.12	PSY-MEC	Shows-how	CD,D,D-BED,SIM
CO1,CO2,CO3, CO4	Demonstrate management of autoimmune disorders involving the Raktavaha Srotas by incorporating comprehensive knowledge of the indications, contraindications, and dosing protocols of various Aushadha and Kriyakrama.	2	Practical11.13	PSY-MEC	Shows-how	DIS,CBL,D,PER
CO1,CO2,CO3, CO4,CO5,CO7	Identify a comprehensive management protocol encompassing the principles of Daivavyapashraya, Yuktivyapashraya, and Satvavajaya chikitsa in autoimmune disorders such as Pemphigus vulgaris, Pemphigus foliaceus, Bullous pemphigoid, Systemic Lupus Erythematosus (SLE), Scleroderma, Systemic inflammatory vasculitis, Sjögren's syndrome, Temporal arteritis, and Dermatomyositis.	2	Experiential - Learning11.12	PSY-ADT	Does	PER,CBL,DIS
CO1,CO2,CO3, CO4,CO5,CO7	Monitor the patient's response to therapy for autoimmune disorders of the Raktavaha Srotas and adjust the treatment plan based on the Roga Avastha, Rogi Bala, and laboratory findings.	3	Experiential - Learning11.13	PSY-ADT	Does	PSM,PBL,PER,CBL,DIS

CO1,CO2,CO3, CO4,CO5,CO7	Review and reflect on clinical encounters involving the management of autoimmune disorders associated with the Raktavaha Srotas to identify gaps in knowledge and skills for targeted improvement.	3	Experiential - Learning11.14	CS	Does	PBL,RLE,SDL
CO5,CO6,CO7, CO8	Identify the therapeutic effects of various Aushadha and Kriyakrama in the management of various autoimmune disorders related to raktavahasrotas, based on evidence from contemporary research literature.	3	Experiential - Learning11.15	CS	Does	TBL

Practical Training Activity

Practical Training 11.1 Case taking - Tvak vikara

Teacher Activity:

1. Present real cases/ case scenarios with Tvak Roga exhibiting classical symptoms such as Kandu, Pidaka, Vaivarnyata, Daha, etc.
2. Guide scholars in observing clinical signs and gathering relevant patient history using Ayurvedic diagnostic tools.
3. Facilitate a stepwise approach to conducting Roga Pariksha using Nidana Panchaka and understanding Dosha-Dushya Sammurchana.
4. Supervise scholars in performing Rogi Pariksha, including Dashavidha and Ashtavidha Pariksha, to assess the strength and constitution of the patient.
5. Provide textual references to correlate signs and symptoms of skin disorders like Maha Kushtha, Kshudra Kushta, Visarpa, Svitra, Kshudra roga, etc., with classical descriptions.
6. Support clinical reasoning in differentiating among types of Tvak Roga and understanding the disease stage (Ama/Nirama, Asukari/Chirakari, Dhathugata Avastha, etc.).
7. Instruct and monitor the formulation of a complete treatment protocol comprising Aushadha, Kriyakrama, and Pathya-Apathya.
8. Evaluate scholar performance based on clarity of diagnosis, appropriateness of treatment plan, and their ability to justify it using classical texts.
9. Provide structured feedback to refine diagnostic accuracy and therapeutic planning skills.

Scholar Activity:

1. Actively participate in clinical examination of the patient presented with Tvak Roga, following classical Ayurvedic methods of Roga-Rogi Pariksha.
2. Conduct Nidana Panchaka analysis: identify Hetu, Poorvaroop, Roopa, Samprapti, and Upashaya-Anupashaya.
3. Perform Rogi Pariksha using Trividha, Ashtavidha and Dashavidha Pariksha.

4. Document the clinical features of the disease in Ayurvedic terms—Dosha (dominance and vitiation), Dushya (Rasa, Rakta, Mamsa, etc.), Srotas involved, and the presence of Ama or Nirama Lakshana.
5. Arrive at a precise Ayurvedic diagnosis by differentiating between types of Tvak Roga such as Maha Kushta, Kshudra Kushta, Visarpa, Svitra, Kshudraroga, etc. based on clinical features and classical criteria.
6. Correlate the diagnosis with the disease stage (Acute/Chronic), severity, and Rogi bala to determine appropriate Chikitsa prayoga (Shodhana or Shamana).
7. Formulate a detailed and personalized treatment protocol including:
 - a. Aushadha Prayoga: Select herbal or herbo-mineral preparations (e.g., Khadirarishta, Gandhaka Rasayana, Triphala Churna) and justify based on Rasa, Guna, Veerya, and Vipaka.
 - b. Kriyakrama: Propose Panchakarma therapies/ Seka/ Lepa/ Abhyanga or Raktamokshana based on Dosha predominance and Rogi bala.
 - c. Pathya-Apathya: Recommend dietary and lifestyle guidelines to pacify Dosha, enhance Agni, and prevent recurrence.
8. Daiva vyapasraya chikitsa: Advice on methods of Daiva vyapasraya chikitsa if necessary.
9. Present the diagnosis and treatment plan in a clinical discussion format, with classical references supporting each component.
10. Participate in interactive feedback, refine the treatment strategy as advised, and document the final protocol for submission.

Practical Training 11.2 Case taking in Tvak roga of infective origin.

Teacher Activity:

1. Present a series of clinical cases representing infective Tvak Roga, including bacterial (e.g., Folliculitis, Vivrita, Pidaka, Koshika Shotha, Visarpa, Galita Kushtha), viral (Charmakila, Molluscum Contagiosum, HSV, HZV), and fungal/yeast infections (Dadru, Chippa).
2. Explain the clinical relevance of contemporary investigations, including KOH mount, Gram staining, Tzanck smear, PCR, skin biopsy, and culture sensitivity, and their indications in various Tvak Roga.
3. Supervise scholars while they perform patient examinations and elicit histories under guided clinical settings.
4. Lead a discussion on differential diagnosis using modern dermatological frameworks.
5. Instruct scholars in correlating Ayurvedic and biomedical diagnoses accurately for each condition and in recommending appropriate investigative workup.
6. Evaluate each scholar's skill in selecting, justifying, and interpreting investigations and provide constructive clinical feedback.

Scholar Activity:

1. Conduct a thorough clinical history elicitation of a patient presenting with suspected infectious Tvak Roga.
2. Identify the clinical features, record systemic associations (fever, malaise, regional lymphadenopathy) and chronicity for differentiation between acute and chronic forms.
3. Identify the probable diagnosis:
 - a. Bacterial: Vivrita (Furunculosis), Koshika Shotha (Cellulitis), Visarpa (Erysipelas), Galita Kushtha (Leprosy, etc).
 - b. Viral: Charmakila (Warts), Herpes Simplex Virus (HSV) and Herpes Zoster Virus (HZV), etc.
 - c. Fungal/Yeast: Dadru (Dermatophytosis), Candidiasis, Chippa (Onychomycosis), etc.

4. Recommend appropriate modern investigations based on the provisional diagnosis- KOH mount for dermatophytes or yeast, Gram stain for bacterial etiology, Tzanck smear for HSV or HZV, Skin biopsy for chronic or atypical lesions, Slit-skin smear or PCR for leprosy, Culture and sensitivity for furunculosis, carbuncles, or cellulitis, CBC, ESR, CRP for systemic response assessment.
5. Justify the need for each investigation based on clinical findings.
6. Present the diagnosis and investigative interpretation in clinical discussion rounds or practical assessments.
7. Submit a reflective write-up outlining key insights gained in history-taking and investigative interpretation.

Practical Training 11.3 Ayurvedic diagnosis of Infective Skin disorders.

Teacher Activity:

1. Present varied clinical cases of infective Tvak Roga, representing bacterial (Folliculitis, Vivrita, Pidaka, Koshika Shotha, Visarpa, Galita Kushtha), viral (Charmakila, Molluscum Contagiosum, HSV, HZV), and fungal/yeast infections (Dadru, Chippa).
2. Guide learners through Ayurvedic diagnostic principles, emphasizing Dosha Dushya Sammurchana, Srotodushti, Avastha (Ama/Nirama), and Dhatu involvement.
3. Explain how to apply Dashavidha and Ashtavidha Pariksha to evaluate the Rogi Bala and plan personalized therapy.
4. Teach scholars to identify appropriate Aushadha Prayoga, including classical formulations, their pharmacological properties, specific indications, contraindications, and precise dosage guidelines.
5. Introduce essential Kriyakrama procedures applicable to infective skin conditions, such as Raktamokshana, Virechana, Pralepa, Abhyanga, Parisheka, and Nasya, based on Dosha predominance and clinical stage.
6. Demonstrate proper sequencing of Purvakarma, Pradhanakarma, and Paschatkarma, with clinical justification for each.
7. Emphasize patient safety, dose modification in chronic infections, and possible interactions with ongoing biomedical therapy.
8. Assess scholar-prepared treatment protocols for accuracy, rational drug/procedure selection, classical referencing, and alignment with patient condition.

Scholar Activity:

1. Participate in the clinical evaluation of patients with infectious Tvak Roga, applying Ayurvedic diagnostic tools to assess Dosha predominance, Dushya, Srotas, and Rogi Bala.
2. Identify the condition accurately, correlating clinical features with Ayurvedic entities such as Folliculitis, Vivrita, Pidaka (Carbuncle), Koshika Shotha (Cellulitis), Visarpa (Erysipelas), Galita Kushtha (Leprosy), Charmakila (Warts), Molluscum Contagiosum – Ajagallika, Herpes Simplex Virus (HSV), HZV (Pittaja-Vataja Visarpa involving burning, grouped vesicles), Dadru (Dermatophytosis), Candidiasis Chippa (Onychomycosis), etc.
3. Based on Dosha and Roga Avastha, select appropriate Aushadha Prayoga, including:
 - a. Shamana Yogas: Panchatikta Ghrita, Khadirarishta, Gandhaka Rasayana, Kaishora Guggulu, Mahamanjishtadi Kwatha, etc.
 - b. Shodhana Yogas: Avipattikara Churna, Trivrit Lehya, Triphala Churna for Virechana, Vamana dravyas like Madanaphalapippali, Yashtimadhu, Vacha, etc.
 - c. Raktashodhaka and Krimighna Dravyas: Nimba, Haridra, Khadira, Manjishtha
4. Justify each formulation with classical references, and clearly state indications, contraindications and dosing protocols (dose,

Anupana, time of administration, and duration)

5. Identify suitable Kriyakrama based on condition and patient's strength- Raktamokshana, Vamana, Virechana, Nasya, Pralepa, Parisheka, Abhyanga, Lekhana, etc.

6. Design and present a complete treatment plan for a selected case, integrating diagnosis, Aushadha with dosing schedule, Kriyakrama with sequence and procedural details and Pathya-Apathya, in a clinical discussion forum and receive teacher and peer feedback.

7. Submit a case report that includes: history, diagnosis, Ayurvedic rationale for therapy, dosing logic, procedural planning, and a reflective summary on the learning process.

Practical Training 11.4 Identification of Tvak roga - Infestations.

Teacher Activity:

1. Arranges for the presence of clinical cases or case scenarios (with images) of skin diseases with suspected or confirmed parasitic/infestation aetiology, such as scabies, pediculosis, or cutaneous larva migrans.
2. Demonstrates the step-by-step method of comprehensive clinical history taking, emphasizing key elements including:
 - a. Onset and progression of skin lesions.
 - b. Seasonal variation and environmental exposure.
 - c. Contact history, personal hygiene, and living conditions.
 - d. History of itching, nocturnal aggravation, and contagious symptoms.
3. Guides scholars on how to integrate dermatological examination findings with classical clinical history formats.
4. Introduces scholars to the clinical reasoning process involved in selecting suitable investigations based on presenting complaints and examination findings.
5. Provides orientation on appropriate investigative modalities including:
 - a. Skin scrapings for microscopic examination.
 - b. Dermoscopy, Wood's lamp examination.
 - c. KOH mount preparation and interpretation.
 - d. CBC with eosinophil count, stool examination for ova/parasites, and biopsy if indicated.
6. Facilitates individual scholar assessments while observing their technique, communication with the patient, and diagnostic interpretation skills.

Scholar Activity:

1. Conducts independent clinical history taking from the patient or standardized case using a structured approach including, Presenting complaints and symptom chronology, Lifestyle, occupation, hygiene practices, Contact history with individuals having similar symptoms, Food habits and immune status,
2. Applies dermatological examination skills, noting characteristics such as:
 - a. Type and distribution of lesions.
 - b. Evidence of burrows, excoriation, and secondary infection.
 - c. Pruritus patterns and time-related exacerbation.

3. Identifies signs pointing toward infestation and documents findings accurately.
4. Recommends relevant investigations with clinical justification for each, such as:
 - a. Skin scraping and microscopic detection of mites or ova.
 - b. KOH mount to differentiate fungal elements.
 - c. CBC and eosinophilia as supportive markers.
 - d. Dermoscopic clues specific to parasitic dermatoses.
5. Interprets investigation reports with guidance from the teacher and correlates laboratory findings with clinical diagnosis.
6. Presents findings during a peer discussion session, explaining reasoning behind the investigative choices and diagnostic conclusions.
7. Submits a reflective summary documenting:
 - a. Learning experiences from the patient interaction.
 - b. Challenges in interpreting investigative results.

Practical Training 11.5 Practical session on management of Tvak roga due to Infestation.

Teacher Activity:

1. Identifies suitable patients or clinical case records displaying classical signs of Krimija Tvak Roga, particularly those with external parasitic origin including Pama, Yuka, Pipilika/Liksha, or Cutaneous larva migrans.
2. Demonstrates comprehensive Ayurvedic clinical history taking and physical examination using Trividha, Ashtavidha and Dashavidha Pariksha.
3. Evaluation of Nidana Panchaka, Samprapti, and Roga Avastha
4. Discusses specific doshic vitiation and dhatu involvement (Rasa, Rakta, Mamsa) in various types of infestations, correlating them with clinical symptoms such as itching, erythema, papular eruptions, and localized inflammation.
5. Demonstrates identification and differentiation of infestations through clinical examination, and guides on the selection of relevant supportive investigations such as skin scrapings, dermoscopy, KOH mount, or eosinophil count when necessary.
6. Explains the rationale behind the selection of internal and external Ayurvedic formulations (Aushadha) with specific emphasis on:
 - a. Krimighna, Kandughna, and Raktashodhaka herbs
 - b. Drugs - Nimba, Haridra, Karanja taila, Gandhaka Rasayana, Sidharthaka Snana, Kandughna gana, Aragwadhadhi gana, Karanjasava, etc.
 - c. Dose calculation, frequency, duration, and Anupana selection
 - d. Contraindications and precautions in vulnerable groups
7. Discuss on the Kriyakrama/ procedures applicable in infestation-induced Tvak Roga, including:
 - a. Abhyanga with medicated oils like Nimba Taila, Karanja Taila
 - b. Parisheka, Udvaartana, and Lepana procedures
 - c. Shodhana if indicated, such as Vamana, Virechana or Raktamokshana

8. Facilitates a group-based clinical discussion and peer-feedback session focused on Ayurvedic principles of infestation-related skin disorders.

Scholar Activity:

1. Conducts independent clinical history taking for patients with infestation-related Tvak Roga, covering, Chief complaints, symptom chronology, triggering and relieving factors, History of contact with affected individuals or exposure to infested surroundings, Personal hygiene, dietary habits, seasonal factors, and past treatments.
2. Assessment of Rogibala, Agni, Satmya, and Desha
3. Performs a detailed Ayurvedic clinical examination using principles of Trividha Pariksha, identifies typical signs of scabies, lice infestation, or larva migrans, and documents dosha-dhatu involvement.
4. Selects appropriate Ayurvedic medicines, with focus on: Drug name, type, dose, timing, Anupana, and duration, contraindications in specific conditions like pregnancy or paediatric use, mechanism of action as per Virya, Vipaka, and Prabhava
5. Prescribes external applications such as herbal pastes and medicated oils, justifying their selection and explaining indications, site of application, and mode of action.
6. Integrates knowledge of dietary and lifestyle recommendations (Pathya-Apathya) suitable for managing and preventing recurrence of Krimija Tvak Rogas.
7. Participates in group discussions and presents a complete case summary with Ayurvedic diagnosis, Aushadha and Kriyakrama plan, and justification.
8. Submits a written clinical record including overall treatment strategy and expected outcomes.

Practical Training 11.6 Case taking of Tvak roga due to inflammation

Teacher Activity:

1. Selects and presents suitable clinical cases of inflammatory skin diseases such as eczema, psoriasis, contact dermatitis, or lichen planus, either through real patients or simulated case scenarios.
2. Demonstrates the process of eliciting a detailed and structured clinical history with emphasis on Onset, duration, and progression of lesions, Itching, scaling, burning, or pain associated with the skin condition, Possible triggering factors such as allergens, irritants, or stress, Family history, occupational exposure, personal hygiene, and drug history.
3. Guides students on the clinical examination of inflammatory skin lesions.
4. Introduces appropriate investigations relevant to inflammatory skin diseases including:
 - CBC with ESR and CRP.
 - Patch testing for contact allergens.
 - Skin biopsy and histopathological examination.
 - ANA and other autoimmune markers if indicated.
 - Skin swab or culture to rule out secondary infection.
5. Supervises each scholar during case interaction, correcting any deviations in communication, technique, or clinical reasoning.

Scholar Activity:

1. Independently elicits a detailed clinical history using a systematic approach that includes Chief complaints and duration, History of present illness with timeline and progression, Identification of triggers or exacerbating factors, Past medical history, family history of similar illness, Dietary patterns, sleep quality, and stress evaluation, Use of personal care products and history of topical applications.
2. Performs a thorough clinical examination noting characteristics of inflammation such as erythema, swelling, scaling, crusting, or vesiculation.
3. Identifies the need for specific investigations and provides rationale for each based on clinical findings. Interprets the findings of investigations in context with the clinical presentation, discussing whether the results support or rule out inflammatory pathology.
4. Prepares and presents a clinical case summary, including suspected diagnosis, investigative findings, and preliminary diagnostic conclusion.
5. Participates in peer discussions and accepts feedback from faculty and fellow scholars to refine diagnostic and history-taking skills.

Practical Training 11.7 Ayurvedic diagnosis of Tvak vikara due to Inflammation.

Teacher Activity:

1. Identifies and presents clinical cases/ case scenarios of inflammatory and allergic skin conditions covering a broad range from papulosquamous disorders to chronic eczematous and autoimmune patterns.
2. Demonstrates Ayurvedic clinical examination and diagnosis using Trividha Pariksha, Nidana Panchaka analysis for each type of Twak Roga, Identification of Dosha, Dushya, Srotas, Udbhava Sthana, and Roga marga involved.
3. Discusses classification of Tvak Roga under Ayurvedic categories such as Kshudra Kushtha, Maha Kustha, Kshudra roga or Raktapradoshaja Vikara, based on symptomatology.
4. Provides training in recognizing modern dermatological conditions such as acne, seborrheic dermatitis, psoriasis, lichen planus, atopic dermatitis, and urticaria, and correlating them with their Ayurvedic counterparts.
5. Guides on the selection and explanation of Aushadha including; Krimighna, Raktashodhaka, Shothahara, Kandughna, herbs and formulations, their dose, Anupana, and frequency based on Rogi bala, Desha, Kala and Vyadhi avastha.
6. Specific contraindications and cautions for formulations such as Tiktaka Ghrita, Mahatiktaka Ghrita, Mahamanjistadi Kwatha, Patolakaturohinyadi Kashaya, etc.
7. Demonstrates internal and external Kriyakrama procedures such as:
 - a. Shodhana: Vamana, Virechana, Raktamokshana, where indicated
 - b. Shamana: Abhyanga with medicated oils, Lepana, Takradhara, and local Parisheka
8. Conducts structured case discussions and problem-solving scenarios focusing on patient-specific management plans, integrating both textual and clinical understanding.

Scholar Activity:

1. Performs clinical history taking focused on: Nature, location, duration, and progression of lesions, Associated symptoms like itching, scaling, pain, oozing, or dryness, Lifestyle, diet, emotional stressors, seasonal variation, family history, and drug history.
2. Assessment of Prakriti, Agni, Satmya, and Rogibala

3. Conducts Ayurvedic clinical examination using Trividha, Ashtavidha, and Dashavidha Pariksha, identifying relevant Dosha, Dushya, Srotas, and disease stage.
4. Classifies the disorder under relevant Ayurvedic taxonomy such as Kshudra Kustha, Mahakushta, Kshudra Roga, etc. based on the Ayurvedic signs and symptoms.
5. Selects appropriate Ayurvedic formulations for internal and external application considering dosage, Anupana, indications and contraindications.
6. Participates in case presentations, explaining diagnostic logic, line of treatment, and follow-up plan. Integrates dietary and lifestyle advice in the treatment plan using Pathya-Apathya guidelines suited to the patient's condition.
7. Prepares and submits a structured clinical record containing patient details, diagnosis and management with (expected) outcomes.

Practical Training 11.8 Case taking in Pigmentation disorders and Keratinization disorders

Teacher Activity:

1. Selects representative clinical cases/standardized patients/ Case profiles with images, exhibiting pigmentation disorders such as vitiligo, melasma, post-inflammatory hyperpigmentation, or keratinization disorders like ichthyosis, palmoplantar keratoderma, or keratosis pilaris.
2. Demonstrates structured and comprehensive clinical history taking that focuses on: Onset and progression of pigmentation or scaling, Distribution pattern, symmetry, and associated symptoms, Sun exposure, trauma, chemical use, and cosmetic application history, Nutritional deficiencies, drug intake, hormonal influences, and family history.
3. Provides clarity on differentiating between depigmentation and hyperpigmentation, as well as scaling versus thickening lesions.
4. Guides students in dermatological examination with particular focus on visual inspection, palpation, lesion morphology, and texture assessment.
5. Introduces the scholars to appropriate investigative modalities which may include: Wood's lamp examination for pigment loss or fungal etiology; Skin biopsy and histopathology for keratinization patterns; Serum vitamin B12, thyroid profile, ANA, and other autoimmune markers; Dermoscopy for lesion architecture; Genetic counseling and molecular tests in hereditary keratinization disorders.
6. Demonstrates the method of correlating clinical findings with relevant laboratory and imaging results, highlighting their diagnostic utility and limitations.
7. Facilitates interactive case discussion sessions where scholars present their diagnostic impressions and justification for investigative choices.

Scholar Activity:

1. Independently performs history taking, ensuring the inclusion of: Presenting complaints, duration, and progression, History of exposure to chemicals, sun, or trauma, Drug history and history of previous skin treatments, Dietary and menstrual history in relevant cases, Family history and presence of any systemic illnesses.
2. Conducts a systematic skin examination to assess pigmentation pattern, scaling, lichenification, or hyperkeratosis.
3. Identifies the need for specific investigations, justifies the selection, and explains how each test contributes to diagnosis.
4. Interprets investigation reports with guidance, and integrates findings with clinical observations.

5. Compiles a diagnostic summary, including:
 - a. Working diagnosis based on symptoms and investigations.
 - b. Suggestions for further confirmation or referrals, if needed.
6. Participates in peer discussions to present findings and receive feedback on diagnostic approach and case analysis.
7. Reflects on the entire clinical process through a brief write-up that includes:
 - a. Experience during history-taking and examination.
 - b. Challenges in distinguishing similar clinical presentations.

Practical Training 11.9 Practical session on management of Pigmentation disorders and Keratinization disorders

Teacher Activity:

1. Selects representative patients or documented cases exhibiting clinical features of pigmentation disorders (such as Shwitra, Vyanga, Neelika) and keratinization disorders, ensuring diverse clinical presentation.
2. Demonstrates the Ayurvedic approach to clinical evaluation using: Trividha Pariksha, Ashtavidha and Dashavidha Pariksha to assess Rogibala and Roga Avastha. Application of Nidana Panchaka in establishing diagnosis and planning management.
3. Explains the role of Samprapti ghatakas in both pigmentary and keratinization disorders, and correlates these with the chronicity and depth of the lesions.
4. Highlights key distinguishing features and doshic dominance in conditions like vitiligo (Shwitra), melasma (Vyanga), ichthyosis, and lichenification patterns.
5. Guides students in selecting Aushadha, explaining:
 - a. Indications for internal medicines such as Bakuchi Churna, Khadirarishta, Panchatikta ghritha, Manikya Ras, Gandhaka Rasayana, etc.
 - b. External application of oils and lepa such as Bakuchi Taila, Avalgujadi lepa
 - c. Dosing protocols based on Agni, Rogibala, age, and stage of the disease
 - d. Contraindications in conditions like pregnancy, sensitive skin, or immunocompromised state
6. Discuss applicable Kriyakrama, such as:
 - a. Virechana or Raktamokshana in selected cases with chronic Rakta Dusti
 - b. Lepana, Parisheka, Abhyanga, and Takradhara for external management
7. Monitoring for adverse reactions to photosensitizing agents like Bakuchi
8. Facilitates peer-reviewed clinical case discussions focusing on Ayurvedic logic behind diagnosis and individualized treatment selection.

Scholar Activity:

1. Conducts detailed Ayurvedic clinical history taking, including: Duration, onset, and progression of pigmentation or scaling, Environmental triggers, dietary factors, emotional stress, trauma, chemical exposures, Past treatments, recurrence pattern, and family history.
2. Performs comprehensive clinical examination using Darshana, Sparshana, and Prashna, identifying the color, distribution, surface

texture, margins, and associated symptoms of the lesions.

3. Establishes Ayurvedic diagnosis using: Nidana Panchaka, Samprapti ghatakas, Vyadhi Avastha and Kriya Kala

4. Selects and justifies internal medications based on classical references, considering:

a. Action (e.g., Raktashodhaka, Twachya, Kusthaghna, Varnya)

b. Dose, Anupana, time of administration

c. Contraindications, safety, and patient suitability

5. Proposes external formulations such as herbal lepas or oils, considering:

a. Preparation, method of application, duration

b. Monitoring for reactions or hypersensitivity

c. Frequency and site-specific instructions

6. Records and maintains a complete clinical case profile.

Practical Training 11.10 Diagnosing Hair problem.

Teacher Activity:

1. Selects appropriate clinical cases of patients with hair disorders such as Khalitya (alopecia), Indralupta (alopecia areata), Palitya (premature greying), or Darunaka (dandruff-related scalp disorders), ensuring variation in presentation and chronicity.

2. Demonstrates the systematic method of Roga Pariksha including Observation of the scalp and hair texture, density, and distribution, Inquiry regarding onset, duration, severity, progression, and pattern of hair loss, Identification of associated symptoms such as itching, burning, pain, or discolouration, Evaluation of aggravating and relieving factors, seasonal variation, diet, stress, and sleep

3. Explains the role of Nidana Panchaka in arriving at the diagnosis of hair disorders.

4. Demonstrates Rogi Pariksha using Trividha, Ashtavidha and Dashavidha Pariksha and explains the involvement of Dosha, Dushya (predominantly Rasa, Rakta, Mamsa, and Asthi), Agni, and Srotas (predominantly Rasavaha, Raktavaha, and Majjavaha) in the pathology of various Keshha vyadhi.

5. Guides scholars in integrating clinical findings with textual references from classics such as Charaka Samhita, Sushruta Samhita, and Ashtanga Hridaya. Supervises scholar performance during patient interaction and ensures accurate application of Pariksha methods and diagnostic formulation. Conducts discussion on differential diagnosis and Ayurvedic classification of hair disorders based on Samprapti, dosha predominance, and chronicity.

Scholar Activity:

1. Conducts independent history-taking of patients with hair-related complaints, eliciting Chief complaints including hair fall, greying, thinning, or patchy loss, Onset, duration, progression, and pattern, Lifestyle factors, diet, emotional triggers, exposure to chemicals or heat, Menstrual history, sleep pattern, digestion, and bowel movements, Family history of hair disorders

2. Performs Roga Pariksha by assessing: Site and pattern of hair disorder, Scalp condition including presence of dandruff, erythema, or scaling

Hair texture, fragility, and growth rate, Identification of associated skin or systemic manifestations

3. Carries out Rogi Pariksha through Ashtavidha and Dashavidha Pariksha. Identifies the dosha predominance and evaluates the

involvement of relevant Dushya and Srotas.

4. Formulates the Ayurvedic diagnosis based on Nidana Panchaka, Samprapti, Dosha-Dushya-Srotas analysis, and Vyadhi Avastha (chronic or acute stage).

5. Documents the entire case in a structured format and presents the case to peers and teacher, justifying the Ayurvedic diagnosis based on signs, symptoms, and examination. Participates in group discussion to understand other variations of hair disorders and their Ayurvedic interpretations.

Practical Training 11.11 Diagnosing Cosmetic Problems.

Teacher Activity:

1. Identifies and presents real or simulated patients/ case scenarios, with cosmetic issues such as facial wrinkles, skin laxity, hyperpigmentation, periorbital puffiness, xerosis, and oily skin to provide varied and relevant clinical exposure.
2. Demonstrates the steps of Roga Pariksha (disease assessment) by observing Site, depth, and pattern of wrinkles or lines, Distribution and color of pigmented patches, Skin tone, texture, moisture balance, and elasticity, Presence of Kandu (itching), Sphutana (cracking), or Snigdha (greasiness)
3. Demonstrates Roga Pariksha using Trividha, Ashtavidha and Dashavidha Pariksha.
4. Explains the involvement of Dosha (especially Vata in wrinkles and dryness, Pitta in pigmentation, Kapha in puffiness and oiliness), Dushya (Predominantly Rasa, Rakta, Mamsa), and Srotas (Predominantly Rasavaha, Raktavaha, Medovaha).
5. Guides scholars in eliciting Nidana (causative factors), Purvarupa, Rupa, and Samprapti specific to the above conditions, linking with improper diet, lifestyle, sleep pattern, seasonal variations, and emotional factors.
6. Supervises the scholar's performance in conducting complete Roga-Rogi Pariksha, prompting corrections and refining clinical skills.

Scholar Activity:

1. Elicits detailed patient history focusing on Onset, progression, and severity of skin changes like wrinkles, sagging, or discoloration, Occupational, dietary, lifestyle, cosmetic product use, and sleep-related factors, Emotional stressors, menstrual history (if applicable), and seasonal aggravations
2. Conducts physical examination of the skin and identifies: Fine lines, folds, discoloration, dryness, oiliness, and laxity, Texture, tone, pigmentation, and temperature of affected areas, Areas of under-eye puffiness or hyperpigmentation
3. Applies Trividha, Ashtavidha, and Dashavidha Pariksha methods to analyze Roga avastha and Roga bala
4. Identifies predominant Dosha imbalance responsible for the patient's presentation. Evaluates Dushya and Srotas affected and connects symptoms to Rasa, Rakta, Mamsa and Medo Dhatu dushti.
5. Establishes the Ayurvedic diagnosis using Nidana Panchaka, Classical references and textual parallels.
6. Documents the complete case and presents it before peers and teacher, explaining the logic and methodology behind the diagnosis. Participates in discussion on differential diagnosis, patient counselling, and individualized cosmetic health evaluation from an Ayurvedic perspective.

Practical Training 11.12 Case taking in Autoimmune disorders of Raktavaha Srotas.

Teacher Activity:

1. Identifies and arranges clinical cases /standardized patients/case scenarios with images, demonstrating classical signs of autoimmune skin disorders, including mucocutaneous involvement, blistering, photosensitivity, sclerotic plaques, livedo reticularis, or systemic signs such as Raynaud's phenomenon or myopathy.
2. Demonstrates a detailed method of clinical history taking tailored to autoimmune skin diseases, highlighting:
 - a. Duration, pattern, and triggers of the lesions.
 - b. Systemic involvement such as joint pain, fatigue, dryness, myalgia, or fever.
 - c. History of photosensitivity, mucosal ulcers, Raynaud's episodes, or difficulty in swallowing.
 - d. Family history of autoimmune conditions or previous autoimmune disorders.
3. Guides students in performing a structured physical examination focusing on Cutaneous signs, including erosions, bullae, pigment changes, and sclerotic skin, Nail, scalp, and mucosal examination, Signs of systemic involvement such as oedema, arthropathy, lymphadenopathy, and muscle weakness.
4. Explains relevant investigative strategies for diagnostic confirmation and disease monitoring, including:
 - a. Skin biopsy and histopathology with immunofluorescence.
 - b. ANA panel, anti-dsDNA, anti-Ro/SSA, anti-La/SSB, anti-Scl-70, anti-Jo-1, anti-centromere, ANCA.
 - c. ESR, CRP, CBC, LFTs, urinalysis.
 - d. Imaging such as high-resolution CT for interstitial lung disease in systemic sclerosis.
 - e. Salivary gland biopsy in Sjögren's syndrome, EMG/nerve conduction in dermatomyositis.
5. Explains the clinical significance of correlating dermatological findings with systemic disease indicators.
6. Provides real-time supervision of scholar activities, observing patient interaction, data elicitation, and interpretation processes.
7. Facilitates case presentations where each scholar presents diagnostic impressions supported by history, physical findings, and investigations.

Scholar Activity:

1. Independently elicits a comprehensive clinical history from the patient or case model, with emphasis on Onset and course of skin manifestations, Features suggestive of autoimmunity such as photosensitivity, non-healing ulcers, dry mouth/eyes, tightening of skin, joint or muscle symptoms, Previous episodes or flare-ups, treatment history, and response, Family history, menstrual and obstetric history, where applicable.
2. Performs a focused physical examination to identify Bullous, vesicular, and ulcerative lesions; Sclerotic skin changes and telangiectasia; Oral and genital mucosal involvement; Periorbital heliotrope rash, Gottron's papules, or alopecia; Associated systemic signs like decreased muscle strength or digital ulcers.
3. Suggests appropriate investigations with logical reasoning based on clinical findings. Interprets the results of investigations in correlation with clinical findings to arrive at a probable diagnosis.
4. Prepares and presents a structured case summary covering Chief complaints, clinical history, and systemic review, Examination findings, Investigation results and interpretation.
5. Participates in peer review discussions and responds to queries on clinical reasoning, differential diagnosis, and investigation

justification.

6. Reflects on the learning experience by submitting a clinical log that includes strengths and areas of improvement in history-taking and diagnostic skills.

Practical Training 11.13 Practical session on management of Autoimmune disorders of Raktavaha Srotas.

Teacher Activity:

1. Identifies patients or detailed case records diagnosed with autoimmune disorders such as Pemphigus vulgaris, SLE, Scleroderma, or vasculitis syndromes, highlighting typical manifestations affecting the Raktavaha Srotas.
2. Demonstrates clinical history taking and examination based on Trividha Pariksha (Skin and mucosal erosions or blistering, Joint pain, fatigue, systemic inflammation), Nidana Panchaka, Samprapti ghataka, etc.
3. Discusses pathogenesis in terms of Raktavaha Srotodushti, Ama, Agnimandya, Ojakshaya, and involvement of Rasa, Rakta, Mamsa, and Majja Dhatus.
4. Guides selection of appropriate Aushadha based on: Raktashodhaka, Rasayana, Ama pachaka, and Shothahara properties, Indications for formulations such as Guduchi Satva, Mahamanjishtadi Kwatha, Trayantyadi Kwatha, Sarivadyasava, Panchtikta Ghrita Guggulu, Mahatiktaka Ghrita, Khadirarishta, Siddha Makaradhwaja, Dashanga lepa, etc., Specific contraindications in conditions like pregnancy, immunosuppression, hepatic compromise, etc., Dosing based on Rogibala, Agni, Vyadhi Avastha, and chronicity.
5. Discuss Kriyakrama applicable to the specific condition including Vamana, Virechana, Raktamoksha, Parisheka, Alepa, etc.
6. Explains the role of Pathya-Apathya, Daivavyapasraya and Satvavajaya chikitsa.
7. Promotes clinical discussions focusing on integrative approaches for autoimmune pathologies.

Scholar Activity:

1. Conducts a comprehensive patient history, eliciting Specific symptoms such as skin lesions, joint pain, photosensitivity, oral ulcers, fatigue, Personal, dietary, lifestyle, and stress-related history, Past treatments and systemic involvement, Duration and cyclic nature of disease episodes
2. Performs Ayurvedic clinical examination using Darshana, Sparshana, and Prashna, identifying: Skin changes (e.g., vesicles, blisters, ulcers, induration, discoloration), Systemic signs such as fever, joint swelling, neurological signs, etc., Constitutional and metabolic indicators (e.g., Agni, Nadi, Mala, Mutra, Jihva)
3. Applies Nidana Panchaka to formulate an Ayurvedic diagnosis, identifying: Predominant Dosha , Affected Dhatus and Srotas
4. Identifies and justifies the selection of Aushadha for Shodhana, Shamana and Bahya prayoga, considering:
 - a. Herb and mineral selection (e.g., Guduchi, Sariva, Manjistha, Kaishora Guggulu)
 - b. Form, dose, Anupana, and frequency
 - c. Contraindications based on clinical status
5. Propose Raktamokshana where indicated under supervision
6. Present a complete structured case report with History and examination findings, Ayurvedic diagnosis and pathogenesis, Treatment strategy including Aushadha, Kriyakrama, Pathya-Apathya and expected outcomes. Presents the case to the group, explaining the

diagnostic pathway and rationale for treatment.

Participates in clinical discussions and contributes to peer learning through analysis of variations in clinical presentation.

Experiential Learning Activity

Experiential-Learning Learning 11.1: Management of Tvak roga

Teacher Activity:

1. Presents clinical cases of Tvak Vikara with multi-factorial pathogenesis, emphasizing dosha imbalance, psychological triggers, immune dysfunction, and due to unknown aetiology.
2. Explains the classical background, definitions, and boundaries of the three types of Chikitsa—Daivavyapasraya, Yuktivyapasraya, and Satvavajaya—with reference to Charaka Samhita, Sushruta Samhita and Ashtanga Hridaya.
3. Demonstrates the integration of these three modalities in the treatment of selected skin disorders such as Vicharchika, Kitibha, Shwitra, Pama, and autoimmune conditions.
4. Guides scholars to identify and justify clinical scenarios where each form of treatment is particularly indicated or contraindicated.
5. Provides illustrations and practices on procedures like Homa, Japa, Dana, Virechana, Raktamokshana, Lepa, Satvavajaya techniques including mental restraint and behavioral modification.
6. Facilitates group discussions and reflections to stimulate insights on how to personalize Ayurvedic treatment using the tripartite approach.
7. Reviews treatment plans submitted by scholars and offers constructive critique to strengthen doctrinal understanding and clinical applicability.

Scholar Activity:

1. Analyses teacher-presented and independently assigned cases of Tvak Vikara, identifying the Samprapti including Dosha, Dushya, Agnibala, Rogibala, Srotodushti, and Manasika Bhava.
2. Recognizes clinical indicators that favour the use of Daivavyapasraya Chikitsa, such as:
 - a. Chronic, relapsing, or having unexplained aetiology (e.g., Shwitra, Arunshika)
 - b. Poor response to conventional Yuktivyapasraya therapy
 - c. History of psychological or ancestral burden
3. Studies and enlists methods of Daivavyapasraya like Mantra, Homa, Japa, Dana, Upavasa, and Prayaschitta.
 - a. Documents how to advise and assist patients in adopting these practices
 - b. Identifies contraindications such as patient non-compliance, disbelief, or acute crisis
4. Identifies indications for Yuktivyapasraya Chikitsa such as:
 - a. Clear Nidana and dosha pathology (Pitta-Kapha in Vicharchika, Vata-Kapha in Kitibha)
 - b. Systemic involvement that can be addressed via Shodhana, Shamana, and Rasayana
 - c. Robust Agni and suitable patient strength
5. Details Shodhana procedures considering indications, contraindications and pre - post operative procedures

6. Describes Shamana therapy including the rational use of:
 - a. Internal medications like Khadirarishta, Panchtikta Ghrita, Arogya Vardhini
 - b. Local therapies such as Lepa, Parisheka, Takradhara
7. Designs a Rasayana plan for immune modulation and tissue regeneration in chronic and autoimmune Tvak Vikara, using agents like Guduchi, Bakuchi, Bhallataka, Tuvaraka, etc.
8. Constructs a Pathya-Apathya regimen specific to the doshic nature of the disease, as advised in classical texts.
9. Evaluates the role of Satvavajaya Chikitsa in:
 - a. Emotionally triggered or stress-exacerbated conditions (e.g., Vicharchika, Shwitra)
 - b. Enhancing coping in visible or disfiguring lesions leading to low self-esteem
 - c. Counseling, Pranayama, guided visualization, positive reinforcement, and Dharana Shakti development
 - d. Contraindications include acute psychiatric illness, disorientation, or non-receptive mindset
10. Integrates the three modalities into a comprehensive and personalized management strategy for a chosen Tvak Vikara, documenting:
 - a. Diagnostic basis (Dosha, Dushya, Srotas)
 - b. Detailed therapeutic plan with expected outcomes
11. Presents the protocol in a peer session and defends the choice of Daivavyapasraya, Yuktivyapasraya, or Satvavajaya based on the clinical context.

Experiential-Learning Learning 11.2: Aushadha praoga in Tvak rogas

Teacher Activity:

1. Mention classification of Tvak Vikara- Mahakushta, Kshudra Kushta, Kshudra roga, Visarpa, Svithra, etc.
2. Demonstrates a rational approach of selecting Ayurvedic medicines based on Dosha-Dushya Sammurchana, Roga Avastha, and Rogi Bala.
3. Explains the pharmacological properties (Rasa, Guna, Virya, Vipaka, Prabhava) and therapeutic classifications of key internal and external drugs used in dermatological practice.
4. Illustrates with examples the indications, contraindications, dosage, frequency, duration, and method of administration of medicines -in addition to those mentioned in Undergraduate syllabus - Aragwadharishta, Khadirarishta, manibhadra Gulam, Madhusnuhi Rasayana, Guggulumarichadi taila, Nalpamaradi taila, Somaraji taila/ Bakuchi taila, Kushtaghna Gana, Kandughna Gana, Udarda Prashamana Gana, Varnya Gana, etc.
5. Guides students in observing patient profiles to determine individualized therapeutic choices.
6. Provides access to classical references from Charaka Samhita, Ashtanga Hridaya, and Bhaishajya Ratnavali, supporting each medicine's use in dermatological settings.
7. Facilitates interactive sessions such as drug demonstration, formulation reviews, and clinical scenario analyses to engage scholars in active learning.

8. Evaluates scholar performance through oral presentations, case-based discussions, and written assignments on Ayurvedic pharmacotherapeutics in skin disorders.

Scholar Activity:

1. Compiles a list of commonly used internal medications in Tvak Vikara management and classifies them under:
 - a. Shamana Aushadha (e.g., Khadirarishta, Arogya Vardhini Vati)
 - b. Shodhana supporting formulations (e.g., Madanaphalapippali, Trivrit Lehyam, Avipattikara Churna, Manibhadra gula)
 - c. Raktashodhaka and Rasayana herbs (e.g., Manjishtha, Guduchi, Sariva)
2. Describes the indications of each drug based on classical and contemporary understanding.
3. Enumerates the contraindications based on Vyadhi Avastha, Rogibala, associated systemic conditions, pregnancy, lactation, digestive strength, or Ama presence.
4. Learns to determine the dosage schedule by:
 - a. Assessing Agni, Koshtha, Bala, Kala, Desha, and Vyadhi Avastha
 - b. Recording the form (e.g., Kwatha, Churna, Vati, Ghrita), dose (e.g., ml, gm, tablets), and frequency (e.g., once or twice daily) with suitable Anupana
 - c. Understanding classical dosage units (e.g., Ratti, Masha) and translating them into clinical equivalents
5. Prepares a list of commonly used external applications, classifying them into Lepa, Parisheka and Taila/ Ghrita/ Yamaka.
6. For each external preparation, identifies:
 - a. Site of application and skin condition suitable
 - b. Preparation method and safety considerations
 - c. Duration of application and patient instructions
 - d. Contraindications such as open wounds, or hypersensitivity
7. Participates in discussion and feedback session to refine understanding of medicine selection, safety, and precision in dosage determination.

Experiential-Learning Learning 11.3: Management of Infective Skin Disorders.

Teacher Activity:

1. Present clinically oriented case scenarios/ real cases, covering bacterial, viral, and fungal/yeast Tvak Vikara.
2. Facilitate clinical reasoning and encourage Dosha-Dushya analysis.
3. Guide learners in designing evidence-based Ayurvedic treatment protocols.
4. Offer classical textual references and contemporary research-based inputs.
5. Assess learner understanding through presentations, discussions, or reflective assignments.
6. Give constructive feedback and recommend areas for improvement.

Scholar Activity:

1. Case-Based Clinical Interpretation: Each scholar will evaluate the presented case(s) of Tvak Vikara due to various infections and

identify key clinical features. They will perform Trividha, Ashtavidha and Dashavidha Pariksha to diagnose the type of Tvak Vikara based on Samprapti ghataka, Rogi Bala, and Vyadhi Bala.

2. Formulation of Ayurvedic Treatment Protocol: Scholars will draft a complete treatment plan addressing internal medication (Aushadha Prayoga), external therapy (Kriyakrama), and lifestyle/dietary regulations (Pathya-Apathya). They will consider:

a. Bacterial Conditions: (e.g., Visarpa, Pidaka, Galita Kushtha)

Formulations like Panchtikta Guggulu, Patolakaturhinyadi Kashaya, Mahatiktaghrita, etc. will be considered.

b. Viral Conditions: (e.g., Charmakila, HSV, HZV)

Formulations like Guduchyadi gana kwatha, Mahatiktaka Ghrita, Avipathikara choorna, Shatadhauta ghrita, etc. will be considered.

c. Fungal/Yeast Infections: (e.g., Dadru, Chippa)

Use of Gandhaka Rasayana, Triphala Churna, Aragwadhadi Kashaya, Nimbadi formulations, and Lepa for local application will be incorporated.

3. Dosage and Administration Planning: Scholars will list precise details of each formulation including dosage, Anupana, time of administration, and duration of treatment. They will mention contraindications and precautionary advice specific to the patient's condition and constitution.

4. Kriyakrama Planning: Each scholar will identify suitable external therapies such as Lepa, Parisheka, Raktamoksha, Ksharakarma or Agnikarma. Protocols will include indications, contraindications, and procedural details.

5. Pathya-Apathya Mapping: Scholars will prepare an individualized Pathya-Apathya for each case.

6. Cross-Mapping with Contemporary Diagnosis: Scholars will perform cross-mapping of the Ayurvedic diagnosis with modern clinical terminology (e.g., Pidaka with Carbuncle, Dadru with Tinea corporis). This enhances their understanding of differential diagnosis and integrative care.

7. Justification with Classical References: For each intervention selected, scholars will cite Ayurvedic textual sources like Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya, Bhaishajyaratnavali, etc. They will relate their selections to classical formulations, yogas, and specific chikitsa sutras (e.g., Kushtha Chikitsa, Visarpa Chikitsa, Kshudra roga Chikitsa).

8. Peer Presentation and Comparative Discussion: Scholars will present their treatment protocol to the group. They will participate in peer discussions, comparing approaches to treatment, justifying drug choices, and resolving differences based on textual authority and clinical logic.

9. Clinical Documentation and Reporting: Each scholar will document their findings and protocol in a structured format, including diagnosis, Samprapti, line of treatment, formulations, local procedures, dietary rules, follow-up, and prognosis. They will be required to prepare a report that mimics actual clinical documentation.

Experiential-Learning Learning 11.4: Management of Tvak roga due to Infestation.

Teacher Activity:

1. Present clinical case scenarios of skin infestations including Pama (Scabies), Yuka, Pipilika/Liksha (Pediculosis), and Cutaneous Larva Migrans.

2. Guide learners through Ayurvedic interpretation of infestation-related Tvak Vikara using Nidana Panchaka and Samprapti framework.

3. Demonstrate therapeutic modalities such as Lepa, Abhyanga, and Parisheka for external infestations.
4. Provide references from classical texts highlighting Krimi Chikitsa and relevant formulations.
5. Facilitate discussion on differentiating Dosha-Dushya involvement and individualized treatment.

Scholar Activity:

1. Case Analysis and Diagnostic Mapping: Scholars will analyze the clinical presentation of each infestation-related Tvak Vikara. For example:

- a. Pama (Scabies): Kandu (intense itching), Raga (redness), Papular eruptions, especially at night.
- b. Yuka and Liksha (Pediculosis): Hair involvement, itching, excoriation.
- c. Cutaneous Larva Migrans: Creeping eruptions, serpiginous lesions with irritation.

Learners will identify the type of Krimi (Bahya or Abhyantara), involved Doshas (usually Kapha-Pitta or Rakta Dushti), and local Srotodushti.

2. Formulation of Ayurvedic Diagnosis: Each scholar will prepare the Ayurvedic diagnosis using Nidana Panchaka with specific attention to Krimi Lakshanas and Dosha predominance.

3. Design of Comprehensive Treatment Protocol: Scholars will create individualized protocols involving Internal Medications such as Vidangadi Churna, Krimimudgara Rasa, Triphala Churna, Gandhaka Rasayana, Khadirarishta or Aragwadharishta depending on Dosha and Dushya involvement.

External Therapies (Kriyakrama) including Lepa with Haridra, Nimba, Vacha, or Triphala for local lesion management, Parisheka with decoctions like Nimbadi Kwatha, Triphaladi Kwatha, Abhyanga with Dineshavalyadi Taila, Nimba Taila, Hair applications for Yuka/Liksha.

4. Dosage and Scheduling: Scholars will specify drug dosages (e.g., Vidangadi Churna 3-6 g twice daily), anupana (e.g., warm water or Takra), timing (before/after meals), and duration of therapy.

5. Pathya-Apathya Formulation: Scholars will develop dietary and lifestyle recommendations suitable to Krimi and Tvak disorders.

6. Classical Justification: Each scholar will justify their treatment choices with references from Brihatrayee and other authoritative texts.

7. Correlation with Contemporary Dermatology: Scholars will map Ayurvedic conditions with contemporary equivalents:

- a. Pama with scabies.
- b. Yuka/Pipilika with pediculosis capitis.

8. Presentation and Peer Review: Scholars will present their treatment protocols to peers and faculty. They will critically evaluate each other's plans and offer suggestions for improvement based on Ayurvedic logic and classical authority.

9. Clinical Documentation: Scholars will submit a structured treatment report covering diagnosis, Samprapti, internal medications, external therapies, dietary plan, expected outcomes, and references. Emphasis will be placed on clinical format and practical applicability.

Experiential-Learning Learning 11.5: Advancement in management of Tvak Vikara due to Infestations

Teacher Activity:

1. Introduce diverse cases of Tvak Vikara resulting from bacterial, viral, fungal, and parasitic (infestation) origins with emphasis on

clinical relevance.

2. Guide the interpretation of classical treatment principles and alignment with evidence-based perspectives.
3. Facilitate access to Ayurvedic and contemporary research databases (e.g., PubMed, AYUSH Research Portal, CCRAS, DHARA).
4. Demonstrate the methodology of evidence compilation—how to frame research questions, identify relevant studies, and extract meaningful data. Assist scholars in correlating therapeutic principles from Ayurvedic texts with modern research findings and clinical outcomes. Moderate presentations and critical discussions on compiled evidence and provide academic feedback on both content and interpretation.

Scholar Activity:

1. Identification and Classification of Tvak Vikara Types: Scholars will classify selected Tvak Vikara into infection-based (e.g., bacterial, viral, fungal) and infestation-based categories such as Pama (Scabies), Yuka (Lice infestation), Pipilika/Liksha (Pediculosis), Cutaneous Larva Migrans.
2. Each scholar will define the clinical features and underlying Dosha-Dushya involvement based on Ayurvedic principles for each condition.
3. Literature Review and Research Compilation:: Each scholar will independently search relevant scientific databases (e.g., PubMed, Scopus, Web of Science, AYUSH Portal) to compile Clinical trials or observational studies on Ayurvedic treatment for scabies, pediculosis, and other infestations, Pharmacological studies evaluating antimicrobial, antiparasitic, anti-inflammatory, and healing properties of Ayurvedic herbs and formulations, Case reports or reviews supporting the efficacy of Kriyakrama techniques in dermatological infestations.
4. Critical Analysis of Research Evidence: Scholars will analyze the research data by Assessing study design, sample size, interventions, outcome measures, and limitations, Comparing the outcomes of Ayurvedic therapies with conventional treatments, Identifying the strengths and gaps in the available evidence for each condition.
5. Presentation of Review Findings: Scholars will present their compiled and analyzed data before peers and facilitators, defending their findings with references and logical reasoning. The focus will be on Efficacy of Aushadha and Kriyakrama, Evidence strength and reproducibility, Practical applicability in a clinical setting, Formulation of Research-Supported Treatment Protocols
6. Based on their analysis, scholars will propose comprehensive treatment protocols for specific conditions using Ayurvedic measures that are supported by both classical texts and research evidence.
7. Reflection and Self-Assessment: Scholars will document their learning process in a reflective report, including - What insights were gained about Ayurvedic treatment efficacy, Challenges encountered during literature review, How evidence strengthened their understanding and clinical reasoning, etc.

Experiential-Learning Learning 11.6: Management of Tvak vikara due to Inflammation

Teacher Activity:

1. Present curated case studies of inflammatory skin disorders representing different clinical categories like papulosquamous, seborrheic, allergic, and follicular inflammations.
2. Facilitate Dosha-Dushya analysis and encourage interpretation of Samprapti in each condition.

3. Guide learners in formulating a structured treatment protocol integrating Aushadha Prayoga, Kriyakrama, and Pathya-Apathya.
4. Encourage critical discussion and peer evaluation of scholar-submitted protocols.
5. Provide feedback on diagnostic reasoning, rational drug choice, procedural planning, and evidence integration.

Scholar Activity:

1. Case Analysis and Ayurvedic Diagnosis: Scholars will be provided with or will select one clinical case/ Case Scenarios, from among the listed inflammatory skin conditions: Yuvanapidika (Acne vulgaris), Hidradenitis suppurativa, Seborrhoeic dermatitis, Stasis dermatitis, Psoriasis (Shalkayukta Tvak Vikara), Lichen planus, Pityriasis rosea (Shewalikabha Tvak Vikara), Vicharchika (Eczema), Urticaria, Wheal disorders (Anurjatatanya Tvak Vikara). The scholar will analyze Dosha involvement, Dushya vitiation, Srotodushti, and Rogi Bala/Roga Bala to establish a precise Ayurvedic diagnosis using Nidana Panchaka.
2. Treatment Protocol Formulation – Includes appropriate Aushadha Prayoga, Sodhana and other procedures, Rasayana prayoga, Pathya Apathya, Daivavyapasraya and Satvavajaya measures.
3. Condition-Specific Modification of Protocol: Each scholar will adapt their protocol specifically for the selected inflammatory disorder. Examples include:
 - a. Use of Panchatikta Ghrita Guggul, Mahamanjishtadi kwath and Virechana in psoriasis.
 - b. Haridra Khanda and Avipattikara Churna in allergic contact dermatitis.
4. Justification Using Classical References: Scholars will substantiate their treatment selections using citations from classical texts such as Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya, Bhavaprakasha, Yogaratnakara, etc.
5. Presentation and Peer Review: Scholars will present their complete treatment protocol before faculty and peers, explaining rationale, selection logic, expected outcomes, and references. They will receive feedback and engage in constructive critique of peer submissions.
6. Final Report Submission: A comprehensive written case report will be prepared and submitted.

Experiential-Learning Learning 11.7: Monitoring management of Tvak Vikara of inflammatory origin.

Teacher Activity:

1. Provide real or simulated case profiles of patients with inflammatory skin disorders at various stages of disease progression.
2. Monitor the clinical application of Ayurvedic assessment tools for evaluating Roga Avastha (acute, chronic, subacute) and Rogi Bala (Prakriti, Satva, Sara, Ahara Shakti, Vyayama Shakti).
3. Facilitate observation of clinical parameters such as changes in Kandu (itching), Daha (burning), Shotha (swelling), Srava (discharge), and Vaivarnya (discoloration).
4. Guide the application of Ayurvedic decision-making in modifying treatment protocols—adjusting Shamana, Shodhana, and Kriyakrama based on disease response.

Scholar Activity:

1. Initial Clinical Assessment and Baseline Recording: Scholars will study and record the patient's clinical status before starting treatment. Parameters such as type of Tvak Vikara, site of lesion, Dosha-Dushya involvement, presence of Srava, Raga, Daha, and

Kandu will be documented along with Rogi-specific factors such as Prakriti, Agni status, Vyayama Shakti, and mental status.

2. Daily Monitoring of Therapeutic Response: During the learning session, scholars will monitor Reduction in subjective symptoms (itching, burning, pain, Changes in lesion appearance (color, size, thickness, scaling, moisture), Reduction in discharge or infection, Skin texture improvement and signs of healing, Any emergence of side effects or aggravation. Scholars will maintain daily records or therapeutic charts for each case.

3. Roga Avastha Identification: Based on symptom progression or regression, scholars will categorize the disease stage as - Sama Avastha, Nirama Avastha, Prakupita Avastha (flare-up), Samana Avastha (healing)

4. Assessment of Rogi Bala: Scholars will evaluate Deha bala, Satva bala, Agni bala, of the patient to determine eligibility for procedures like Virechana, Raktamokshana. Also address Co-morbid conditions or nutritional deficiencies that may affect the response.

5. Modification of Treatment Plan Based on Observations: Scholars will modify their protocol based on the updated assessment like;

a. If improvement is observed: Dose tapering, transition to regenerative or supportive therapies.

b. If symptoms persist or worsen: Consider Shodhana (Virechana, Raktamokshana), switching of internal drugs (e.g., from Kaishora Guggulu to Dooshi vishari /Arogya Vardhini Vati), or revising Kriyakrama.

c. If new symptoms arise: Address through adjunct medications (e.g., for Daha—use Chandana, Usheera-based preparations; for Srava—use Triphala Kwatha Parisheka).

6. Peer Presentation and Discussion: Scholars will present patient progress, assessment summaries, and the rationale behind therapeutic changes. They will engage in clinical debate with peers regarding Timely decision-making, Avoidance of over-intervention, Prognosis prediction based on Ayurvedic factors, etc.

7. Preparation of Case Documentation Report: Scholars will prepare a clinical log that includes Baseline patient profile, Day-wise monitoring notes, Assessment of Roga Avastha and Rogi Bala, Changes made to treatment and their rationale, Outcome summary and follow-up plan.

Experiential-Learning Learning 11.8: Management of Pigmentation disorders

Teacher Activity:

1. Present categorized case scenarios representing hypopigmentation and hyperpigmentation with clinical cases/ case records/images/ videos/ or simulations.

2. Guide the classification of Dosha-Dushya involvement and Samprapti analysis based on each condition.

3. Instruct scholars on the selection of Aushadha and Kriyakrama based on pigmentation patterns, chronicity, and tissue-level pathology.

4. Facilitate discussion on differentiating similar presentations (e.g., Piebaldism vs. Vitiligo; Melasma vs. Café-au-lait macules).

5. Support scholars in integrating Ayurvedic and contemporary evidence during treatment planning.

Scholar Activity:

1. Disease Category Analysis and Ayurvedic Diagnosis: Scholars will begin by classifying their assigned or chosen case under one of the following categories:

a. Hypopigmentation Disorders: Shvitra (Vitiligo), Piebaldism, Idiopathic Guttate Hypomelanosis.

- b. Hyperpigmentation Disorders: Seborrheic keratosis, Café-au-lait macules, Melasma, Lichen Planus Pigmentosa.
2. Each scholar will assess the Dosha predominance, Dusya vitiation (Tvak, Rakta, Mamsa, Lasika), and Srotodushti (mainly Rasavaha, Raktavaha, and Swedavaha Srotas). The Samprapti Ghatakas (Hetu, Dosha, Dushya, Agni, Srotas, Udbhava Sthana, Vyaktisthana) will be described.
 3. Formulation of Treatment Protocol: Scholars will design a tailored management protocol including internal and external medications and procedures, Pathya Apathya, Daivavyapasraya and Satvavajaya methods, based on the type of pigmentation disorder and Roga rogi bala.
 4. Textual Reference Justification: Scholars will refer classical texts so as to justify their treatment plan.
 5. Protocol Presentation and Discussion: Each scholar will present their treatment protocol in structured clinical format followed with Peer discussion and constructive critique to evaluate treatment rationality, innovation, and classical alignment.
 6. Clinical Case Report Compilation: Scholars compile the case findings in structured format and submit for evaluation.

Experiential-Learning Learning 11.9: Management of Keratinization disorders.

Teacher Activity:

1. Present clinically documented or simulated cases of keratinization disorders (Ichthyosis, Keratosis Pilaris, Palmoplantar Keratoderma).
2. Guide scholars through Ayurvedic diagnostic reasoning by analyzing Dosha-Dushya-Srotas involvement.
3. Provide textual references from Brihatrayi and Laghutrayi for formulation-based treatment.
4. Support scholars in identifying principles of Rasa-Rakta-Meda Dushti in relation to keratin build-up.
5. Facilitate discussion on treatment challenges and customization strategies based on chronicity, severity, and Rogi Bala.

Scholar Activity:

1. Disease Classification and Ayurvedic Diagnosis: Scholars will study and classify the assigned condition under keratinization disorders - Ichthyosis: Chronic dry, scaly skin resembling fish scales, Keratosis Pilaris: Plugged hair follicles appearing as rough patches, Palmoplantar Keratoderma: Thickening of skin on palms and soles. Ayurvedic diagnosis will include detailed assessment of Dosha involvement (Dominant Vata with Kapha association), Dushya (Tvak, Rasa, Rakta, Meda), Srotodushti and other Samprapti ghataka.
2. Formulation of Aushadha Prayoga and Kriyakrama: Scholars will design a patient-specific internal medicine plan with dose, Anupana, and rationale. They also plan individualized external therapy protocols including Lepa, Parisheka, Abhyanga, Vamana, Viechana, etc. Patient tailored Pathya-Apathya will be proposed which is meant to support skin health and slow keratin build-up.
3. Textual Validation and Clinical Correlation: Each scholar will support their treatment plan with textual references from Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya, Bhaishajyaratnavali, etc. In addition, the scholar will correlate with modern dermatological knowledge of keratinization disorders and highlight overlap with Ayurvedic interpretations.
4. Presentation of Treatment Protocol: Scholars will present their protocol in a clinical meeting, covering Diagnosis based on Ayurvedic and biomedical understanding, Formulations selected and justification, External therapies with step-wise guidance, Dietary and lifestyle

planning, Expected therapeutic outcomes and challenges.

5. Documentation and Submission: Scholars will compile and submit a structured report for evaluation.

Experiential-Learning Learning 11.10: Management of Hair Problem

Teacher Activity:

1. Present clinically documented or simulated case scenarios of different hair disorders including Alopecia, premature greying, excessive hair growth (Hirsutism), and hair damage.
2. Facilitate a diagnostic work-up using Roga-Rogi Pariksha methods.
3. Share references from Brihatrayi and Laghutrayi texts to identify relevant formulations and therapeutic interventions.
4. Guide scholars through the integration of Shodhana, Shamana, Rasayana, and Pathya in designing the protocol.
5. Moderate a group discussion on individualized treatment strategy and challenges in chronic or autoimmune hair disorders.

Scholar Activity:

1. Clinical Condition Classification and Ayurvedic Diagnosis:
 - a. Analyze the assigned case (e.g., Alopecia Areata, Premature Greying, etc.) and classify it under Ayurvedic concepts: Indralupta, Khalitya, Palitya, etc.
 - b. Conduct Ayurvedic diagnosis by identifying Samprapti ghataka.
2. Formulation of Shodhana Chikitsa Plan: Propose suitable Shodhana therapies based on the Dosha predominance. Mention indications, duration, and precautions for Shodhana therapy.
3. Shamana Chikitsa Formulation: Select internal medicines and external applications with justification:
Examples: Bhingaraja Taila, Neelibhringadi Taila, Mahatiktaka Ghrita, Chyawanprasha, Amalaki Rasayana, Narasimha Rasayana, Tila Rasayana.
Define dose, Anupana, and schedule of administration with supporting classical references.
4. Pathya-Apathya Regimen Planning: Construct a comprehensive diet and lifestyle plan to support treatment
5. Textual Validation and Modern Correlation: Support every therapeutic plan with relevant Ayurvedic textual citations from Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya, and Bhaishajya Ratnavali. Correlate with modern insights into the disease such as autoimmune basis in Alopecia Areata, oxidative stress in premature greying, and androgen sensitivity in hirsutism.
6. Protocol Presentation: Prepare and present the detailed treatment protocol in a clinical round or group discussion with justification on selection of Aushadha and Kriyakrama.
7. Report Submission: Compile a structured document including Case summary, Ayurvedic diagnosis and Samprapti, Complete treatment protocol (internal and external), Pathya-Apathya chart, Textual references and modern correlation, Expected benefits and outcome plan.

Experiential-Learning Learning 11.11: Management of Cosmetic issues.

Teacher Activity:

1. Present real or simulated clinical cases of cosmetic concerns to stimulate observation and clinical reasoning.

2. Initiate discussions on Ayurvedic aetiopathogenesis of age-related and appearance-related skin conditions.
3. Demonstrate diagnostic approaches grounded in Tridosha theory, Dhatu involvement, and Srotas analysis.
4. Provide authoritative references from Samhitas and Nighantus to help scholars justify their treatment selections.
5. Encourage interactive learning through group discussions, questioning, and feedback loops.

Scholar Activity:

1. Identification and Ayurvedic Diagnosis of Cosmetic Concerns:
 - a. Analyze the assigned aesthetic issue (e.g., fine lines, pigment disorders, under-eye swelling, dryness).
 - b. Perform a complete Ayurvedic diagnostic evaluation including Dosha Prakopa (Vata predominant in wrinkles and dryness, Pitta in pigmentation and blemishes, Kapha in puffiness and oiliness), Dushya (Primarily Rasa, Rakta, Meda), Srotodushti (Involvement of Rasavaha, Raktavaha, and Swedavaha Srotas), Nidana Panchaka, and Vyadhi Samprapti tailored to each concern.
2. Planning of Therapy: Suggest suitable Shodhana and Shamana interventions considering the Roga avastha and Rogi Bala. Select internal drugs like Sarivadyasava, Manjishtadi Kwatha, Yashtimadhu Churna, Khadirarishta, etc. and external applications such as Kumkumadi Taila, Lodhra-Chandana Lepa, Triphala decoction washes, etc. Propose Rasayana regimens for skin restoration, collagen support, and anti-aging benefits like Amalaki Rasayana, Chyawanprasha, Bhringaraja, Mandukaparni, Shatavari, Ashwagandha.
3. Pathya-Apathya Determination - Frame comprehensive dietary and lifestyle guidelines supporting classical and contemporary references.
4. Link treatment strategies to:
 - a. Classical Ayurvedic texts (Charaka, Sushruta, Ashtanga Hridaya, Bhaishajya Ratnavali).
 - b. Recent dermatological insights regarding collagen degradation, oxidative stress, water balance, and melanin regulation.
5. Integrate biomedical and Ayurvedic terminologies for diagnostic clarity and interdisciplinary understanding.
6. Protocol Presentation and Clinical Reasoning: Deliver an organized case presentation covering Diagnosis (Ayurvedic and modern), Shodhana and Shamana plan with explanations, Rasayana protocol and sequencing, Pathya-Apathya and supportive care, Prognosis, duration, challenges in chronic or relapsing conditions. Justify therapy plan based on Dosha-Dushya-Srotas concept, skin type, chronicity, and environmental influence. The detailed case report to be submitted for evaluation.

Experiential-Learning Learning 11.12: Recent evidence based management in Autoimmune disorders of Raktavaha Srotas.

Teacher Activity:

1. Guide the selection of relevant autoimmune disorders related to Raktavaha Srotas for literature review.
2. Facilitate access to online journals and research databases (e.g., PubMed, Scopus, Web of Science, AYUSH Research Portal).
3. Monitor progress and offer feedback during group presentations and discussions.
4. Ensure standard referencing and citation practices are followed.

Scholar Activity:

1. Identify and categorize autoimmune disorders involving Raktavaha Srotas, focusing on cutaneous and systemic manifestations,

such as Pemphigus variants, SLE, Scleroderma, Vasculitides, etc.

2. Conduct a classical review of Ayurvedic principles relevant to the pathogenesis and chikitsa sutra of such disorders, including the involvement of Dosha, Dhatu, and Srotas.

3. Collect and compile research articles, case studies, and clinical trials from contemporary literature evaluating Ayurvedic interventions (both Aushadha and Kriyakrama).

4. Prepare individual disease-wise dossiers summarizing therapeutic interventions including internal medicines (Raktashodhaka, Rasayana, Krimighna dravyas), external applications, Panchakarma procedures (Virechana, Raktamokshana), and local therapies (Lepa, Parisheka, Abhyanga).

5. Critically analyze clinical efficacy, mechanism of action, and outcomes using parameters such as reduction in inflammatory markers, symptom scores, and histopathological changes.

6. Integrate classical references with contemporary evidence to propose potential Ayurvedic treatment protocols for each autoimmune condition.

7. Present findings in group discussions with peer review and faculty feedback to refine interpretations.

8. Submit a comprehensive written compilation with proper citations and a comparative chart of disease-wise interventions and outcomes observed.

Experiential-Learning Learning 11.13: Management of Autoimmune disorders of Raktavaha Srotas.

Teacher Activity:

1. Present clinically-oriented or simulated case studies of diverse autoimmune conditions affecting the skin, connective tissue, and vasculature.

2. Guide diagnostic reasoning using Ayurvedic principles of Dosha-Dushya-Srotas involvement, Nidana Panchaka, and Rogi-Roga Bala assessment.

3. Provide references from Samhita texts and supportive contemporary research for integrating Yuktivyapashraya principles.

4. Introduce the role of Daivavyapashraya and Satvavajaya Chikitsa in managing chronic immune-mediated conditions.

5. Facilitate interactive case discussions to encourage critical thinking and individualized protocol development.

Scholar Activity:

1. Clinical Analysis and Ayurvedic Diagnosis: Examine the assigned autoimmune condition in detail - Pemphigus (vulgaris/foliaceus), Bullous pemphigoid, SLE, Scleroderma, Vasculitis, Sjögren's syndrome, Temporal arteritis, or Dermatomyositis.

2. Perform Ayurvedic diagnosis incorporating Nidana Panchaka and Samprapti Ghataka.

3. Yuktivyapashraya Chikitsa Planning: Develop a personalized treatment plan using Ayurvedic formulations:

a. Internal medications: Mahatikta Ghrita, Panchatikta Ghrita Guggulu, Kaishora Guggulu, Manjishtadi Kwatha, Raktashodhaka and Kandughna drugs.

b. External treatments: Lepa, Parisheka, Abhyanga, or Takradhara depending on Dosha presentation and Dhatu involvement.

c. Panchakarma: Plan appropriate Shodhana therapy like Vamana, Virechana, Raktamokshana or Nasya as per the condition and

patient strength.

d. Define the rationale, dosage, Anupana, mode of administration, and duration.

e. Address chronicity, recurrence, and tissue depletion with appropriate Rasayana therapies such as Bhallataka, Chitraka, Gandhaka Rasayana, etc.

4. Integration of Daivavyapashraya Chikitsa: Suggest suitable spiritual and faith-based therapies aligned with classical practice and patient belief system -

Mantra japa, Daan, Homa, Yatra, Niyama Palana, and Aushadha Devata Archana.

5. Incorporation of Satvavajaya Chikitsa: Evaluate and address mental/emotional factors contributing to disease severity or progression. Recommend: Counselling for anxiety, fear, body image disturbances, or despair.

Mind-training practices: Dhyana (meditation), Dharana (concentration), Pranayama (breathing), positive visualization.

Emotional regulation tools: Cultivation of Satvika Ahara, company of supportive individuals (Satsanga), and journal-based reflective methods.

Focus on enhancing Satva, resilience, and emotional stability to support long-term healing and coping.

6. Pathya-Apathya: Design a specific dietary and lifestyle plan addressing Dosha and Dhatu balance

7. Correlation with Biomedical Understanding: Correlate Ayurvedic pathology with biomedical disease mechanisms -

a. Autoantibody-mediated cell destruction in Pemphigus.

b. Collagen deposition in Scleroderma.

c. Immune complex formation in SLE.

d. Bridge Ayurvedic management with current research on inflammation, oxidative stress, immune dysregulation, and psychoneuroimmunology.

8. Protocol Presentation and Discussion: Present the full case in a structured clinical session covering Ayurvedic diagnosis with Samprapti, Internal and external therapeutic approach with justification, Panchakarma and Rasayana integration, Daivavyapashraya and Satvavajaya inclusions, Pathya-Apathya and lifestyle correction, Anticipated outcomes, challenges, relapse management, and follow-up schedule.

9. Documentation and Submission: Submit a detailed structured case report for evaluation.

Experiential-Learning Learning 11.14: Avasthanusari chikitsa of Autoimmune disorders of Raktavaha srotas.

Teacher Activity:

1. Present clinical profiles and progress notes of patients undergoing treatment for Raktavaha Srotas-related autoimmune disorders.

2. Guide scholars in assessing changes in Roga Avastha based on clinical signs, subjective symptoms, and diagnostic findings.

3. Facilitate review of laboratory parameters such as ANA, anti-dsDNA, ESR, CRP, CBC, and skin/muscle biopsy interpretations.

4. Provide references from Ayurvedic Samhitas for stage-wise treatment modifications and signs of Rogavastha transitions.

5. Encourage discussion on evaluating Rogibala (patient vitality, Satva, Dhatu status) and tailoring therapy accordingly.

6. Supervise development and presentation of revised treatment protocols based on real-time or simulated patient updates.

Scholar Activity:

1. Clinical Data Review and Evaluation of Disease Progression:

- a. Analyze the given patient scenario diagnosed with an autoimmune disorder involving Raktavaha Srotas (e.g., Pemphigus, SLE, Scleroderma).
 - b. Review historical and recent clinical data including Symptom intensity and pattern (pain, blistering, fatigue, etc.), Objective findings from examination (e.g., skin lesions, joint stiffness, vascular signs), Psychosomatic status (mental strength, stress, Satva), Assessment of Roga Avastha
 - c. Identify current disease status using Ayurvedic principles - Sama or Nirama, Dosha avastha, Upashaya -Anupashaya, responses to previous treatments, Shifts in Avastha such as Shamana (subsiding) or Prakopa (exacerbation), etc.
2. Evaluation of Rogi Bala: Conduct a structured evaluation of the patient's strength (Bala) - Sharirika Bala, Agni Bala, Manasika Bala, Vyadhi Kshamatva. Note any changes due to treatment, diet, or lifestyle influences.
3. Interpretation of Laboratory and Diagnostic Findings:
- ESR, CRP – as indicators of inflammation.
 - ANA, anti-dsDNA, rheumatoid factor – autoimmune activity.
 - CBC – signs of anemia, leukopenia, or eosinophilia.
 - Creatine kinase or aldolase – for muscle involvement in Dermatomyositis.
 - Biopsy reports, imaging studies (if provided).

Interpret trends in lab results to determine disease remission, flare-up, or complications.

4. Treatment Plan Reassessment and Modification: Revisit the original therapeutic plan and assess the Effectiveness of internal medications (Raktashodhaka, Kandughna, Rasayana), Tolerance and benefit from Shodhana therapy (if administered), Effectiveness of topical or supportive therapies. Modify the treatment protocol based on clinical and laboratory insights - Escalate, taper, or switch medications. Recommend repeat or deferred Panchakarma procedures. Introduce or adjust Rasayana support depending on Dhatu Kshaya or Ojas condition. Modify Pathya-Apathya guidelines as per digestion status and metabolic changes.

5. Documentation of Therapeutic Response: Prepare a detailed progress report including Symptom changes (before, during, after therapy), Lab trends and corresponding Ayurvedic interpretations, Evidence of Dosha Shamana or Prakopa, Adjustments made to the plan with justification, Anticipated next steps in care.

6. Follow-up Strategy Development: Frame a comprehensive follow-up plan Weekly or bi-weekly monitoring guidelines, Red flags indicating relapse or complication, Psychological counselling or Satvavajaya inclusion if needed, Timeline for reassessment of Bala and Dhatu status.

7. Case Presentation: Present the revised protocol in a clinical forum detailing Initial presentation and Roga-Rogi assessment, Evolution of symptoms and lab values, Rationale behind each modification, Integration of classical principles and modern indicators, Prognosis and measures for relapse prevention.

8. Reflective Practice: Submit a reflection note covering Lessons learned in dynamic disease monitoring, Challenges in correlating lab values with Ayurvedic indices, Skills improved in protocol adaptation and patient-specific planning.

Experiential-Learning Learning 11.15: Managing unexpected Outcomes in Autoimmune disorders of Raktavaha Srotas.

Teacher Activity:

1. Present real or simulated case experiences involving autoimmune disorders affecting Raktavaha Srotas, with emphasis on diagnostic complexity, multidisciplinary management, and outcome variability.
2. Facilitate guided reflection sessions using open-ended questions to help scholars process their clinical involvement.
3. Provide Ayurvedic and modern references highlighting expected standards of care, diagnostic accuracy, and evidence-based practices.
4. Encourage identification and discussion of errors, uncertainties, or areas of difficulty encountered in past clinical cases.
5. Support learners in drafting self-directed learning objectives to address their identified gaps.

Scholar Activity:

1. Clinical Encounter Recollection: Recall and document a recent or previously observed clinical case (or Case summaries provided by the Teacher) involving an autoimmune disorder such as Pemphigus vulgaris or foliaceus, Bullous pemphigoid, Systemic Lupus Erythematosus (SLE), Scleroderma or Systemic sclerosis, Sjögren's syndrome, Temporal arteritis, Inflammatory vasculitis, Dermatomyositis. Outline the key elements of the case such as Presenting symptoms, clinical findings, diagnostic process, Ayurvedic and biomedical assessment, Treatment protocol and follow-up plan, Observed clinical response or patient feedback.

2. Ayurvedic Analysis of the Case: Reflect on the Ayurvedic understanding applied during the encounter such as, Assessment of Dosha-Dushya-Srotas involvement, Formulation of Samprapti and Roga Avastha, Justification for selected Aushadha, Kriyakrama, Rasayana, and Pathya-Apathya.

Identify gaps in classical knowledge, Samhita references, or interpretation of Nidana Panchaka.

3. Biomedical Clinical Integration: Evaluate how effectively biomedical investigations and diagnosis were understood or incorporated:

- a. Correlation with autoimmune markers (e.g., ANA, dsDNA, ESR)
- b. Understanding of organ-specific involvement (e.g., renal, skin, joints)
- c. Knowledge of standard modern treatment protocols and prognosis

Recognize any deficiencies in correlating Ayurvedic and modern frameworks for autoimmune pathology.

4. Critical Incident Reflection:

- a. Highlight specific moments during the case where Diagnostic uncertainty was present/ Therapeutic confusion arose/

Communication with patient or team was inadequate/ Patient outcomes deviated from expectations

- b. Reflect on personal actions, thought processes, and clinical judgments during those moments.

5. Self-Assessment of Competency:

- a. Evaluate personal proficiency in the following domains:

- Clinical reasoning based on Ayurvedic principles
- Use of Daivavyapashraya and Satvavajaya where appropriate
- Laboratory interpretation and disease monitoring
- Communication with patients experiencing chronic or relapsing illness
- Documentation and protocol formulation

- b. Identify specific gaps in knowledge or confidence.

6. Targeted Learning Goal Formulation: a. Based on the reflection, draft personalized learning objectives, such as: - Enhancing knowledge of Rasayana application in autoimmune skin conditions - Mastering communication skills with patients dealing with relapsing diseases b. Define methods to address these goals through reading, mentorship, clinical observation, or simulated practice. 7. Reflective Journal Submission: Prepare a structured reflection document containing Brief description of the selected case, Ayurvedic and biomedical analysis, Identified gaps in knowledge, application, or behavior, Actionable strategies to overcome these gaps, Timeline for achieving improvements, Emotional and intellectual reflections on the learning process. 8. Peer Review and Group Dialogue: Participate in small group discussion to Share key insights from individual reflections, Learn from the experiences and gaps of peers, Receive feedback and alternate perspectives on case handling. (Use feedback to further refine learning objectives). 9. Continued Reflective Practice: Maintain a reflection log for future clinical encounters involving autoimmune conditions. Seek continued mentoring to support progression in clinical decision-making and patient care delivery.	
Modular Assessment	
Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 75 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome-Based Assessment: 03 credits x 06 hours x 75 marks Practical Learning Outcome Assessment: Application of Ayurvedic Principles in Diagnosis and Management of Tvak Vikara. [40 marks x 4 hour] Station 1: Identification of Tvak Roga (30 minutes) Activity: Scholars will be shown 5 images/videos of different Tvak Roga and asked to identify the disease name (Ayurveda and modern correlation), mention its Dosha dominance, and specify one unique lakshana. Assessment Method: OSPE (Objective Structured Practical Examination) Rubrics (Total: 10 marks): Criteria includes Identification (5x1=5 marks), Dosha dominance (5x0.5=2.5 marks) and Key lakshana (5x0.5=2.5 marks) Station 2: Clinical Examination & Diagnosis (90 minutes) Activity: One real or standardized patient with a Tvak Roga will be provided to each scholar. They will be instructed to conduct Roga-Rogi pariksha, note symptoms, assess Samprapti ghataka, and present probable diagnosis (Ayurvedic & modern). Assessment Method: Mini-CEX (Mini Clinical Evaluation Exercise)/ Viva with examiner (observation checklist)	6

Rubrics (Total: 9 marks): Criteria includes Rogi pariksha (2 marks), Roga Pariksha (2 marks), Samprapti ghataka (3 marks), Differential Diagnosis and Final diagnosis (2 marks) Station 3: Samana or Shodhana Decision Making (90 minutes) Activity: 3 case scenarios/ real cases of different Tvak roga will be presented. Each student should suggest, whether Shodhana or Samana is appropriate in each case and justify with treatment plan (Antaparimarjana, Bahiparimarjana chikitsa, Aushadha and Pathya-apathya). Assessment Method: Written response or oral presentation Rubrics (Total: 12 marks): Criteria includes Choice of Chikitsa (3x1=3marks), appropriate medicine selection (3x1=3marks), justification (3x1=3marks), Pathya-apathya (3x1=3marks) Station 4: Pharmacological knowledge of key medicines (30 minutes) Activity: From a list of any five commonly used drugs in Tvak Roga, choose any three, and mention the ingredients, indications, Anupana, and mode of administration. Assessment Method: Oral or written response Rubrics (Total: 9 marks): Criteria includes Ingredients (3x1 =3 marks), Indications (3 x1=3 marks), Anupana if any and Usage (3x1=3 marks) Structured viva (15 marks x 1 hour) Experiential Learning Outcome Assessment: [20 marks x 1 hour] Eg: Simulate a patient counselling session, to explain the patient on the importance of Pathya-apathya, Dinacharya, Ritucharya, Achara Rasayana and Daivavyapasraya chikitsa, in accordance with their clinical condition. Assessment Method: Checklist evaluation (15 marks) – Criteria includes Empathetic communication (5 marks), Content and clarity in explanation (10 marks) and Ensuring patient understanding/ compliance (5 marks). Or Any practical in converted form can be taken for assessment. (40 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (35 marks)	
Semester No : 5	
Module 12 : Mamsa Pradoshaja vikara	
Module Learning Objectives (At the end of the module, the students should be able to) 1. Describe and Diagnose Mamsapradoshajavikaras.	

2. Conduct detailed clinical examination of the patient with MamsapradoshajaVikara.
3. Advice, Analyse and interpret appropriate investigations in MamsapradoshajaVikara.
4. Provide awareness on prevention of malignant disorders.
5. Plan, Execute and analyze patient care in Mamsapradoshajavikaras adhered to the principles of Samana, Sodhana, Panchakarma, Rasayana chikitsa and Pathyapathya

Unit 1 Galaganda, Gandamala and Apachi

- Galaganda, Gandamala, Apachi
- Goitre, Lymphadenitis.
- Investigations – Blood tests [TSH, T3, T4, Thyroid antibodies test], Imaging [CT scans, USG, Nuclear medicine tests – Thyroid scan, Radioactive Iodine uptake test], FNAC, Biopsy

References: 2,3,4,9,10,13,15,16,41,42

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experienti al Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teaching Learning Methods
CO1	Differentiate Mamsapradoshaja Vikaras— Galaganda, Gandamala, and Apachi—by analysing their presentation through Nidana Panchaka, evaluating their Sadyasadyata, and outlining appropriate principles of Chikitsa.	1	Lecture	CAN	Know	L&PPT ,FC,L&GD ,DIS
CO1	Describe a comprehensive understanding of goitre and lymphadenitis by explaining their aetiopathogenesis, classification, clinical manifestations, examination findings, and appropriate diagnostic investigations.	1	Lecture	CC	Know	L&PPT ,DIS,L&G D,FC

CO1,CO5	Discuss an integrated treatment approach by applying the principles of Shamana, Shodhana, Panchakarma, Rasayana Chikitsa, and Pathya-Apathya in relation to the types and stages of goitre and lymphadenitis.	1	Lecture	CAP	Know	DIS,L&G D,FC,L&P PT ,D- BED
CO1	Demonstrate clinical examination and recommend appropriate investigations for diagnosing goitre.	1	Practical12. 1	PSY-GUD	Shows-how	CD,D- BED,CBL
CO1	Formulate a differential diagnosis of goitre, determine its stage and prognosis by interpreting investigation findings, and explain the case to peers.	1	Practical12. 2	PSY-GUD	Shows-how	LRI,CD,C BL,PL
CO5	Develop Dosha Pratyanika and Vyadhi Pratyanika Chikitsa plans based on Roga Avastha and Rogi Bala in the management of Galaganda.	1	Experiential - Learning12. 1	PSY-MEC	Does	PER,CBL, TBL

CO1	Justify the rationale for the selection of Oushadha and Kriyakramas with respect to Avastha Bheda of Roga and Rogi during the treatment of Galaganda.	1	Experiential - Learning12.2	AFT-VAL	Does	CBL,PER
CO1	Elicit case history, demonstrate clinical examination, and recommend appropriate investigations for diagnosing lymphadenitis.	1	Practical12.3	PSY-GUD	Shows-how	D-BED,CBL,CD
CO1	Formulate a differential diagnosis of lymphadenitis and determine its stage and prognosis by interpreting investigation reports, and explain the findings to peers.	1	Practical12.4	PSY-GUD	Shows-how	CD,PL,CBL,LRI
CO5	Generate Dosha Pratyanka and Vyadhi Pratyanka Chikitsa plans based on Roga Avastha and Rogi Bala in the management of Apachi.	1	Experiential - Learning12.3	CS	Does	TBL,PER,CBL
CO5	Justify the rationale for selecting Oushadha and Kriyakramas with respect to Avastha Bheda of Roga and Rogi during the treatment of Apachi.	1	Experiential -	CE	Does	PER,CBL

			Learning12.4			
CO5	Evaluate the effect of various medicines and treatment procedures for Galaganda, Gandamala, and Apachi based on evidence from published research articles.	2	Experiential - Learning12.5	CE	Does	TBL,DIS,LS

Unit 2 Granthi, Arbuda and Neoplasm

- Granthi and its types.
- Arbuda and its types.
- Epidemiology, Aetiopathogenesis and Classification of Neoplastic disorders (benign neoplasms, in situ neoplasms, malignant neoplasms, and neoplasms of uncertain or unknown behavior).
- Prognosis based on Clinical and Pathologic staging [tumor, node, and metastasis (TNM) classification] of tumors.
- Tumor Markers: Hormones [human chorionic gonadotropin (HCG), Calcitonin, Catecholamines], Oncofetal Antigens [AFP, Carcinoembryonic antigen], Enzymes [Prostatic acid phosphates, Neuron Specific enolase, Lactate dehydrogenase], Tumor associated proteins [PSA, Monoclonal Immunoglobulin, CA-125, CA 19.9, CD 30, CD25]
- Screening of Cancers: Mammography, MRI, PAP test, HPV test, Sigmoidoscopy, Colonoscopy, FOBT, FIT, CT scan, Transvaginal Ultrasound, CA-125, PSA.
- Management of Neoplastic disorders Contemporary methods – Ablation, Embolisation, Chemotherapy, Radiation, Hormonal therapy, Immunotherapy, Management of complications, Supportive care and Palliative care. Ayurvedic methods - Prophylactic [Primary, secondary and tertiary prevention], Adjuvant / Co-therapy along with Chemotherapy and radiation, Post-surgical care for symptoms like nausea, vomiting, sore throat, constipation , belching etc., Curative, Palliative and supportive treatment to improve Quality of life. Nutritional care in Ayurveda.

References: 2,3,4,9,10,15,16,38,40,41,42,44,45

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods

CO1	Differentiate Granthi based on Nidana Panchaka and Sadyasadyata. Differentiate Arbuda Roga based on Nidana Panchaka and Sadyasadyata, with emphasis on diagnostic clarity and prognostic evaluation.	2	Lecture	CAN	Knows-how	DIS,L&PP T ,FC,L&GD
CO1	Summarise the epidemiology, aetiopathogenesis, and classification of neoplastic disorders, and describe contemporary principles of management for benign neoplasms, in situ neoplasms, malignant neoplasms, and neoplasms of uncertain or unknown behaviour.	1	Lecture	CAP	Knows-how	DIS,FC,L &GD,L&P PT
CO5	Prepare a treatment protocol adhering to the principles of Daivavyapasraya, Yuktivyapasraya (including Shamana, Shodhana, Panchakarma, Rasayana Chikitsa, and Pathya-Apathya) and Satvavajaya Chikitsa with respect to the types and stages of Granthi and Arbuda.	1	Lecture	CAN	Knows-how	FC,L&GD, D- BED,DIS, L&PPT
CO1	Categorise the stage and ascertain the prognosis of Granthi (tumours) based on clinical and pathological staging using the TNM classification system.	1	Practical12. 5	PSY-MEC	Shows-how	PER
CO1	Distinguish various tumour markers and investigations in the identification of malignant lesions.	3	Practical12. 6	PSY-MEC	Shows-how	PT

CO1	Perform Roga-Rogi Pariksha and recommend appropriate investigations to differentiate and diagnose Granthi and Arbuda.	3	Practical12.7	PSY-GUD	Shows-how	D-BED,CD,CBL,DIS
CO1	Analyse and interpret investigation findings to ascertain the diagnosis and Sadyasadyata (prognosis) of Granthi.	3	Practical12.8	PSY-GUD	Shows-how	LRI,CD,CBL
CO1,CO5	Develop a treatment protocol for Granthi Roga based on the clinical assessment of Roga Avastha and Rogi Bala.	1	Experiential - Learning12.6	CE	Does	TBL,PER,CBL
CO1,CO5	Diagnose, report and manage any adverse/unexpected outcomes or Asadhya lakshanas in the course of treatment of a case of Arbuda.	1	Experiential - Learning12.7	PSY-ADT	Does	CD,CBL,DIS
CO5	Justify the rationale for the selection of Ayurvedic drugs and procedures with respect to the Avastha Bheda of Granthi and Rogibala.	1	Experiential - Learning12.8	CE	Does	CBL,PER

CO2,CO5	Critically appraise the effect of various Ayurvedic medicines and treatment procedures for Granthi Roga based on evidence from published research articles.	1	Experiential - Learning12.9	CS	Does	JC,DIS,TBL,LS
CO5	Conduct awareness camps for the primary prevention of malignant disorders in alignment with the latest prevention guidelines.	4	Experiential - Learning12.10	PSY-ORG	Does	TBL
CO5	Communicate effectively with patients, relatives, and other stakeholders regarding the clinical condition, prognosis, and scope of management in malignancy.	1	Experiential - Learning12.11	AFT-VAL	Does	CBL,RP

Unit 3 Arbuda – Carcinoma

- Adenocarcinoma
- Basal Cell Carcinoma
- Squamous cell Carcinoma
- Transitional cell carcinoma

References: 15,16,41,44

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods

CO1	Differentiate Carcinoma based on Epidemiology, Aetiopathogenesis, clinical features, prognosis and complications.	1	Lecture	CAN	Knows-how	FC,DIS,L &GD,L&P PT
CO1	Apply Ayurvedic principles of diagnosis and management in Carcinoma.	1	Lecture	CAN	Knows-how	L&PPT ,L&GD,FC ,DIS
CO1	Elicit case history, demonstrate clinical examination, and recommend appropriate investigations for diagnosing Carcinoma.	2	Practical12. 9	PSY-MEC	Shows-how	D- BED,CD, CBL
CO1	Perform differential diagnosis of Carcinoma and determine its stage and prognosis by interpreting relevant investigations and communicating findings with peers.	1	Practical12. 10	PSY-MEC	Shows-how	PL,CD,CB L,LRI
CO5	Integrate Ayurvedic principles of diagnosis based on Rogarogi Pariksha and elicit the Sadyasadyata (prognosis) in cases of Carcinoma.	1	Practical12. 11	PSY-ADT	Shows-how	CBL,CD
CO5	Plan and recommend appropriate Ayurvedic management—including prophylactic, curative, co-therapy, supportive therapy, palliative therapy, and nutritional care—for cases of Carcinoma,	2	Experiential - Learning12. 12	CS	Does	CBL,PER, TBL

	considering Roga Avastha and Rogi Bala, while adhering to principles of clinical ethics.					
CO5	Justify the rationale for selecting appropriate Upakrama, Oushadha, Kriyakrama, and Pathyapathya in relation to the stage of disease (Avastha Bheda) and patient strength (Rogibala) in Arbuda (Carcinoma).	2	Experiential - Learning12.13	CE	Does	CBL,PER
CO4,CO6	Interpret the effect of Ayurvedic treatment protocols in Carcinoma cases published in indexed journals through critical review and peer-level academic exchange.	2	Experiential - Learning12.14	CS	Does	TBL,LS,DIS

Unit 4 Arbuda – Sarcoma

- Osteosarcoma
- Chondrosarcoma
- Rhabdomyosarcoma/ Leiomyosarcoma

References: 16,41,44

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods

CO1,CO2	Differentiate types of Sarcoma based on their epidemiology, aetiopathogenesis, clinical features, prognosis, and complications.	1	Lecture	CAN	Knows-how	L&GD,L&PPT,DIS,FC
CO1,CO5	Apply Ayurvedic principles of diagnosis and management in cases of Sarcoma.	1	Lecture	CAN	Knows-how	DIS,L&PPT,FC,D-BED,L&GD
CO1,CO2	Elicit case history, demonstrate clinical examination, and recommend appropriate investigations for diagnosing Sarcoma.	2	Practical12.12	PSY-MEC	Shows-how	CBL,CD,D-BED
CO1,CO4,CO5	Differentially diagnose Sarcoma and its stage, and interpret prognosis using clinical findings and investigations, while effectively communicating the conclusions with peers/ scholars.	1	Practical12.13	PSY-MEC	Shows-how	LRI,CBL,PL,CD
CO1,CO5	Integrate Ayurvedic principles of diagnosis through Rogarogi Pariksha and elicit the prognosis (Sadyasadyata) in a case of Sarcoma.	1	Practical12.14	PSY-GUD	Shows-how	CD,CBL
CO1,CO5	Plan and recommend appropriate Ayurvedic management — including prophylactic, curative, co-therapy, supportive, palliative, and nutritional care — for a case of Sarcoma, considering roga avastha, rogibala, and the principles of clinical ethics.	2	Experiential - Learning12.15	PSY-ADT	Does	CBL,PER,TBL

CO1,CO5	Justify the selection of Ayurvedic treatment principles, medicines, and procedures for Sarcoma based on avastha bheda (stage of disease) and rogibala (patient strength).	2	Experiential - Learning12.16	AFT-VAL	Does	PER,CBL
CO6	Identify the outcomes of Ayurvedic treatment protocols in Sarcoma cases published in indexed journals through peer-level academic discussion.	2	Experiential - Learning12.17	CS	Does	LS,JC,TB L,DIS

Unit 5 Arbuda – Rakta Arbuda (Blood Cancer)

- Raktakarkah (Leukemia)
- Lasikarka (Lymphoma)
- Myeloma
- Myelodysplastic syndromes (MDS)
- Myeloproliferative neoplasms (MPNs).

References: 16,40,41,44

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1	Differentiate types of Blood Cancers based on their epidemiology, aetiopathogenesis, clinical features, prognosis, and complications.	1	Lecture	CAN	Knows-how	L&PPT ,DIS,FC,L &GD

CO1,CO5	Apply Ayurvedic principles of diagnosis and management in cases of Blood Cancer (<i>Arbuda</i>).	1	Lecture	CAN	Knows-how	DIS,FC,L &GD,L&P PT ,D- BED
CO1,CO2	Elicit case history, demonstrate clinical examination, and recommend appropriate investigations for the diagnosis of Blood Cancer.	2	Practical12. 15	PSY-MEC	Shows-how	CBL,CD, D-BED
CO1,CO2	Perform differential diagnosis, staging, and prognosis of Blood Cancer by interpreting clinical findings and investigations, and communicate these insights effectively with peers /colleagues.	1	Practical12. 16	PSY-GUD	Shows-how	LRI,PL,C D,CBL
CO1,CO5	Demonstrate Ayurvedic diagnostic principles through Rogarogi Pariksha and elicit the prognosis (Sadyasadhyata) in a case of Blood Cancer.	1	Practical12. 17	PSY-GUD	Shows-how	CD,CBL
CO1,CO5	Plan and recommend appropriate Ayurvedic management — including prophylactic, curative, co-therapy, supportive, palliative, and nutritional care — for a case of Blood Cancer, in accordance with the principles of clinical ethics and considering roga avastha and rogibala.	2	Experiential - Learning12. 18	PSY-ADT	Does	TBL,CBL, L&PPT ,PER

CO5	Justify the selection of Ayurvedic treatment principles, medicines, and procedures for Blood Cancer, considering avastha bheda and rogibala.	2	Experiential - Learning12.19	AFT-VAL	Does	CBL,PER
CO6	Identify the outcomes of Ayurvedic treatment protocols in blood cancer cases published in indexed journals, and share insights through peer-level academic discussions.	2	Experiential - Learning12.20	CS	Does	TBL,JC,L S,DIS

Unit 6 Brain and Spinal cord Cancers

- Glioma (Astrocytoma, Brain stem glioma, Optic glioma)
- Chordoma
- Meningioma
- Germ cell tumors

References: 16,40,41,44

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1	Differentiate the <i>Arbuda</i> of the Brain and Spinal Cord based on epidemiology, aetio-pathogenesis, clinical presentation, prognosis, and possible complications.	1	Lecture	CAN	Knows-how	DIS,FC,L &PPT ,L&GD
CO1	Apply Ayurvedic principles of diagnosis and management in cases of Brain and Spinal Cord cancer (Arbuda).	1	Lecture	CAP	Knows-how	FC,L&GD, L&PPT ,DIS

CO1,CO2	Elicit case history, perform clinical examination, and recommend appropriate investigations for the diagnosis of Arbuda of the Brain and Spinal Cord.	2	Practical12.18	PSY-MEC	Shows-how	CD,CBL,D-BED
CO1,CO2	demonstrate the differential diagnosis, staging, and prognosis of Arbuda of the Brain and Spinal Cord by interpreting clinical and diagnostic investigations, and communicate findings effectively with peers and colleagues.	1	Practical12.19	PSY-MEC	Shows-how	PL,CBL,C D,LRI
CO1,CO4,CO5	Apply Ayurvedic principles of diagnosis through Rogarogi Pariksha and elicit the prognosis (Sadyasadyata) in cases of Arbuda of the Brain and Spinal Cord.	1	Practical12.20	PSY-MEC	Shows-how	CBL,CD
CO1,CO5	Plan and recommend appropriate Ayurvedic management strategies — including prophylactic, curative, co-therapy, supportive, palliative, and nutritional care — for Arbuda of the Brain and Spinal Cord, in alignment with clinical ethics and considering the disease stage (roga avastha) and patient strength (rogibala).	2	Experiential - Learning12.21	PSY-ADT	Does	PER,CBL,TBL
CO1,CO5	Justify the selection of treatment principles, medicines, and procedures in Ayurvedic management of tumours of the Brain and Spinal Cord, considering avastha bheda and rogibala (patient strength).	2	Experiential - Learning12.22	AFT-VAL	Does	PER,CBL
CO3	Identify the outcomes of Ayurvedic treatment protocols for Brain and Spinal Cord cancers,	2	Experiential -	CS	Does	DIS,LS,TBL,JC

	based on findings from indexed journal articles, through collaborative peer discussions.		Learning12.23			
Practical Training Activity						
Practical Training 12.1 Clinical examination and diagnostic investigations in goitre						
Teacher Activity: Instruct scholars to elicit clinical history using Nidana Panchaka and construct the Samprapti of goitre. Demonstrate clinical examination techniques specific to thyroid assessment. Discuss the selection, indications, and interpretation of investigations such as thyroid function tests, ultrasound, and FNAC. Provide structured feedback during case discussions. Scholar Activity: Elicit case history and construct Samprapti based on Ayurvedic principles. Perform clinical examination and identify relevant signs of goitre. Recommend and justify diagnostic investigations appropriate to the case. Interpret investigation reports in correlation with clinical findings and present for peer review.						
Practical Training 12.2 Differential diagnosis and prognosis of goitre						
Teacher Activity: 1. Guide scholars in eliciting clinical history using Nidana Panchaka and constructing the Samprapti of goitre. 2. Supervise clinical examination and facilitate discussion of relevant signs. 3. Explain the selection and relevance of investigations such as thyroid profile, ultrasound, and FNAC. 4. Moderate case presentation sessions and provide academic feedback. Scholar Activity:						

1. Elicit clinical history and construct Samprapti for the given case of goitre.
2. Perform clinical examination and identify diagnostic features.
3. Recommend and interpret appropriate investigations to derive a differential diagnosis.
4. Determine the stage and prognosis of goitre based on clinical and diagnostic inputs.
5. Present the case and engage in academic discussion during a seminar.
6. Attend a related CME/seminar/symposium on thyroid disorders for supplementary learning.

Practical Training 12.3 Diagnostic approach to lymphadenitis cases.

Teacher Activity:

1. Demonstrate history taking using Nidana Panchaka in a lymphadenitis case.
2. Guide scholars through clinical examination with emphasis on diagnostic signs
3. Discuss and explain the selection of appropriate investigations for confirmation of diagnosis.

Scholar Activity:

1. Elicit and document the case history of lymphadenitis using Ayurvedic principles.
2. Perform clinical examination and record relevant findings.
3. Recommend appropriate investigations and justify their diagnostic value in peer discussions.

Practical Training 12.4 Differential diagnosis, staging and prognostic assessment of lymphadenitis

Teacher Activity:

1. Provide clinical case data or guide scholars to identify lymphadenitis cases in OPD/IPD.
2. Explain interpretation of investigation reports (e.g., CT, biopsy) for differential diagnosis and staging.
3. Facilitate group discussion and review peer presentations

Scholar Activity:

1. Analyse clinical signs and interpret investigation findings in lymphadenitis cases.
2. Formulate a differential diagnosis, assess the stage and prognosis.

3. Present findings in peer discussions and submit conclusions for faculty feedback.

Practical Training 12.5 Prognostic assessment using TNM staging in Granthi

Teacher Activity:

1. Present a case-based demonstration using PowerPoint or video, highlighting TNM classification.
2. Explain tumour stage categorisation and its correlation with clinical outcomes in Granthi.
3. Facilitate discussion on the use of TNM staging in Ayurvedic and integrative settings.

Scholar Activity:

1. Observe and interpret the TNM staging demonstration.
2. Categorise the tumour stage in the given case based on clinical and pathological data.
3. Discuss the prognostic implications and prepare a brief report or presentation on the staging outcome.

Practical Training 12.6 Interpretation of tumour markers and diagnostic investigations in malignancy

Teacher Activity:

1. Introduce key tumour markers and their diagnostic role in malignant conditions.
2. Explain associated investigations and their interpretation in clinical settings.
3. Facilitate group discussions and assess scholarly presentations

Scholar Activity:

1. Participate in group assignments on tumour markers or investigations.
2. Prepare a structured presentation on the clinical relevance, interpretation, and utility of the assigned marker.
3. Present findings to peers and engage in academic discussions for collective learning

Practical Training 12.7 Differential diagnosis of Granthi and Arbuda

Teacher Activities

1. Present a patient/case
2. Demonstrate Roga–Rogi Pariksha and local examination.
3. Show relevant investigation reports and explain the differentiating points.
4. Guide scholars during hands-on practice and discussion.

Scholar Activities

1. Perform history taking and clinical examination.
2. Record findings in the case proforma.
3. Identify features of Granthi vs Arbuda.
4. Suggest appropriate investigations and present reasoning.

Practical Training 12.8 Diagnostic and prognostic assessment in Granthi

Teacher Activities

1. Present a case of Granthi with history, examination findings, and investigation reports.
2. Demonstrate a systematic approach to confirming the diagnosis using clinical features and modern investigations.
3. Explain how to apply Ayurvedic diagnostic parameters (Dosha, Dushya, Srotas involvement) along with modern data.
4. Highlight the prognostic criteria (Sadyasadyata) relevant to Granthi.
5. Guide scholars through case-based discussions on integrating diagnosis and prognosis

Scholar Activities

1. Review and interpret the investigation reports of the case.
2. Arrive at the final diagnosis of Granthi by integrating clinical and laboratory/imaging findings.
3. Apply Ayurvedic principles to assess Sadyasadyata (prognosis).
4. Prepare a short presentation/report justifying both diagnosis and prognosis, and present in peer discussion.

Practical Training 12.9 Case-based diagnostic approach for Carcinoma

Teacher Activities

1. Select two real or simulated Carcinoma cases from OPD/IPD for academic demonstration.
2. Demonstrate clinical history-taking and systematic examination techniques.
3. Guide interpretation of clinical signs and symptoms relevant to Carcinoma
4. Explain the rationale for selecting investigations such as imaging, biopsy, and blood tests.
5. Evaluate scholars' clinical reasoning through interactive discussion and documentation review.

Scholar Activities

1. Observe teacher-led case demonstrations and participate in history-taking and examination.
2. Record case history, clinical findings, and recommended investigations in the logbook
3. Discuss clinical reasoning for diagnosis and investigation choices with peers or mentors.
4. Present their case analysis and receive feedback on accuracy and clinical integration.

Practical Training 12.10 Diagnostic reasoning and staging in Carcinoma**Teacher Activities**

1. Present clinical scenarios, diagnostic images, and case summaries related to Carcinoma
2. Guide interpretation of investigations such as imaging, biopsy, and laboratory data
3. Facilitate academic discussions on diagnosis, staging, and prognosis.
4. Arrange observerships in oncology units or multidisciplinary departments

Scholar Activities

1. Observe Carcinoma cases through video demonstrations, case-based learning, or clinical postings.
2. Analyse clinical data and interpret relevant investigations to differentiate Carcinoma from similar conditions.
3. Determine disease stage and assess prognosis.
4. Discuss diagnostic reasoning, staging, and prognostic conclusions with peers in group forums.
5. Participate in observerships in oncology wards or cancer clinics for practical exposure.

Practical Training 12.11 Ayurvedic diagnostic and prognostic assessment in Carcinoma

Teacher Activities

1. Present Carcinoma cases through videos, case simulations, or supervised OPD/IPD observation
2. Demonstrate application of Rogarogi Pariksha for disease and patient assessment.
3. Guide interpretation of Sadyasadyata and its role in clinical decision-making
4. Facilitate development of supportive Ayurvedic care plans for symptom relief.
5. Arrange observerships in oncology departments or cancer care centres for integrated exposure.

Scholar Activities

1. Observe Carcinoma cases through multimedia tools or clinical visits.
2. Apply Rogarogi Pariksha to assess disease and patient factors.
3. Interpret prognosis (Sadyasadyata) using classical Ayurvedic principles.
4. Plan a supportive management strategy for symptomatic care and quality of life improvement.
5. Present and discuss the approach with peers in academic discussions
6. Implement the plan under supervision, where applicable, and document findings in clinical logbooks.
7. Participate in observerships for real-time exposure to cancer care practices

Practical Training 12.12 Diagnostic evaluation of Sarcoma**Teacher Activities**

1. Facilitate case-based learning using video demonstrations, clinical scenarios, or OPD/IPD exposure
2. Guide scholars in structured history taking and clinical examination methods
3. Discuss the selection and interpretation of investigations relevant to Sarcoma diagnosis.
4. Coordinate observerships in oncology clinics or IPD/OPD units for practical exposure.

Scholar Activities

1. Observe Sarcoma cases through videos, simulations, or clinical postings.
2. Elicit case history and correlate findings with Ayurvedic diagnostic principles.
3. Perform and demonstrate a complete clinical examination with a diagnostic focus.
4. Recommend appropriate investigations (e.g., imaging, biopsy, haematological tests)
5. Interpret diagnostic results and discuss their clinical implications with peers.
6. Participate in observerships in oncology or general medicine departments for integrated learning

Practical Training 12.13 Clinical approach to Sarcoma – Diagnosis, Staging, and Prognostic interpretation

Teacher Activities:

1. Facilitate clinical case discussions through recorded videos, simulated case scenarios, or live OPD/IPD observations.
2. Conduct interactive sessions on the differential diagnosis of soft tissue and bone sarcomas.
3. Guide scholars in identifying key clinical signs and correlating them with staging systems (e.g., TNM, FNCLCC).
4. Explain the interpretation of diagnostic tools such as imaging (MRI, CT), biopsy techniques, and tumour markers.
5. Provide feedback during presentations and peer teaching sessions.
6. Coordinate observership postings in oncology wards or modern medicine departments to enhance real-time clinical exposure.

Scholar Activities:

1. Observe Sarcoma cases in videos, simulated scenarios, or hospital settings.
2. Elicit and record relevant clinical findings and engage in discussions to develop differential diagnoses.
3. Identify, justify, and interpret appropriate investigations, including radiological and pathological tests.
4. Present findings and differential diagnosis to peers, integrating investigation results and clinical parameters.
5. Analyse and stage Sarcoma cases and correlate staging with prognostic outcomes.
6. Communicate their conclusions effectively during discussions and peer teaching exercises.
7. Participate in observerships in oncology or general medicine wards to reinforce learning through practical exposure.

Practical Training 12.14 Ayurvedic prognostic assessment of Sarcoma

Teacher Activities

1. Present Sarcoma cases via video content, case scenarios, or OPD/IPD exposure
2. Demonstrate Rogarogi Pariksha with emphasis on Roga Bala and Rogi Bala assessment.
3. Facilitate interpretation of Sadyasadyata and clinical referral decision-making.
4. Guide preparation of referral documentation and review protocols
5. Coordinate observerships in modern oncology or cancer care units

Scholar Activities

1. Observe clinical cases of Sarcoma through structured media or real-time exposure.

2. Perform Ayurvedic history-taking and clinical examination to assess disease and patient strength.
3. Interpret prognosis (Sadyasadyata) based on diagnostic evaluation.
4. Identify referral needs and prepare a formal referral note as per institutional protocol.
5. Participate in observerships in modern oncology settings for an integrative understanding

Practical Training 12.15 Ayurvedic clinical diagnosis of Blood cancer

Teacher Activities

1. Guide scholars in history taking using Nidana Panchaka
2. Demonstrate clinical examination techniques relevant to Blood Cancer diagnosis.
3. Facilitate discussions on constructing Samprapti and its clinical relevance.
4. Explain rationale for investigation selection based on clinical and Ayurvedic principles.
5. Interpret diagnostic findings collaboratively with scholars.

Scholar Activities

1. Elicit clinical history systematically using the Nidana Panchaka framework.
2. Perform and demonstrate relevant clinical examination skills.
3. Construct Ayurvedic pathogenesis (Samprapti) based on history and findings.
4. Recommend appropriate investigations (e.g., haematological profiles, imaging, bone marrow analysis)
5. Interpret investigation results about both modern diagnosis and Ayurvedic understanding.
6. Engage in discussions with peers to consolidate clinical reasoning

Practical Training 12.16 Diagnostic differentiation and staging of Blood cancer

Teacher Activities

1. Provide access to Blood Cancer case scenarios, video content, and OPD/IPD observations.
2. Facilitate discussion on differential diagnosis, staging methods, and interpretation of clinical findings.
3. Guide investigation selection and clinical reasoning exercises
4. Arrange postings in clinical laboratories or oncology wards for practical exposure.

Scholar Activities

1. Observe Blood Cancer cases via clinical postings, video modules, or simulated scenarios.
2. Elicit clinical findings and discuss their diagnostic relevance.
3. Identify and recommend suitable investigations (e.g., haematological tests, imaging, bone marrow analysis)
4. Interpret investigation reports to differentiate Blood Cancer from similar conditions.
5. Assess staging and prognosis based on findings.
6. Communicate insights clearly during academic discussions and peer sessions.
7. Participate in observerships in diagnostic and oncology units

Practical Training 12.17 Prognostic evaluation and referral decision-making in blood cancer cases.

Teacher Activities

1. Facilitate observation of Blood Cancer cases through video modules, case scenarios, or clinical postings.
2. Demonstrate Rogarogi Pariksha methods and guide history-taking practice.
3. Guide interpreting prognosis and ethical referral practices.
4. Organise observerships in Medicine or Oncology units of modern hospitals

Scholar Activities

1. Observe Blood Cancer cases in various formats (video, OPD/IPD, simulations)
2. Conduct Ayurvedic clinical examination and elicit history focusing on Roga Bala and Rogi Bala.
3. Interpret findings to determine prognosis (Sadyasadyata)
4. Identify cases that require referral and prepare referral documentation.
5. Participate in discussions on clinical judgment and ethical practice.
6. Attend observerships for broader exposure to clinical oncology

Practical Training 12.18 Clinical assessment and investigation planning of Arbuda of brain and Spinal cord.

Teacher Activities

1. Provide access to case scenarios, clinical videos, and OPD/IPD observation opportunities.
2. Demonstrate structured history-taking and neurological examination techniques.
3. Facilitate discussions on diagnostic investigations and interpretation.
4. Coordinate observerships in modern departments for real-time exposure

Scholar Activities

1. Observe Arbuda cases through clinical postings, video modules, or simulations.
2. Elicit detailed case history and perform relevant clinical examinations.
3. Recommend appropriate diagnostic investigations (e.g., imaging, pathology)
4. Interpret investigation results and correlate with clinical findings.
5. Discuss diagnostic reasoning and decision-making with peers.
6. Participate in observerships in Medicine/Oncology units for practical learning

Practical Training 12.19 Differential diagnosis and staging of Brain and Spinal cord tumours.

Teacher Activities

1. Provide case-based scenarios and facilitate OPD/IPD observation sessions.
2. Present imaging and pathology data relevant to brain and spinal tumours
3. Organise group discussions on differential diagnosis and staging.
4. Arrange postings in clinical labs, imaging centres, or oncology wards

Scholar Activities

1. Observe Arbuda cases through video demonstrations and clinical exposure.
2. Elicit and analyse clinical signs and symptoms relevant to diagnosis.
3. Identify appropriate investigations (e.g., imaging, pathology)
4. Interpret findings to differentiate Arbuda from other conditions.
5. Assess disease stage and predict prognosis.
6. Share diagnostic reasoning and conclusions through peer discussions.
7. Participate in observerships for enhanced diagnostic understanding

Practical Training 12.20 Ayurvedic diagnostic application in cases of Brain and Spinal cord tumours.

Teacher Activities

1. Facilitate clinical observation through videos, OPD/IPD sessions, and case-based scenarios
2. Demonstrate Rogarogi Pariksha methods in neuro-oncology cases.
3. Guide discussion on Sadyasadyata and referral protocols

4. Coordinate observerships in modern medicine departments for clinical correlation.

Scholar Activities

1. Observe Arbuda cases and document clinical features.
2. Perform Rogarogi Pariksha, including assessment of Roga Bala and Rogi Bala.
3. Interpret clinical findings to determine prognosis (Sadyasadyata)
4. Identify cases needing referral and prepare appropriate referral notes.
5. Participate in discussions on clinical reasoning and decision-making.
6. Attend observerships in Medicine/Oncology units for better clinical orientation

Experiential Learning Activity

Experiential-Learning Learning 12.1: Dosha and Vyadhi-specific treatment planning in Galaganda

Teacher Activity:

1. Demonstrate history taking in Galaganda using Nidana Panchaka and explain Samprapti.
2. Guide clinical examination and discussion of staging and pathogenesis
3. Discuss the need for relevant investigations (e.g., thyroid profile, imaging) and their interpretation.

Scholar Activity:

1. Elicit and document the history and clinical findings of Galaganda.
2. Recommend and interpret investigations related to diagnosis and staging.
3. Prepare and justify a treatment plan incorporating Dosha Pratyanka and Vyadhi Pratyanka Chikitsa aligned to Roga Avastha and Rogi Bala, and present for academic discussion

Experiential-Learning Learning 12.2: Justification of Oushadha and Kriyakrama in Galaganda management

Teacher Activity:

1. Provide two clinical cases of Galaganda through IPD/OPD or structured scenarios.
2. Guide scholars in analysing Dosha, Samprapti, Roga Bala, and Rogi Bala
3. Facilitate a discussion on how to link Avastha Bheda with appropriate treatment choices.

Scholar Activity:

1. Analyse the given Galaganda cases to determine Roga and Rogi Bala.
2. Select and justify suitable Oushadha and Kriyakramas aligned with Avastha Bheda.
3. Present the proposed treatment plan to the consultant for academic discussion and feedback.

Experiential-Learning Learning 12.3: Dosha and Vyadhi-specific treatment in Apachi**Teacher Activity:**

1. Provide access to clinical cases of Apachi in OPD/IPD.
2. Guide scholars in identifying Roga Avastha and Rogi Bala
3. Supervise and review the chikitsa plans, encouraging peer discussion on rationale.

Scholar Activity:

1. Observe and document clinical features in Apachi cases.
2. Assess disease stage and patient strength.
3. Prepare a treatment plan with clear Dosha Pratyanka and Vyadhi Pratyanka components.
4. Discuss, revise, and implement the plan under supervision, and record observations for follow-up

Experiential-Learning Learning 12.4: Treatment rationale in Apachi based on Avastha Bheda.**Teacher Activity:**

1. Provide case records of Apachi with clinical and investigation details.
2. Guide scholars in assessing disease stage (Avastha Bheda) and patient strength (Rogibala)
3. Facilitate academic discussions on the rational selection of interventions

Scholar Activity:

1. Analyse the case to assess Roga and Rogi Bala.
2. Formulate an Ayurvedic treatment plan with justified selection of Oushadha and Kriyakramas.
3. Explain the rationale, probable action, and Samprapti Vighatana during an academic presentation.

4. Record observations, response to therapy, and outcome in the case file

Experiential-Learning Learning 12.5: Evidence-based evaluation of Ayurvedic interventions in Galaganda, Gandamala, Apachi

Teacher Activity:

1. Explain evidence-based research methods and appraisal techniques.
2. Guide on selecting appropriate research articles and evaluating study quality.
3. Facilitate and moderate journal club or group discussion sessions

Scholar Activity:

1. Collect and review relevant research articles (RCTs, reviews, case reports) on Galaganda, Gandamala, and Apachi.
2. Critically appraise selected studies, focusing on treatment efficacy and Ayurvedic rationale.
3. Present findings in a structured format, highlighting clinical outcomes and research limitations in an academic setting

Experiential-Learning Learning 12.6: Treatment protocol formulation for Granthi.

Teacher Activity:

1. Provide a clinical case scenario of Granthi with relevant findings and investigation reports.
2. Guide scholars to assess Samprapti, Roga Avastha, and Rogi Bala
3. Review and provide feedback on the proposed treatment protocols

Scholar Activity:

1. Evaluate the case and determine Roga Avastha and Rogi Bala.
2. Formulate an Ayurvedic treatment protocol with medicines and procedures.
3. Present the treatment plan for academic discussion and refinement

Experiential-Learning Learning 12.7: Clinical identification and management of adverse/unexpected outcomes in Arbuda care

Teacher Activities

1. Guide scholars to review complications of radiotherapy, chemotherapy, and Ayurvedic therapies
2. Organise observership visits to oncology wards or cancer hospitals for exposure to real-time cases.
3. Facilitate discussion on Arishta Lakshanas and Asadhya features as described in classical texts.
4. Supervise scholar-led discussions on complication management from an integrative perspective.

Scholar Activities

1. List common complications and adverse events associated with chemotherapy and radiotherapy.
2. Visit oncology wards or cancer hospitals under supervision to observe patients undergoing such therapies.
3. Identify and report adverse events, unexpected outcomes, or Asadhya/Arishta Lakshanas.
4. Propose an Ayurvedic management plan for the observed complications and discuss it with peers.
5. Record findings, complications, and management strategies in the academic logbook with references

Experiential-Learning Learning 12.8: Justificatory analysis of formulations and procedures in Granthi management

Teacher Activities

1. Present selected cases of Granthi via clinical demonstration, case scenarios, or video resources
2. Guide scholars in identifying Avastha Bheda and Rogibala based on clinical data
3. Supervise scholar-led treatment planning and provide structured academic feedback.
4. Facilitate peer discussions and critical reasoning sessions

Scholar Activities

1. Observe and analyse at least two Granthi cases for clinical staging and patient assessment.
2. Determine Roga Avastha and Rogibala using Ayurvedic diagnostic parameters.
3. Formulate a stage-appropriate Ayurvedic prescription including drugs and procedures.
4. Present and justify the treatment plan in academic discussions with peers
5. Revise the plan based on peer and mentor feedback, and document the final rationale in the logbook

Experiential-Learning Learning 12.9: Evidence-based review of Ayurvedic management of Granthi

Teacher Activities

1. Assign specific research topics on Ayurvedic management of Granthi Roga for literature search.
2. Guide scholars in evaluating research design, methodology, and clinical applicability
3. Facilitate structured journal club sessions and peer review discussions.
4. Provide feedback on scholarly presentation and critical thinking skills

Scholar Activities

1. Search and collect published research articles (RCTs, systematic reviews, meta-analyses, case reports) on Granthi Roga.
2. Analyse and appraise the methodology, outcomes, and Ayurvedic relevance of selected studies.
3. Prepare structured presentations highlighting strengths, limitations, and implications for clinical practice.
4. Present their critical evaluations in a journal club or research forum for academic discussion

Experiential-Learning Learning 12.10: Community-based cancer prevention

Teacher Activities

1. Identify high-risk areas suitable for community-based cancer prevention programs.
2. Guide scholars in the development of educational materials based on national/international guidelines (e.g., ICMR, WHO)
3. Supervise the planning, execution, and evaluation of awareness camps.
4. Provide structured feedback on health communication and outreach methods

Scholar Activities

1. Conduct a needs assessment and select a suitable area for awareness activity (e.g., slum, industrial zone, hospital periphery)
2. Prepare educational pamphlets/posters covering Pathya-Apathya, early signs of malignancy, and lifestyle-related risk factors.
3. Organise and implement at least one awareness camp with interactive educational sessions for the community.
4. Maintain a detailed report of the camp, including location, audience, materials used, participation, and feedback

Experiential-Learning Learning 12.11: Clinical communication in malignancy care

Teacher Activities

1. Organise scholar participation in cancer awareness camps, OPD/IPD visits, or palliative care wards
2. Demonstrate model communication with patients and caregivers, focusing on clarity, empathy, and ethical boundaries.
3. Facilitate group reflections and peer feedback sessions to improve communication techniques.
4. Introduce scholars to integrative approaches in counselling and patient education.

Scholar Activities

1. Participate in hospital-based or community cancer care programs for real-time observation and interaction.
2. Communicate with patients and their families to explain diagnosis, prognosis, complications, and treatment options.
3. Educate patients and the public on the role of integrative oncology (Ayurveda and modern medicine)
4. Reflect on the communication experience and document it in the academic logbook or group discussions

Experiential-Learning Learning 12.12: Comprehensive Ayurvedic care planning in Carcinoma

Teacher Activities

1. Present structured case scenarios and clinical demonstrations of Carcinoma
2. Guide assessment of Roga Avastha and Rogi Bala through clinical examples and diagnostic interpretation
3. Facilitate group discussions and mentor scholar-led treatment planning exercises.
4. Supervise treatment implementation (where feasible) and review documentation in logbooks.
5. Coordinate observerships in oncology or general medicine departments for integrated learning.

Scholar Activities

1. Observe Carcinoma cases via video, case-based simulation, or direct OPD/IPD exposure.
2. Analyse clinical and investigative findings to evaluate Roga Avastha and Rogi Bala.
3. Design a stage-appropriate Ayurvedic management plan integrating multiple care dimensions: prophylactic, curative, co-therapy, supportive, palliative, and nutritional.
4. Discuss the proposed plan in academic forums for feedback and refinement.
5. Implement the treatment strategy under faculty supervision when applicable and record observations in the logbook.
6. Participate in observerships for exposure to interdisciplinary oncology practices

Experiential-Learning Learning 12.13: Stage-wise therapeutic justification in Carcinoma

Teacher Activities

1. Present case-based scenarios of Arbuda (Carcinoma) through clinical videos, simulations, or OPD/IPD exposure
2. Facilitate group discussions on interpreting Avastha Bheda and Rogibala in real-life clinical settings.
3. Guide scholars in selecting and rationalising Ayurvedic therapeutic components—Upakrama, Oushadha, Kriyakrama, and Pathyapathya—based on classical references
4. Supervise scholar presentations and provide feedback on treatment planning and clinical justification.
5. Arrange observerships in modern oncology units or interdisciplinary departments for integrated learning.

Scholar Activities

1. Observe clinical cases of Carcinoma through multimedia resources or direct exposure in OPD/IPD settings.
2. Analyse case history and clinical findings to assess disease stage (Avastha Bheda) and patient strength (Rogibala)
3. Select and justify appropriate Ayurvedic interventions, including Upakrama, Oushadha, Kriyakrama, and Pathyapathya.
4. Present the treatment rationale in academic discussions with peers.
5. Implement the treatment plan under supervision, where feasible, and record the outcomes in the academic logbook.
6. Participate in interdisciplinary observership programs to broaden clinical insight

Experiential-Learning Learning 12.14: Critical review of Ayurvedic evidence in Carcinoma**Teacher Activities**

1. Facilitate journal club or research discussion forums.
2. Guide selection and appraisal of indexed literature on Ayurvedic management of Carcinoma
3. Provide training in critical review and structured presentation techniques.
4. Moderate peer discussions and feedback sessions

Scholar Activities

1. Collect indexed journal articles (RCTs, systematic reviews, meta-analyses, case reports) on Ayurvedic treatment in Carcinoma.
2. Critically review and analyse study methodology, outcomes, and clinical implications.
3. Prepare structured academic presentations based on literature findings.
4. Present and discuss insights in peer-led journal clubs or academic forums

Experiential-Learning Learning 12.15: Comprehensive care planning for Sarcoma

Teacher Activities

1. Provide structured case scenarios, video demonstrations, and clinical exposure opportunities.
2. Facilitate discussions on ethical, individualised, and evidence-informed care strategies.
3. Guide scholars in formulating stage-specific and patient-specific treatment plans
4. Arrange observerships in modern medicine or oncology units.
5. Encourage participation in interdisciplinary workshops and academic events

Scholar Activities

1. Observe Sarcoma cases through videos, simulations, or OPD/IPD postings.
2. Discuss and interpret clinical findings and investigations with peers.
3. Design an Ayurvedic management plan addressing all phases of care, tailored to roga avastha and rogibala
4. Present the plan in academic discussions for peer feedback.
5. Implement the treatment plan under supervision, if feasible, and document outcomes in the clinical logbook.
6. Participate in observerships and academic events for interdisciplinary learning

Experiential-Learning Learning 12.16: Stage-based therapeutic planning for Sarcoma.

Teacher Activities

1. Present case-based scenarios and facilitate observation through clinical videos or OPD/IPD postings
2. Demonstrate interpretation of clinical findings and diagnostic reports relevant to Sarcoma.
3. Guide discussion on the rationale for Ayurvedic treatment selection based on avastha bheda and rogibala
4. Coordinate observerships in modern medicine or oncology departments for interdisciplinary exposure.

Scholar Activities

1. Observe clinical presentations of Sarcoma through multimedia or clinical postings.
2. Interpret clinical and diagnostic findings to assess stage and patient strength.
3. Formulate and justify a stage-appropriate Ayurvedic treatment plan.
4. Present and discuss treatment strategies with peers for academic feedback.
5. Implement treatment plans under supervision where feasible and document outcomes in the academic logbook.
6. Participate in observerships for enhanced exposure to integrative cancer care

Experiential-Learning Learning 12.17: Evidence-based appraisal of Ayurvedic treatment protocols for Sarcoma Cases in indexed journals

Teacher Activities

1. Facilitate journal club or research club sessions.
2. Guide article selection and provide orientation on evidence-based review methods
3. Support presentation skills and structured academic discussions

Scholar Activities

1. Collect published articles (RCTs, systematic reviews, meta-analyses, case reports) on Ayurvedic management of Sarcoma.
2. Critically appraise study design, methodology, outcomes, and clinical implications.
3. Prepare structured presentations summarising key findings.
4. Present and discuss insights during peer-level academic sessions

Experiential-Learning Learning 12.18: Comprehensive cancer care planning for blood cancer.

Teacher Activities

1. Present case-based scenarios and guide clinical observations (video/OPD/IPD)
2. Facilitate discussions on clinical ethics, individualised care, and integrated approaches.
3. Review scholar-generated treatment plans and provide constructive feedback.
4. Coordinate observerships in modern departments or oncology units.
5. Encourage participation in academic events like workshops and seminars

Scholar Activities

1. Observe Blood Cancer cases through video modules, simulated cases, or clinical postings.
2. Analyse clinical findings and investigation reports to determine management needs.
3. Design a patient-specific Ayurvedic management plan considering roga avastha and rogibala
4. Integrate multiple care modalities (preventive, curative, supportive, etc.) into the plan.
5. Present and discuss the plan in academic forums for peer review
6. Implement the plan under supervision, where feasible, and document outcomes in the academic logbook.
7. Participate in observerships and attend interdisciplinary academic programs.

Experiential-Learning Learning 12.19: Case-based therapeutic planning for blood cancer.

Teacher Activities

1. Provide case-based scenarios and clinical observation opportunities.
2. Facilitate interpretation of clinical findings and diagnostic reports.
3. Guide peer discussions on treatment planning with reference to classical texts and ethical considerations
4. Coordinate observerships in Medicine or Oncology departments for integrated learning.

Scholar Activities

1. Observe clinical cases of blood cancer through videos, case scenarios, or OPD/IPD visits.
2. Interpret clinical findings and investigation reports for therapeutic decision-making.
3. Formulate and justify an Ayurvedic treatment plan based on avastha bheda and rogibala
4. Present treatment rationale and plan in peer discussion settings
5. Implement the proposed plan under supervision if the clinical context permits.
6. Record treatment outcomes and reflections in the academic logbook
7. Participate in interdisciplinary observerships to enhance clinical orientation

Experiential-Learning Learning 12.20: Journal-based evidence appraisal of published blood cancer cases

Teacher Activities

1. Facilitate journal club or research club sessions.
2. Guide scholars in selecting relevant high-quality research articles
3. Provide orientation on critical appraisal and structured presentation methods.
4. Moderate peer discussions on methodology and clinical outcomes

Scholar Activities

1. Collect and select published articles (RCTs, systematic reviews, meta-analyses, case reports) on Ayurvedic management of blood cancers.
2. Critically appraise study design, results, and clinical implications.
3. Prepare structured presentations highlighting key findings.
4. Present and discuss insights with peers during academic sessions

Experiential-Learning Learning 12.21: Integrated oncological care planning for Brain and Spinal Cord tumours

Teacher Activities

1. Present case-based clinical scenarios and OPD/IPD exposure
2. Guide scholarly discussions on ethical Ayurvedic oncological practice.
3. Organise seminars, workshops, or observerships in oncology units (Ayurveda/modern)
4. Provide feedback on scholar-designed management plans.

Scholar Activities

1. Observe Arbuda cases via video modules or clinical postings.
2. Interpret diagnostic data and discuss clinical implications with peers.
3. Design a comprehensive Ayurvedic management plan integrating multiple approaches (prophylactic, curative, supportive, etc.)
4. Present and justify treatment strategies in group discussions.
5. Implement treatment in suitable cases, ensuring ethical and individualised care.
6. Document outcomes systematically in the academic logbook
7. Attend relevant CME programs, workshops, or symposiums on integrative oncology

Experiential-Learning Learning 12.22: Case-based therapeutic reasoning in Brain and Spinal cord tumours.

Teacher Activities

1. Organise case-based discussions and OPD/IPD observation sessions.
2. Provide clinical scenarios or video demonstrations of Arbuda management.
3. Facilitate peer-group reflection on avastha bheda and rogibala considerations.
4. Coordinate modern hospital observerships for integrated exposure

Scholar Activities

1. Observe and document Arbuda cases from Ayurvedic and modern perspectives.
2. Analyse clinical findings and investigation reports for relevance to Ayurvedic diagnosis.
3. Formulate a personalised treatment plan considering stage-wise variation and patient strength.
4. Justify treatment choices through presentation and peer discussion.
5. Implement treatment plan (where feasible) and record outcomes in a clinical logbook

Experiential-Learning Learning 12.23: Journal-based critical appraisal of Ayurvedic treatment protocols for Brain and Spinal Cord cancers

Teacher Activities

1. Facilitate journal club/research club sessions.
2. Guide selection of high-quality articles (e.g., RCTs, meta-analyses)
3. Encourage structured academic discussion.

Scholar Activities

1. Identify and compile relevant literature on Ayurvedic treatment for neuro-oncology
2. Analyse and summarise study designs, results, and limitations.
3. Prepare and deliver evidence-based presentations.
4. Engage in peer discussions to evaluate treatment outcomes.

Modular Assessment

Assessment

Hour

Instructions: Conduct a structured modular assessment. The assessment will be for 75 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.

Outcome Based Assessment: 03 credits x 06 hours x 75 marks

Practical learning outcome assessment (Duration: 4 hrs, Marks: 40)

The instructor shall provide a real/simulated case scenario from one of the following:

Galaganda, Apachi, Granthi Roga, Carcinoma, Sarcoma, Blood Cancer, or brain and spinal cord cancers

Instructions to Scholars:

Scholars will be instructed to

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- Elicit detailed case history
- Perform complete clinical examination (Ayurveda & contemporary methods)
- Recommend and interpret appropriate investigations (CBC, FNAC, USG, Biopsy, Tumour markers, CT/MRI, etc.)
- Formulate differential diagnosis and identify the disease stage (Ayurveda + TNM classification where applicable)
- Assess prognosis (Sadyasadyata) using Roga-Rogi Pariksha
- Communicate findings and explain them in peer group discussion

Rubric for practical (40 marks)

- Case history and physical examination-10 marks
- Interpretation of clinical/lab/radiological findings- 5 marks
- Differential diagnosis, staging, and prognosis-10 marks
- Ayurvedic assessment (Dosha-Dushya, Samprapti, etc.)- 10 marks
- Communication & clinical reasoning in peer discussion-5 marks

Structured viva (Duration- 1 hr, marks- 15)

Scholars will appear for an oral viva covering the following:

- Classification and staging of tumours (TNM, Ayurvedic perspective)
- Diagnostic approaches to Galaganda, Apachi, Granthi, Arbuda
- Differentiation of Carcinoma, Sarcoma, Blood Cancer, CNS tumours
- Prognostic features and Ayurvedic reasoning
- Tumour markers and modern pathological correlation

Experiential learning outcome assessment (Duration- 1hr, marks- 20)

Assessment method: Portfolio / Reflection / Case-Based Presentation / Peer Symposium

Scholars may choose one of the following tasks:

Options for Experiential Assessment:

- Develop Dosha/Vyadhi Pratyanika Chikitsa plans for Galaganda/Apachi/Granthi/Arbuda based on Roga Avastha & Rogibala.

• Prepare a clinical protocol for any malignancy, including Shamana, Shodhana, Rasayana, Pathya, and supportive therapies. • Conduct a critical appraisal of published clinical trials on Ayurvedic management of malignancy (Carcinoma/Sarcoma/Blood Cancer). • Reflective report on managing unexpected outcomes or Asadhya Lakshanas during cancer treatment. • Simulate or report on a patient education/counselling session on Ayurvedic management of malignancy. • Present a case-based discussion on Ayurvedic palliative care approaches in advanced stages of cancer. Rubric for Experiential (20 marks) • Ayurvedic principles applied (Dosha, Vyadhi, etc.)-5 marks • Clinical/ethical appropriateness of treatment plan-5 marks • Critical thinking and literature appraisal-5 marks • Clarity, presentation, and communication- 5 marks Or Any practical in converted form can be taken for assessment. (40 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (35 marks)	
Semester No : 6	
Module 13 : Medo Doshaja Vikara	
Module Learning Objectives (At the end of the module, the students should be able to) 1. Describe and Diagnose Medodoshajavikaras – Medoroga, Sthoulya and Prameha. 2. Conduct detailed clinical examination of the patient with Medodoshajavikara. 3. Advice, Analyze and interpret appropriate investigations in Medodoshajavikara. 4. Provide awareness on prevention of Medodoshajavikaras. 5. Plan, Execute and analyze patient care in Medodoshajavikaras adhered to the principles of Samana, Sodhana, Panchakarma, Rasayana chikitsa and Pathyapathya	
Unit 1 Medo roga • Medoroga, Dyslipidemia	

- Investigations: Fasting Lipid Panel [T.Cholesterol, LDL, HDL and Triglycerides], Dual energy X-ray Absorptiometry (DEXA)

References: 1,2,3,4,7,9,10,13,16,40,42,45

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,CO5	Differentiate Medoroga and dyslipidemia along with their complications, with reference to epidemiology, etiopathogenesis, clinical features, and diagnostic investigations.	2	Lecture	CAN	Knows-how	L&PPT ,L&GD,DIS,FC
CO1,CO2,CO4,CO5	Describe a treatment protocol for Medoroga and its complications based on the principles of Shamana, Shodhana, Panchakarma, Rasayana Chikitsā, and Pathya–Apathya.	1	Lecture	CAP	Knows-how	DIS,FC,L &PPT ,L&GD,D
CO1,CO2,CO4,CO5	Demonstrate clinical history, physical examination, and recommend appropriate investigations for diagnosing Dyslipidemia.	2	Practical13.1	PSY-MEC	Shows-how	CBL
CO1,CO2	Illustrate investigation reports to diagnose Dyslipidemia and discuss the findings with peers or scholars.	2	Practical13.2	PSY-MEC	Shows-how	CBL,LRI,CD,PT
CO5	Assess for planning and treatment for Dyslipidemia using the principles of rationalised drug therapy, Panchakarma, Rasayana, and Pathya-Apathya.	2	Experiential - Learning13.1	PSY-ADT	Does	PL,TBL,CBL

CO5	Justify the selection of Upakrama, Aushadha, and Kriyakrama with respect to the stage of Medoroga.	2	Experiential - Learning13.2	PSY-ADT	Does	CBL,PER
CO5,CO6	Identify the effects of various medicines and treatment procedures for Medoroga based on evidence from clinical research literature.	2	Experiential - Learning13.3	CS	Does	JC,TBL
CO1,CO2	Discuss overweight, obesity, and lipodystrophy concerning aetiopathogenesis, classification, clinical features, clinical examination, and relevant investigations.	1	Lecture	CAP	Knows-how	L&GD,FC, LRI,DIS,L &PPT
CO5	Design a comprehensive treatment protocol for Sthoulya and its complications based on the principles of Shamana, Shodhana, Panchakarma, Rasayana Chikitsa, and Pathya-Apathya.	1	Lecture	CAP	Knows-how	L&GD,FC, DIS,D-BED,L&P PT
CO1,CO2	Elicit a detailed clinical history, perform clinical examination, and advise as well as interpret appropriate investigations for diagnosing obesity and its complications.	2	Practical13.3	PSY-MEC	Shows-how	D-BED,CBL, CD
CO1	Diagnose Diabetes mellitus and assess prognosis by interpreting investigations; discuss findings with peers or scholars.	2	Practical13.4	PSY-MEC	Shows-how	PAL,CBL, LRI,CD
Unit 2 Sthoulya Sthoulya, Overweight, Obesity, Lipodystrophy.						

- Investigations: Fasting Lipid Panel [T.Cholesterol, LDL, HDL and Triglycerides], LFT, Dual energy X-ray Absorptiometry (DEXA), TSH

References: 1,2,3,4,9,10,13,16,40,42,45

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experienti al Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teaching Learning Methods
CO1	Discuss Sthoulya and its Upadrava with reference to Nidana Panchaka and Sadhyasadyata.	1	Lecture	CC	Knows-how	L&GD,DIS,L&PPT,FC
CO5	Assess by planning comprehensive treatment for Sthoulya/Atisthoulya using the principles of rationalised drug therapy, Panchakarma, and Pathya-Apathya.	2	Experiential - Learning13.4	PSY-ADT	Does	TBL,PER,CBL,PSM
CO6	Identify the effect of various medicines and treatment procedures for Sthoulya/ Atisthoulya from evidence-based research articles.	2	Experiential - Learning13.5	PSY-ADT	Does	DIS,TBL
CO5	Design treatment protocol adhering to the principles of Shamana, Shodhana, Panchakarma, Rasayana Chikitsa, and Pathyapathya with respect to the types and stages of Prameha.	1	Lecture	CAP	Know	L&PPT,L&GD,PBL,FC

CO1,CO2	Illustrate detailed clinical history, demonstrate clinical examination, and advise appropriate investigations for diagnosing Diabetes mellitus	2	Practical13.5	PSY-MEC	Shows-how	CD,CBL, D-BED
CO1,CO2	Apply Ayurvedic principles of Roga Nirnaya in a case of Diabetes mellitus and assess the Sadhyasadyata.	2	Practical13.6	PSY-MEC	Shows-how	D-BED,CBL
CO5	Integrate Ayurvedic principles in the management of Type 1 Diabetes mellitus and Plan comprehensive treatment using the principles of rationalised drug therapy/ Panchakarma/ Rasayana, and Pathyapathya	1	Experiential - Learning13.6	PSY-ADT	Does	SIM,PER, TBL,PL,C BL
CO5	Integrate Ayurvedic principles in the management of Type 2 Diabetes Mellitus and plan a comprehensive treatment strategy using rationalised drug therapy, Panchakarma, Rasayana, and Pathya-Apathya.	2	Experiential - Learning13.7	PSY-ADT	Does	PER,TBL, CBL
CO5	Plan and recommend a comprehensive management protocol for the pre-diabetic stage based on the principles of Nidana Parivarjana and Samprapti Vighatana	1	Experiential - Learning13.8	PSY-ADT	Does	TBL,CBL, PAL
CO5	Identify the effects of various medicines and treatment procedures for Prameha based on evidence from research literature.	2	Experiential - Learning13.9	CS	Does	DIS,JC,L S

Unit 3 Prameha

- Prameha and types
- Madhumeha(Diabetes Mellitus and types)
- Investigations: A1C, Fasting Plasma Glucose, OGTT, Random Plasma Glucose test, Insulin test, Urine test for Glucose, Ketones and Albumin

References: 1,2,3,7,8,9,10,13,15,16,42

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experienti al Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teaching Learning Methods
CO2	Differentiate Prameha and its types based on Nidana Panchaka and assess their Sadhya-Asadhyata.	1	Lecture	CAN	Knows-how	L&GD,DIS,FC
CO1,CO5	Discuss Diabetes mellitus and its types based on aetiopathogenesis, classification, clinical features, examinations, investigations, and contemporary principles of management.	1	Lecture	CC	Knows-how	FC,L&PP T ,L&GD,DIS

Unit 4 Prameha Upadrava

- Upadrava roga of Prameha- Prameha Pidaka, Anya Upadrava
- Complications of Diabetes Mellitus

Acute – Durmehah (Diabetic Ketoacidosis), Hyperglycemic hyperosmolar non ketotic Syndrome, Alpasharkara (hypoglycemia)

Late/ Chronic Complications – Microvascular (Diabetic Retinopathy, Diabetic Nephropathy, Diabetic Neuropathy), Macrovascular (Cardiovascular disease, Peripheral arterial disease) and other causes (Foot ulcers, Skin conditions like Acanthosis Nigricans, Diabetic dermopathy, Hearing loss, Cognitive impairment)

- Investigations: A1C, Fasting Plasma Glucose, OGTT, Random Plasma Glucose test, Insulin test, Urine test for Glucose, Ketones and Albumin, Nerve Conduction Velocity, Vibrotherm.

References: 1,2,3,4,7,8,9,15,16,40,42

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experienti al Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,CO5	Differentiate Prameha Pidaka, Vatika, Paittika, and Kaphaja Prameha Upadrava Lakshana, assess their Sadhyasadhyata and Chikitsa, and explain the acute and chronic complications of Diabetes Mellitus, including their classification, clinical features, investigations, prognosis, and principles of contemporary management.	1	Lecture	CAN	Knows-how	L&GD,FC, DIS,L&PP T
CO1	Assess for diagnosis Prameha Pidaka with respect to Roga and Rogi Pariksha in a patient.	2	Practical13. 7	PSY-MEC	Shows-how	D- BED,CBL
CO1,CO2	Perform clinical examination and recommend appropriate investigations for diagnosing acute complications of Diabetes Mellitus.	2	Practical13. 8	PSY-MEC	Shows-how	CBL,CD, D-BED

CO1,CO2	Assess for diagnosing acute complications of Diabetes Mellitus and ascertain prognosis by interpreting clinical findings and investigations.	2	Practical13.9	PSY-MEC	Shows-how	LRI,CD,CBL
CO1	Apply Ayurvedic principles of Roga Nirnaya in a case of acute complication of Diabetes Mellitus and ascertain the Sadhyasadyata.	2	Practical13.10	PSY-MEC	Shows-how	CD,CBL,D-BED
CO5	Identify Ayurvedic principles in the management of acute complications of Diabetes mellitus through rationalised use of drug therapy, Panchakarma, Rasayana, and Pathya-Apathya.	2	Experiential - Learning13.10	PSY-ADT	Does	PER,CBL
CO5	Assess for planning and advising Prameha Chikitsa in a case of Diabetic Retinopathy through appropriate interdepartmental communication with the Shalakya Tantra department, considering Ayurvedic principles and patient-specific factors.	2	Experiential - Learning13.11	PSY-ADT	Does	TBL,CBL,TPW,PER
CO5	Identify Prameha Chikitsa in a case of Diabetic Neuropathy, considering Roga Avastha and Rogi Bala, through the application of Ayurvedic principles and integrative clinical reasoning.	2	Experiential - Learning13.12	PSY-ADT	Does	CBL,PER,TBL
CO5	Identify Prameha Chikitsa in a patient with coronary artery disease, considering Roga	2	Experiential -	PSY-ADT	Does	PER,CBL

	Avastha and Rogi Bala, through critical application of Ayurvedic principles and integrative clinical reasoning.		Learning13.13			
CO5	Illustrate Prameha types and stages using Nidana Panchaka, and evaluate its Samprapti to formulate integrative management strategies based on Ayurvedic and biomedical principles	2	Experiential - Learning13.14	PSY-ADT	Does	DIS,REC,SDL

Practical Training Activity

Practical Training 13.1 Clinical examination of dyslipidemia cases, interpretation of findings, and recommendation of relevant investigations for diagnostic confirmation

Clinical Evaluation and Diagnostic Planning in Dyslipidemia

Teacher's Activities:

1. Identify three clinically confirmed Dyslipidemia cases from OPD/IPD, each with a distinct profile (e.g., isolated hypercholesterolemia, mixed pattern, or secondary dyslipidemia).
2. Interpret patient history and guide scholars on identifying Ayurvedic Nidana, Samprapti, and relevant lifestyle/dietary factors.
3. Demonstrate physical examination techniques, including anthropometric measures, blood pressure, etc.
4. Explain the selection and interpretation of key investigations like lipid profile, blood sugar, thyroid profile, and liver function tests based on suspected comorbidities.

Scholar's Activities:

1. Observe and document the clinical history of demonstrated cases, identifying key risk factors and correlating with Nidana Panchaka principles.
2. Participate in hands-on examination under supervision and record findings relevant to Medoroga and Dyslipidemia.
3. Recommend appropriate investigations for diagnosis and staging, with justification based on individual case context.
4. Reflect on findings and prepare a brief diagnostic summary of each case for academic discussion.

Practical Training 13.2 Case-based interpretation of lipid profiles and related investigations to enhance clinical reasoning and peer-level academic exchange.

Interpretation of Diagnostic Reports in Dyslipidemia

Teacher's Activities:

1. Select and provide five anonymised investigation reports of confirmed or suspected Dyslipidemia cases, ensuring clinical variety (e.g., isolated LDL elevation, mixed dyslipidemia, or triglyceride-dominant patterns).
2. Briefly explain the components of the lipid profile and their relevance in clinical diagnosis and Ayurvedic assessment of Medodushti or Santarpanajanya Vyadhi.
3. Facilitate peer discussion or small group presentation sessions, encouraging each scholar to explain their interpretation and diagnostic reasoning.
4. Guide scholars on when and why to recommend additional tests (e.g., thyroid profile, blood sugar, LFT) based on the lipid report and clinical background.

Scholar's Activities:

1. Analyse five selected investigation reports related to Dyslipidemia, identifying key deviations from normal lipid values.
2. Correlate investigation findings with possible clinical features or history (where provided), including risk factors such as obesity, diabetes, or metabolic syndrome.
3. Determine the necessity for additional investigations in cases where primary reports indicate complexity or comorbidity.
4. Active participation in group discussions and departmental seminars, followed by keeping records of gained insights.

Practical Training 13.3 Case-based clinical evaluation of obesity and its systemic complications using Ayurvedic and approaches of modern medical science.

Clinical Diagnosis and Evaluation of Obesity and Its Complications

Teacher's Activities

1. Identify five clinically distinct presentations of obesity from OPD/IPD, including cases with associated conditions (e.g., dyslipidemia, PCOS, NAFLD, hypertension).
2. Guide scholars in eliciting detailed history and classify patients based on Ayurvedic principles and BMI grading.
3. Demonstrate relevant clinical examination techniques (e.g., abdominal girth, pulse, blood pressure, signs of metabolic syndrome).

4. Explain and interpret key investigations such as lipid profile, fasting/postprandial blood glucose, thyroid profile, and liver function tests regarding complications.
5. Facilitate discussions on differential diagnosis and prognosis using integrated clinical reasoning.

Scholar's Activities

1. Observe the selected OPD/IPD cases and record detailed clinical history using both Ayurvedic and modern medical formats.
2. Perform clinical examination under supervision and document findings, including anthropometric measurements and systemic observations.
3. Recommend and interpret investigations in the context of disease classification, complications, and treatment planning.
4. Maintain a structured case sheet and participate in group discussions to present findings and receive feedback.
5. Correlate Ayurvedic assessment with modern diagnostic parameters.

Practical Training 13.4 Assess Diabetes cases from OPD/IPD, interpret investigations to diagnose and evaluate prognosis, and discuss findings in academic forums or peer groups.

Diagnostic Interpretation and Prognostic Assessment in Diabetes Mellitus

Teacher's Activities

1. Select ten investigation reports of clinically diverse cases of Type 1 and Type 2 Diabetes Mellitus, including data on blood sugar levels, HbA1c, lipid profile, renal function tests, and abdominal ultrasonography.
2. Analyse each report and guide discussion on disease stage, glycemic control, organ function status, and associated comorbidities.
3. Interpret diagnostic patterns and explain the need for further investigations or referral in complex cases such as those involving diabetic retinopathy, diabetic foot ulcers, or insulin management challenges.
4. Facilitate scholar-led peer discussion on interpretation outcomes and clinical reasoning.

Scholar's Activities

1. Review and interpret selected investigation reports of Type 1 and Type 2 Diabetes Mellitus under guidance.
2. Identify diagnostic indicators of glycemic control, lipid imbalance, nephropathy, or hepatic/metabolic involvement.
3. Correlate findings with clinical context and formulate a provisional diagnosis and prognostic outlook.
4. Participate in academic group discussions or peer forums to present interpretations and exchange clinical insights.

5. Record diagnostic conclusions and prognostic assessments in logbooks, including notes on referrals or additional investigations if warranted.

Practical Training 13.5 Clinical examination of Diabetes cases in OPD/IPD, illustrates history, demonstrates clinical methods, and advises investigations

Clinical Evaluation and Diagnostic Approach to Diabetes Mellitus

Teacher's Activities

1. Identify five clinically relevant cases of Type 1 or Type 2 Diabetes Mellitus from OPD/IPD for demonstration and discussion.
2. Illustrate how to take a comprehensive clinical history.
3. Discuss Samprapti Ghataka, associated comorbidities (e.g., hypertension, dyslipidemia), and current conventional therapy.
4. Explain and rationalise the selection of investigations such as BSL, HbA1c, urine sugar, lipid profile, renal function tests, and USG abdomen based on clinical findings and disease stage.
5. Demonstrate structured clinical examination focusing on diabetic signs (e.g., peripheral neuropathy, dermopathy, foot inspection, etc.) and Ayurvedic parameters.

Scholar's Activities

1. Observe and record clinical history presented by the teacher and apply Nidana Panchaka to structure case findings.
2. Assist or perform clinical examination under supervision, noting general and system-specific findings relevant to diabetes.
3. Identify appropriate laboratory and imaging investigations based on clinical suspicion, stage of disease, and potential complications.
4. Document case summaries, including Ayurvedic interpretation and biomedical investigations, in the academic logbook.
5. Present findings and diagnostic reasoning in group discussions or case-based learning sessions.

Practical Training 13.6 Application of Ayurvedic diagnostic methods in Diabetes cases from OPD/IPD to assess Dosha, Dushya, and disease stage, and evaluate Sadhyasadyata.

Ayurvedic Diagnostic Reasoning and Prognostic Evaluation in Diabetes Mellitus

Teacher's Activities

1. Present and discuss detailed clinical findings of Prameha cases categorised under Jataja, Avarana, or Apathyaja types, highlighting the presence of Sama condition, Medodushti, Dosha-Dhatu Dushti, and multi-srotasa involvement.
2. Correlate Ayurvedic clinical assessment with modern diagnostic findings (e.g., HbA1c, renal parameters, lipid profile) to support prognostic evaluation.
3. Explain when further evaluation or interdisciplinary referral is indicated (e.g., endocrinology, nephrology), emphasising integrative care planning.

Scholar's Activities

1. Analyse assigned cases and apply principles of Roga Nirnaya to classify the type and clinical status based on Dosha, Dushya, Srotas, Bala, and Kala.
2. Assess the Sadhyasadhyata of each case using classical Ayurvedic criteria and justify prognostic conclusions.
3. Correlate findings from Ayurvedic assessment with available investigation reports to validate clinical understanding.
4. Identify cases requiring referral or further evaluation and document rationale based on both Ayurvedic and the perspectives of modern medical science.
5. Record assessments and prognostic reasoning in academic logbooks and present selected cases for peer discussion.

Practical Training 13.7 Assessment of Dermatological Manifestations of Diabetes Mellitus

Clinical Differentiation and Diagnostic Reasoning in Prameha Pidaka

Teacher's Activities

Select five relevant clinical cases of Prameha Pidaka from OPD, IPD, Shalya Tantra units, or affiliated wound care centres for clinical exposure.

Demonstrate step-by-step clinical examination techniques, correlating features with the type and stage of Prameha Pidaka.

Guide interpretation of diagnostic features through Roga Pariksha and Rogi Pariksha.

Discuss diagnostic distinctions between types of Pidaka and their Ayurvedic classification in diabetic patients.

Scholar's Activities

Visit wound care units in the institute or affiliated hospitals to observe patients diagnosed with Prameha Pidaka.

Perform focused clinical examination under supervision and apply principles of Roga and Rogi Pariksha to each case.

Maintain structured case records including clinical findings, diagnostic reasoning, and classification of Pidaka.

Document wound progression using pre- and post-treatment photographs and summarise clinical observations in a report

Practical Training 13.8 Case-Based Diagnostics for acute diabetic complications

Clinical Examination and Diagnostic Workup in Acute Diabetic Complications

Teacher's Activities

Demonstrate clinical examination techniques relevant to identifying acute diabetic complications such as Diabetic Ketoacidosis, Hyperosmolar Hyperglycemic State, and Severe Hypoglycemia.

Explain the clinical significance of vital signs, hydration status, neurological findings, and systemic examination in acute settings.

Present case-based examples to highlight key high-risk indicators and early signs of acute decompensation.

Discuss the rationale, timing, and interpretation of investigations such as RBS, blood ketones, serum electrolytes, ABG, ECG, and renal function tests.

Supervise bedside clinical sessions and clarify scholars' doubts through guided discussion.

Scholar's Activities

Perform clinical examination of patients presenting with suspected acute diabetic complications under supervision.

Identify key clinical findings relevant to emergency diagnosis and initiate appropriate documentation.

Recommend and justify investigations necessary to confirm diagnosis and assess severity.

Record all examination findings and investigation results in the academic logbook or case sheet.

Present a summary of diagnostic findings and proposed investigations during clinical discussions.

Practical Training 13.9 Case-Based clinical diagnostics and prognosis of Diabetes Mellitus

Clinical Application of Ayurvedic Diagnosis and Prognosis in Acute Diabetic Complications

Teacher's Activities

Identify five clinically relevant cases of acute diabetic complications, with or without multi-organ involvement, for observation and guided discussion.

Perform bedside clinical examination and explain key findings to scholars through demonstration and interactive teaching.

Facilitate discussion on the role and interpretation of investigations (e.g., blood sugar levels, electrolytes, ketones, organ function markers) to assess disease stage and prognosis.

Guide scholars in correlating Ayurvedic diagnostic principles with clinical and laboratory data in acute settings.

Scholar's Activities

Observe the selected cases and record presenting symptoms, clinical signs, and diagnostic findings under teacher supervision.

Maintain comprehensive case records, including updates in investigations and clinical course over the observation period.

Correlate Ayurvedic principles of Roga Nirnaya with an understanding of the case in terms of modern medical science.

Contribute to group discussions by presenting interpretations and reflecting on prognostic assessment.

Practical Training 13.10 Ayurvedic diagnosis and prognosis in acute complications of Diabetes Mellitus.

Emergency Care Orientation for Acute Diabetic Complications

Teacher's Activities

Introduce the Ayurvedic diagnostic framework (Roga-Rogi Pariksha) with emphasis on its relevance in acute complications of Diabetes Mellitus.

Present and guide the clinical analysis of real or simulated cases such as Diabetic Ketoacidosis, Hyperosmolar Hyperglycemic State, and Severe Hypoglycemia.

Demonstrate the application of Dosha involvement, Dushya, Adhithana, and Srotas analysis in the context of acute pathogenesis.

Explain classical Ayurvedic parameters for assessing Sadhyasadyata, integrating both textual references and clinical indicators.

Facilitate structured case discussions and provide formative feedback on scholars' diagnostic reasoning and prognostic interpretation.

Scholar's Activities

Examine an assigned acute diabetic case and apply Ayurvedic principles of Roga Nirnaya for diagnosis.

Analyse the condition in terms of Dosha-Dushya Sammurchana, Samprapti, Adhithana, and Roga Bala-Rogi Bala.

Determine the Sadhyasadyata of the case using Ayurvedic criteria and justify the prognosis with textual support.

Prepare and present a diagnostic summary outlining reasoning, prognosis, and preliminary management considerations.

Maintain a logbook of studied cases for reflective learning and discussions in the department.

Experiential Learning Activity

Experiential-Learning Learning 13.1: Planning and implementation of treatment for Dyslipidemia cases, monitoring outcomes, and documenting findings for academic discussion or publication

Integrative Clinical Management of Dyslipidemia

Teacher's Activities:

1. Assign five clinically confirmed Dyslipidemia cases from IPD/OPD with varied clinical backgrounds (e.g., associated with obesity, hypertension, or diabetes).
2. Guide scholars in assessing the stage of disease based on Nidana, Samprapti, and correlation with principles of modern medicine.
3. Review proposed treatment plans and advise on appropriate selection of Shodhana, Shamana, or Rasayana interventions.
4. Demonstrate preparation and counselling for Pathya–Apathya planning, including dietary and lifestyle changes.
5. Facilitate academic discussions on the scope of integrative management for Dyslipidemia and mentor case report compilation for presentations or publication.

Scholar's Activities:

1. Assess five assigned IPD/OPD Dyslipidemia cases and document findings based on Ayurvedic diagnosis and biomedical reports.
2. Formulate individualised treatment plans incorporating principles of Nidana Parivarjana, Shodhana, Rasayana, and appropriate drug therapy.
3. Design personalised diet charts and advise on lifestyle modifications aligned with Pathya–Apathya guidelines.
4. Evaluate patient progress and determine the need for procedural interventions (e.g., Virechana or Udvartana) based on clinical response.
5. Justify the use of an integrative treatment approach during academic group discussions or seminar presentations.
6. Maintain a logbook with case-wise documentation of planned treatment, clinical progress, and reflections.

Experiential-Learning Learning 13.2: Case-based clinical training to plan and justify personalised interventions in Medoroga based on disease staging and therapeutic principles

Stage-Wise Therapeutic Planning in Medoroga Based on Ayurvedic Principles

Teacher's Activities:

1. Select ten stage-varied cases of suspected Medoroga/Dyslipidemia from OPD/IPD for review and planning.
2. Demonstrate how to assess the stage of Medoroga using classical Ayurvedic parameters (Sama/Nirama, Sthana-Samshraya, Rasa–Meda involvement, etc.).
3. Explain the rationale behind choosing specific Upakrama, Aushadha, and Kriyakramas for different disease stages.
4. Supervise the scholar in performing selected external therapies (e.g., Udvartana, Svedana) and ensure clinical safety.
5. Facilitate group discussions and reflective sessions on decision-making in Medoroga management.

Scholar's Activities:

1. Review ten randomly selected OPD/IPD case records and identify those diagnosed with Medoroga/Dyslipidemia using clinical signs and investigative findings.
2. Assess the disease stage and plan stage-specific management protocols.
3. Perform appropriate Bahya Upakramas such as Udvartana, Langhana, Upavasa, Svedana, Deepana–Pachana, or Virechana based on the patient's condition.
4. Justify their chosen treatment strategies during academic discussions or clinical seminars.
5. Maintain structured logbook documentation, including clinical reasoning, interventions, and outcomes.

Experiential-Learning Learning 13.3: Critical review of evidence-based literature on Medoroga management and interpretation of clinical outcomes for academic dissemination

Evidence-Based Critical Appraisal for the Management of Medoroga

Teacher's Activities

1. Introduce the fundamentals of evidence-based practice and guide the selection of appropriate databases (e.g., PubMed, Scopus, AYUSH Research Portal, institutional repositories).
2. Demonstrate how to identify high-quality studies and appraise literature using standardised tools (e.g., CONSORT for RCTs, PRISMA for systematic reviews, etc.)
3. Assist scholars in framing key clinical questions related to Medoroga using formats such as PICO (Population, Intervention, Comparison, Outcome).
4. Supervise the critical review process, ensuring appropriate understanding of research methodology, statistical validity, and Ayurvedic relevance.
5. Moderate academic presentations and provide structured feedback to scholars during departmental seminars or journal club sessions.

Scholar's Activities

1. Search biomedical and institutional databases for clinical studies, systematic reviews, or meta-analyses about the treatment of Medoroga.
2. Critically evaluate the methodology, findings, limitations, and clinical relevance of selected articles, comparing Ayurvedic and modern medicine approaches.
3. Prepare and deliver a structured academic presentation summarising evidence, key outcomes, and research implications in Medoroga management.

4. Participate in group discussions, clarify doubts, and share clinical insights based on the knowledge and understanding gained from the review of articles.

Experiential-Learning Learning 13.4: Case-based clinical learning approach to develop individualised treatment strategies for Sthoulya using Ayurvedic principles and therapeutic modalities

Case-Based Clinical Management of Sthaulya and Atisthauya

Teacher's Activities

1. Identify 5–10 OPD/IPD cases of Sthaulya/Atisthauya with varying severity and associated complications.
2. Demonstrate clinical examination techniques and explain diagnostic reasoning based on Dosha-Dushya involvement, Srotas status, and Medodushti features.
3. Guide scholars in designing personalised treatment plans integrating Shamana, Shodhana, Bahirparimarjana Chikitsa, and Pathya-Apathya
4. Discuss outcome evaluation and review case findings in academic group sessions.

Scholar's Activities

1. Attend the OPD/IPD and observe patients diagnosed with Sthaulya/Atisthauya; document clinical findings and therapy plans.
2. Maintain a logbook for at least five follow-up visits per case, recording progress, dietary compliance, and outcomes.
3. Create individualised diet charts and lifestyle plans in line with Langhana, Shodhana, and Bahirparimarjana therapies and track changes in clinical parameters (e.g., weight, appetite, bowel regularity).
4. Participate in case-based group discussions and justify chosen treatment protocols based on classical principles and modern clinical relevance.
5. Compile the observed data and prepare brief case summaries or outcome reports for academic presentation or seminar submission.

Experiential-Learning Learning 13.5: Critically analyse recent evidence on the management of Sthoulya/Atisthoulya and develop context-appropriate treatment recommendations.

Evidence-Based Evaluation and Treatment Planning in Sthoulya/Atisthoulya

Teacher's Activities:

1. Facilitate selection of peer-reviewed journal articles (RCTs, meta-analyses, case series) on Sthoulya/Atisthoulya.
2. Explain structured review methodology and tools for critical appraisal (e.g., PRISMA, CONSORT).
3. Moderate seminar presentations and group discussions to evaluate scholars' interpretations.
4. Guide scholars in designing improved or new Ayurvedic protocols based on their analysis.

Scholar's Activities:

1. Search and select recent, high-quality articles related to the treatment of Sthoulya/Atisthoulya from reliable scientific databases.
2. Analyse the content, methodology, results, and clinical relevance of selected studies.
3. Evaluate the implications of evidence for current Ayurvedic practices and identify gaps or updates needed.
4. Prepare and present findings in the departmental seminar using structured formats.
5. Create or revise a treatment guideline using insights from research, aligning them with Ayurvedic principles.

Experiential-Learning Learning 13.6: Case-based integrative planning for Type 1 Diabetes Mellitus with Ayurvedic approaches

Ayurvedic Integration in the Clinical Management of Type 1 Diabetes Mellitus

Teacher's Activities

1. Facilitate scholar visits to IPD units managing Type 1 Diabetes Mellitus and orient them to the modern medical science and Ayurvedic considerations in insulin-dependent cases.
2. Guide interpretation of laboratory data, including blood sugar trends, renal function, lipid profiles, and other relevant investigations.
3. Explain clinical decision-making around insulin management, complication surveillance (e.g., hypoglycemia, DKA), and integrative possibilities.
4. Supervise scholar-led treatment planning incorporating Shamana, Rasayana, Panchakarma, and Pathya-Apathya.
5. Mentor scholars in drafting personalised care plans and assessing their impact on clinical outcomes.

Scholar's Activities

1. Visit the IPD to observe and monitor ongoing clinical management of Type 1 Diabetes Mellitus cases.
2. Analyse clinical status through relevant investigations, including blood sugar levels, renal function tests, and lipid profiles.
3. Monitor insulin dosage patterns, blood sugar charting, and assess for signs of complications such as hypoglycemia, hyperglycemia, or ketoacidosis.

4. Discuss findings with the attending physician and collaboratively plan an integrative management strategy based on the patient's condition.
5. Observe the outcomes of the treatment plan and document changes in clinical status in the academic logbook.
6. Design personalised diet and lifestyle recommendations and evaluate their effect on patient progress.

Experiential-Learning Learning 13.7: Case-based integrative management planning for Type 2 Diabetes Mellitus using Ayurvedic principles.

Integrated Ayurvedic Management Planning for Type 2 Diabetes Mellitus

Teacher's Activities

1. Identify and assign ten clinical cases of Type 2 Diabetes Mellitus from OPD/IPD for integrative management observation.
2. Facilitate orientation on the principles of Ayurvedic management, including selection criteria for Shamana, Shodhana, Rasayana, and Pathya-Apathya.
3. Guide scholars in clinical assessment and individualised treatment planning using a multimodal Ayurvedic approach.
4. Supervise implementation of scholar-devised protocols and ensure clinical safety and rationality.

Scholar's Activities

1. Observe and document outcomes of integrative treatment plans in ten cases of Type 2 Diabetes Mellitus managed in the OPD/IPD of the Kayachikitsa department.
2. Assess each patient's clinical status and plan individualised management protocols integrating rational drug use, Panchakarma, Rasayana, and Pathya–Apathya.
3. Present proposed protocols for peer review and implement the final plan under supervision.

Experiential-Learning Learning 13.8: Case-based protocol planning and preventive approach in pre-diabetes.

Title:

Preventive Strategies and Protocol Design for Pre-Diabetic Management

Teacher's Activities

1. Explain the concept of Medo Dushti, pre-diabetes, and Samprapti of Prameha, with reference to classical Ayurvedic and modern frameworks.
2. Guide the identification of risk factors and early clinical signs through analysis of case reports and patient profiles.
3. Discuss the application of Nidana Panchaka and the role of Nidana Parivarjana for Samprapti Vighatana in real-world pre-diabetic cases.
4. Supervise scholar-designed dietary and lifestyle plans, ensuring alignment with evidence-based and Ayurvedic recommendations.
5. Facilitate critical review sessions focused on current national and international guidelines related to pre-diabetes prevention and control.

Scholar's Activities

1. Analyse clinical reports of individuals with symptoms suggestive of Medo Dushti, metabolic syndrome, or a positive family history of diabetes.
2. Identify potential or emerging pre-diabetic cases and correlate findings with Ayurvedic Dosha-Dushya principles.
3. Plan and recommend personalised lifestyle and dietary modifications based on Nidana Parivarjana, aiming at Samprapti Vighatana.
4. Maintain follow-up records to assess adherence and clinical outcomes.
5. Critically review national and international guidelines on pre-diabetes management and integrate key recommendations into their proposed protocols.

Experiential-Learning Learning 13.9: Critical Appraisal of Evidence-Based Therapies for Prameha Roga

Evidence-Based Analysis of Treatment Strategies in Prameha

Teacher's Activities

1. Introduce the fundamentals of evidence-based medicine and guide scholars in selecting appropriate types of literature, including RCTs, systematic reviews, meta-analyses, case reports, and clinical guidelines.
2. Demonstrate how to critically appraise literature using standard tools (e.g., CONSORT, PRISMA) with examples from studies related to Prameha.
3. Supervise scholar-led literature reviews and support the synthesis of findings into a coherent, clinically meaningful narrative.
4. Facilitate presentations and moderate peer discussions in departmental research forums or journal clubs.

Scholar's Activities

1. Collect and curate published research literature related to the management and diagnosis of Prameha, including clinical trials, reviews, and treatment guidelines.
2. Critically analyse the methodology, outcomes, and clinical relevance of selected studies to understand the therapeutic impact and limitations.
3. Prepare and present an evidence-based review highlighting key findings, Ayurvedic and biomedical perspectives, and clinical implications.
4. Engage in departmental discussions, respond to peer feedback, and revise the presentation for academic submission or further exploration.

Experiential-Learning Learning 13.10: Rational Therapeutics in Acute Diabetic Complications

Integrative Exposure and Clinical Documentation in Emergency Care Settings

Teacher's Activities

- Facilitate scholars' observership in emergency units of modern hospitals through departmental coordination and necessary permissions.
- Provide orientation on acute conditions commonly encountered in emergency settings, highlighting opportunities for Ayurvedic co-management.
- Guide discussions on the application of Panchakarma, Rasayana, rationalised drug therapy, and Pathya-Apathya in acute and sub-acute conditions.
- Review and assess case records and provide feedback on the structure and clarity of case presentations or reports.
- Support scholars in developing publishable case reports or seminar-ready presentations through editorial or academic mentorship.

Scholar's Activities

- Participate in an observership program at emergency units of medical hospitals, observe clinical findings, review investigation reports, and document critical observations relevant to acute conditions of Diabetes mellitus.
- Engage in discussions with Ayurveda experts to explore the scope and applicability of integrative management using Panchakarma, Rasayana, rationalised drug therapy, and Pathya-Apathya.
- Maintain detailed case records and develop a case presentation for a departmental seminar or a structured case report suitable for publication.

Experiential-Learning Learning 13.11: Disease and Patient-Specific Intervention Planning for the management of Diabetic retinopathy through interdepartmental cooperation

Interdisciplinary Clinical Management of Diabetic Retinopathy in Prameha Patients

Teacher's Activities

- Facilitate clinical exposure by coordinating with the Shalakya Tantra department for integrated case referrals and observation.
- Explain the systemic connection between Prameha and Diabetic Retinopathy, with focus on Ayurvedic understanding of pathogenesis and complications.
- Guide scholars' understanding of investigation reports related to diabetes and their relevance to retinal pathology.
- Supervise and verify the documentation of referral notes and interdepartmental communications.
- Organise and evaluate seminar presentations and clinical discussions, providing feedback on case interpretation and collaborative management strategies.

Scholar's Activities

- Observe and document the clinical findings of patients with Diabetic Retinopathy referred to the Kayachikitsa department for Prameha management.
- Maintain investigation reports related to diabetes and study the treatment protocols aimed at glycemic control.
- Maintain referral notes and clinical records, ensuring accurate interdepartmental communication with the Shalakya Tantra department.
- Participate in seminar presentations or clinical discussions, showcasing case progress, management challenges, and learnings from collaborative practice.

Experiential-Learning Learning 13.12: Disease and Patient-Specific Intervention Planning for the management of Diabetic neuropathy

Justification and clinical application of the integrative management approach in Diabetic Neuropathy.

Teacher's Activities

Facilitate clinical observation of Diabetic Neuropathy cases in Kayachikitsa OPD/IPD by assigning relevant patients and guiding diagnostic interpretation.

Explain Ayurvedic understanding of Prameha complications, with emphasis on Dosha- Dushya involvement in Diabetic Neuropathy.
Guide scholars in designing individualised treatment protocols using Shamana Chikitsa, local procedures and Rasayana therapy.

Conduct peer-review sessions or supervise protocol discussions to ensure rationality and safety in the chosen interventions.
Mentor scholars in clinical documentation and academic writing for case series compilation, presentation, or submission.

Scholars' Activities

Observe and interpret clinical findings, investigation reports, and treatment protocols of Diabetic Neuropathy cases in OPD/IPD settings. Plan individualised treatment protocols for five Diabetic Neuropathy patients using Shamana Chikitsa, appropriate local therapies, and Rasayana therapy based on Roga Avastha and Rogi Bala.
Seek peer review and faculty approval of proposed treatment plans, and monitor patient progress by tracking therapeutic responses. Maintain detailed documentation in the academic logbook for both better understanding and reflective learning.
Compile patient data into a structured case series and present findings in departmental seminars or submit for publication in a peer-reviewed journal.

Experiential-Learning Learning 13.13: Disease and Patient-Specific Intervention Planning for the management of Prameha Roga

Justification and Application of Integrative Management Protocols in Diabetes with CAD

Teacher's Activities

1. Demonstrate the clinical assessment of Diabetes co-existing with CAD, focusing on Ayurvedic parameters.
2. Explain Ayurvedic textual references for Prameha and Hridroga with emphasis on overlap in pathogenesis and management approach.
3. Discuss the integrative rationale and mechanism of Shamana, Shodhana, and Rasayana therapies in managing diabetic patients with CAD.
4. Guide the formulation of patient-specific treatment protocols incorporating Ahara, Vihara, Aushadhi, and modern clinical safety guidelines.
5. Mentor scholars in documenting and critically reviewing outcomes, preparing academic case reports or seminar presentations.

Scholar's Activities

1. Identify patients having co-existing Diabetes and CAD, and classify them according to Ayurvedic principles and modern medical diagnosis.
2. Formulate individualised treatment plans based on Roga Avastha and Rogi Bala with the use of Shamana, Shodhana, and Rasayana therapies suitable for dual pathology.

3. Determine the appropriateness and justify the selection of drugs, procedures, or diet plans using Ayurvedic principles like Prakriti, Rogi Bala and Roga Avastha.
4. Implement the treatment protocol and observe changes in clinical and biochemical parameters (e.g., HbA1c, lipid profile, Blood pressure, etc.)
5. Maintain case records with regular documentation of interventions and compile a structured case series.

Experiential-Learning Learning 13.14: Critical Evaluation and Management of Prameha Roga

Activity 1: Clinical Observations and Integrative Analysis

Teacher's Activities:

1. Guide scholars in identifying diagnostic markers and Nidana Panchaka elements.
2. Provide clinical exposure and assign five high-risk Prameha patients.
3. Introduce biomedical parameters to be tracked.
4. Explain integrative care approaches, including Ayurveda and modern medical science.
5. Review and approve patient selection and documentation methods.

Scholar's Activities:

1. Identify and analyse five high-risk Prameha patients across varying stages and comorbid conditions through systematic clinical observation.
2. Evaluate the impact of add-on integrative interventions on quality of life and clinical parameters in Prameha cases.
3. Document and interpret patient case records, monitor diet chart adherence, and assess lifestyle and dietary influences on outcomes.

Activity 2: Applied Clinical Monitoring and Outcome Evaluation

Teacher's Activities:

1. Assign five Prameha patients at different stages with co-morbidities.
2. Orient scholars on outcome measures, diet chart design, and physical activity integration.
3. Supervise and support evaluation of Pathya–Apathya and physical activity outcomes.
4. Provide tools/templates for case record maintenance and parameter tracking.

Scholar's Activities:

1. Observe and analyse five Prameha patients at different stages with comorbidities to understand disease progression and individual variation.
2. Evaluate clinical changes post Pathya–Apathya and physical activity implementation.
3. Maintain and interpret patient case records, monitor adherence, and correlate outcomes to assess intervention effectiveness.

Modular Assessment

Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome Based Assessment: 02 credits x 04 hours x 50 marks Practical learning outcome assessment (time: 2 hrs, marks: 25) Method: Mini-CEX / OSCE – Rubric-Based Evaluation Scholars will be given real/simulated case scenarios from any one of the following: Dyslipidemia / Sthoulya / Type 2 Diabetes Mellitus. Instructions for Scholars: • Perform clinical history taking and physical examination • Interpret investigation reports (lipid profile, HbA1c, OGTT, BMI, etc.) • Arrive at a diagnosis using Ayurvedic and modern frameworks • Assess disease prognosis and acute complications if present • Recommend appropriate lab investigations and interpret findings Rubric based Evaluation (25 marks) • Clinical history and examination- 5 marks • Interpretation of investigations- 5 marks	4

- Diagnosis and prognosis (Ayurveda & modern)- 5 marks
- Ayurvedic assessment of Dosha, Dushya, etc- 5 marks
- Communication/ peer presentation skills- 5 marks

Structured Viva (Time: 1hr, Marks- 10)

Method: Oral viva

Topics will be drawn from:

- Roga-Rogi Pariksha for Dyslipidemia / Sthoulya / Prameha
- Prognostic assessment (Sadhyasadhyata) in Diabetes
- Acute complications in Prameha and Ayurvedic management
- Investigation-based diagnostic differentiation

Experiential Learning Outcome Assessment (Time: 1hr, Marks- 15)

Method: Portfolio / Reflection / Project / Case Presentation

Each scholar shall submit or present one of the following:

Choose from:

- Case-based integrative treatment plan for Dyslipidemia or Obesity
- Evidence-based treatment plan for Type 2 Diabetes using Ayurveda
- Protocol planning for Pre-diabetes
- Management approach in Diabetic Neuropathy
- Critical review of Medoroga/Prameha literature and its clinical application

Rubric based Evaluation (15 marks)

- Clinical insight and individualised planning- 5 marks
- Use of ayurvedic principles and logic- 5 marks
- Clarity, structure and applicability- 5 marks

Or - Any practical in converted form can be taken for assessment. (25 marks) - Any experiential as portfolio / reflection / presentations / projects / symposium can be taken for assessment. (25 marks)						
Module 14 : Chaya – Apachaya Janya roga (Metabolic disorders) & Anthasravi Granthi Roga (Endocrine disorders)						
Module Learning Objectives (At the end of the module, the students should be able to) - Describe and Diagnose Chaya –ApachayaJanya Roga &Anthasravigrandhi roga. - Conduct detailed clinical examination of the patient with Chaya –ApachayaJanya Roga &Anthasravigrandhi roga. - Advice, Analyse and interpret appropriate investigations in Chaya –ApachayaJanya Roga &Anthasravigrandhi roga. - Provide awareness on prevention of Chaya –ApachayaJanya Roga &Anthasravigrandhi roga. - Plan, Execute and Analysepatient care in Chaya –ApachayaJanya Roga &Anthasravigrandhi roga adhered to the principles of Samana, Sodhana, Panchakarma, Rasayana chikitsa and Pathyapathya						
Unit 1 Metabolic disorders - Metabolic Syndrome - Dhamanai Praticaya (Atherosclerosis) - Hyperuricemia, Kupratanaka (Amyloidosis) - Wilson’s disease, Glycogen Storage diseases (Gaucher disease, Pompes disease etc.) - Phenylketonurea - Hemochromatosis. - Investigations – Blood glucose, LFT, RFT, Phenylketonuria (PKU) test, Serum Ceruloplasmin, serum protein electrophoresis (SPEP), Total blood Copper test, 24-hour Urine copper test, Serum Ferritin.						
References: 15,16,40,41,42						
3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/	3E Domain/ Sub Domain	3F Level (Does/Show s	3G Teaching Learning Methods

			Experiential Learning		how/Knows how/Know)	
CO1	1. Describe Chaya–Apachaya Janya Roga such as Metabolic Syndrome, Atherosclerosis, Amyloidosis, and Wilson’s Disease with respect to their epidemiology, aetiopathogenesis, clinical presentation, and prognosis. 2. Analyse Hyperuricemia, Glycogen Storage Disorders (e.g., Gaucher disease, Pompe disease, etc.), Phenylketonuria, and Hemochromatosis in terms of epidemiology, aetiopathogenesis, clinical features, and prognosis.	2	Lecture	CC	Knows-how	L&GD,L&PPT,FC,DIS
CO5	Integrate Ayurvedic principles of diagnosis and management in Chaya–Apachaya Janya Roga through the application of Samprapti, Dosha-Dushya, and stage-wise treatment planning. 1. 1.	1	Lecture	CAP	Knows-how	FC,L&GD,D-BED,DIS,L&PPT
CO1	Elicit a detailed clinical history, perform clinical examination and advise appropriate investigations for diagnosing Chaya-Apachaya Janya roga	3	Practical14.1	PSY-MEC	Shows-how	CD,D-BED,CBL
CO1	Differentiate Chaya–Apachaya Janya Roga by interpreting relevant clinical and laboratory	2	Practical14.2	PSY-MEC	Shows-how	LRI,CBL,CD,PL

	investigations and communicate the diagnostic rationale effectively to scholars.					
CO5	Integrate Ayurvedic principles in the diagnosis and management of Chaya–Apachaya Janya Roga by applying rationalised drug therapy, Panchakarma, Rasayana, and Pathyapathya.	4	Experiential - Learning14.1	PSY-ADT	Does	PER,TBL, CBL
CO5	Evaluate and justify the selection of medicines and procedures based on the stage of disease (Avasthabheda of Chaya -Apachaya Janya Roga) and patient strength (Rogi Bala) during treatment.	2	Experiential - Learning14.2	PSY-ADT	Does	CBL,PER
CO5	Analyse evidence-based research articles to evaluate the effectiveness of various medicines and treatment procedures used in the management of metabolic disorders.	2	Experiential - Learning14.3	CS	Does	LS,TBL,J C,DIS

Unit 2 Endocrine disorders

- Epidemiology, Aetiological factors, Pathophysiology and Classification of Endocrine disorders.
- Investigations – Blood tests [insulin-like growth factor (IGF), Growth hormone (GH), Prolactin, LH, FSH, estrogen, Progesterone, Testosterone, TSH, T3, T4, Thyroid antibodies test, PTH, Blood Calcium level, Vit-D, Catecholamines, Epinephrine, Norepinephrine, Dopamine, Cortisol, ACTH stimulation test, Oestradiol], Nuclear medicine tests – Thyroid scan, Radioactive Iodine uptake test, Osmolality of blood and Urine, Water deprivation Urine test, Late night salivary Cortisol, 24 hour Urinary cortisol excretion, Petrosal Sinus sampling, Potassium, Plasma aldosterone concentration, Plasma renin activity, plasma renin activity, and plasma aldosterone concentration ratio: PRA/PAC ratio, Imaging [USG, CT, MRI]

References: 16,40,41,42,45

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1	Describe and discuss the epidemiology, aetiopathogenesis, and classification of Antahsṛavi Granthi Roga (endocrine disorders) from both Ayurvedic and contemporary perspectives.	1	Lecture	CC	Knows-how	FC,L&GD, L&PPT ,DIS
CO1	Integrate Ayurvedic principles of diagnosis and management to understand and address Antahsṛavi Granthi Roga (endocrine disorders).	1	Lecture	CAP	Knows-how	BS,L&GD, DIS,PBL, L&PPT
CO1	Distinguish various investigations used in the screening and diagnosis of different Antahsṛavi Granthi Roga (endocrine disorders).	1	Practical14.3	PSY-MEC	Shows-how	PT,CBL
CO6	Analyse evidence-based research articles to evaluate the effectiveness of various medicines and treatment procedures used in the management of endocrine gland disorders.	2	Experiential - Learning14.4	CS	Does	JC
Unit 3 Endocrine disorders of Pituitary Gland						

- Vikayata (Acromegaly)
- Upavrkkatiravah(Cushing's Syndrome)
- Udakameha (Diabetes Insipidus)
- Kapiyusakah(Hypopituitarism)
- Pituitary adenomas

References: 16,41,42,44

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Show s how/Knows how/Know)	3G Teaching Learning Methods
CO1	Describe and discuss the epidemiology, aetiopathogenesis, clinical features, investigations, and prognosis of Pituitary gland disorders such as Acromegaly, Cushing's Syndrome, Diabetes Insipidus, Hypopituitarism, and Pituitary adenomas.	1	Lecture	CC	Knows-how	FC,DIS,L &PPT ,L&GD
CO1	Perform detailed history-taking, clinical examination, and recommend appropriate investigations for diagnosing pituitary gland disorders.	2	Practical14.4	PSY-MEC	Shows-how	CD,D-BED,CBL
CO1	Interpret clinical findings and differentiate pituitary gland disorders by evaluating investigative data, and present conclusions in academic discussions.	2	Practical14.5	PSY-MEC	Shows-how	CD,LRI,P L,L_VC,C BL

CO1,CO5	Integrate Ayurvedic principles in the diagnosis and management of Pituitary gland disorders using the principles of rationalised drug therapy/ Panchakarma/ Rasayana, and Pathyapathya.	2	Experiential - Learning14.5	PSY-ADT	Does	SIM,CBL, PER,TBL
CO1	Evaluate the rationale behind the selection of medicines and procedures based on the Avasthabheda of Roga and Rogi during treatment.	2	Experiential - Learning14.6	CE	Does	PER,CBL

Unit 4 Thyroid and Parathyroid gland disorders

- Mandavatuh (Hypothyroidism)
- Tivravatuh (Hyperthyroidism)
- Nishkriyavatuh (Hashimoto thyroiditis), G
- Grave's disease
- Thyroid storm
- Paparavatukah (Hyperparathyroidism)
- Kaparavatukah (Hypoparathyroidism)

References: 15,16,40,41

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1	Describe Thyroid and Parathyroid gland disorders such as Hypothyroidism, Hyperthyroidism, Hashimoto's thyroiditis, and Grave's disease with respect to epidemiology, aetiopathogenesis,	2	Lecture	CC	Know	DIS,FC,L &GD,L&P PT

	clinical presentation, investigations, and prognosis through case-based discussions.					
CO1	Perform and demonstrate detailed history taking, clinical examination, and selection of appropriate investigations to diagnose Thyroid and Parathyroid gland disorders.	3	Practical14.6	PSY-MEC	Shows-how	CBL,D-BED,CD
CO1	Differentiate thyroid and parathyroid gland disorders by analysing and interpreting relevant investigations, and communicate findings effectively to peers/scholars.	2	Practical14.7	PSY-MEC	Shows-how	CD,PL,CBL,LRI
CO1	Integrate Ayurvedic principles in the diagnosis and management of Thyroid gland disorders using the principles of rationalised drug therapy/ Panchakarma/ Rasayana, and Pathyapathya.	4	Experiential - Learning14.7	PSY-ADT	Does	PER,CBL
CO2,CO5	Justify the rationale behind the selection of medicines and procedures according to the avasthabheda (stage of disease and patient) in the treatment of endocrine disorders through case-based clinical analysis.	2	Experiential - Learning14.8	AFT-VAL	Does	PER,CBL

Unit 5 Adrenal gland disorders

- Upavrikkakasravah (Addison's disease),
- Adrenal tumours [Pheochromocytoma, Cushing's and Conn's Syndromes, Adrenal Cancer]
- Hirsutism

References: 15,16,41,42,44

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1	Elaborate Adrenal gland disorders like Addison's disease, Adrenal tumours [Pheochromocytoma, Cushing's and Conn's Syndromes, Adrenal Cancer], Hirsutism with respect to epidemiology, aetiopathogenesis, clinical presentation, investigations and prognosis	1	Lecture	CAN	Knows-how	FC,L&GD, L&PPT ,DIS
CO1	Perform a detailed history taking, demonstrate clinical examination and recommend appropriate investigations for diagnosing Adrenal gland disorders.	1	Practical14.8	PSY-MEC	Shows-how	CBL,D-BED,CD
CO1	Interpret investigation reports to differentially diagnose adrenal gland disorders and communicate the findings effectively to peers or students.	1	Practical14.9	PSY-MEC	Shows-how	PL,CD,CBL,LRI
CO1,CO5	Integrate Ayurvedic principles in the diagnosis and management of adrenal gland disorders by	1	Experiential -	PSY-ADT	Does	SIM,TBL,PER,CBL

	applying rationalised drug therapy, Panchakarma, Rasayana, and Pathyapathya approaches.		Learning14.9			
CO5	Justify the rationale for selection of medicines and procedures based on Avasthabheda of Roga and Rogi during treatment of Adrenal disorders.	1	Experiential - Learning14.10	CE	Does	PER,CBL

Unit 6 Disorders of reproductive glands – Testes and Ovary

- PCOD/PCOS
- Ovarian insufficiency
- Menopausal Symptoms
- Gynaecomastia
- Low Testosterone in males

References: 15,16,41

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1	Discuss reproductive hormone-related disorders such as PCOD/PCOS, ovarian insufficiency, menopausal symptoms, gynecomastia, and low testosterone in males with respect to epidemiology, aetiopathogenesis, clinical presentation, investigations, and prognosis.	1	Lecture	CC	Knows-how	L&GD,FC, L&PPT ,DIS

CO1	Perform a detailed history taking, clinical examination, and recommend appropriate investigations for diagnosing reproductive hormone-related disorders.	2	Practical14.10	PSY-MEC	Shows-how	CBL,CD, D-BED
CO1	Differentially diagnose Reproductive hormone-related disorders by interpreting investigations and explaining them to peers/ scholars.	1	Practical14.11	PSY-MEC	Shows-how	CBL,LRI, PL,CD
CO5	Illustrate Ayurvedic principles in the diagnosis and management of reproductive hormone-related disorders using the principles of rationalised drug therapy, Panchakarma, Rasayana, and Pathyapathya.	2	Experiential - Learning14.11	PSY-ADT	Does	SIM,CBL, TBL
CO5	Illustrate the rationale for selecting medicines and procedures based on Avasthabheda of Roga and Rogi during treatment for reproductive hormonal disorders.	2	Experiential - Learning14.12	CE	Does	PER,CBL

Practical Training Activity

Practical Training 14.1 Case-based exploration of clinical history, examination findings, and relevant investigations to support accurate diagnosis of Chaya–Apachaya Janya Roga.

Clinical Diagnosis of Chaya–Apachaya Janya Roga: History, Examination, and Investigation Planning

Teacher's Activities:

1. Identify five representative OPD/IPD cases each of Chaya–Apachaya Janya Roga (e.g., Metabolic Syndrome, Atherosclerosis, Hyperuricemia).
2. Demonstrate detailed clinical history taking using Nidana Panchaka, and conduct physical examination focusing on Dosha–Dhatu–Srotas involvement.
3. Discuss the clinical findings and rationale with scholars, highlighting the Avasthabheda.
4. Explain the appropriate set of investigations (e.g., lipid profile, uric acid, blood glucose, inflammatory markers), justifying their diagnostic and prognostic relevance.

Scholar's Activities:

1. Observe and participate in history elicitation and physical examination under supervision.
2. Record patient history and findings using Ayurvedic and biomedical parameters in the logbook.
3. Recommend relevant investigations based on the clinical scenario and justify their use.
4. Participate in discussions and reflect on the diagnostic reasoning process during group learning sessions.

Practical Training 14.2 Case-based interpretation and discussion of investigation reports to differentiate Chaya–Apachaya Janya Roga and explain diagnostic reasoning.

Diagnostic Interpretation and Communication in Chaya–Apachaya Janya Roga

Teacher's Activities:

1. Select ten representative investigation reports demonstrating various stages or presentations of Chaya–Apachaya Janya Roga (e.g., early diabetes, fatty liver, metabolic syndrome).
2. Discuss key diagnostic parameters (e.g., lipid profile, blood glucose, inflammatory markers) and correlate them with Ayurvedic stages like Chaya, Prakopa, and Prasara.
3. Facilitate case-based discussions, guiding scholars in clinical reasoning and identifying red flags or critical diagnostic cues.

Scholar's Activities:

1. Analyse and interpret investigation findings in the context of clinical symptoms and Ayurvedic pathology.
2. Correlate reports with Samprapti, Dosha–Dhatu–Srotas involvement, and disease staging.
3. Prepare and present diagnostic rationale and interpretation in group discussions or peer learning forums.

4. Justify the differentiation of conditions based on an integrated understanding of Ayurvedic and biomedical principles.

Practical Training 14.3 Diagnostic and screening investigations used for various endocrine disorders.

Comparative Interpretation of Diagnostic Investigations in Endocrine Disorders

Teacher's Activities:

1. Select and present a variety of investigation reports (e.g., thyroid profile, HbA1c, serum cortisol, insulin levels, hormone panels, imaging) from different endocrine disorders such as Diabetes, PCOS, Hypo-/Hyperthyroidism, Cushing's Syndrome, Acromegaly.
2. Discuss the clinical significance of each investigation in terms of pathophysiology, staging, and monitoring.
3. Facilitate group analysis sessions, encouraging pattern recognition and comparison across disorders.

Scholar's Activities:

1. Interpret investigation findings for assigned cases and correlate them with clinical symptoms and Ayurvedic understanding (Dosha–Dhatu–Srotasa involvement).
2. Compare findings between overlapping or similar disorders (e.g., Type 1 vs. Type 2 diabetes, hypothyroidism vs. Cushing's).
3. Identify diagnostic differentiators and potential pitfalls in interpretation.
4. Present selected cases and diagnostic reasoning in small group discussions, emphasising clinical decision-making and integrative perspectives.

Practical Training 14.4 Diagnostic evaluation of pituitary gland disorders

Diagnostic Evaluation of Pituitary Disorders through Clinical and Investigative Correlation

Teacher's Activities:

1. Facilitate clinical case-based sessions where scholars elicit history using Nidana Panchaka and construct the Samprapti.
2. Guide clinical examination techniques relevant to pituitary disorders (e.g., growth changes, menstrual irregularities, visual field defects).
3. Conduct structured group discussions to analyse clinical findings and decide on required investigations.
4. Assist scholars in correlating clinical data with lab/imaging findings and mentor the diagnostic reasoning process.

Scholar's Activities:

1. Perform detailed history-taking for assigned cases, focusing on Ayurvedic and biomedical symptomatology.
2. Conduct supervised clinical examination and record findings.
3. Recommend and justify appropriate investigations such as hormone profiles, MRI/CT, and others based on the provisional diagnosis.
4. Interpret investigation reports and correlate them with clinical observations.
5. Present the final diagnosis and case summary in a departmental seminar, followed by discussion.

Practical Training 14.5 Interpretation of investigations to distinguish pituitary disorders and discuss findings with peers**Clinical Differentiation of Pituitary Disorders through Diagnostic Interpretation****Teacher's Activities:**

1. Present anonymised case materials including blood reports, MRI/CT findings for disorders like Acromegaly, Cushing's syndrome, Diabetes insipidus, Hypopituitarism, Pituitary adenomas
2. Explain the clinical significance of each investigation in relation to presenting features and pathophysiology.
3. Highlight Ayurvedic correlations and relevant diagnostic clues from a Roga-Rogi Pariksha perspective.
4. Facilitate group discussions or mini case rounds to encourage scholar participation and interpretation.

Scholar's Activities:

1. Review and interpret assigned investigation data (e.g., serum cortisol, IGF-1, urine osmolality, imaging reports) for differentiation of pituitary disorders.
2. Correlate findings with clinical signs and symptoms from the case scenarios.
3. Prepare and present conclusions in peer discussions, demonstrating reasoning behind differential diagnosis.
4. Maintain documentation in academic logbooks, noting key distinguishing features and suggested Ayurvedic interpretations where applicable.

Practical Training 14.6 History taking and examination-based diagnostic planning in thyroid and parathyroid disorders.

Teacher Activities:

1. Guide scholars to elicit detailed clinical history using Nidana Panchaka and construct the Samprapti of hypo/hyperthyroidism.
2. Demonstrate clinical examination techniques specific to thyroid and parathyroid pathologies.
3. Facilitate interpretation of investigations such as TSH, T3/T4, PTH, calcium, ultrasound, and FNAC.
4. Provide case reports for comparative analysis and moderate peer discussion.

Scholar Activities:

1. Perform history taking and clinical examination on case scenarios or IPD/OPD patients.
2. Recommend appropriate investigations and interpret reports in correlation with clinical findings.
3. Analyse and compare case reports, particularly those with comorbidities or diagnostic challenges.
4. Present case findings and differential diagnosis in academic discussions or seminars.

Practical Training 14.7 Interpretation-based differentiation of thyroid and parathyroid disorders.**Teacher Activities:**

1. Provide case-based scenarios with investigation reports (e.g., TSH, T3/T4, PTH, calcium, ultrasound, scintigraphy).
2. Facilitate discussion on differential diagnostic markers and clinical features of thyroid and parathyroid disorders.
3. Guide scholars in preparing structured case presentations for peer exchange.

Scholar Activities:

1. Analyse and interpret investigations for provided cases, focusing on distinguishing features between thyroid and parathyroid disorders.
2. Discuss clinical implications and differential diagnosis with peers or juniors.
3. Present case analyses and rational diagnostic conclusions in departmental seminars or peer groups.

Practical Training 14.8 Clinical reasoning for adrenal gland disorder diagnosis.

Teacher Activities:

1. Present case-based scenarios or video demonstrations of adrenal gland disorders.
2. Demonstrate clinical examination techniques relevant to adrenal dysfunction (e.g., BP assessment, pigmentation signs, etc.).
3. Facilitate discussion on the selection and interpretation of appropriate investigations, such as serum cortisol, ACTH, and imaging.
4. Coordinate observership postings in endocrine units for live exposure.

Scholar Activities:

1. Analyse history and clinical features from given case scenarios or videos.
2. Participate in clinical demonstrations and practice relevant examination techniques.
3. Interpret investigation findings and relate them to clinical diagnosis.
4. Participate in hospital observership to correlate theoretical knowledge with clinical practice.

Practical Training 14.9 Interpretation and peer-level communication of adrenal disorder investigations.**Teacher Activities:**

1. Select and present 3–5 case-based scenarios of adrenal gland disorders with investigation reports (e.g., cortisol levels, ACTH, imaging).
2. Facilitate guided interpretation and clinical reasoning discussions in small groups.
3. Moderate peer presentations and provide academic feedback on diagnostic accuracy and communication.
4. Encourage reflection and summarisation of key diagnostic markers and their clinical implications.

Scholar Activities:

1. Analyse the clinical case and interpret investigation findings using guided worksheets or discussion points.
2. Collaborate with peers to formulate a differential diagnosis and identify confirmatory markers.
3. Prepare and deliver a structured presentation of the case and diagnosis to peers.
4. Engage in group discussion to refine reasoning and improve communication of diagnostic findings.

Practical Training 14.10 Clinical evaluation and diagnostic planning in reproductive hormone disorders.

Teacher Activity:

1. Demonstrate the clinical history-taking framework and relevant examination techniques in suspected reproductive hormone disorders.
2. Provide investigation reports (e.g., hormonal profiles, pelvic ultrasound, semen analysis) for analysis.
3. Facilitate guided discussions on correlating clinical findings with diagnostic strategies.

Scholar Activity:

1. Observe and document real or simulated cases of reproductive hormone-related disorders in OPD/IPD.
2. Perform detailed clinical history and examination under supervision.
3. Recommend appropriate investigations based on the suspected diagnosis.
4. Present a structured case summary including diagnostic reasoning and investigative interpretation for peer review.

Practical Training 14.11 Differential diagnosis of reproductive hormonal disorders using investigation analysis.

Teacher Activity:

1. Provide ten investigation reports related to male and female reproductive hormone disorders.
2. Explain the rationale behind investigation selection (e.g., hormonal assays, imaging).
3. Guide scholars in interpreting diagnostic data and correlating it with clinical scenarios.
4. Moderate group discussions and provide feedback during presentations.

Scholar Activity:

1. Analyse and interpret given investigation reports to formulate differential diagnoses.
2. Prepare individual or group case presentations based on diagnostic interpretation.
3. Participate in journal club or departmental seminar to explain and discuss findings.
4. Engage in group discussions for collaborative learning and clinical reasoning.

Experiential Learning Activity

Experiential-Learning Learning 14.1: Application of Ayurvedic principles in the diagnosis and management of Chaya–Apachaya Janya Roga.

Case-Based Integrative Management of Chaya–Apachaya Janya Roga

Teacher's Activities:

1. Select and assign ten OPD/IPD cases diagnosed with Chaya–Apachaya Janya Roga (e.g., early metabolic or degenerative conditions).
2. Explain clinical relevance of Chaya, Prakopa, and Prasara stages and correlate them with Rogabala and Rogibala.
3. Guide scholars in treatment planning by revisiting relevant Samhita references, modern evidence, and interdisciplinary approaches.
4. Facilitate peer-review sessions and monitor the appropriateness of proposed management protocols.
5. Review case presentations and case reports for clinical depth, Ayurvedic reasoning, and research value.

Scholar's Activities:

1. Observe the outcomes of integrative treatment plans in 10 IPD/OPD cases of Chaya–Apachaya Janya Roga.
2. Analyse patient conditions and formulate treatment protocols incorporating Shamana, Shodhana, Panchakarma, Rasayana, and Pathya–Apathya.
3. Present proposed protocols to peers for review, and implement under supervision after approval.
4. Monitor patient response, investigate clinical changes, and document all findings in academic logbooks.
5. Present each case in academic discussions with justification for the chosen interventions.
6. Compile a case report with key clinical observations for institutional publication or seminar/journal submission.

Experiential-Learning Learning 14.2: Evaluation of treatment selection based on Avasthabheda and Rogi Bala

Stage-Specific Treatment Planning and Clinical Decision-Making in Metabolic Disorders

Teacher's Activities:

1. Select a set of OPD/IPD cases with varied Avasthabheda and comorbidities (e.g., Sthoulya with hyperuricemia, Prameha with atherosclerosis).

2. Guide scholars in assessing Rogibala and Rogabala, emphasising clinical indicators such as chronicity, strength, complications, and tolerance to therapy.
3. Demonstrate how to adapt treatment protocols (e.g., shifting from Shodhana to Shamana or incorporating Rasayana) based on clinical condition.
4. Supervise scholar-led treatment planning discussions and provide feedback on rationale and safety.
5. Review documented outcomes and mentor scholars in summarising and presenting their case data.

Scholar's Activities:

1. Observe selected clinical cases of metabolic disorders, noting presenting features, staging, and treatment strategies.
2. Document clinical changes and compare investigation reports before and after treatment initiation.
3. Formulate individualised treatment plans considering Avasthabheda and Rogibala, aligning with Ayurvedic principles.
4. Present treatment protocols for peer review; implement approved plans under supervision.
5. Record treatment outcomes and reflections in academic logbooks and present findings in departmental seminars.

Experiential-Learning Learning 14.3: Review of research articles to analyse the effectiveness of medicines and treatment procedures in managing metabolic disorders.

Critical Appraisal of Research Evidence in Metabolic Disorder Management

Teacher's Activities:

1. Guide scholars in identifying and selecting high-quality research articles (RCTs, meta-analyses, systematic reviews, case studies) related to the Ayurvedic and integrative management of metabolic disorders (e.g., Prameha, Sthoulya, Dyslipidemia).
2. Provide an orientation on critical appraisal tools (e.g., CONSORT, PRISMA) and methodological evaluation.
3. Supervise and provide feedback on scholarly presentations or written analyses.
4. Facilitate group discussions or journal club sessions to encourage debate, clarification, and academic exchange.

Scholar's Activities:

1. Collect relevant research articles from credible databases (e.g., PubMed, Cochrane, AYUSH research portals) on metabolic disorder management.
2. Critically analyse the study design, outcomes, sample size, methodology, and clinical implications of each selected study.
3. Develop a structured presentation or summary highlighting key findings and their relevance to Ayurvedic clinical practice.

4. Present the review in a research club, journal club, or departmental seminar, followed by discussion and peer feedback.

Experiential-Learning Learning 14.4: Review of published research to analyse treatment outcomes of medicines and procedures used in managing endocrine gland disorders.

Evidence-Based Evaluation of Therapeutic Approaches in Endocrine Disorders

Teacher's Activities:

1. Guide scholars on selecting high-quality research articles, including RCTs, systematic reviews, meta-analyses, and clinical case studies related to endocrine disorders (e.g., Prameha, PCOS, thyroid dysfunction).
2. Demonstrate critical appraisal techniques using standardised tools (e.g., CONSORT checklist, PRISMA guidelines).
3. Review and provide feedback on scholar presentations and analytical reports.
4. Facilitate journal club or research group discussions to facilitate the exchange of insights and clarifications.

Scholar's Activities:

1. Collect and review evidence-based research articles on Ayurvedic and conventional treatments for endocrine disorders.
2. Critically analyse the methodology, results, and clinical applicability of selected studies.
3. Prepare a structured presentation or written report summarising the findings.
4. Present outcomes and interpretations in a journal club or research forum for peer discussion and academic feedback.

Experiential-Learning Learning 14.5: Application of Ayurvedic principles in diagnosing and managing pituitary disorders

Integrative Clinical Management of Pituitary Disorders through Ayurvedic Principles

Teacher's Activities:

1. Identify clinical cases or video demonstrations of common pituitary disorders (e.g., acromegaly, prolactinoma, Cushing's disease).
2. Provide Ayurvedic correlations for clinical features based on Dosha–Dhatu–Srotas involvement.
3. Guide interpretation of investigation reports (MRI, hormonal assays) alongside Ayurvedic diagnostic tools (e.g., Roga–Rogi Pariksha).
4. Review and provide feedback on Ayurveda-based treatment plans prepared by scholars.

5. Facilitate discussions on integrative management approaches and mentor scholars participating in observerships or cross-disciplinary rotations.

Scholar's Activities:

1. Observe and analyse case-based scenarios or video content of patients with pituitary disorders.
2. Interpret clinical findings and investigation reports, and discuss implications with peers.
3. Formulate Ayurvedic management plans addressing symptoms like amenorrhea, infertility, or growth abnormalities using appropriate Shamana, Shodhana, and Rasayana strategies.
4. Implement the treatment plan under supervision (if cases are available) and document clinical progress in academic logbooks.
5. Participate in observerships at endocrinology units (if feasible) to understand the role of integrative approaches and reflect on interdisciplinary coordination.

Experiential-Learning Learning 14.6: Rationale of drug selection in Pituitary gland disorders

Teacher Activities

1. Assign case-based learning tasks where scholars assess patients (or case scenarios) with Pituitary gland disorders and identify appropriate Ayurvedic interventions.
2. Guide scholars in analysing treatment strategies by reviewing patient records, Ayurvedic texts, and modern medical correlations.
3. Facilitate reflective group discussions on drug and procedure selection in various stages (acute, chronic, aggravated) of Pituitary disorders.
4. Supervise the implementation or simulation of treatment planning in OPD/IPD or academic case presentations.
5. Evaluate scholar reflections, logbook entries, or small projects that compare Ayurvedic drug selection with modern endocrine management strategies.

scholar activities

1. Interpret real or simulated patient cases of Pituitary gland disorders and propose Ayurvedic treatment plans based on the stage of the disease and Rogibala.
2. Participate in group discussions or peer reviews to evaluate the rationale behind selected medicines and procedures.
3. Document case reflections or experiences from OPD/IPD postings, highlighting stage-specific treatment approaches.
4. Compare modern treatment strategies observed during clinical observerships with Ayurvedic protocols and discuss findings.

5. Prepare and submit a brief portfolio or reflection report summarising the justification for drug selection with classical references and personal insights.

Experiential-Learning Learning 14.7: Ayurvedic integration in thyroid disorder management using stage-specific interventions.

Teacher Activities:

1. Present case examples of hypothyroidism and hyperthyroidism from OPD/IPD or video materials.
2. Facilitate interpretation of dosha-dushya involvement and samprapti based on clinical and lab findings.
3. Guide the scholars in designing an appropriate Ayurvedic management plan incorporating Chikitsa Sutras.
4. Supervise discussion sessions on stage-wise therapy, Rasayana use, and lifestyle modifications.

Scholar Activities:

1. Observe and document clinical cases of thyroid disorders with attention to Ayurvedic diagnostic principles.
2. Analyse findings and discuss samprapti and treatment options with peers or juniors.
3. Formulate management plans including rational drug selection, Panchakarma, Rasayana, and Pathyapathya.
4. Present and refine plans through peer discussion and, if applicable, implement them under supervision.
5. Record reflections and outcomes in the academic logbook and participate in interdisciplinary postings if available.

Experiential-Learning Learning 14.8: Rational selection of Ayurvedic treatments in endocrine disorders based on avasthabheda.

Teacher Activities:

1. Present case scenarios of thyroid/parathyroid disorders, highlighting different stages (avasthabheda).
2. Facilitate discussion on dosha-dushya, samprapti, and stage-specific chikitsa.
3. Guide students in identifying proper Oushadha and Kriyakrama.
4. Provide feedback on the rationale submitted in student presentations.

Scholar Activities:

1. Analyse the given case scenarios and determine Roga and Rogi Bala.

2. Justify the selection of medicines and procedures based on the disease stage and the strength of the treatment.
3. Present individualised treatment plans with references to classical texts.
4. Collaborate with peers and refine protocols based on academic discussion.

Experiential-Learning Learning 14.9: Case-based analysis and synthesis of Ayurvedic management for adrenal disorders.

Teacher Activities:

1. Select and present clinical cases of adrenal gland disorders via OPD/IPD exposure or simulated scenarios.
2. Demonstrate the application of Ayurvedic diagnostic principles and explain the relevance of Dosha-Dushya Sammurchana.
3. Guide scholars in interpreting investigation reports and linking them with Samprapti.
4. Facilitate group discussions on rational selection of Oushadha, Panchakarma, and Rasayana therapies.
5. Supervise case-based presentations and provide feedback on treatment plans.

Scholar Activities:

1. Observe and document adrenal gland disorder cases in clinical or simulated settings.
2. Analyse case findings, assess Roga Avastha and Rogi Bala, and construct the Samprapti.
3. Interpret investigations and propose a treatment strategy based on Ayurvedic principles.
4. Develop and justify individualised management plans including drug therapy, Panchakarma, Rasayana, and Pathyapathya.
5. Present the case and treatment approach in departmental discussions or seminars.

Experiential-Learning Learning 14.10: Stage-based treatment rationale in adrenal disorders.

Teacher Activity:

1. Provide adrenal disorder case scenarios with relevant clinical and investigative findings.
2. Explain Avasthabheda-based treatment principles and facilitate group discussion.
3. Guide scholars in identifying appropriate Oushadha and Panchakarma procedures with rationale.

Scholar Activity:

1. Interpret findings of adrenal disorder cases and discuss implications with peers.
2. Formulate individualised Ayurvedic treatment plans based on Roga-Rogi Bala and the stage of disease.

3. Justify the selected therapies and procedures with reference to classical guidelines in seminar presentations.
4. Participate in observerships in the Medicine department of modern hospitals to compare contemporary approaches.

Experiential-Learning Learning 14.11: Integration of Ayurvedic principles in reproductive hormonal disorder - diagnosis and management.

Teacher Activity:

1. Present case scenarios or assign real cases of male and female reproductive hormonal disorders from OPD/IPD.
2. Guide scholars in clinical reasoning using Dosha-Dushya and Samprapti analysis.
3. Facilitate discussion on rational drug selection, Panchakarma, Rasayana, and Pathyapathya principles.
4. Moderate case discussions and provide feedback on management plans and treatment implementation.

Scholar Activity:

1. Observe clinical cases and document history, examination findings, and investigation results.
2. Interpret findings and formulate individualised management plans integrating Ayurvedic principles.
3. Implement treatment under supervision if applicable and maintain records in logbooks.
4. Present selected cases and discuss outcomes in seminars for academic review.

Experiential-Learning Learning 14.12: Rationale for selecting medicines and procedures in reproductive hormonal disorders.

Teacher Activity:

1. Guide scholars in identifying Avasthabheda of Roga and assessing Rogibala through case records.
2. Facilitate discussions on interpreting clinical signs and hormonal investigation reports.
3. Supervise the formulation and peer-review of individualised Ayurvedic treatment plans.
4. Arrange observation sessions in OPD/IPD and coordinate participation in related workshops or seminars.

Scholar Activity:

1. Observe and document clinical findings in cases of male and female reproductive hormonal disorders.
2. Interpret investigation reports and identify hormonal imbalances relevant to clinical presentation.
3. Justify the selection of medicines and procedures according to Avasthabheda and Rogibala in treatment planning.

4. Present and review plans with peers and implement in clinical cases when permitted.
5. Attend relevant academic events and record reflections and outcomes in the logbook.

Modular Assessment

Assessment

Hour

Instructions: Conduct a structured modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.

Outcome Based Assessment: 02 credits x 04 hours x 50 marks

Practical learning outcome assessment (Duration: 2hrs, Marks: 25)

Assessment Method: Mini-CEX / OSCE – Rubric-Based evaluation

Provide each scholar with a real or simulated case from the following disease categories:

- Chaya–Apachaya Janya Roga (e.g., Metabolic syndrome, Amyloidosis, Wilson’s disease, Hyperuricemia)
- Endocrine Disorders (e.g., Pituitary, Thyroid, Parathyroid, Adrenal, Reproductive hormonal disorders)

Scholars should be instructed to:

- Elicit a detailed clinical history (Ayurveda and Modern)
- Perform a focused physical examination
- Recommend appropriate laboratory and radiological investigations
- Interpret findings and formulate differential diagnoses
- Present diagnostic rationale to the examiner or peer group
- Describe prognosis (Sadyasadyata) based on Ayurvedic and modern clinical indicators

Rubric based Evaluation (25 marks):

- Case history and clinical examination- 5 marks
- interpretation of lab or radiological data- 5 marks

4

- differential diagnosis and disease staging- 5 marks
- Ayurvedic diagnostic approach- 5 marks
- communication and academic explanation to peers- 5 marks

Structured viva (Duration: 1hr, marks: 10)

Method: Oral Viva Voce

Conduct an individual viva on the following focus areas:

- Diagnostic approach and prognosis in endocrine disorders
- Nidana Panchaka and Samprapti of metabolic and hormonal disorders
- Appropriate investigation strategy for hormonal/metabolic diseases
- Ayurvedic management strategies for Chaya–Apachaya Janya Roga

Experiential learning outcome assessment (Duration: 1 hr, marks: 15)

Assessment Method: Case Portfolio / Presentation / Critical Review

Instructions to examiner:

Each scholar will submit one experiential task chosen from the following options:

- Prepare a case-based integrative treatment plan (using rational drug therapy, Panchakarma, Rasayana, Pathya-Apathya) for a diagnosed condition (e.g., PCOS, Hypothyroidism, Cushing's syndrome, etc.)
- Justify the rationale of the selected treatment based on Roga Avastha and Rogibala
- Critically review a published research article on Ayurvedic management of endocrine/metabolic disorders and present insights
- Reflect on patient-specific decision-making challenges faced during OPD/IPD postings in cases of endocrine disorders

Rubric based Evaluation (15 marks):

- Application of Ayurvedic principles- 5 marks
- Evidence-based reasoning and treatment logic- 5 marks
- Clarity, critical thinking, and academic expression- 5 marks

Or

Any practical in converted form can be taken for assessment. (25 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (25 marks)

Paper No : 3(Asthi Majja Shukravaha srotodushti vikara & Manoroga, Vata Vyadhi chikitsa)**Semester No : 3****Module 15 : Asthi-Majjavahasrotas Vikara evam Chikitsa (Management of Bone and Joint Disorders/ Skeletal System Disorders)****Module Learning Objectives**

(At the end of the module, the students should be able to)

1. Describe the chikitsa siddhanta of asthi- majjavaha srotas vikaras.
2. Diagnose various types of arthritis.
3. Identify the disorders related to bone.
4. Conduct the different investigations in diagnosing the bone and joint disorders.

Unit 1 Asthikshaya and Sandhigatavata

- Asthikshaya, Asthigatavata, Majjagatavata, Sandhigatavata
- Understanding the Etiopathogenesis of Asthikshaya (Osteopenia)(SP00), Ashti soughirya (Osteoporosis)(SP00-SP0Z).
- Sandhigatavata(Osteoarthritis)(SP12), Sandhi Shotha(Inflammatory Joint Diseases), Sankramita Sandhivata (Suppurative Arthritis, Tuberculous Arthritis), Carpal tunnel syndrome, Nadigranthi (Cyst of Ganglion), Bursitis, Khandara Shotha (Tendonitis)

References: 1,2,3,7,9

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2, CO5	Analyse the Nidana, Samprapti and Lakshana of Asthikshaya, Asthi and Majjagatavata,	1	Lecture	CAN	Knows-how	FC,L&GD,L,LS ,L&PPT
CO1,CO2, CO5	Differentiate Osteopenia and Osteoporosis by clinical features, radiological findings and T-score	1	Lecture	CAN	Knows-how	L_VC,L&GD,L &PPT ,FC,L

CO1,CO2,CO3,CO5	Describe Asthivahasrotodushti Chikitsa Siddhanta including Shamana, Shodhana and Rasayana.	1	Lecture	CC	Knows-how	L,FC,L&PPT,L_VC,L&GD
CO1,CO2,CO3,CO5	Prescribe the Rasayana drugs for a patient of Sandivata and collect the Recent updates in the management of Primary Osteoporosis.	2	Practical15.1	PSY-GUD	Shows-how	FC,PER,TBL,PAL,DIS
CO1,CO2,CO3,CO5	Assess and identify the acute conditions in Asthimajjavaha Srotovikara	2	Practical15.2	PSY-MEC	Shows-how	PT,RP,DIS,TBL
CO1,CO2,CO3,CO5	Diagnose Osteopenia and Osteoporosis, and prepare an official letter to a Pharmaceutical company to sponsor a free BMD checkup medical camp	2	Practical15.3	PSY-MEC	Shows-how	D,LRI,CBL
CO1,CO2,CO3,CO5	Illustrate an appropriate treatment protocol, Pathyapathya, and prepare a medical prescription for a patient of Osteopenia /Osteoporosis.	3	Experiential-Learning15.1	PSY-ADT	Does	PBL
CO1,CO2,CO3,CO5	Discuss and compile the Sandhigatavata Nidana, Samprapti, and Lakshana as per various texts	1	Lecture	CC	Knows-how	L,L_VC,L&PPT
CO1,CO2,CO5	Differentiate the Etiopathogenesis and Pathological Changes in Primary and Secondary Osteoarthritis.	1	Lecture	CAN	Knows-how	L&PPT,L&GD,L_VC
CO1,CO2,CO5	Interpret the Management of Osteoarthritis using Ayurvedic principles, including Shamana, Shodhana, and Rasayana therapies.	1	Lecture	CAN	Knows-how	L&PPT,L_VC,L&GD

CO1,CO2,CO5	Examine clinically and present a comprehensive clinical examination protocol aimed at accurately diagnosing Sandhigataavata (Osteoarthritis) while effectively distinguishing it from other joint disorders.	2	Practical15.4	PSY-MEC	Shows-how	BL,D
CO1,CO2,CO5	Differentiate between Normal and Abnormal Joints through clinical examination and distinguish the types of Arthritis (Inflammatory, Suppurative, and Tubercular).	2	Practical15.5	PSY-MEC	Shows-how	PT,SIM,L_VC
CO1,CO2,CO3,CO5	Design a treatment protocol for a case of Joint pain with History taking and clinical examination based on Guna Siddhanta.	3	Experiential-Learning15.2	PSY-ADT	Shows-how	PL,CBL,RLE
CO1,CO2,CO5	Discuss and differentially diagnose Carpal Tunnel Syndrome, Ganglion Cyst, Bursitis, and Tendonitis based on clinical features	1	Lecture	CAN	Knows-how	L_VC,LS,L&P PT
CO1,CO2,CO5	Assess and categorize the conditions of Carpal Tunnel Syndrome, Ganglion Cyst, Bursitis, and Tendonitis according to their respective clinical and pathological features and discuss the management.	2	Practical15.6	PSY-GUD	Shows-how	D,CD,CBL
CO1,CO2,CO5	Plan the Ayurvedic Treatment Principle of Osteoporosis and Osteopenia.	3	Experiential-Learning15.3	CS	Shows-how	RLE,RP
CO1,CO2,CO5	Demonstrate the administration of Bahiparimarjana Chikitsa in a case of Sandivata/Amavata based on the diagnosis.	2	Practical15.7	PSY-MEC	Shows-how	D-M,PT,DL

CO1,CO2,CO5	Assess and propose a treatment protocol for a patient with Sandhivata, along with discharge advice that includes Pathyapathya.	3	Experiential-Learning15.4	PSY-ADT	Shows-how	DL,LRI

Unit 2 Asthi-Majjavidradhi

- Asthi-Majjavidradhi
- Understanding the Etiopathogenesis of Majjashotha (Osteomyelitis), Myeloproliferative and suppression disorders

References: 1,2,3

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,CO3,CO5	Describe Asthi-Majjavidradhi (Majjaparipaka), Nidana, Samprapti Lakshana and etiopathogenesis, classification, and clinical diagnosis of Osteomyelitis.	1	Lecture	CC	Knows-how	L_VC,L,L&PPT ,L&GD
CO1,CO2,CO5	Demonstrate the differences between osteomyelitis, myeloproliferative disorders, and suppression disorders in terms of their etiology, pathogenesis, and management.	2	Practical15.8	PSY-MEC	Shows-how	CBL,PER,CD, PT
CO1,CO2,CO5	Assess and analyse recent updates of diagnosis and management of Asthi-Majjavidradhi(Majjaparipaka - osteomyelitis), including Shamana, Shodhana, and Rasayana therapies, along with pathyapathya	3	Experiential-Learning15.5	CS	Shows-how	PBL,PER
CO1,CO2,CO5	Demonstrate various methods for clinical joint examination and analyze relevant investigations to achieve differential diagnosis in joint disorders.	2	Practical15.9	PSY-GUD	Shows-how	D-BED,D

CO1,CO2,CO5	Design an outpatient treatment protocol for a chronic case of osteomyelitis, and discuss the possible causes of suppurative and non-suppurative osteomyelitis.	3	Experiential-Learning15.6	PSY-ADT	Does	PER,RP

Unit 3 Metabolic and autoimmune joint Disorders

- Vatarakta(SP14)
- Understanding the etiopathogenesis and management of - Vatarakta (Gout and Gouty Arthritis), Pseudo Gout
- Amavata,(SP11)
- Rheumatoid arthritis, Rheumatic fever, Kaishorya Sandhi shotha (Juvenile arthritis), Ekakushthaja Sandhivata (Psoriatic arthritis).

References: 1,2,3,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO2,CO5	Describe Vatarakta Nidana, Samprapti, Lakshana as per different Classics. Explain the etiopathogenesis of Gout and Gouty Arthritis, Pseudo-Gout	1	Lecture	CC	Knows-how	L&PPT ,L,L&GD
CO1,CO2,CO5	Describe Vatarakata Chikitsa, including Shamana, Shodhana, and Rasayana. Additionally, discuss the management of Gout and Gouty Arthritis.	1	Lecture	CAP	Knows-how	L&GD,L_VC,L &PPT
CO1,CO2,CO5	Present a clinical case of Vatarakta, evaluate its symptoms, explain the rationale for selecting Basti Chikitsa as the preferred treatment, and provide the formulation details of Ksheerabasti	2	Practical15.10	PSY-MEC	Shows-how	DIS,DA
CO1,CO2,CO5	Demonstrate the external therapies(Lepa/Seka/Vyayama) for Urustambha	2	Practical15.11	PSY-MEC	Shows-how	DA,PL,PBL,DIS

	and evaluate how Vyayama can aid in its management.					
CO1,CO2,CO5	Advise specific tests to diagnose Vatarakta and identify recent updates in the diagnosis and treatment of Gouty Arthritis.	3	Experiential-Learning15.7	CS	Shows-how	C_L,DIS,JC,CBL
CO1,CO2,CO5	Assess and prescribe post-discharge medication and Pathya Vihara for a vatarakta patient	3	Experiential-Learning15.8	AFT-RES	Shows-how	SDL,PER,PBL,RLE,REC
CO1,CO2,CO5	Describe the etiopathogenesis and management of Rheumatoid Arthritis, Rheumatic fever, and Juvenile arthritis	1	Lecture	CC	Knows-how	FC,L_VC,L&PPT,L,L&GD
CO1,CO2,CO5	Describe the recent updates in the Diagnosis and management of Rheumatoid Arthritis.	1	Lecture	CAP	Knows-how	L&GD,FC,L_VC,L&PPT
CO1,CO2,CO5	Describe Amavata Chikitsa that clearly outlines its essential components, including Shamana, Shodhana, and Rasayana. Additionally, list the important elements of Pathya and Apathaya, including Anupana. Furthermore, analyze Vyapath Chikitsa in the context of Amavata with precision.	1	Lecture	CAN	Knows-how	L&PPT,PER,L&GD,L_VC,FC
CO1,CO2,CO5	Demonstrate the Clinical Assessment of Avasthabheda and the therapeutic application of Eranda Prayoga in Amavata	2	Practical15.12	PSY-MEC	Shows-how	C_L,PBL
CO1,CO2,CO5	Assess clinically before administering Ksharabasti/Vaitaranabasti and analyze the ingredients of Ksharabasti and Vaitaranabasti for their mechanisms of action in Amavata	2	Practical15.13	PSY-MEC	Shows-how	DA,DIS

CO1,CO2,CO5	Identify the mode of action of Sampraptivinashana of Avasthanusara Bahiparimarjana chikitsa in Amavata	3	Experiential-Learning15.9	AFT-RES	Shows-how	CD
CO1,CO2,CO5	Create a care plan of advice on discharge for an Amavata patient, including specific vyayama to be performed after discharge.	3	Experiential-Learning15.10	PSY-ADT	Shows-how	CBL,DIS,SDL,FC

Unit 4 Urustambha and prayoga shalina pariksha in Joint Disorders

- Urustambha
- Investigations - Hb%, TC, DC, ESR, CRP, RBS, RA, Anti-CCP, ANA, X-ray, Joint fluid analysis , CPK

References: 1,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,CO5	Describe the Chikitsa Sutra and Pathya-Apathya in the management of Urustambha(with possible correlation), with an emphasis on the integrative application of Shamana, Shodhana, and Rasayana therapies for comprehensive disease resolution.	1	Lecture	CC	Knows-how	L&PPT ,L,L&GD
CO1,CO2,CO5	Illustrate the contraindications of Panchakarma therapy for patients diagnosed with Urustambha, including potential correlations, and support points with references from classical texts as well as practical observations based on Guna Siddhanta.	2	Practical15.14	PSY-MEC	Shows-how	DIS,PSM
CO1,CO2,CO5	Design a treatment protocol for a patient with Urustambha, including the specific types of Vyayama suitable for managing Urustambha.	3	Experiential-Learning15.11	CE	Knows-how	TBL

CO1,CO2,CO5	Discuss the external therapies prescribed for Urustambha, along with the potential mode of action of Vyayama in its management.	1	Lecture	CC	Knows-how	L&GD,L&PPT
CO2,CO5	Demonstrate the various examinations used for assessment and diagnose of muscular diseases affecting the lower limbs.	2	Practical15.15	PSY-MEC	Shows-how	D-BED,CBL
CO1,CO2,CO5	Prescribe medicine or a patient with Severe pain and Muscle Stiffness in the lower limbs.	3	Experiential-Learning15.12	PSY-ADT	Shows-how	PBL,CBL
CO1,CO2,CO5	Examine and interpret specific investigations such as Hb%, TC, DC, ESR, CRP, RBS, RA, serum urea, creatinine, uric acid, anti-CCP, ANA, X-ray, joint fluid analysis, CPK, and cartilage mapping MRI to aid in the diagnosis of various joint disorders.	3	Experiential-Learning15.13	PSY-MEC	Shows-how	CBL,LRI

Practical Training Activity

Practical Training 15.1 Administration of Rasayana drugs in a case of Sandivata

1. PG scholars are divided into two groups and instructed to take the clinical history and perform a detailed examination of the locomotor system of an IPD case of Sandhivata, after obtaining the patient's consent.
2. Assess the present avastha of the patient with respect to Deha Bala, Vyadhi Bala, and Dosha Bala.
3. Evaluate the presence of Shula (pain), Shotha (swelling), and the mobility of the patient.
4. Observe a demonstration by the teacher of specific examinations related to the knee joints, and understand the findings based on Guna-Karma Siddhanta.
5. Assess the necessity of Deepana-Pachana and other Bahiparimarjana and Antahparimarjana Chikitsa.
6. The teacher, after analysing the Koshtha, advises Mridu Virechana(Koshtha Shodhana) to the patient.
7. The scholars are asked to comprehend the Phalashruti, Sevanakala, Matra, and Anupana of the following Aushadha Yogas - Rasna Guggulu, Navaka Guggulu, Triphala Guggulu, and Yogaraja Guggulu.
8. Explains the rationality behind prescribing specific Rasayana drugs.
9. The teacher asked to compile recent updates regarding the diagnosis and management of Osteoporosis and present them.
10. Document the challenges encountered during the group activity.
11. The teacher will conclude the session and explain how to overcome the challenges.

Practical Training 15.2 Case scenario-Asthimajjavaha Srotovikara emergencies

1. The teacher will give brief knowledge about acute conditions involved in Asthimajjavaha srotovikaras like Fracture, Dislocation, Osteomyelitis, Bone marrow oedema, etc.
2. Each scholar will be assigned these acute conditions(case scenario)
3. The scholar should work in detail on the steps involved in managing acute conditions. Steps includes -
 - a. Assessment: Patient's symptoms, including pain levels, Mobility issues, and signs of infection
 - b. Stabilization: Managing pain and providing support for fractures or severe injuries
 - c. Immediate referral: for imaging and laboratory tests
 - d. Supportive care
 - e. Patient education and follow-up
4. The scholar has to present their assigned acute condition
5. The teacher will give feedback on the assessment and interpretations, and summarize the key points

Practical Training 15.3 Identification of the most suitable diagnostic investigations for Osteopenia and Osteoporosis.

1. The teacher will provide a brief overview of osteoporosis and osteopenia, and the importance of early diagnosis and intervention.
2. In-depth discussion on BMD assessment techniques like:
 - a. Principles of DEXA (Dual-Energy X-ray Absorptiometry) - Gold standard for measuring bone mineral density
 - b. QCT (Quantitative Computed Tomography)
 - c. Ultrasound densitometry.
 - d. Overview of biochemical markers (Tests such as serum calcium, vitamin D levels, PTH, and bone resorption markers (e.g., CTX, NTX) and their relevance.
 - e. T-scores and Z-scores.
3. Divide scholars into 2-3 groups.
4. Provide each group with a clinical case, including demographic data, history, and results from various diagnostic tests.
5. Ask groups to interpret the results, identify risk factors, and suggest management strategies.
6. Each group presents its case findings and recommendations.
7. The teacher will give feedback on the assessment and interpretations.
8. The teacher will address any questions from the scholars and summarize key takeaways regarding the investigation of osteopenia and

osteoporosis.

9. Regarding the letter to the pharmaceutical company:

1. The teacher has to describe the key points that have to be mentioned in the letter.
2. Make each scholar write a letter.
3. The teacher will correct the letters and give feedback.

Practical Training 15.4 Clinical Examination Protocol for Differential Diagnosis of Sandhigatavata (Osteoarthritis)

1. The teacher will divide the scholars into two groups, provide a brief overview of osteoarthritis, its relevance in clinical practice, and the importance of differential diagnosis in joint disorders.

2. Discuss the pathophysiology and epidemiology of osteoarthritis.

3. Highlight the key clinical features and diagnostic criteria.

4. Present the differential diagnoses with distinguishing features

Egs, a. Rheumatoid Arthritis: Symmetrical joint involvement, morning stiffness lasting >1 hour.

b. Gout: Sudden onset, red swollen joint (often the first metatarsophalangeal joint), pain intensity.

c. Psoriatic Arthritis: Joint involvement associated with skin lesions, dactylitis (sausage fingers).

d. Septic Arthritis: Rapid onset of joint swelling and severe pain with fever, etc

5. The teacher will demonstrate step-by-step clinical examination on a volunteer or model.

Explains key examination techniques and highlights common findings in osteoarthritis vs. other joint disorders.

6. The teacher will divide scholars into small groups and provide different case scenarios (osteoarthritis vs. other joint disorders).

7. Each group performs a mock examination based on the case and presents the findings.

8. Discuss differential diagnoses and rationalize their choices.

9. The teacher will summarize key takeaways regarding the examination and differential diagnosis of joint disorders.

Practical Training 15.5 Differentiation of Normal and Abnormal Joints through Clinical Examination to distinguish various types of Arthritis.

1. The teacher will briefly explain the importance of joint examination in clinical practice.
2. The teacher will explain and demonstrate the differentiation of normal and abnormal joints through clinical examination in terms of:
Appearance, Palpation, Crepitus, and Range of motion . Normal Joint:

- Appearance: smooth, symmetrical without swelling, redness, deformity, etc
- Range of Motion (ROM) with the help of goniometry: Full, pain-free active and passive range of motion.
- Palpation: Absence of tenderness or warmth
- Crepitus: Occasionally present

Abnormal Joint:

- Appearance: Presence of swelling, deformity, and redness may be observed.
- Range of Motion: Reduced or painful range of motion; may exhibit instability.
- Palpation: Presence of tenderness, effusion, warmth, or abnormal masses (e.g., ganglia).
- Crepitus: Often more pronounced; may indicate degenerative changes or inflammatory processes.

4. Explain and demonstrate the differentiation among joint diseases through step-by-step clinical examination, like:

a. Inflammatory Joint Diseases (e.g., Rheumatoid Arthritis, Psoriatic Arthritis)

- Onset: Often gradual, with morning stiffness lasting >1 hour.
- Symmetry: Usually symmetrical involvement of joints.
- Other Symptoms: Systemic symptoms (fatigue, fever, malaise), extra-articular manifestations (nodules, skin lesions).
- Joint Changes: Swelling, tenderness, and potential deformities (ulnar deviation, swan-neck deformities).

2. Suppurative Arthritis (Septic Arthritis)

- Onset: Rapid onset, often with severe pain and swelling.
- Symptoms: Fever, chills, and systemic signs of infection.
- Joint Changes: Single joint involvement (most commonly the knee or hip), significant tenderness, and warmth.
- Laboratory Findings: Synovial fluid analysis shows a high white cell count with neutrophils, and positive culture.

3. Tubercular Arthritis

- Onset: Insidious; may have a chronic course.
- Symptoms: Mild pain, swelling, and limited motion; often associated with systemic TB symptoms (fever, weight loss).
- Joint Changes: Typically involves larger joints (e.g., hip, knee), with signs of joint destruction over time.
- Laboratory Findings: Synovial fluid shows lymphocytic predominance, acid-fast bacilli may be present, but cultures can be slow.

4. The instructor will divide scholars into small groups and provide various case scenarios reflecting normal and abnormal joint presentations.

5. Each group performs mock examinations based on their case and presents findings, including differential diagnoses.

6. The teacher will give feedback on the assessment and interpretations, and summarize the key points

Practical Training 15.6 Ayurvedic Management of Carpal Tunnel Syndrome, Ganglion Cyst, Bursitis, and Tendonitis

1. The teacher will brief overview of common musculoskeletal conditions affecting the wrist and hand, and the importance of accurate diagnosis in clinical practice.
2. Discuss the pathophysiology and clinical features, and demonstrate step-by-step clinical examination of each condition of Carpal Tunnel Syndrome, Type, Pathophysiology, Symptoms, Clinical Examination, Ganglion Cyst, Bursitis, Tendonitis
3. The teacher will divide scholars into small groups and provide various case scenarios reflecting normal and abnormal joint presentations.
4. Each group performs mock examinations based on their case and presents findings, including differential diagnoses and discusses the possible management, including shodhana and shamana.
5. The teacher will give feedback on the assessment and interpretations on diagnosis and treatment and summarize the key points.

Practical Training 15.7 Administration of Bahiparimarjana Chikitsa in a case of Sandhivata/Amavata

1. The teacher will explain the classical symptoms of sandhivata, like pain and swelling of the affected joint associated with painful and restricted range of motion.
2. The teacher will demonstrate step-by-step clinical examination of every joint (shoulder joint, elbow joint, wrist joint, interphalangeal joints, hip joint, knee joint, ankle joint) concerning inspection, palpation, range of motion with the help of goniometry, along with special tests.
3. The teacher will explain the important investigations that confirm the diagnosis, X-rays, MRI, and Laboratory Tests.
4. The teacher will explain and demonstrate the practice of various types of Bahiparimarjana Chikitsa in sandhivata/Amavata based on different avastha and Dosha involvement.
5. The teacher will divide the PG scholars into small groups and allot a case of sandhivata
6. Scholars have to take a detailed history of the patient, perform specific clinical examination step-by-step, diagnose the condition, and suggest the relevant Bahiparimarjana Chikitsa.

7. The teacher will give feedback on the assessment and interpretations, and summarize the key points

Practical Training 15.8 Comparison of Osteomyelitis, Myeloproliferative Disorders, and Suppression Disorders with management.

1. The teacher gives an overview of the three conditions: definition and significance in clinical practice.

2. Detailed discussion on etiopathogenesis and management:

a. Osteomyelitis

- Definition: Bone infection, typically bacterial.
- Causes:
 - Hematogenous spread, direct inoculation (trauma/surgery), and contiguous spread from soft tissue infections.
- Risk Factors: Diabetes, immunosuppression, chronic kidney disease, IV drug use.
- Management: Antibiotics, surgical intervention, supportive care.

b. Myeloproliferative Disorders

- Definition: Excessive blood cell production.
- Causes: Mutations in hematopoietic stem cells (e.g., JAK2).
- Pathophysiology: Overproduction can lead to complications like thrombosis and leukemia.
- Management: Phlebotomy for conditions like Polycythemia Vera, cytoreductive therapy with hydroxyurea or JAK inhibitors.

c. Suppression Disorders

- Definition: Impaired bone marrow or immune function.
- Causes: Aplastic anemia, autoimmune disorders, infections, toxins (e.g., chemotherapy).
- Pathophysiology: Results in anemia, leukopenia, and thrombocytopenia.
- Management: Supportive care (transfusions), immunosuppressive therapy (ATG, cyclosporine), and bone marrow transplant for severe cases.

3. Divide scholars into small groups for case studies/case scenarios on each condition.

4. Each group analyzes, identifies key features, presents the diagnosis, and discusses the Ayurveda management Principles.

5. The teacher provides feedback and summarizes key points on Ayurveda management and its limitations.

Practical Training 15.9 Clinical joint examination methods and differential diagnosis analyses.

1. The teacher will briefly explain the importance of clinical joint examination in diagnosing joint disorders.
Discuss common joint disorders, highlighting signs and symptoms by using the

- Anatomical models of joints (if available)
- Goniometer for assessing range of motion
- Reflex hammer
- Inspection and palpation tools (e.g., latex gloves, measuring tape)
- Patient consent forms (if using real patients)
- Sample imaging results (X-rays, MRI, etc.) for investigation analysis

2. The teacher will demonstrate the following examinations

- Inspection: Show how to visually inspect the joint for swelling, redness, and deformities.
- Palpation: Demonstrate palpation techniques to assess tenderness, warmth, and effusion.
- Range of Motion Assessment: Use a goniometer to measure active and passive range of motion.
- Special Tests: Perform and explain the significance of tests such as McMurray's test for the knee or the Lachman test, etc.

4. Divide scholars into small groups and assign each group a specific joint to examine.

- Encourage them to practice inspection, palpation, and range of motion techniques on each other (or use models).

5. Teacher will initiate the discussion on Investigations

- Present case studies highlighting different joint disorders.
- Discuss relevant investigations such as blood tests (e.g., rheumatoid factor, ESR), imaging (X-rays, MRI), and synovial fluid analysis.

6. Open the floor for any questions to clarify examination techniques or differential diagnoses for joint disorders. Scholars participate actively in discussions, especially when analyzing case studies and relevant investigations.

5. Reflection:

- After the practical session, reflect on the techniques learned and consider how they apply to clinical settings you may encounter in the future.

6. The teacher will summarize the key points of the session and emphasize the significance of thorough clinical examination and appropriate investigations in the successful diagnosis and management of joint disorders.

Practical Training 15.10 Practical Steps for Vatarakta Management: Basti as the Best Chikitsa.

The teacher will demonstrate.

1. Patient Assessment - Medical History: Gather a detailed medical history to identify risk factors and previous treatments, and investigation reports. Physical Examination: Assess the affected areas for warmth, swelling, discoloration, tenderness, deformities, mobility etc.,

2. Assess the Dosha Dushya involvement and avasta of the Vyadhi to plan a treatment protocol.
3. Explain the Samprapti vighatana Chikitsa in Vatarakta and justify why Basti is best in Vatarakta (Ksheerabasti)
4. The scholars will be asked to list the ingredients of Ksheerabasti and to present the probable mode of action.
5. Monitor the Patient after giving Ksheerabasti in the ward for any immediate changes/benefits/reduction in the symptomatology etc. (as per the availability of patients)
6. The teacher will conclude, and students are asked to write their observations.

Practical Training 15.11 Exploring External Therapies for Urustambha

1. The teacher will provide an overview of various examination methods and differential diagnoses for Urustambha, and clarify how external therapies assist in treating Urustambha, along with their probable modes of action.
2. The scholars are assigned a clinical case of Urustambha.
3. The teacher will demonstrate and explain any of the external therapies mentioned in Urustambha, including parisheka, utsadana, pradeha, pralepa, and the specific vyayama mentioned in this disease.
4. Scholars should discuss the specific vyayama mentioned in the classics, like walking on the gravel, sand jumping, plavana (swimming), or possible joint mobilization, stretching, strengthening, and breathing exercises (Pranayama).
5. The teacher will summarize key points and conclude with the probable mode of action of specific treatment.

Practical Training 15.12 Clinical Assessment of Avasthabheda and Eranda Prayoga for Amavata

1. Scholars will be divided into 2 groups.
2. Scholars will take a detailed history, do the general physical examination, special examinations, assessments, and investigations in a case of Amavata.
3. The teacher will explain about the Samprapti Vighatana Chikitsa and the clinical application of Eranda prayoga based on the avasthabheda.
4. The teacher will also provide knowledge regarding various eranda yogas and their mode of action.
5. Scholars should analyse the avastha beda and give appropriate anupana for eranda prayoga.
6. The scholars present their case with an understanding of the mode of action of Eranda, including pharmacological correlation.
7. The teacher will conclude by justifying that Eranda Prayoga is the best therapy for Amavata.

Practical Training 15.13 Assessing Amavata and Analyzing Ksharabasti and Vaitaranabasti ingredients

1. Scholars will be divided into 2 groups.
2. Scholars will take a detailed history, do the general physical examination, special examinations, assessments, and investigations in a case of Amavata/case scenario.

3. The teacher will explain about the Samprapti Vighatana Chikitsa and the clinical application of Ksharabasti/Vaitaranabasti based on the avasthabeda.
4. The teacher will also provide knowledge regarding the differences between Ksharabasti and Vaitarana basti, along with their mode of action.
5. Scholars should analyse the avastha beda and advise the appropriate type of Basti.
6. The scholars present their case with an understanding of the assessment of avastha, the mode of action of Ksharabasti and Vataranabasti, including pharmacological correlation.
7. The teacher will conclude by justifying that Ksharabasti/Vataranabasti is one of the best therapies for Amavata.

Practical Training 15.14 Evaluating the Contraindications of Panchakarma in Urustambha.

1. The teacher will explain the Nidana Panchaka and the possible correlation of the disease, Urustambha.
2. The teacher will explain the classical reason for the contraindication of Panchakarma treatments with reasoning.
3. Scholars will be divided into two groups and given a case of Urustambha/case scenario.
4. Scholars will thoroughly take history, do the general physical examination, special assessments and investigations (haematological tests, radiology- X-Ray, BMD test, etc.)
5. Scholars will assess the mobility, balance, and fall risk, etc, through the Timed Up and Go (TUG) Test.
6. Assess the prakruti of the patient, vyadhi avastha, Ama-Meda-dosha-dushya involvement, and justify the statement why panchakarma is contraindicated in Urustambha
7. Scholars will plan management, including Shamana therapy and external therapies, including Vyayama
8. Scholars should emphasize the importance of consistency in both Pathyaapthya and exercise to manage symptoms effectively.
9. The Scholars will work on Communication Skills needed in patients with muscle stiffness, like Active Listening, Empathy, and maintaining eye contact during communication, the Teach-Back Method (For example, after explaining medication instructions, ask the patient to repeat the information in their own words)
10. One member of each group will present and discuss the challenges encountered during the assessments.
11. The teacher will facilitate the group discussion and summarise the key points.

Practical Training 15.15 Diagnostic Approaches for Lower Limb Muscle Disorders.

1. The teacher will give an overview of common muscular diseases affecting the lower limbs, along with discussion points for a practical session.
2. The scholars are divided into two groups and asked to prepare a list of the Muscular Diseases Affecting Lower Limbs: Muscular Dystrophy (MD), Peripheral Artery Disease (PAD), Diabetic Myopathy, Peripheral Neuropathy, etc.
3. The teacher will carry out the demonstration on an IPD case/Case scenario as follows:
4. General Inspection and Gait Analysis - to observe for any visible abnormalities in muscle bulk (Muscle wasting or hypertrophy), posture, and walking pattern, and Asymmetry.

5. The teacher will perform - Hip Flexion (L2-L3): Ask the patient to lift their thigh against resistance, Knee Extension (L3-L4): Ask the patient to straighten their knee against resistance, Ankle Dorsiflexion (L4-L5): Ask the patient to pull their foot upwards against resistance, Ankle Plantarflexion (S1-S2): Ask the patient to push their foot downwards against resistance, and grade muscle strength by using MRC scale
6. The teacher will perform the Neurological Examination - Superficial and Deep tendon reflexes, Sensory Examinations, Coordination tests.
7. The teacher will ask the scholar to list the Specialized investigations.
8. One member of each group will present and discuss the assessments.
9. The teacher will facilitate the group discussion and make them understand that early detection and accurate diagnosis are crucial for effective management and treatment planning.

Experiential Learning Activity

Experiential-Learning Learning 15.1: Treatment Protocol for Osteopenia/Osteoporosis

1. Students will be divided into 2 groups.
2. Students will thoroughly take the history, do the general physical examination, special assessments and investigations (haematological tests, radiology- X-Ray, BMD test, etc.)
3. Students will assess the mobility, balance, and fall risk, etc
4. Assess the avastha based on sadhyasadyata(lakshana and upadrava)
5. Students will plan management, including treatment protocols, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advice, satwawajaya chikitsa, and pathyapathya.
6. Students will work on Communication Skills needed in patients with Osteopenia/Osteoporosis, like Active Listening, Empathy, and maintaining eye contact during communication, Teach-Back Method (For example, after explaining medication instructions, ask the patient to repeat the information in their own words)
7. Comprehend the Phalashruti, Sevanakala, Matra, and Anupana, or external use of the following Aushadha Yogas - Lakhshadi Guggulu, Ganda Taila, Asthishrunkala Taila, Nirgundi Taila.
8. One member of each group will present and discuss the challenges encountered during the assessments.
9. The teacher will coordinate group discussion, summarize key points, and conclude.

Experiential-Learning Learning 15.2: Preparation of treatment protocol for Joint pain based on Guna Siddhanta.

1. Scholars will be divided into 2 groups and assigned one case each from the hospital IPD.
2. Scholars will thoroughly take history, do the general physical examination, special assessments (Musculoskeletal System Examination), and investigations (haematological tests-ESR, CRP, Anti-CCP, radiology- X-Ray, CT Scan, MRI Scan, etc.)

3. Scholars will assess the mobility, range of movement (Goniometry), pain assessment (site, onset, nature, severity-VAS Scale, SOCRATES Scale), aggravating and relieving factors.
4. Diagnose and prepare a treatment protocol based on the Ayurveda approach.
5. One member of each group will present. Discuss the challenges encountered during the assessments.
6. The teacher will coordinate group discussion.
7. The teacher will summarize key points and conclude.

Experiential-Learning Learning 15.3: Construction of the treatment Principle of Osteoporosis and Osteopenia.

1. Scholars will be divided into two groups and assigned one topic each: Osteoporosis and Osteopenia, respectively.
2. Each group is assigned to patients diagnosed with osteopenia and osteoporosis after being investigated through the BMD
3. By understanding the etopathogenesis of this condition, apply the Ayurveda treatment principles for managing the condition (Asthi/Majja kshaya)
4. Consider and discuss the Risk factors involved
5. Analyse and apply the appropriate treatment Principles: Shamana Chikitsa, Shodhana Chikitsa, Rasayana Chikitsa
6. Advise Shareerika and Manasika Pathya-Pathya (lifestyle Modifications, including stress management)
7. Assessment Questions: What is the Ayurvedic understanding of osteoporosis and osteopenia, and key treatment principles in the present condition?
8. One member of each group will present the topic.
9. The teacher will summarize key points and conclude.

Experiential-Learning Learning 15.4: Treatment Protocol and Discharge Advice for Sandhivata

1. Scholars will be divided into two groups and assigned one case of Sandhivata each from the hospital IPD.
2. Scholars will thoroughly take history, do the general physical examination, special assessments and investigations (haematological tests, radiology- X-Ray, BMD test, etc.)
3. Scholars will assess the mobility, range of movement (Goniometry), pain assessment (site, onset, nature, severity-VAS Scale, SOCRATES Scale), aggravating and relieving factors.
4. Students will plan management including treatment protocols, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advice, pathyapathya, and discharge advice (dose, anupana, bhesaja kala) with follow-up/ review date.
5. Scholars will work on Communication Skills needed in patients with Sandhivata, like Active Listening, Empathy, and maintaining eye contact during communication, the Teach-Back Method (For example, after explaining medication instructions, ask the patient to repeat the information in their own words)

6. Comprehend the Phalashruti, Sevanakala, Matra, and Anupana, or external use of the following Aushadha Yogas - Balarishta, Dashamularishta, Dashamula Kashaya, Lakshadi Guggulu, Guggulu tiktaka ghrita, Gokshura Churna, Ksheerabala Taila, Mahanarayana Taila, Kottamchukkadi Taila.
7. One member of each group will present and discuss the rationality behind the selection of specific Rasayana drugs and challenges encountered during the activity.
8. The teacher will coordinate the group discussion, summarize key points, and conclude.

Experiential-Learning Learning 15.5: Recent updates in Asthi-Majjavidradhi management and pathyapathya.

1. Each scholar will be assigned a specific aspect of Asthi-Majjavidradhi (Majja Paripaka) to analyze the recent updates on the diagnosis and management of Asthi-Majjavidradhi (Majjaparipaka - osteomyelitis), including Shamana, Shodhana, and Rasayana therapies, along with Pathyapathya.
2. Scholars should thoroughly prepare their presentations on the assigned topics, covering key aspects such as etiology, clinical features, diagnostic methods, and treatment strategies.
3. Develop a concise presentation that summarizes the information, ensuring clarity and organization.
4. Participate actively in a group discussion coordinated by the instructor to share findings and explore different perspectives.
5. The teacher's Summary: After presentations, engage in the discussion led by the teacher, who will summarize key points and conclude the session.
6. Reflect and Feedback: Reflect on the experience and provide feedback on the presentations and discussion process for continuous improvement.

Experiential-Learning Learning 15.6: Outpatient Treatment Protocol for a Chronic Osteomyelitis case

1. Scholars will be assigned one case of Chronic Osteomyelitis (OPD)/cse scenario.
2. Scholars will thoroughly take the patient's history, conduct a general physical examination, perform special assessments, and carry out investigations.
3. Scholars will analyze and discuss the differential diagnoses and the final diagnosis.
4. The group will discuss the possible causes of both suppurative and non-suppurative osteomyelitis in order to formulate an appropriate treatment plan.

5. Scholars will develop a management plan that includes treatment protocols, modifications for panchakarma (considering procedures, dosages, and comorbidities), shamana (dosage, anupana, and bhesaja kala), rasayana, nutritional advice, satwawajaya, and pathyapathya.
6. One scholar will present the case and the treatment protocol, followed by a group discussion coordinated by the teacher.
7. Scholars will plan management including treatment protocols, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advice, satwawajaya, daivavyapashraya chikitsa, and pathyapathya.
8. The teacher will summarize key points and conclude the session.

Experiential-Learning Learning 15.7: Recent updates in the diagnosis and treatment of Vatarakta (Gouty Arthritis)

1. Assign scholars specific topics related to Gouty Arthritis (genetic predispositions and metabolic abnormalities related to uric acid production and excretion roles in the development of Gout), such as the latest diagnostic criteria, treatment modalities including Shamana, Shodhana, and Rasayana therapies, and relevant dietary recommendations (Pathyapathya).
2. Scholars need to emphasize lifestyle modifications, including dietary changes, reducing purine-rich foods, alcohol intake, and maintaining hydration, are being reinforced in treatment plans.
2. Scholars should thoroughly prepare their presentations on the assigned topics, covering key aspects such as etiology, clinical features, diagnostic methods, and treatment strategies.
3. Develop a concise presentation that summarizes the information, ensuring clarity and organization.
4. Participate actively in a group discussion coordinated by the teacher to share findings and explore different perspectives.
4. Simulated/ Case Management – Solve cases by suggesting personalized treatment plans.
6. Reflect and Feedback: Reflect on the experience and provide feedback on the presentations and discussion process for continuous improvement.

Experiential-Learning Learning 15.8: Post-Discharge Care Plan for Vatarakta Patients: Prescription and Vyayama

1. Scholars will be divided into 2 groups and assigned one case of Vatarakta each from IPD/Case Simulation.

2. Assess recovery progress of a Vātarakta patient on the day of discharge. Implement and monitor dietary and lifestyle modifications as per Ayurvedic principles. Understand follow-up Panchakarma or Shamana therapy. Identify early signs of relapse and management strategies.
3. Review the discharge summary and treatment given. Discuss the patient's understanding of Vātarakta, its triggers, and precautions. Give focus on: Pain level, Joint stiffness, Dietary adherence, Sleep, and stress levels on the day of discharge.
4. Review current diet and compare with Pathya-Apathya guidelines. Identify non-compliance and suggest corrections. Discuss Dinacharya & Ritucharya modifications.
5. Scholars will observe gait, joint movements, swelling (Shotha), and discoloration (Raga).
6. Identify non-compliance and suggest corrections.
7. Scholars will plan Shamana (dose, anupana, bhashajala), rasayana, nutritional advice, satwawajaya chikitsa, pathyapathya, and discharge advice (dose, anupana, bhashajala) with follow-up/ review date.
8. Scholars should advise the specific vyayamas mentioned, like or possible Joint Mobilization, Stretching, Strengthening, Breathing Exercises (Pranayama).
9. Comprehend the Phalashruti, Sevanakala, Matra, and Anupana, or external use of the following Aushadha Yogas - Amritadi Guggulu, Kaishora Guggulu, Guduchi Churna, Kokilaksha Kashaya, Pinda Taila.
10. One member of each group will present and discuss the rationality behind the selection of different Rasayana drugs.
11. The teacher will coordinate the group discussion, summarize key points, and conclude.

Experiential-Learning Learning 15.9: Unraveling Avasthanusara Bahiparimarjana Chikitsa in Amavata

1. Scholars will be divided into two groups and assigned one case each from the hospital's IPD Amavata/Case scenario.
2. Scholars will thoroughly take history, do the general physical examination, special assessments (Musculoskeletal System Examination), and investigations (haematological tests-ESR, CRP, Anti-CCP, radiology- X-Ray, CT Scan, MRI Scan, etc.)
3. Scholars will assess the mobility, range of movement (Goniometry), pain assessment (site, onset, nature, severity-VAS Scale, SOCRATES Scale), aggravating and relieving factors.
4. The scholars will present/demonstrate the practice of various types of Bahiparimarjana Chikitsa for Amavata based on different avasthas and Dosha involvement, and explain how the Sampraptivighatana is facilitated by the Bahiparimarjana Chikitsa.
5. The Scholars will analyze the mode of action of different types of external therapies like Pralepa/Pradeha/Pariseka,
6. One member of each group will present and discuss the challenges encountered during the assessments.
7. The teacher will give feedback on the assessment and interpretations and summarize the key points.

Experiential-Learning Learning 15.10: Post-Discharge Care Plan for Amavata Patient

1. Scholars will be divided into 2 groups and assigned one case of Amavata each from IPD/Case Simulation.

2. Assess the recovery progress of an Amavata patient on the day of discharge. Implement and monitor dietary and lifestyle modifications as per Ayurvedic principles. Understand follow-up Panchakarma or Shamana therapy. Identify early signs of relapse and management strategies.
3. Review the discharge summary and treatment given. Discuss the patient's understanding of Amavata, its triggers, and precautions. Give focus on Pain level, Joint stiffness, Dietary adherence, Sleep, and stress levels on the day of discharge.
4. Review current diet and compare with Pathya-Apathya guidelines. Identify non-compliance and suggest corrections. Discuss Dinacharya & Ritucharya modifications.
5. Scholars will plan shamana (dose, anupana, bhesaja kala), rasayana, nutritional advice, satwawajaya chikitsa, pathyapathya, and discharge advice (dose, anupana, bhesaja kala) with follow-up/ review date.
6. Scholars should advise on the specific vyayamas mentioned, such as Joint Mobilization, Stretching, Strengthening, and Breathing Exercises (Pranayama).
7. Comprehend the Phalashruti, Sevanakala, Matra, and Anupana, or external use of the following Aushadha Yogas - Simhanada Guggulu, Punarnava Guggulu, Amavatari Rasa, Amritottaram Kashaya, Shaddharana Curna, Brihatsaindavadi Taila.
8. One member of each group will present and discuss the rationality behind the selection of specific drugs.
9. The teacher will facilitate the group discussion and summarize the key points.

Experiential-Learning Learning 15.11: Urustambha treatment protocol

1. Scholars will be divided into two groups and assigned one case of Urustambha each from the hospital IPD/Case scenario.
2. Scholars will develop a comprehensive management plan, including treatment protocols, Bahiparimarjana Chikitsa (special procedural modifications for patients with comorbidities), Shamana, pathyapathya guidelines, ensuring clarity on dosage, anupana, and bhesaja kala.
3. Additionally, scholars should recommend specific vyayamas as outlined in classical texts, such as walking on gravel, sand jumping, plavana (swimming), or suitable practices like joint mobilization, stretching, and strengthening exercises to support holistic recovery and well-being.
4. Implement and monitor appropriate dietary and lifestyle modifications based on the avastha and dosha involvement.
5. Ensure continuity of care with suitable Shamana therapy during follow-up. Educate the patient to recognize early signs of relapse, such as stiffness, heaviness, or reduced mobility.
6. Comprehend the Phalashruti, Sevanakala, Matra, and Anupana of the following Aushadha Yoga - Sahacharadi Kashaya, Rasna Saptaka Kashaya, Aajmodadi Churna.
7. Review the discharge summary and treatment given. Discuss the patient's understanding of Urustambha, its triggers, and precautions. Give focus on Pain level, Joint stiffness, Dietary adherence, Sleep, and stress levels on the day of discharge.
8. One member of each group will present and discuss the challenges encountered during the assessments.
9. The teacher will facilitate the group discussion and summarize the key points.

Experiential-Learning Learning 15.12: Prescription for Severe Pain and Muscle Stiffness in Lower Limbs

1. Scholars will be divided into two groups and given a case/ scenario with severe pain and Muscle Stiffness in the lower limbs from the OPD
2. Take a detailed history, including duration, severity, triggering factors, and associated symptoms (such as swelling, numbness, and weakness). Perform a physical examination: muscle tone, reflexes, and pain localization. Write the relevant investigations if necessary.
3. Determine the probable cause: neurological disorder, musculoskeletal strain, systemic condition (e.g., Parkinson's, dystonia, muscular dystrophy, etc.). Rule out contraindications before prescribing medications.
4. Scholars will assess the mobility, balance, and fall risk, etc, through the Timed Up and Go (TUG) Test.
5. Scholars will plan management, including shamana (dose, anupana, bhesaja kala), rasayana chikitsa as per the dosha-dushya involvement and avastha of the disease.
6. Scholars should emphasize the importance of consistency in both Pathyaapthya and exercise to manage symptoms effectively.
7. Scholars will work on Communication Skills needed in patients with muscle stiffness, like Active Listening, Empathy, and maintaining eye contact during communication, the Teach-Back Method (For example, after explaining medication instructions, ask the patient to repeat the information in their own words)
8. One member of each group will present and discuss the challenges encountered during the assessments and while writing the prescription, and the teacher will coordinate the group discussion.

Experiential-Learning Learning 15.13: Report interpretation in Joint disorder

1. The teacher will divide the scholars into two groups and provide different case studies with various investigation reports, including Hb%, TC, DC, ESR, CRP, RBS, RA, serum urea, creatinine, uric acid, anti-CCP, ANA, X-ray, joint fluid analysis, CPK, and cartilage mapping MRI, to analyze and diagnose the cases for developing appropriate treatment plans.
2. The scholars will be asked to present the detailed investigations used in diagnosing various joint disorders through a PowerPoint presentation.
3. Interpret and analyze findings, correlate clinical presentations with investigation results, consider differential diagnoses, diagnose the cases, and confirm the joint disorder diagnosis (osteoarthritis, rheumatoid arthritis, gout).
4. Scholars will develop a treatment plan using Ayurvedic treatment principles based on the investigation results in light of Guna Siddhanta.
5. The teacher will facilitate the group discussion and encourage students to share their experiences in understanding the application of modern investigative methods for effective treatment using Ayurvedic principles.

6. The teacher will conclude the session by explaining how Ayurvedic treatment principles can be applied effectively based on Guna siddhanata, along with the interpretation of modern investigation results.	
Modular Assessment	
Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 75 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Three questions can be asked, each carries 25 marks. 1. Categorize the conditions of Carpal Tunnel Syndrome, Ganglion Cyst, Bursitis, and Tendonitis according to their respective clinical and pathological features and discuss the management. - 25 marks 2. Describe Vatarakta Nidana, Samprapti, and Lakshana as per different Classics. Explain the etiopathogenesis of Gout and Gouty Arthritis, Pseudo-Gout - 25 marks 3. Analyze and interpret the mode of action of Sampraptivinashana of Avasthanusara Bahiparimarjana chikitsa in Amavata - 25marks Or Any practical in converted form can be taken for assessment. (40 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (35 marks)	6
Semester No : 4	
Module 16 : Vatavyadhi -1	
Module Learning Objectives (At the end of the module, the students should be able to) 1. Discuss the fundamentals and applied aspect of vatavyadhi in clinical practice 2. Diagnose various types of vata vikaras and their clinical management 3. Identify the different disorders related to spinal cord and nerve compression	

4. Analyze and appreciate the differences between Avabahuka, Viswachi, Katigraha, Gridhrasi through assessment scales and investigations.
5. Manage the conditions of Avabahuka, Viswachi, Katigraha, Gridhrasi and other vatavyadhis

Unit 1 Vatavyadhi Parichaya

- Nanatmja and Samsargaja Vatavyadhi
- Shuddha vata lakshana, Saama vata lakshana, Kupita vata lakshana
- Avarana vata Nidana, Lakshana, Chikitsa Siddhanta
- Samanya Chikitsa Siddhanta of Vatavyadhi, Vatasya upakrama
- Module Relevant investigations - Hb%, TC, DC, ESR, CRP, RBS, X-ray, MRI Spine, Joint fluid analysis

References: 1,2,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2, CO5	Discuss Nanatmaja Vatavyadhi and the characteristics of Shuddha Vata, Sama Vata, and Kupita Vata Lakshana.	1	Lecture	CC	Knows-how	L,L&PPT ,L&GD,FC
CO1,CO2, CO5	Describe the Nidana, Lakshana, and Chikitsa Siddhanta of Avarana Vata.	1	Lecture	CAP	Knows-how	BS,L,FC,L&PP T ,L&GD
CO1,CO2, CO5	Enumerate the list of Nanatmaja Vyadhis mentioned in various classics and clarify the impact of dosha in various disease manifestations.	2	Practical16.1	PSY-MEC	Shows-how	LS,PT,DIS,CD
CO1,CO2, CO5	Demonstrate a case of Vataja Nanatmaja Vata Vyadhi in the ward and critically analyze the	2	Practical16.2	PSY-MEC	Shows-how	LS,DIS,PT,PE R

	concept of Nanatmajavatayadhi by referencing various journals.					
CO1,CO2,CO5	Assess and diagnose Doshaja Nanatmajavikaras.	3	Experiential-Learning16.1	PSY-ADT	Does	CBL,CD,L&PP T ,PL
CO1,CO2,CO5	Assess and interpret the Chikitsa Siddhanta of Nanatmaja Vata Vikara to differentiate the roles of doshas.	3	Experiential-Learning16.2	CS	Does	FC,CBL
CO1,CO2,CO5	Assess and interpret the Chikitsa Siddhanta and the Samanyachikitsa related to Vatavyadhi.	3	Experiential-Learning16.3	PSY-ADT	Does	D-BED,BL,CBL,D IS

Unit 2 Spinal cord disorders

- Viswachi
- Etiopathogenesis and management of Manya vikara(Cervical conditions)
- Manyastambha (SP44)
- Gridhrasi(SP41)
- Katigraha(SP42)
- Understanding the Katishula (Lumbago)(SP42), Gridhrasi (Sciatica) – Samprapti, Samprapti ghatakas, types and management.
- Manyavikaras (Cervical Spondylitis, Cervical Spondylolisthesis, Cervical Spondylosis) Vamsa kaseru vikruti (Ankylosing Spondylitis).
- Meru Rajju/Sushumna kanda Vikaras (Diseases of the Spinal cord)-, Merudanda Skalana (Herniated disk), Meru danda Bhagna (fracture), Meru Danda Kshaya (spinal degeneration), Meru danda Rakta pindinam (Spinal hematoma), Meru danda Granthi (Spinal tumor), Gativibhrama (Ataxia - Friedreich's Ataxia)
- Cervical and Lumbar Radiculopathy, Manyastambha (Torticollis)(SP44).

References: 1,2,3,15,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential	3C Notional	3D Lecture/ Practical	3E Domain/	3F Level (Does/Shows	3G Teaching

	learning) session, the students should be able to)	learning Hours	Training/ Experiential Learning	Sub Domain	how/Knows how/Know)	Learning Methods
CO1,CO2, CO5	Describe the management of Vishwachi, including Shamana, Shodhana, and Rasayana. Additionally, explain the etiopathogenesis and management of cervical spine disorders.	1	Lecture	CC	Knows-how	FC,L_VC,L&G D,L&PPT ,L
CO1,CO2, CO5	Describe the Chikitsa of Manyastambha(with possible correlation), including Shamana, Shodhana, and Rasayana.	1	Lecture	CAP	Knows-how	L,L_VC,FC,L& GD,L&PPT
CO1,CO2, CO5	Demonstrate the diagnosis of various clinical conditions associated with the cervical spine. Interpret findings based on a comprehensive case history and clinical examination.	2	Practical16.3	PSY-MEC	Shows-how	CD,CBL,PT
CO1,CO2, CO5	Diagnose and propose a treatment plan for a case of Vishwachi/Manyastambha in the outpatient department (OPD) while ruling out any emergencies associated with treatment.	3	Experiential-Learning16.4	PSY-ADT	Does	PL,TBL,RP,SD L,D-BED
CO1,CO2, CO5	Assess and develop a comprehensive treatment protocol for Vishwachi that incorporates Aushadaprayoga, Panchakarma, Rasayana, and Pathyapathya.	3	Experiential-Learning16.5	PSY-ADT	Does	PL,DIS,PAL,P ER,PBL
CO1,CO2, CO5	Generate a treatment protocol for Manyastambha that includes Aushadaprayoga, Panchakarma, Rasayana and Pathyapathya.	3	Experiential-Learning16.6	PSY-ADT	Does	CD,CBL,PL
CO1,CO2, CO5	Discuss the Nidana, Samprapti, and Lakshana of Gridhrasi and Katigraha along with possible correlations.	1	Lecture	CAP	Knows-how	L&GD,L,L&PP T ,FC

CO1,CO2,CO5	Demonstrate how to differentiate between Spondylitis, Spondylolisthesis, Spondylosis, and Ankylosing Spondylitis. Also, differentiate Lumbago (lower back pain) and Sciatica, and explain their different causes and types.	2	Practical16.4	PSY-MEC	Shows-how	D-BED,D,CD,CBL
CO1,CO2,CO5	Elaborate the principles of Gridhrasi Chikitsa Siddhanta, including Shamana, Shodhana, and Rasayana.	1	Lecture	CAP	Knows-how	FC,L&PPT,L&GD,L_VC
CO1,CO2,CO5	Describe the Katigraha Chikitsa Siddhanta, including Shamana, Shodhana, and Rasayana, in terms of contemporary science.	1	Lecture	CAP	Knows-how	L&PPT,L&GD,L,L_VC,FC
CO1,CO2,CO5	Demonstrate to examine a case of low back pain through the Oswestry low back pain disability questionnaire & the Aberdeen low back pain scale.	2	Practical16.5	PSY-GUD	Shows-how	D,CD,CBL
CO1,CO2,CO5	Demonstrate how to develop an Ayurveda management plan for lower back pain in cases of Spondylolisthesis, Spondylosis, and Ankylosing Spondylitis based on the principles of Guna Siddhanta, Dosha-Dushya involvement, and Avasta beda	2	Practical16.6	PSY-GUD	Shows-how	CBL,PT,CD,DIS,PER
CO1,CO2,CO5	Demonstrate the acute spinal conditions to adapt appropriate Chikitsa sutras and guidelines for Pathya and Apathaya.	2	Practical16.7	PSY-MEC	Shows-how	DIS,CD,CBL,PER
CO1,CO2,CO5	Demonstrate the differentiation of spinal cord diseases: herniated disc, fracture, spinal degeneration, hematoma, tumor, Friedreich's ataxia, radiculopathy, and torticollis.	2	Practical16.8	PSY-GUD	Shows-how	PSM,CBL,CD,PT,DIS

CO1,CO2,CO5	Demonstrate examination of a patient with Cervical Radiculopathy and critically analyze the role of Bahiparimarana Chikitsa .	2	Practical16.9	PSY-MEC	Shows-how	D-BED,CBL,CD,D
CO1,CO2,CO5	Create a treatment protocol for Gradhrasi, including Aushadha prayoga, Panchakarma, Rasayana, and Pathyapathya, accompanied by a critical analysis.	3	Experiential-Learning16.7	PSY-ADT	Shows-how	CBL,D-BED,PL,DIS

Unit 3 Snayu & Sandhi Vikara

- Descriptive study of Avabahuka (Frozen Shoulder)(SP15).
- Khalli(Muscle pain, Twisting disorder)(SP20), Khanja(Lamenes) (SK2Y), Pangu (causes for Antalgic gait)
- Padaharsha (Tingling foot)(SP9Y),
- Vatakantaka (Heel Spur/calcaneal Spur, Plantar fasciitis)(SP40)
- Kroshtukasheersha (Synovial arthritis)

References: 1,2,3,7,10,15,16,54

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,CO5	Describe the Chikitsa of Avabahuka, including Shamana, Shodhana, and Rasayana. Additionally, provide an in-depth explanation of the etiopathogenesis and treatment of Frozen Shoulder.	1	Lecture	CAP	Knows-how	L_VC,FC,L&P PT ,L&GD,LS
CO1,CO2,CO5	Demonstrate the examination of the shoulder joints for diagnosing a case of Avabahuka in a way to plan a suitable chikitsa based on the Guna Siddhanta, Dosha-Dushya involvement, and Avastha of the disease.	2	Practical16.10	PSY-MEC	Shows-how	D-BED,D,CD,CBL

CO1,CO2,CO5	Assess the role of Nasya Karma (Bahushhershagate nasyam) in Avabahuka	3	Experiential-Learning16.8	AFT-RES	Does	D-BED,D,DIS,CBL
CO1,CO2,CO5	Examine a case of Frozen Shoulder using the Shoulder Pain and Disability Index (SPADI). Prepare a medical prescription for a patient with Frozen Shoulder and recommend appropriate exercises.	3	Experiential-Learning16.9	PSY-ADT	Does	CD,CBL,PL,PER,DIS
CO1,CO2,CO5	Illustrate the nidana, samprapti, and chikitsa of Khalli, Khanja, and Pangu using contemporary knowledge.	1	Lecture	CAP	Knows-how	L_VC,L&PPT,L&GD,L
CO1,CO2,CO5	Apply the treatment of Padaharsha and Vatakantaka, including Shamana, Shodhana, Pathya, and Apathya based on Guna Siddhanta, along with contemporary understanding.	1	Lecture	CAP	Knows-how	L&PPT,L,LS,L_VC,L&GD
CO1,CO2,CO5	Interpret the etiopathogenesis and management of calcaneal (heel) spur and plantar fasciitis using the principles of Ayurveda treatment.	1	Lecture	CAP	Knows-how	L,L&GD,L_VC,L&PPT
CO1,CO2,CO5	Discuss the Nidana, Samprapti, Lakshana, and Chikitsa of Kroshtukasheersha, as well as the etiopathogenesis of Septic Arthritis.	1	Lecture	CC	Knows-how	FC,L&GD,L_VC,L&PPT
CO1,CO2,CO5	Apply a suitable treatment protocol to differentiate the clinical condition causing pain and swelling in single-knee joint involvement.	2	Practical16.11	PSY-GUD	Shows-how	D-BED,PER,PBL,DIS,CBL
CO1,CO2,CO5	Develop a treatment protocol for Kroshtukasheersha(Synovial arthritis), including Sodhana, Shamana, Rasayana, and Pathyapathya.	3	Experiential-Learning16.10	PSY-ADT	Does	BL,DA,D,D-BED,CD

Unit 4 VegakaalianaVatavyadhi

- Akshepaka(SK30), Apatanaka, Apatantraka, Dandapatanaka, Hanugraha (SK5Y), Hanustambha, Dhanustambha, Abhyantarayama, Bahyayama.
- Knowledge of Akasmika Pesi Sankocha (Convulsive Disorders)(SK20) and Dhanurvata (Tetanus)

References: 1,2,7,15,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2, CO5	Describe the nidana, samprapti, lakshana, sadhyasadyata, and chikitsa sutra of Akshepaka, Apatanaka, Apatantraka, and Dandapatanaka, including Shamana, Shodhana, and Rasayana. Enlist the Pathya and Apathya, and explain the Vyapathchikitsa.	1	Lecture	CC	Knows-how	L&PPT ,L,L&GD
CO1,CO2, CO5	Describe the nidana, samprapti, lakshana, sadhyasadyata, and chikitsa sutra of Hanugraha, Hanustambha, Dhanustambha, Abhyantarayama, and Bahyayama.	1	Lecture	CC	Knows-how	L&GD,L&PPT ,L
CO1,CO2, CO5	Summarise etiopathogenesis and management of Convulsive Disorders	1	Lecture	CAP	Knows-how	L,L&PPT ,L&GD
CO1,CO2, CO5	Assess the various medications currently used for convulsive disorders, discussing their dosages, duration of treatment, and possible side effects.	2	Practical16.12	PSY-GUD	Shows-how	D- BED,CBL,CD, D
CO1,CO2, CO5	Demonstrate a detailed examination of the physical and mental symptoms experienced by individuals with convulsive disorders to understand	2	Practical16.13	PSY-GUD	Shows-how	CBL,D,CD

	their impact on daily life and well-being, and to determine more effective support and interventions.					
CO1,CO2,CO5	Generate a treatment protocol for febrile and afebrile convulsions, including Aushadaprayoga, Panchakarma, Rasayana, and Pathyapathya.	3	Experiential-Learning16.11	PSY-ADT	Does	SDL,L&PPT,DA,TBL,DIS
CO1,CO2,CO5,CO6	Demonstrate how to differentiate between febrile seizures, focal seizures, and status epilepticus in patients.	2	Practical16.14	PSY-GUD	Shows-how	CBL,D,PT,DIS,PER
CO1,CO2,CO5	Prepare a chart detailing the symptoms of various Vega Kaleena Vyadhis(convulsive disorders), highlighting possible correlations in conventional science. Analyze different treatment principles and discuss findings with the peer group.	3	Experiential-Learning16.12	AFT-SET	Does	CBL,PER,PBL
CO1,CO2,CO5	Interpret EEG and low sodium levels in convulsive disorder patients	2	Practical16.15	PSY-MEC	Shows-how	CBL,PER,SIM,PT,CD
CO1,CO2,CO5	Manage tetanus by analysing etiopathogenesis, gather recent updates on the diagnosis and management of convulsive disorders.	3	Experiential-Learning16.13	CS	Shows-how	CD,DIS,CBL,FV

Practical Training Activity

Practical Training 16.1 Enumeration of Nanatmaja Vyadhis and the Impact of Dosha in Disease Manifestations

1. The teacher will explain about the Nanatmaja Vyadhis and provide a brief classification.
2. Divide the scholars into small groups
3. The scholars should be provided with different Ayurveda Samhitas
4. Instruct each group to research references about nanatmaja vyadhis in their respective samhitas and compile the results.
5. Encourage scholar to discuss their approaches.
6. Invite each group to present their results.
7. Encourage scholars to discuss their approaches and findings within their groups.
8. The teacher shall summarize the key concepts covered in the practical session and provide feedback for further improvement.

Practical Training 16.2 Case Study of Vataja Nanatmaja Vyadhi: A Critical Analysis

1. The teacher will explain about the Nanatmaja Vyadhis and provide a brief classification.
2. Divide the scholars into small groups
3. Instruct each group to research references about nanatmaja Vataavyadhis in the current Ayurvedic texts and journals. Check contemporary publications in integrative medicine that explore the intersections of Ayurveda, Vata dosha, and modern medicine, respectively, and compile the results.
4. The teacher will demonstrate a case of vataja nanatmaja vyadhi(Ex. Vataja Gridrasi)/case scenario for its signs and symptoms, specific gunas observed, specific nidanas identified, and to prepare an appropriate treatment protocol - Shodhana, Shamana and Rasayana
5. Invite each group to present their results.
6. Encourage scholars to discuss their approaches and findings within their groups.
7. Reflect on the case presented by considering the patient's psychosocial environment, dietary habits, and lifestyle choices, as these factors can significantly influence treatment outcomes.
8. The teacher shall summarize the key concepts covered in the practical session and provide feedback for further improvement.

Practical Training 16.3 Diagnosis of Cervical Spine Conditions: Interpretation and Case Analysis

Demonstration by the teacher - Case-based learning/Simulation

1. The teacher will briefly explain the importance of case history and clinical examination in diagnosing cervical spine conditions and identifying and describing different clinical conditions related to the cervical spine.
2. Scholars will present 2-3 case histories of different cervical spine conditions (e.g., cervical spondylosis, herniated disc, spinal stenosis, etc). Scholars identify key symptoms and signs to formulate differential diagnoses. Also discuss relevant diagnostic tests (e.g., X-rays, MRI).
3. The teacher will demonstrate a thorough clinical examination of the cervical spine, including inspection and palpation, as well as a Range of motion (ROM) assessment, muscle strength, and reflex testing. Special tests (e.g., Spurling's test, distraction test).
4. The teacher will emphasize the importance of integrating case history and clinical examination findings to diagnose cervical spine conditions.
5. Scholars will actively participate in discussions and practical examinations.
6. The teacher shall summarize the key concepts covered in the practical session and provide feedback for further improvement.
7. Assessment can be done with a written quiz on cervical spine anatomy, clinical conditions, and examination techniques.

Practical Training 16.4 Understanding Spinal Conditions and Back Pain

1. The teacher will introduce the topic and ask students to share personal experiences with back pain.
2. Divide scholars into small groups. Provide scenarios or case studies for each condition.
3. Ask groups to identify the condition and explain each condition of Spondylitis, Spondylolisthesis, Spondylosis, and Ankylosing Spondylitis. Differentiate Lumbago (lower back pain), Sciatica, and explain different causes and types using diagrams to illustrate.
4. Discuss causes, symptoms, and differences between conditions.
5. Use examples or case studies to reinforce understanding.
6. Provide a quiz or worksheet with key terms and definitions.
7. Ask scholars to match conditions with symptoms and causes.
8. Ask scholars to share what they learned.
9. The teacher will conclude by summarizing key points

Practical Training 16.5 Assessing Low Back Pain: Oswestry & Aberdeen Scales

1. Demonstration by the teacher/Case-based learning/case scenario
2. The teacher will brief students on understanding the purpose and application of ODQ and ALBPS, as well as learning how to administer and score both questionnaires.
3. The teacher will interpret results and integrate them into patient care.
4. Materials required for the demonstrations - Copies of the Oswestry Low Back Pain Disability Questionnaire (ODQ) and Copies of the Aberdeen Low Back Pain Scale (ALBPS) on Case studies or patient scenarios
5. The teacher will overview the ODQ and ALBPS, highlighting their development, reliability, and validity. Distribute the ODQ and ALBPS, and review each section, also explain scoring, and discuss interpretation.
6. Case Studies and Group Activity- Provide case studies or patient scenarios, and divide students into small groups, ask each group to administer and score the ODQ and ALBPS, and interpret results as well as discuss implications for patient care.
7. Review key points, address questions, and conduct assessments - use a quiz or group discussion to evaluate understanding.

Practical Training 16.6 Holistic Ayurveda Plan for Managing Lower Back Pain (Spondylolisthesis, Spondylosis, Ankylosing Spondylitis)

1. The teacher will divide the scholars into two groups. Provide scenarios or case studies for each condition.
2. Ask groups to identify the condition and explain each condition of Spondylitis, Spondylolisthesis, Spondylosis, and Ankylosing Spondylitis, and describe different causes and types using diagrams to illustrate.
3. Discuss causes, symptoms, and differences between conditions based on the principles of Guna Siddhanta, Dosha-Dushya involvement, and Avastha beda.

4. The teacher will demonstrate how to assess the avastha of the different conditions based on the principles of Guna Siddhanta, Dosha-Dushya involvement, and how to adapt the treatment principles(Dhatushayajanaya/Avaranajanya/Kevala Vataja)
5. Provide a quiz or worksheet with key terms and definitions.
6. Ask scholars to match conditions with symptoms and causes.
7. Ask scholars to share what they learned.
8. The teacher will conclude by summarizing key points

Practical Training 16.7 Acute Spinal Conditions: Diagnosis, Treatment Principles & Dietary Guidelines

1. The teacher will provide an introduction to Ayurvedic Management of Acute Spine Conditions (e.g., back pain, sciatica, herniated disc).
2. The teacher will divide the scholars into two groups. Provide scenarios or case studies for acute spine conditions.
3. Ask groups to identify similar conditions from the ward/case scenario
4. The teacher will demonstrate and explain the conditions of Spondylitis, Spondylolisthesis, Spondylosis, and Ankylosing Spondylitis, and discuss how to manage acute conditions with severe pain and stiffness through Ayurveda treatment principles.
5. The teacher will demonstrate how to assess the avastha of the different conditions based on the principles of Guna Siddhanta, Dosha-Dushya involvement, and how to adapt the treatment principles(Dhatushayajanaya/Avaranajanya/Kevala Vataja)
6. Practical application of Chikitsa sutra in acute spine conditions
7. Group activity: Create a treatment plan for a spinal condition case study
8. Ask scholars to share what they learned, and the teacher will give the key points on the acute management of spinal conditions.

Practical Training 16.8 Spinal Cord Diseases: Key Differences - in adapting suitable Treatment Principles.

1. The teacher will provide an introduction to Ayurvedic Management of conditions such as herniated disc, fracture, spinal degeneration, hematoma, tumor, Friedreich's ataxia, radiculopathy, and torticollis.
2. The teacher will divide the scholars into two groups. Provide scenarios or case studies for specified conditions.
3. Ask groups to identify similar conditions from the ward/case scenario
4. The teacher will demonstrate and explain the conditions of herniated disc, fracture, spinal degeneration, hematoma, tumor, Friedreich's ataxia, radiculopathy, and torticollis, and discuss how to adapt the treatment principles based on its chronicity.
5. The teacher will demonstrate how to assess the avastha of the different conditions based on the principles of Guna Siddhanta, Dosha-Dushya involvement, and how to adapt the treatment principles(Dhatushayajanaya/Avaranajanya/Kevala Vataja)
6. Group activity: Create a treatment plan for a spinal condition case study
7. Ask scholars to share what they learned, and the teacher will give the key points on the management of spinal conditions.

Practical Training 16.9 Bahiparimarjana Chikitsa in Cervical Radiculopathy.

1. The teacher will provide an introduction to Ayurvedic Management of Cervical Radiculopathy(including Herniated disc, Spinal stenosis, Injury or Trauma, Bone spurs, Degenerative disc diseases).
2. The teacher will divide the scholars into two groups. Provide scenarios or case studies on Cervical Radiculopathy
3. Ask groups to identify similar conditions from the ward/case scenario
4. The teacher will demonstrate and explain the conditions, including Spondylitis, Spondylolisthesis, Spondylosis, and Ankylosing Spondylitis, and discuss how to address the severe pain, numbness, weakness of the limbs, and stiffness through different Bahiparimarana chikitsa after assessing the Rogavasta(Dhatukshayajanya/Avaranajjanya/Kevala or Samsrushta Vata)
5. The teacher will demonstrate how to assess the avastha of the different conditions based on the principles of Guna Siddhanta, Dosha-Dushya involvement, and how to adapt the treatment principles(Dhatushayajanaya/Avaranajjanya/Kevala Vataja)
6. Group activity: Create a treatment plan for a Cervical Radiculopathy condition.
7. Ask scholars to share what they learned, and the teacher will give the key points on the acute management of spinal conditions.

Practical Training 16.10 Assessment of Shoulder Joints in Avabahuka for Tailored Chikitsa.

1. The teacher will provide an introduction to Ayurvedic Management of Avabahuka with contemporary correlation(Frozen shoulder).
2. The teacher will divide the scholars into two groups. Provide scenarios or case studies on Avabahuka. Ask groups to identify similar conditions from the ward.
3. The teacher will explain the Clinical features of Avabahuka (Frozen Shoulder) - Review the clinical features of Avabahuka(Pain and stiffness in the shoulder, Limited active and passive range of motion, Painful and restricted movements, especially external rotation and abduction)
4. The Scholar will observe the patient's posture and shoulder alignment, inspect the shoulder for swelling, redness, or muscle wasting.
5. The teacher will demonstrate palpating the shoulder joint, focusing on tenderness over the deltoid, supraspinatus, and infraspinatus muscles. Observe Range of Motion (ROM) Assessment, and perform the Special tests (Codman's Test, Neer's Sign, Hawkins-Kennedy Test, etc.)
6. The teacher will demonstrate and discuss how to address the severe pain, weakness of the limbs, and stiffness through different Bahiparimarana and Antahparimarjana chikitsa based on the principles of Guna Siddhanta, Dosha-Dushya involvement, and Rogavasta to adapt the treatment principles (Dhatukshayajanaya/Avaranajjanya/Kevala or Samsrushta Vata)
7. Reflect on the case presented by considering the patient's psychosocial environment, dietary habits, and lifestyle choices, as these factors can significantly influence treatment outcomes.
8. The teacher shall summarize the key concepts covered in the practical session and provide feedback for further improvement.

Practical Training 16.11 Knee Pain and Swelling(single knee): Differential Diagnosis and Treatment Principles.

Demonstration by the teacher: Case-based learning/Case Scenario

1. The teacher will divide the scholars into two groups and provide a brief overview of different types of Arthritis, such as Osteoarthritis, Septic arthritis, Psoriatic arthritis, Gouty arthritis, Traumatic injuries, Prepatellar bursitis, or tendonitis, Neoplastic conditions-Osteosarcoma or synovial sarcoma, along with their relevance in clinical practice and the importance of differential diagnosis in joint disorders. Also highlight the key clinical features and diagnostic criteria.
2. The teacher will demonstrate a step-by-step clinical examination by using special tests on a volunteer or model to illustrate how to distinguish between various clinical conditions that could cause pain and swelling in one knee joint through a thorough clinical examination.
3. Explains key examination techniques and highlights common findings in osteoarthritis vs. other joint disorders.
4. Each group performs a mock examination based on the case and presents the findings.
5. Discuss differential diagnoses and rationalize their choices.
6. The teacher will summarize the importance of thorough assessment in differentiating knee conditions and establishing the appropriate treatment protocol. Encourage questions and discussions about the assessment process and findings.

Practical Training 16.12 Current Medications for Convulsive Disorders: Overview and Insights

1. Demonstration by the teacher: Case-based learning/case scenario
2. The teacher will divide the scholars into two groups and distribute an IPD case or case scenario of patients with convulsive issues to each group.
3. The scholars will be instructed to take a comprehensive history of disease chronicity, comorbidities, relevant past medical history, treatment history, and family history.
4. Scholars are asked to compile details about their current medications, including dosage, duration, and time of administration.
5. The teacher will demonstrate and assess various medications used for convulsive disorders, discussing their dosages, treatment duration, and potential side effects through a PowerPoint presentation.
6. The teacher will provide information about possible Ayurveda treatment modalities, specifically Shodhana and Shamana, for patients.
7. The teacher will emphasize that medications may be administered orally or intravenously, depending on the severity of the condition. Explains that routine blood tests may be necessary to monitor drug levels, liver function, and blood counts, especially with drugs that have significant side effects.
8. The teacher will also emphasize the importance of patient education and discuss the importance of adherence to prescribed medication regimens. Inform patients about potential side effects and encourage them to report any adverse reactions. Guide lifestyle modifications and identify seizure triggers.
9. References - Consult recent clinical guidelines and pharmacology references for updated information on drug usage and management strategies.

10. The teacher summarizes key points and emphasizes the importance of individualized treatment plans, encouraging participants to ask questions.

Practical Training 16.13 Examination of the impact of convulsive disorders on daily life and planning appropriate treatment.

1. Demonstration by the teacher: Case-based learning/case scenario
2. The teacher will divide the scholars into two groups and distribute an IPD case or case scenario of patients with convulsive issues to each group.
3. The scholars will be instructed to take a comprehensive history of disease chronicity, comorbidities, relevant past medical history, treatment history, and family history.
4. The teacher will demonstrate and examine the Physical (Seizures (focal, generalized, tonic-clonic, absence),)and Mental symptoms experienced by individuals with convulsive disorders, such as epilepsy, which may include involuntary muscle contractions, loss of consciousness, and confusion during and after seizures, as well as anxiety, depression, Personality changes, Psychotic episodes, Sleep disturbances and difficulties with memory and concentration.
5. The teacher will develop targeted interventions and support systems that address the unique needs of these individuals, ultimately improving their quality of life. Additionally, the teacher will assess various medications used for convulsive disorders, discussing their dosages, treatment durations, and potential side effects through a PowerPoint presentation.
6. The teacher will provide information about possible Ayurvedic treatment modalities, specifically Shodhana, Shamana, and Satvavaya Chikitsa, for patients.
7. The teacher will explain about routine blood tests that may be necessary to monitor drug levels, liver function, and blood counts, especially with drugs that have significant side effects.
8. The teacher will also emphasize the importance of patient education and discuss the importance of adherence to prescribed medication regimens. Inform patients about potential side effects and encourage them to report any adverse reactions that may occur.
9. The teacher summarizes key points and emphasizes the importance of individualized treatment plans in convulsive disorders, encouraging participants to ask questions and understand their impact on daily life and well-being, and to determine more effective support and interventions.

Practical Training 16.14 Differentiating Seizure Types: Febrile, Focal, and Status Epilepticus

Demonstration by the teacher/Case-based learning/Simulation/Role play/PPT

1. The teacher will divide the scholars into two groups and distribute different cases of Febrile, Focal, and Status Epilepticus to each group.
2. The teacher will demonstrate the examination - Physical (Seizures (focal, generalized, tonic-clonic, absence)and Mental symptoms in Febrile, Focal, and Status Epilepticus through Case-based learning/Simulation/Role play/PPT

3. The teacher will develop targeted interventions and support systems that address the unique needs of these individuals, ultimately improving their quality of life. Additionally, the teacher will assess various medications used for convulsive disorders, discussing their dosages, treatment durations, and potential side effects through a PowerPoint presentation.
4. The teacher will provide information about possible Ayurvedic treatment modalities, specifically Shodhana, Shamana, and Satvavaya Chikitsa, tailored to the stage of the disease.
5. The teacher will explain about related investigations that may be necessary to monitor drug levels, liver function, and blood counts, especially with drugs that have significant side effects.
6. The teacher will also emphasize the importance of emergency management in patient education and discuss the importance of adherence to prescribed medication regimens. Inform patients about potential side effects and encourage them to report any adverse reactions that may occur.
7. The teacher summarizes key points and emphasizes the importance of individualized treatment plans in convulsive disorders, encouraging participants to ask questions and to determine more effective support and interventions.

Practical Training 16.15 Interpret EEG and low sodium levels in convulsive disorder patients

Demonstration by the Teacher/Case-based Learning/Case scenario

Materials Required:

- EEG samples (normal and abnormal)
 - Case studies of patients with convulsive disorders and low sodium levels
 - Electrolyte panel (sodium, potassium, calcium)
1. The teacher will introduce the topic and objectives, reviewing the basics of EEG and its role in convulsive disorders, while discussing the importance of electrolyte balance in seizure activity.
 2. Present normal EEG tracings and discuss characteristics (frequency, amplitude, rhythm), show abnormal EEG patterns associated with convulsive disorders, Asymmetry or focal abnormalities, and discuss the significance of EEG findings in convulsive disorders (e.g., localization, lateralization)
 3. The teacher will discuss the relationship between hyponatremia (low sodium levels) and seizure activity and explain the causes of hyponatremia in convulsive disorder patients.
 4. The teacher will analyse a few case studies to illustrate the correlation between low sodium levels and seizure activity.
 5. The teacher will present case studies with EEG and electrolyte panel results and ask students to interpret the EEG, identify abnormal patterns, and discuss how electrolyte imbalance (specifically low sodium levels) may contribute to seizure activity
 6. Encourage critical thinking to integrate EEG and laboratory findings in clinical decision-making
 7. The teacher will divide scholars into small groups and assign each group a case study. Ask each group to present their case, including EEG interpretation and analysis of electrolyte imbalance

8. The teacher will facilitate group discussion to address questions and clarify any misconceptions.

Experiential Learning Activity

Experiential-Learning Learning 16.1: Assessment of Doshaja Nanatmaja Viara

1. Scholars will be divided into 3 groups and assigned one case each from hospital IPD.
2. The scholars will approach the patient, inquire about their symptoms, and conduct a comprehensive history-taking of both present and past illnesses
3. The scholars will conduct Roga and Rogi Pareeksha
4. Scholars will be asked to discuss and do the differential diagnosis of the disease.
5. Scholars will be confident enough to identify if the disease is Vataja, Pittaja, Kaphaja, Nanatmaja Vikara.
6. One member of each group will present and discuss the challenges encountered during the assessments.
7. Group discussion will be coordinated by the teacher and will summarize key points and conclude.

Experiential-Learning Learning 16.2: Chikitsa Siddhanta of Nanatmaja Vata Vikara to differentiate the role of doshas

1. Students will be divided into 3 groups.
2. Students will be allowed to discuss among their group regarding 80 Vataja Nanatmaja Vikara, 40 Pittaja Nanatmaja Vikara, 20 Nanatmaja Vikara.
3. Students will be allowed to discuss about each Dosha Guna like Chala, Sukshma guna of Vata, which primarily affects movement and the nervous system.
4. Scholars will be able to apply the Chikitsa having opposite quality to that of the Doshas.
5. Each group will be assigned to discuss the treatment principles for each Dosha Nanatmaja Vikara, such as Bahya and Abhyantara Snehana, Swedana, Basti in Vataja Nanatmaja Vikara; Virechana in Pittaja Nanatmaja Vikara; Nasya and Vamana in Kaphaja Nanatmaja Vikara, etc., as per the Vadhi avastha.
6. The teacher will facilitate group discussion and conclude.

Experiential-Learning Learning 16.3: Interpretation of Chikitsa Siddhanta and Samanyachikitsa in Vatavyadhi

1. Scholars will be divided into two groups and assigned a Vatavyadhi patient each.
2. Should diagnose whether it is a Kevala–Nirupastambha or Sadosha-Upastambha Vatavyadhi.
3. Scholars, under the supervision of a teacher, will determine the appropriate line of treatment after diagnosing the condition, involving Kevala–Nirupastambha Vatavyadhi Chikitsa, which includes Snehana therapies such as Sarvanga Abhyanga, Ekanga

Abhyanga, administration of Snehapana, and Sthanika Snehana. Additionally, other general Vatavyadhi treatments will be employed, including various types of Swedana and Anuvasana Basti, etc., as per the condition.

4. Scholars will be assigned to perform the following line of treatment in Sadosha-Upastambha Vatavyadhi, like Mridu virechana, administration of Niruha Basti, Deepana-Pachana, etc., based on the type of Roga and the Rogi Bala.
5. Scholars will be assigned to educate patients about the Pathya Ahara and Vihara to be followed, as well as the Apathya Ahara and Vihara to be avoided, during treatment and post-discharge.
6. Each scholar will share their experiences and the challenges they face during treatment.
7. The teacher will coordinate the group discussion and conclude the session.

Experiential-Learning Learning 16.4:

Diagnosis and Treatment Plan for Vishwachi/Manyastambha in Outpatient Care

1. Scholars are divided into two groups based on two different diseases, namely Vishwachi/Manyastambha.
2. Scholars in each group will note down the aetiopathogenesis and progression of the assigned disease, correlating them to different diseases mentioned in contemporary medicine, along with their standard protocol of treatment currently in use.
3. Scholars will examine for any emergency care needed for spinal fractures, herniated discs, spinal tumors, or infections.
4. A group of students will note down the Nidana Panchaka mentioned in Ayurveda concerning Vishwachi and Manyastambha.
5. Scholars will plan management, including treatment protocols with Panchakarma and Shamana. Rasayana Chikitsa, nutritional advice, and identifying probable Vyapath occurring and its corresponding Chikitsa. Patients with comorbidities, spine-related complications, and their special care will be given due importance.
6. Scholars will also make a note of Pathayapathya in terms of Ahara and Vihara.
7. Comprehend the Phalashruti, Sevanakala, Matra, and Anupana, or external use of the following Aushadha Yogas - Rasnadi Kashaya, Maharasnadiashaya, Mahavatavidvamsa Rasa, Laghuvisagarbha Taila.
8. One member of each group will present and discuss the rationality behind the selection of different formulations.
9. The teacher will coordinate the group discussion and summarize the key points, concluding the session.

Experiential-Learning Learning 16.5:

Holistic Treatment Protocol for Vishwachi

1. Scholars will be divided into two groups and assigned a case of Vishwachi. Scholars in the group will take a thorough medical history and conduct a comprehensive cervical spine assessment on patients or case scenarios, enabling them to distinguish between various stages of disease as recognized in contemporary medical practice. Additionally, they will perform relevant examinations to establish clinical correlations.
2. The scholars will conduct a thorough assessment using available radiological investigations, such as X-rays, MRIs, or CT scans of the cervical spine, and analyze the results.

3. Scholars will note down the treatment objectives for Vishwachi mentioned in the classics, such as Shodhana and Shamana, including Aushadha Prayoga, Rasayana, and state their mode of action in terms of Pathya and Apathya, about Ahara and Vihara.
4. Further, one scholar from each group will present their viewpoints.
5. The teacher will coordinate the group discussion.
6. The teacher will provide feedback on the assessment and interpretation, summarizing the key points.

Experiential-Learning Learning 16.6: Treatment Protocol for Manyastambha

1. Scholars will be divided into two groups and assigned a case of Manyastambha
2. Scholars in the group will take a thorough medical history and conduct a comprehensive cervical spine assessment on patients or case scenarios, enabling them to distinguish between various stages of disease as recognized in contemporary medical practice.
3. Additionally, they will perform relevant examinations to establish clinical correlations.
4. The scholars will conduct a thorough assessment using available radiological investigations, such as X-rays, MRIs, or CT scans of the cervical spine, and analyze the results.
5. Scholars will note down the treatment objectives for Manyastambha mentioned in the classics, such as Shodhana and Shamana, including Aushadha Prayoga, Rasayana, and state their mode of action in terms of Pathya and Apathya, about Ahara and Vihara, and finally generate a treatment protocol as per the condition.
6. Further, one scholar from each group will present their viewpoints.
7. The teacher will coordinate the group discussion.
8. The teacher will provide feedback on the assessment and interpretation, summarizing the key points.

Experiential-Learning Learning 16.7: Comprehensive Treatment Protocol for Gradhrasi.

1. Scholars will be divided into two groups and assigned a case of Gradhrasi. Scholars in the group will take a thorough medical history and conduct a comprehensive lumbar spine assessment on patients or case scenarios, enabling them to distinguish between various stages of disease as recognized in contemporary medical practice. Additionally, they will perform relevant examinations to establish clinical correlations.
2. The scholars will conduct a thorough assessment using available radiological investigations, such as X-rays, MRIs, or CT scans of the lumbar spine, and analyze the results.
3. Scholars will note down the treatment for Gradhrasi mentioned in the classics, based on Vataja and Vatakaphaja Gridhrasi, with a correlation to Mobility disorders and Neuropathies related to the Lumbar spine.
4. Scholars will also note down about Gridhrasi, including its Dhatukshayajanya, Margavarodhajanya, and Marma Abhighatajanya Samprapti, along with their probable correlation according to Modern Science and plan the chikitsa sutra, including Shodhana and Shamana, Aushadha Prayoga, Rasayana, and state their mode along with Pathya and Apathya.
5. Comprehend the Phalashruti, Sevanakala, Matra, and Anupana, or external use of the following Aushadha Yogas - Trayodashanga Guggulu, Ashtavargam kashaya, Gandarvahastadi Kashaya, Masha Taila.

6. One scholar from each group will present and discuss the challenges encountered during the assessments.
7. A group discussion will be held on treatment protocols, prognosis, and related procedures.
8. The teacher will provide feedback on the assessment and interpretation, summarizing the key points.

Experiential-Learning Learning 16.8: Role of Nasya (Bahushhershagate nasyam) in Avabahuka

1. Students will be divided into small groups and each assigned a case of Avabahuka/case scenario.
2. Students will plan management, including panchakarma, especially Nasya karma, in one patient and another patient with only Shamanoushadhis(dose, anupana, bhashaja kala) to understand the samprapti vighatana in each case.
3. Scholars will emphasise more on the mode of action and selection of specific dravya in different avasthabeda of the disease.
4. One member from each group will present and justify the role of Nasya-Bahushhershagate Nasyam(selection of type of Nasya, taila/ghrita) in Avabahuka, discussing the queries raised during the process.
5. The teacher will coordinate group discussion, summarize key points and conclude the session.

Experiential-Learning Learning 16.9: Evaluation and Management of Frozen Shoulder

1. Scholars will be divided into two groups and assigned one case of Frozen shoulder each from the hospital IPD.
2. The scholars should assess the SPADI index questionnaire for the patient.
3. Scholars will plan medical prescriptions, including treatment protocols, Shamana (dose, anupana, bhashaja kala), Rasayana, and Pathyapathya, after assessing the gradings and severity.
4. Scholars should demonstrate specific vyayamas, such as Joint mobilization, Stretching, Strengthening, and Breathing Exercises (Pranayama).
5. Comprehend the Phalashruti, Sevanakala, Matra, and Anupana, or external use of the following Aushadha Yogas - Vatagajankusha Rasa, Mahamasha Taila
6. One member of each group will present and discuss the challenges encountered during the assessments in terms of planning the treatment protocol, including the selection of treatment procedures (Shamanoushadhis/Pathyapathya).
7. The teacher will coordinate the group discussion, summarize the key points, and provide a conclusion.

Experiential-Learning Learning 16.10: Kroshtukasheersha Treatment Protocol

1. Scholars will be divided into two groups and assigned a case of Kroshtukasheersha (Synovial arthritis) or a case scenario.
2. Diagnose the case with detailed history, examination, investigations, and differential diagnosis.
3. Scholars will plan management, including treatment protocols, Shodhana (special modifications needed in procedure, dose, or for patients with comorbidities), Shamana (matra, anupana, bhashaja kala), Rasayana, pathyapathya, and discharge advice (dose, anupana, bhashaja kala), with a follow-up or review date.

4. Scholars should demonstrate specific vyayamas, such as gentle joint mobilization, Stretching, and strengthening exercises.
5. Comprehend the Phalashruti, Sevanakala, Matra, and Anupana of the following Aushadha Yogas - Vatari Guggulu, Gokshura Punarnavadi Kashaya.
6. One member of each group will present and discuss the challenges encountered during the assessments.
7. The teacher will coordinate group discussion, summarize key points, and conclude.

Experiential-Learning Learning 16.11: Ayurveda Treatment Protocol for Febrile and Afebrile Convulsions

1. Scholars will be divided into two groups and assigned one topic each (Febrile Convulsions and Afebrile Convulsions) based on IPD patients/case scenarios.
2. Scholars will thoroughly study and prepare a presentation regarding the pathophysiology and treatment protocol for both febrile and afebrile convulsive disorders, including Aushadha Prayoga (matra, kaala, anupana, mode of action), Panchakarma, Rasayana (yoga, matra, kaala, anupana), as well as Pathyapathya based on the avastha and as per the Ayurveda principles for the assigned topic.
3. Comprehend the Phalashruti, Sevanakala, Matra, and Anupana, or external use of the following Aushadha Yogas - Sarswatarishtam, Ashwagandarishtam, Tantupashana, Brahmi Vati, Saraswata Ghrita.
4. One member of each group will present and discuss the queries raised during the presentation.
5. The teacher will facilitate a discussion on integrating Ayurveda medication with contemporary treatments, exploring potential drug interactions, and considering Ayurveda as a standalone therapy, while accounting for the specific needs of the patient.
6. The teacher will coordinate the group discussion and summarize the key points to conclude the session.

Experiential-Learning Learning 16.12: Vega Kaleena Vyadhis: Symptoms and Treatment Correlations

Demonstration by the Scholars/Chart Preparation/PPT

1. The scholars are divided into two groups and will be assigned a scenario of Vega Kaleena vyadhis, such as Akshepaka, Apatanaka, Apatantraka, Dandapatanaka, Hanugraha, Hanustambha, Dhanustambha, Abhyantarayama, or Bahyayama, etc.
2. The scholars must create a chart or presentation that includes their symptoms and lists potential correlations with Ayurveda treatment protocols, along with treatment principles in conventional medicine.
3. The scholars will present the topic, providing clear reasoning for the identified correlations.
4. The teacher will provide information about possible Ayurvedic treatment modalities, specifically Shodhana, Shamana, and Satvavaya Chikitsa, tailored to the stage of the disease.
5. The teacher will also emphasize the importance of emergency management for patients.

- The teacher summarizes key points and emphasizes the importance of individualized treatment plans in convulsive disorders, encouraging participants to ask questions.

Experiential-Learning Learning 16.13: Visit to the ED Hospital: Tetanus and Convulsive Disorders Update

Field Visit

- All scholars will be taken to a hospital that specializes in epidemiological diseases after obtaining permission from the relevant authority.
- An interactive session will be arranged between the scholars and consulting doctors or epidemiologists.
- By the end of the session, scholars must understand the etiopathogenesis and management of Tetanus.
- Scholars must then collect recent updates, including case studies, case reports, and critical review articles, about the diagnosis and management of Convulsive Disorders and present their findings.
- The teacher summarizes key points and asks the scholars to share their experiences and how it will be helpful in future clinical practice.

Modular Assessment

Assessment

Instructions: Conduct a structured modular assessment. The assessment will be for 75 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Three questions can be asked, each carries 25 marks.

- Describe the management of Vishwachi, including Shamana, Shodhana, and Rasayana. Additionally, explain the etiopathogenesis and management of cervical spine disorders - 25 marks
- Explain a detailed examination of the physical and mental symptoms of convulsive disorders and suggest adequate support and interventions to improve daily life and well-being (real case or case-based scenarios) - 25 marks
- Describe the Phalashruti, Sevanakala, Matra, and Anupana, or external use of the following Aushadha Yogas- Sarswatarishtam, Ashwagandarishtam, Tantupashana, Brahmi Vati, and Saraswata Grita - 25marks

Or

6

Any practical in converted form can be taken for assessment. (40 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (35 marks)	

Module 17 : Vatavyadhi – 2

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describe the fundamentals of Mastishka Aghata (Brain Stroke)
2. Identify various causes responsible for Mastishka Aghata (Cerebro vascular accident (CVA))
3. Identify the various types of Pakshaghata (Paralysis), Speech Disorders, Movement Disorders And Their Management
4. Conduct Specific Investigations To Diagnose A Case Of CVA

Unit 1 Arditavata, Gatavata

- Ardita vata (SK20)
- Mooka, Minmina, Gadgada(SK553)
- Disorders of Cranial Nerves - Facial palsy, Bell's Palsy. Vak Aghata (Disorders of Speech, Language and Communications)
- Disorders of Phonation – Swarabhanga (Aphonia & Dysphonia)
- Disorders of Articulation –Anarthria & Dysarthria
- Disorders Fluency – Gadgada (Stammering(Stuttering) & Cluttering)
- Disorders of Language – Mookata (Aphasia), Alexia, Vagvikara (Dyslexia), Agraphia
- Twakgata, raktagata, mamsagata, medogata, snayugata, siragatavata.
- Importance of virechana, anulomana, vasti in vatavyadhi, Pathya-apathya in vatavyadhi

References: 1,2,3,15,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2, CO5	Discuss the sadhyasadyata and the Chikitsa Sutra in the context of Pakshavadha/Pakshaghata. Interpret these concepts in relation to	1	Lecture	CC	Knows-how	L_VC,L,L&PPT ,FC,L&GD

	cerebrovascular accidents (CVA) and describe their etiopathogenesis(Ischemic and Hemorrhagic CVA)					
CO1,CO2,CO5	Demonstrate the examination of cranial nerves in a patient with Pakshaghata (Hemiplegia) to plan the appropriate treatment protocol.	2	Practical17.1	PSY-MEC	Shows-how	CBL,D,PT,PER,CD
CO1,CO2,CO5	Demonstrate the examination of a Pakshaghata/Hemiplegia patient regarding superficial and deep tendon reflexes to evaluate and interpret the findings for the Samprapti Vighatana.	2	Practical17.2	PSY-MEC	Shows-how	D-BED,CD,CBL
CO1,CO2,CO5	Assess a comprehensive medical history of the patient with Pakshaghata and conduct examinations to establish a clinical diagnosis for treatment interpretation.	3	Experiential-Learning17.1	PSY-ADT	Does	PER,CD,RLE,CBL
CO1,CO2,CO5	Describe the Chikitsa for Pakshaghata (Pakshavadha) based on Avastha beda, including Shamana, Shodhana, and Rasayana. Additionally, list the Pathya and Apathya. Elaborate on the different types of strokes and discuss the acute management strategies.	1	Lecture	CC	Knows-how	L&GD,L,L&PPT,FC
CO1,CO2,CO5	Construct a treatment protocol that includes Shodhana, Shamana, and Rasayana for a pakshaghata patient with an ischemic stroke.	3	Experiential-Learning17.2	PSY-ADT	Does	CBL,CD,DIS,D-BED
CO1,CO2,CO5	Describe the Chikitsa sutra, and Sadhyasadyata of Adharanga Vata, Ekangavata, and Sarvanga	1	Lecture	CC	Knows-how	L&PPT,L,L&GD

	Vata, including Shamana, Shodhana, and Rasayana Chikitsa based on the Nidana Panchaka. Explain the management of various types of Stroke: Hemiplegia, Paraplegia, Monoplegia, and Quadriplegia.					
CO1,CO2, CO5	Assess a Hemiplegic patient with MRI/CT Brain report and the clinical signs and symptoms.	2	Practical17.3	PSY-MEC	Shows-how	CD,CBL,D-BED,D
CO1,CO2, CO5	Diagnose with interpretation hemiplegia, paraplegia, monoplegia, and quadriplegia in terms of their etiopathogenesis and treatment approaches.	2	Practical17.4	PSY-MEC	Shows-how	D-BED,CBL,CD
CO1,CO2, CO5	Design a comprehensive treatment protocol including Aushadhaprayoga, Panchakarma, and Rasayana for a Sarvangavata patient.	3	Experiential-Learning17.3	PSY-ADT	Does	PER,RP,RLE, SIM,CBL
CO1,CO2, CO5	Describe Pakshaghata/Pakshavadha in contemporary science. Distinguish the relationships among pitta-kaphanubandha, Dhatukshayajanya, Avaranajanya, and chikitsa yojana based on various classical texts, including Shamana, Shodhana, and Rasayana. Additionally, discuss Pathya, Apathaya, Anupana, and the understanding of emergencies and complications.	1	Lecture	CAP	Knows-how	L&GD,L&PPT ,L

CO1,CO2, CO5	Demonstrate the ROSIER Assessment Scale in the Diagnosis of CVA/Stroke	2	Practical17.5	PSY-GUD	Shows-how	CD,PER,PT,D, CBL
CO1,CO2, CO5	Discuss the etiopathogenesis, predisposing factors, risks, signs, and symptoms of TIA, along with detailed knowledge of the management of TIA with Ayurveda interpretation.	1	Lecture	CC	Knows-how	L&GD,L&PPT ,L
CO1,CO2, CO5	Assess the signs and symptoms of a brain stroke based on the assessment of the affected lobes of the brain.	2	Practical17.6	PSY-MEC	Shows-how	CD,PBL

Unit 2 Madhya Shareeragata vata and Tuni

- Koshtagata, gudagata, amashayagata, pakwashayagata vayu lakshana
- Tuni, Pratituni(SM83)
- Knowledge of Renal and Ureteric Colic(SM83)

References: 1,2,3,15,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods

CO1,CO2, CO5	Describe the nidana, samprapti, lakshana, and sadhyasadyata of Ardita, including etiopathogenesis of disorders of Cranial Nerves - Facial palsy, Bell's Palsy.	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO5	Elaborate the Chikitsa of Ardita, including Shamana, Shodhana, and Rasayana. List the Pathya and Apathya. Discuss the management of Bell's Palsy and Facial Palsy.	1	Lecture	CAP	Knows-how	L&PPT
CO1,CO2, CO5	Discuss the Nidana Panchaka, Chikitsa Sutra, and Sadhyasadyatha of Mooka (Dumb), Minmina (Speaking with nasal tone/hypernasality), and Gadgada (Stuttering/Stammering), including Shamana, Shodhana, and Rasayana, in relation to disorders of speech, language, and communication.	1	Lecture	CAP	Knows-how	FC
CO1,CO2, CO5	Demonstrate the examination in a patient with Bell's palsy and identify potential triggers to develop an appropriate treatment protocol.	2	Practical17.7	PSY-MEC	Shows-how	D-BED
CO1,CO2, CO5	Describe the nidana panchaka, sadhyasadyata, and chikitsa sutra of Koshtagata, Gudagata, Amashayagata, Pakwashayagata, Twakgata, Raktagata, Mamsagata, Medogata, Shukragata,snayugata, Siragatavata, including Shamana, Shodhana, and Rasayana, along with Pathya and Apathya.	1	Lecture	CC	Knows-how	FC
CO1,CO2, CO5	Interpret different lakshana showing the lakshanas of different gatavatas, with possible correlations in	2	Practical17.8	PSY-MEC	Shows-how	TBL,DIS

	conventional science, and discuss with the peer group.					
CO1,CO2,CO5	Review and justify the use of Virechana karma in Pakshaghata with various research articles and classical references.	3	Experiential-Learning17.4	AFT-SET	Shows-how	CBL
CO1,CO2,CO5	Discuss and substantiate how Anulomana chikitsa is essential in treating almost all the Vata vyadhis.	3	Experiential-Learning17.5	AFT-SET	Shows-how	CBL
CO1,CO2,CO5	Assess and emphasize the critical role of Basti Chikitsa in effectively treating all types of Vatavyadhi to enhance patient outcomes and address these conditions comprehensively.	3	Experiential-Learning17.6	AFT-REC	Shows-how	CBL
CO1,CO2,CO5	Discuss the comprehensive treatment for Ardita, which includes Nasya, Murdhni Taila, Tarpana, Dhoomapana, Nadisweda, and Upanaha.	1	Lecture	CAP	Knows-how	FC
CO1,CO2,CO5	Assess House- Brackmann Facial Nerve Grading in Diagnosis of Facial Palsy.	2	Practical17.9	PSY-GUD	Shows-how	CBL
CO1,CO2,CO5	Review and apply the Recent updates in the diagnosis and management of Facial palsy.	2	Practical17.10	PSY-GUD	Shows-how	DIS
CO1,CO2,CO5	Interpret the outcomes of using different virechana yogas in patients with Gata vata.	2	Practical17.11	CE	Shows-how	PBL,DIS
Unit 3 Kampavata/Parkinson's Disease and Bahu tantrika Shotha (Polyneuropathy)						

- Understanding the Etiopathogenesis and management of – Jeerna Bahu tantrika Shotha (Chronic Polyneuropathy), Anuvamshika tantrika Shotha Hereditary Neuropathy, Chronic demyelinating polyneuropathy, Entrapment neuropathy, Multifocal neuropathy, Polyneuropathy, Tantrikanughatah(Guillain - Barre Syndrome)
- Kampavata(SP52) - Nidana/ Chikitsa including Nidana Parivarjana, Pathya, Apathaya, Chikitsa siddhanta, Shamana, Shodhana, Panchakarma, Rasayana and VyapathChikitsa (Anupana, Drug/Nondrug) as per Ayurvedic and conventional therapeutics
- Knowledge of - Kampavata (Parkinsonism) with Movement Disorders –Hypokinetic - Parkinson's and other Parkinsonian disorders(Parkinsonism plus syndrome)& Hyper Kinetic - Akathisia, Ataxia, Chorea, Dystonia, Myoclonus, Spasticity Steriotypes, Tics, Tremors (resting tremors, action tremors, postural tremors, intentional tremors)

References: 1,2,3,7,15,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2, CO5	Describe the nidana panchaka, sadhyasadyata, and chikitsa sutra of Koshtagata, Gudagata, Amashayagata, and Pakwashayagata. Include Shamana, Shodhana, Rasayana Chikitsa, and Pathyapthya, along with their appropriate Anupana, along with a modern interpretation.	1	Lecture	CC	Knows-how	FC
CO1,CO2, CO5	Describe the nidana panchaka, sadhyasadyata, and chikitsa sutra of Tuni and Pratituni, along with etiopathogenesis and management of acute conditions associated with renal and ureteric colic.	1	Lecture	CC	Knows-how	FC

CO1,CO2,CO5	Design an Ayurveda treatment protocol to manage an acute condition of sudden obstruction due to urine, including bahya and abhyantara Chikitsa.	3	Experiential-Learning17.7	PSY-GUD	Shows-how	RLE,CBL
CO1,CO2,CO5	Interpret the diagnosis of Koshtagata vata and gulma, Gudagata vata with tuni and pratituni based on the nidana, samprapti, chikitsa, rasayana prayoga, and pathyapathya.	3	Experiential-Learning17.8	PSY-ADT	Does	PL,PER,LS
CO1,CO2,CO5	Examine clinically and interpret the diagnostic methods for renal and ureteric colic by utilizing clinical examinations, along with Radiological findings and Urine analysis.	2	Practical17.12	PSY-MEC	Shows-how	PL,PBL,PT
CO1,CO2,CO5	Justify how Shodhana therapies are essential for Koshta-gata, Guda-gata, Amashaya-gata, and Pakwashaya-gata Vata.	3	Experiential-Learning17.9	AFT-RES	Does	TBL,DIS

Unit 4 Pakshaghata

1. Pakshaghata(SK22)/ Pakshavadha, Adharanga Vata, Ekangavata(SK22) and Sarvanga Vata(SK22)
2. Knowledge of Etiopathogenesis and management of CVA
3. Ischemic CVA – TIA, Acute Ischemic Stroke, Cerebral Embolism, Lacunar Strokes
4. Mastishka asru srava (Haemorrhagic CVA) – Intra cerebral Haemorrhage, Sub Arachnoid Haemorrhage (SAH)
5. Knowledge of UMN & LMN lesions
6. Etiopathogenesis and management of Hemiplegia, Paraplegia, Monoplegia, Quadriplegia
7. Complications of Mastishka Aghata (CVA), Stroke(SK5Y) rehabilitation and Physiotherapy.

References: 1,2,3,7,8,10,15,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2, CO5	Describe the etiopathogenesis and management of chronic polyneuropathy, hereditary neuropathy, chronic demyelinating polyneuropathy, entrapment neuropathy, multifocal neuropathy, polyneuropathy, and Guillain-Barré syndrome.	1	Lecture	CAP	Knows-how	FC
CO1,CO2, CO5	Interpret the classification of the different types of neuropathies into Kevala Nirupasthambha and Sadosha Upasthambha Vatavyadhis	2	Practical17.13	PSY-MEC	Shows-how	PT,D-BED
CO1,CO2, CO5	Design a treatment protocol by classifying the different types of neuropathies into Kevala Nirupasthambha and Sadosha Upasthambha Vatavyadhis, including shodhana, shamana, and rasayana therapies.	3	Experiential-Learning17.10	PSY-ADT	Does	CBL,RLE
CO1,CO2, CO5	Describe the Nidana Panchaka and Sadhyasadyata of Kampavata in relation to contemporary knowledge of Parkinsonism, particularly focusing on movement disorders such as hypokinetic Parkinson's disease and other	1	Lecture	CC	Knows-how	L&GD

	conditions associated with Parkinsonism plus syndrome.					
CO1,CO2,CO5	Elaborate the Kampavata Chikitsa Sutra, including Shamana, Shodhana, and Rasayana. List the Pathya, Apathya, and Anupana along with the management of Parkinson's disease and Parkinsonism.	1	Lecture	CAP	Knows-how	L&PPT
CO1,CO2,CO5	Demonstrate the examination of the extrapyramidal system in relation to Parkinson's disease for diagnosis based on Ayurvedic principles.	2	Practical17.14	PSY-MEC	Shows-how	PT
CO1,CO2,CO5	Illustrate the differential diagnosis of Parkinson's disease from other Parkinsonian disorders and neuromuscular disorders based on their etiopathogenesis.	3	Experiential-Learning17.11	PSY-ADT	Does	RLE
CO1,CO2,CO5	Differentiate the signs and symptoms of hyperkinetic conditions: akathisia, ataxia, chorea, dystonia, myoclonus, spasticity, stereotypies, tics, and tremors (resting tremors, action tremors, postural tremors, intentional tremors). Additionally, make a possible correlation according to Ayurveda.	2	Practical17.15	PSY-MEC	Shows-how	PT,PER

CO1,CO2, CO5	Design treatment protocol for a Kampavata patient, including Shodhana, Shamana, Bahiparimarana chikitsa, and rasayana therapies.	3	Experiential-Learning17.12	PSY-ADT	Does	CBL
CO1,CO2, CO5	Assess the detailed history of entrapment neuropathy in relation to Ayurveda and propose an Ayurvedic treatment protocol, along with necessary physiotherapy and dietary recommendations for the IP patient.	3	Experiential-Learning17.13	AFT-SET	Does	CBL

Practical Training Activity

Practical Training 17.1 Assessment of Cranial Nerves in Hemiplegic Patients for Treatment Planning

1. The teacher will provide an overview of case taking in neurological conditions, including symptoms, history taking, general assessments, examination, and special assessments in neurological cases. Familiarize scholars with common symptoms witnessed in neurological conditions, including cognitive impairment, functional limitations, and chronic illnesses.
2. The teacher will demonstrate specific motor and sensory examinations under cranial nerve examinations by using cranial nerve charts.
3. Discuss common challenges in assessing these cases for diagnosis.
4. Scholars are categorized into two groups for history-taking, general physical examination, and special cranial nerve examination using different scales.
5. The teacher will later demonstrate special assessments in Hemiplegia and explain the importance of these assessments as a comprehensive framework for evaluating hemiplegia, tracking progress over time, determining the effectiveness of interventions, and guiding rehabilitation strategies.
6. One of the scholars from each group will present and discuss the challenges encountered during the assessments.
7. The group discussion will be coordinated by the teacher, who will summarize the key points and provide a concluding statement.

Practical Training 17.2 Assessment of Reflexes in Pakshaghata/Hemiplegia: Ayurveda understanding

Case-based learning/Scenario/Simulation

1. The teacher will give an overview of the special considerations needed for assessment of Hemiplegia
2. Scholars are divided into two groups and assigned to examine patients with hemiplegia, who will undergo a comprehensive assessment.
3. The teacher demonstrates a detailed step-by-step approach to the reflex examination. Step 1: Initial Assessment - History Taking and General Inspection. Step 2: Examination of Superficial Reflexes- Abdominal Reflex, Cremasteric Reflex (in males), Plantar Reflex, Anal Reflex. Step 3: Examination of Deep Tendon Reflexes - Biceps Reflex, Triceps Reflex, Brachioradialis Reflex, Patellar Reflex, and Achilles Reflex. Step 4: Interpretation of findings according to Ayurvedic principles, which enables the application of Samprapti Vighatana.
4. Emphasize the clinical reasoning behind the findings and how they relate to the underlying pathology of hemiplegia.
5. The implications of the reflex assessment in the broader context of neurological function and rehabilitation planning will be discussed, along with Comprehensive Ayurvedic management.
6. Furthermore, one student from each group will present their views.
7. The teacher will provide feedback on the assessment and interpretation, and summarize the key points.

Practical Training 17.3 Interpretation and assessment of a hemiplegic patient, with the MRI/CT Brain report and the clinical signs and symptoms.

1. The teacher will provide a brief overview of recent imaging techniques applicable to neurological conditions in general and hemiplegia in particular.
2. The scholars are asked to divide into two groups. They are assigned to collect available information related to the disease, including presenting signs and symptoms, assessment, and findings, as determined by various imaging modalities.
3. The teacher will demonstrate the specific examination of a Hemiplegia patient, and an assessment will be performed, along with the patient's investigation reports (MRI/CT).
4. Scholars will further attempt to analyze the difference in the report and interpret the clinical signs and symptoms in the patient.
5. The teacher then initiates a discussion on prognosis and all treatment modalities to determine the best course of action for the patient, based on the interpretation.
6. The scholars will then present the challenges encountered during the assessments, case taking, treatment protocol, and related procedures.
7. The teacher will summarize and conclude key takeaways from the session.

Practical Training 17.4 Understanding Hemiplegia, Paraplegia, Monoplegia, and Quadriplegia: Causes and Treatments.

1. The teacher will address the scholars and give a brief overview of different types of Strokes.
2. The scholars are asked to study the clinical aspects of definition, anatomical basis, features, etiopathogenesis, and prognosis of different types of strokes.
3. The scholars are divided into two groups based on cases of Hemiplegia, Paraplegia, Monoplegia, and Quadriplegia.
4. The Scholars will perform patient assessment, which includes taking a history, conducting general physical examinations, special examinations, reviewing radiological investigations, making a diagnosis, and developing a treatment protocol.
5. Teacher will further stress on various key tests in these conditions like Neurological Examination, Fugl-Meyer Assessment, Brunnstrom Stages of Motor Recovery, Modified Ashworth Scale, ASIA (American Spinal Injury Association) Scale, Bowel and Bladder Assessment, Gait Analysis, Motor Function Assessment, Nerve Conduction Studies (NCS), Electromyography (EMG), Respiratory Function Tests, Functional Independence Measure (FIM)
6. One student from each group is asked to summarize the specific findings in that condition and list the differentiation points between the conditions, then discuss these points among the groups.
7. A group discussion will be held on case taking, treatment protocols, prognosis, and the challenges encountered during assessments.
8. The teacher will summarize and conclude the key takeaways from the session, including the importance of understanding these terms for tailoring management strategies and rehabilitation based on assessments, which can significantly improve patient outcomes and quality of life.

Practical Training 17.5 ROSIER Assessment Scale in Diagnosis of CVA/Stroke

Presentation/Simulation

1. The teacher provides a brief overview of various assessment Scales used as clinical tools by healthcare professionals for the quick identification of a cerebrovascular accident (CVA/Stroke).
2. The teacher provides a brief introduction to the ROSIER Assessment Scale, including its purpose and development strategies.

3. The teacher will explain each component of the ROSIER Scale, along with its scoring system and method of interpretation of the Results.
6. The teacher will also explain the implementation in Clinical Practice, especially in emergency conditions, along with its Limitations.
8. One student from the group will present the outline of the scale, and a group discussion will be held to scope further the development of similar assessment tools, especially those based on Ayurveda.
9. The teacher will provide feedback on the assessment, summarize the key takeaways from the session, and conclude the session.

Practical Training 17.6 Understanding Brain Stroke based on Signs, Symptoms, and Affected Lobes.

1. Demonstration of the case by the teacher in the hospital IPD/OPD. The teacher will demonstrate to students how to conduct the assessment in patients with stroke and its management.
2. Divide the students into two groups based on patients with strokes affecting different brain lobes.
3. Students will be made to demonstrate a general examination of the patient.
4. The teacher will explain the Overview of the brain lobes, signs and symptoms of each lobe involvement, critical analysis of signs and symptoms for differential diagnosis and prognosis, various assessment tools such as neurological examination, Imaging Studies, Standardized Scales, along with management implications.
5. The teacher will critically analyze and interpret the signs and symptoms of stroke affecting different brain lobes, based on the functions associated with each lobe, and explain how their impairment manifests clinically.
6. A scholar from each group will present and discuss the examination done, pathogenesis, and treatment protocol.
7. The teacher will facilitate a discussion on the different approaches to tackle the pathology, any challenges encountered during the assignment, targeted assessment, and the need for collaboration among healthcare professionals to address the diverse impacts of stroke on patients' lives.
8. The teacher will provide feedback on the assessment, summarize the key takeaways from the session, and conclude.

Practical Training 17.7 Demonstration of the examination of a patient with Bell's palsy.

Case-based learning/Case scenario

1. Demonstration of the clinical examination of a Bell's palsy patient by the teacher in the hospital IPD/case scenario.
2. The scholars are assigned to take patient's history, including Chief Complaint, Associated Symptoms, Medical History, Medication History, and Potential triggering points, and to observe General Inspection, Facial Symmetry, etc.

3. The teacher will demonstrate the clinical assessment, key signs to observe, and rationale for each step, including motor function of the facial nerve (cranial nerve VII), and identify signs of Bell's palsy.
4. The teacher will also perform a Neurological Examination, including a Cranial Nerve Assessment, Facial Movement, Taste Sensation, Assessment of Other Cranial Nerves, Additional Assessments, Evaluation of Tearing and Salivation, Assessment of Ear Pain, Functional Assessment, Activities of Daily Living, Emotional Expression, Documentation, and Assessment of Severity.
5. Functional tests, such as the House-Brackmann Scale, Facial Disability Index, and specialized tests (EMG and NCS), as well as imaging studies (CT and MRI findings and their interpretations), and audiological assessments (Tuning Fork Tests), will be carried out.
6. Conclusion and Management Plan- potential management strategies, including corticosteroids, physical therapy, and eye care measures
7. Discussion of the expected course of recovery and the need for follow-up appointments to monitor progress.
8. One student from the group is asked to briefly summarize the examination results, emphasizing key abnormalities consistent with Bell's palsy.
9. The teacher will later summarize and conclude key takeaways from the session.

Practical Training 17.8 Chart of Gatavata Lakshanas and Scientific Correlations.

1. The teacher will first give a brief introduction to the topic in general, and the scholars will be assigned to different groups to prepare a chart.
2. The scholars are asked to prepare a chart that includes the Lakshanas of Different Gatavatas and their Conventional Correlations.
3. A discussion with the peer group will be held to explore different understandings of Gatavatas and the importance of Vata dosha, exploring how its imbalance leads to various disorders.
4. Peers will explore the nuances of different types of Gatavatas, Clinical Correlation, and their implications for treatment.
5. Compare the Ayurvedic symptoms with conventional medical diagnoses to understand their overlaps in pathophysiology.
6. Discuss how understanding both systems can enhance diagnostic accuracy and treatment strategies.
7. Discuss potential research opportunities in bridging Ayurvedic and conventional medical practices.
8. The teacher will encourage the sharing of case studies where integration of both approaches led to improved patient outcomes and discuss how this knowledge can be applied in clinical practice, especially in holistic approaches to patient care.

9. The teacher will justify the importance of this chart and the accompanying discussion points. The role of a deeper understanding of Gatavatas and the promotion of collaborative learning will be pronounced.

Practical Training 17.9 Assess House- Brackmann Facial Nerve Grading in Diagnosis of Facial Palsy.

1. The teacher will give a brief knowledge of various facial nerve gradings for the diagnosis of facial palsy
2. Scholars are divided into two groups - keep ready the recording sheets for documentation
3. Video or photographic equipment (optional, for visual records)
4. Demonstration of the case by the teacher in the hospital IPD/OPD
5. The teacher will demonstrate the evaluation of the condition: Facial symmetry at rest, Forehead movement (raising eyebrows), Eye closure (orbicularis oculi), Smile (zygomaticus major), Mouth movement (orbicularis oris), and Nasolabial fold.
6. Step 1: Patient Preparation; Explain the Procedure & Obtain Consent
7. Step 2: Initial Assessment- Clinical History, Observations
8. Step 3: Demonstration of how to Perform the House-Brackmann Assessment
9. The teacher will explain the purpose of this Grade and its interpretation in detail.
10. Also provide knowledge of this scale in Clinical Applications: Bell's palsy, Ramsay Hunt syndrome, Facial nerve trauma, Cerebellopontine angle tumors, Stroke or cerebral vasculitis.
11. The importance of adhering to this protocol to enhance diagnostic accuracy, severity, and for appropriate management strategies will be explained.
12. A group discussion will be initiated to develop a protocol for facial palsy assessment.
13. The teacher will coordinate the group discussion, summarize the key points, and conclude.

Practical Training 17.10 Recent Advances in Facial Palsy Diagnosis and Management

1. The teacher will explain a stepwise protocol for collecting recent updates in the diagnosis and management of facial palsy.
2. The teacher will provide an overview of the causes of Facial paralysis, including stroke, Bell's palsy, Middle ear infection, Skull fracture, and Autoimmune diseases such as multiple sclerosis. Also, Head, neck, or brain tumor, Facial nerve schwannoma (a slow-growing, usually noncancerous tumor on your 7th cranial nerve), Sarcoidosis, Ramsay Hunt syndrome, Guillain-Barré syndrome, etc.
3. The teacher will also provide information about treatment options, including medication, steroid therapy, physical therapy, surgery, and Botox injections, to improve muscle function and symmetry.
4. The group will plan a structured approach to ensure thorough and efficient information gathering.
5. Stepwise Protocol; Step 1: Define the Scope- Identify Types: Focus on different types of facial palsy (e.g., Bell's palsy, post-viral facial palsy, traumatic facial palsy)

6. Key Areas of Interest: Diagnosis, management, treatment options, rehabilitation strategies, and recent research findings.
7. Step 2: Conduct a Literature Review- Databases to Search-PubMed, Google Scholar, Cochrane Library, ResearchGate
8. Usage of the following search terms- "Facial palsy diagnosis 2023", "Facial palsy management 2023", "Bell's palsy updates", "Facial nerve recovery research"
9. Scholars are given knowledge to Filter Results found: Use filters for recent articles (last 5 years) and clinical guidelines
10. Step 3: Review Clinical Guidelines - Sources for Guidelines: American Academy of Neurology (AAN), National Institute for Health and Care Excellence (NICE), and Other relevant neurological or ENT associations. Key Components: Look for updates on: Diagnostic criteria, Treatment protocols (medications, therapies), Recommendations for rehabilitation
11. Step 4: Explore Recent Studies and Trials-Clinical Trials: Check databases like ClinicalTrials.gov for ongoing or recently completed trials related to facial palsy. Findings to Note: Focus on new therapeutic agents (e.g., antivirals, corticosteroids), Innovative treatment modalities (e.g., acupuncture, physiotherapy techniques).
12. Step 5: Analyze and Summarize Findings-Create a Summary Document-Organize findings into sections: Diagnosis, Management, Rehabilitation, and Future Directions. Highlight Key Updates: Include any shifts in diagnostic criteria, emerging treatment options, and significant research findings.
13. Step 6: Collaborate with Peers-Peer Discussions: Share findings with colleagues or mentors for additional insights and perspectives, Group Analysis: Consider forming a study group to discuss implications of new findings on clinical practice.
14. Step 7: Continuous Learning, Set Alerts: Use tools like Google Scholar Alerts or PubMed Alerts to stay updated on new publications related to facial palsy. Follow Key Journals: Regularly check journals specializing in neurology, otolaryngology, and rehabilitation for the latest research.
15. The teacher will coordinate group discussion, summarize the key points, and conclude

Practical Training 17.11 Outcomes of Virechana Yogas in Gata Vata Management

1. The teacher will provide a brief introduction to Gata Vata and its potential correlation, including Vata disorders that affect the musculoskeletal system, such as osteoarthritis, rheumatoid arthritis, and muscular dystrophy, etc.
2. The teacher will demonstrate how to analyze the different conditions of Gatavata for the specific selection of different Virechana Yogas as per the Avastha of the condition, Dosha-Dushya involvement, and rogi bala
3. Discussion on the outcomes of virechana in different gatavatas with probable mode of action.
4. The teacher will choose patients with Gata Vata and significant ama accumulation. Adjust dosage and duration according to the patient's response and tolerance.
5. Consider combining Virechana yoga with other Ayurvedic therapies (e.g., Panchakarma, Rasayana) or with different Anupana as needed.
6. Regularly monitor patients for any discomfort or adverse effects and adjust treatment accordingly.

7. The teacher will summarize by explaining the potentiality of virechana yogas when used judiciously

Practical Training 17.12

Diagnostic Approaches for Renal and Ureteric Colic

1. Scholars will be divided into 2-3 groups based on different cases/case scenarios.
2. Various clinical examinations along with imaging techniques and laboratory tests contribute to the diagnosis and management of this condition, which will be explained by the teacher, such as CT Scan, Abdominal X-ray (AXR), Urine Test, Urine Culture, etc, and interpret the possible conditions associated, such as presence of Hematuria, Proteinuria, Leukocytes, Nitrites.
3. The teacher will interpret with specific conditions, such as Renal Colic, Ureteric Colic, which may be secondary to Pyelonephritis, Nephrolithiasis, Urinary Tract Infection, Appendicitis, Diverticulitis, etc.
4. The teacher will further explain the Importance of the diagnostic methods in confirming the diagnosis, determining the appropriate treatment, and monitoring for potential complications.
5. One scholar from each group will present their viewpoints and challenges.
6. The Teacher will coordinate a group discussion, provide feedback on the assessment and interpretation, and summarize the key points.

Practical Training 17.13 Classification of Neuropathies under Kevala Nirupasthambha and Sadosha Upasthambha Vatavyadhis

Case-based learning/Case scenario

1. The Teacher will provide a brief overview of various types of Neuropathies.
2. The scholars are divided into two groups based on Kevala Nirupasthambha and Sadosha Upasthambha Vatavyadhis.
3. The teacher will explain and demonstrate how neuropathies can be categorized into two main groups based on their characteristics as Kevala Nirupasthambha and Sadosha Upasthambha Vatavyadhis.
4. The teacher will encourage the scholars to apply the treatment principles based on the above classification to the underlying doshic imbalances.
5. Furthermore, one student from each group will present and discuss the topic with the other groups.
6. A group discussion will be held on case taking, treatment protocols, prognosis, and related procedures in these cases.
7. The teacher will summarize and conclude key takeaways from the session.

Practical Training 17.14 Ayurvedic Diagnosis of Parkinson's Disease with the Extrapyrarnidal System Examination.

1. The teacher will explain various terminology used in neurological cases.
2. A brief note on the extrapyramidal system will be provided with clinical examination in various steps.
3. The teacher will demonstrate the various steps of specific examinations of extrapyramidal system including - Patient History- Chief Complaints, Onset and Duration, Medication and family History, Observation - Gait, Posture, Facial Expressions, Neurological Examination - Motor Function, Coordination Tests, Assessment of Dystonia and Abnormal Movements, Reflexes and Sensory Examination, Specialized Tests- Unified Parkinson's Disease Rating Scale, Abnormal Involuntary Movement Scale, Extrapyramidal Side Effects Rating Scale, etc.
4. Also demonstrate an outline on Motor Function Test- Tremor Assessment, Rigidity Testing, Bradykinesia Assessment- Finger Tapping, Hand Movements, Coordination Tests- Finger-to-Nose Test, Heel-to-Shin Test, Dystonia and Abnormal Movements, Observe for Dystonia, Chorea Assessment, Myoclonus Observation, Specialized Assessments, Imaging Studies, Additional Considerations.
5. The teacher will provide an overview of EMG, NCS, CT, MRI, blood investigations, and neuropsychological tests.
6. Based on the explanation, students are asked to record the complete patient's history along with treatment.
7. The significance of examining the extrapyramidal system and neurological cases will be emphasized, along with understanding Dosha-Dushya vivechana - categorization under Avaranajanya Vatavyadhi, and diagnosis based on other signs and symptoms.
8. Furthermore, one student from each group will present the findings of the case they have been assigned.
9. Group discussion will be held on case taking, treatment protocol, prognosis, and related procedures
10. The teacher will summarize and conclude key takeaways from the session.

Practical Training 17.15 Comparison and Ayurvedic Perspectives on Hyperkinetic Conditions

1.
 1. The Teacher will provide a framework for understanding the clinical manifestations and underlying mechanisms of Hyperkinetic conditions.
 2. A structured approach is made that incorporates definitions, characteristics, and contemporary correlations of the condition, which also emphasizes the interconnectedness of neuroanatomy, neurotransmitter systems, and potential therapeutic strategies, fostering a comprehensive understanding
 3. Definition of Hyperkinetic Conditions, Classification and characteristics of Hyperkinetic Movements will be explained
 4. Probable correlation in contemporary sciences in terms of Neuroanatomy, Neurotransmitter Systems, Genetics and Epigenetics, Pharmacology, and Neuroplasticity will be explained.
 5. Demonstration of various clinical examination specific for these conditions on IPD Patients.
 6. Furthermore, one student from the group will summarize the session and discuss the critical views.
 7. A group discussion will be held to explore the complexity of these disorders and the potential for innovative treatment approaches.

8. The teacher will give feedback on the assessment, summarize, and conclude key takeaways from the session.

Experiential Learning Activity

Experiential-Learning Learning 17.1: Comprehensive Medical History and Clinical Diagnosis in Pakshaghata for treatment interpretation.

1. Scholars are divided into two groups and assigned to examine patients with hemiplegia.
2. PG Scholars should initially perform a thorough history taking, starting from the presenting complaints, previous illnesses, identifying risk factors, regular current medications, family history, lifestyle factors, and occupational history.
3. PG scholars should perform thorough Physical examinations, which include General Assessment, i.e, Vital signs, Signs of distress or discomfort, and other systemic examinations, including the Cardiovascular system, the Respiratory system, and the Gastrointestinal system.
4. Scholars should further perform thorough Neurological examination which includes Higher Mental function examination using Glasgow Coma Scale and special tests such as MMSE(Mini mental status examination), MoCA(Montreal Cognitive Assessment), Trial making test (TMT), Clock Drawing test, Boston naming test, Rey Auditory Verbal learning test (RAVLT), Functional Independence Measure, followed by Detailed Cranial Nerve Examination, Motor system examination with special assessment i.e Fugl Meyer assessment, Sensory Examination, Co-ordination tests, Cerebellar signs.
5. PG scholars should adopt specific scales for assessing stroke severity using the National Institute of Health stroke scale (NIHSS), the FAST (Face, Arms, Speech, Time) assessment scale for rapid stroke recognition.
6. Emphasize the clinical reasoning and the findings and how they relate to the underlying pathology of hemiplegia.
7. The implications of the assessment in the broader context of neurological function and rehabilitation planning will be discussed, along with Comprehensive Ayurvedic management.
8. Further, one PG Scholar will present and discuss the findings and challenges encountered during the assessments among the groups.
9. The teacher will coordinate group discussions on case taking, bedside examination skills, and diagnostic points.
10. The teacher provides feedback on the assessment and interpretation, summarizing the key points that help in diagnosing the case appropriately.
11. Reflect on the learning experience, noting what went well and areas for improvement, and discuss the process with mentors or peers to gain insights and suggestions for future practice.

Experiential-Learning Learning 17.2: Comprehensive treatment protocol for Pakshaghata following Ischemic Stroke: Shodhana, Shamana, and Rasayana Approaches.

1. Scholars are divided into two groups and assigned to examine patients with hemiplegia.
2. PG Scholars should initially perform a thorough history taking, starting from the presenting complaints, previous illnesses, identifying risk factors, regular current medications, family history, lifestyle factors, and occupational history.
3. PG scholars should perform thorough Physical examinations, which include General Assessment, i.e, Vital signs, Signs of distress or discomfort, and other systemic examinations, including the Cardiovascular system, the Respiratory system, and the Gastrointestinal system.
4. Scholars should further perform a thorough Neurological examination, which includes Higher Mental function, followed by Detailed Cranial Nerve Examination, Motor system examination, Sensory Examination, coordination tests, Cerebellar signs, etc.
5. Scholars should adopt specific scales for assessing stroke severity using the National Institute of Health stroke scale (NIHSS), the FAST (Face, Arms, Speech, Time) assessment scale for rapid stroke recognition.
6. Scholars should diagnose the case (Ischaemic Stroke) based on the history, examinations, and relevant radiological investigations, along with Ayurveda interpretations(Avarana, Dhatukshaya, etc.).
7. Scholars will plan the treatment protocol, Shodhana (special modifications in - Virechana, Nasya, Basti, etc.), Shamana- Kashthaushadi, Rasaushadhi (dose, anupana, bhesaja kala), Rasayana chikitsa, nutritional advice, pathayapahtya, and justify the selection of specific Rasayana Yoga based on Rogabala and Rogi bala.
8. Comprehend the Phalashruti, Sevanakala, Matra, and Anupana, or external use of the following Aushadha Yogas - Brihitvatachintamani Rasa, Ekangaveera Rasa, Jayamangala Rasa, Suvarna Malini Vasanta Rasa, Rasaraja Rasa, Ashwaganada Curna, Bala Taila, Karpasathyadi Taila.
9. Further, one PG Scholar will present and discuss the findings and challenges encountered during the assessments among the groups.
10. The teacher provides feedback on the assessment and interpretation, summarizing the key points that help in diagnosing the case appropriately.
11. Reflect on the learning experience, noting what went well and areas for improvement, and discuss the process with mentors or peers to gain insights and suggestions for future practice.

Experiential-Learning Learning 17.3: Comprehensive Treatment Protocol for Sarvangavata: Aushadhaprayoga, Shodhana, and Rasayana

1. The teacher will brief on the different examinations needed for the diagnosis of Sarvanga Vata. Guide students through the investigations necessary for diagnosing Sarvanga Vata.
2. The scholars are divided into two groups and asked to take a detailed history of the Sarvanga Vata case and formulate internal medicines, external therapies, and a diet, justifying the protocol.
3. Assign groups to explore recent updates on Sarvanga Vata, and also understand the contemporary relevance and scientific approach of these practices.

4. Students will do an assessment that includes history taking, physical examinations, investigations including radiological investigations, pathogenesis, diagnosis, discussion, and treatment protocol including shodhana (special modifications needed in procedure, dose, patients with comorbidities), shamana- Kasthaushadi, Rasaushadhi (dose, anupana, bhesaja kala), rasayana, nutritional advice, Satwawajaya Chikitsa, Pathayapahtya, and justify the selection of specific Rasayana Yoga based on Rogabala and Rogi bala.
5. Encourage self-assessment and more profound understanding through reflective learning.
6. Refer to the medicines, diet, and helpful regimen for Sarvanga Vata as outlined in research articles.
7. The teacher will summarize and conclude key takeaways from the session.
8. Follow up on the patient after treatment to know the effectiveness of the treatment.

Experiential-Learning Learning 17.4: Justification of Virechana Karma in Pakshaghata: A Review of Research and Classical Insights

Presentation/Group Discussion

1. The teacher will discuss the recent classification of ICD on Pakshaghata.
2. Encourage self-assessment and more profound understanding through reflective learning.
3. Refer to the etiopathogenesis, treatment protocol, medicines, diet, and helpful regimen in Pakshaghata as outlined in relevant research articles.
4. Understand the dosha-dushya involvement and association of Avarana or Dhatukshaya and justify the role of virechana in the management of Pakshaghata in terms of Ayurveda and contemporary science.
5. One scholar from each group is asked to summarize the specific points discussed to justify the treatment protocol. Then, the groups discuss these points among themselves.
6. The teacher will then summarize and conclude the key takeaways from the session, including the importance of understanding the Ayurveda management strategies and rehabilitation based on assessments, which can significantly improve patient outcomes and quality of life.
7. Question and answer sessions will be carried out by the teacher.

Experiential-Learning Learning 17.5: Significance of Anulomana Chikitsa in Vata Vyadhi Treatment.

Case-Based Learning/Case Scenario

1. The scholars are divided into groups of two to three. Scholars will be assigned various cases of Vatavyadhi (two to three) diagnosed through clinical examinations and investigations.
2. Scholars will analyze the Dosha-Dushya involvement, Avastha, and the type of Vatavyadhi (Avaranajanya/Dhatukshyajanya), as well as the disease's chronicity and the patient's Bala.
3. Encourage self-assessment and a deeper understanding through reflective learning.
4. Refer to the Samhita for the Chikitsa sutra, which includes information on medicines, a helpful regimen for Vatavyadhi, as well as relevant research articles.
5. Understanding the samprapti of Vatavyadhi and the Role of Anuloma Chikitsa in Vatavyadhi and its mechanism.
6. Discuss and substantiate how anuloma chikitsa is the integral treatment protocol in vata vyadhi
7. Facilitate a discussion; one representative from each group will present on identifying the appropriate selection of different Anmuloma yogas for various vatavyadhi conditions.
8. The teacher will conclude the session by stating that Anulomana chikitsa is essential for treating nearly all Vatavyadhis, as it effectively addresses their underlying issues and promotes better health outcomes.

Experiential-Learning Learning 17.6: Critical Role of Basti Chikitsa in Vatavyadhi Treatment

Case-Based Learning/Case Scenario

1. The scholars are divided into groups of two to three. Scholars will be assigned various cases of Vatavyadhi (two to three) diagnosed through clinical examinations and investigations.
2. Scholars will analyze the Dosha-Dushya involvement, Avastha, and the type of Vatavyadhi (Avaranajanya/Dhatukshyajanya), as well as the disease's chronicity and the patient's Bala.
3. Encourage self-assessment and a deeper understanding through reflective learning.
4. Refer to the Samhita for the Chikitsa sutra, which includes information on medicines, a helpful regimen for Vatavyadhi, as well as relevant research articles.
5. Understanding the samprapti of Vatavyadhi and the Role of Basti Chikitsa in Vatavyadhi and its mechanism.
6. Discuss and substantiate how Basti Chikitsa is the integral treatment protocol in vata vyadhi
7. Facilitate a discussion; one representative from each group will present on identifying the appropriate selection of different Basti Yogas for various vatavyadhi conditions.
8. The teacher will conclude the session by stating that Basti Chikitsa is essential for treating nearly all Vatavyadhis, as it effectively addresses their underlying issues and promotes better health outcomes.

Experiential-Learning Learning 17.7: Ayurveda Management Protocol for Acute Urinary Obstruction

Case-based learning/Case scenario

1. The scholars are divided into two groups and assigned a case or case scenario involving an acute renal condition, particularly with sudden urinary obstruction, characterized by severe pain in the abdomen and back.
2. The Scholars will present this case after patient assessment, evaluation, Prakriti and Vikriti analysis, and diagnosis, and discuss the appropriate bahya and abhyantara Chikitsa to be applied along with pathyapathya.
3. Additionally, the student should prepare a report on the Ayurvedic treatment principles and doshas involved in the progression of the disease.
4. The scholar will include Bahaya chikitsa - Avagaha sweada, Nabhi pichu, Abhyantara chikitsa - Mridu virechana/Basti with suitable medicine, shamanoushadhis, vatanulomana yogas with information on probable mode of action.
5. Furthermore, scholars will prescribe dietary management, Kashaushadhi, and rasaushadhi, as well as lifestyle recommendations and regular exercise, according to the specific requirements of the condition.
6. The scholars should conclude the learning achieved through experience.
7. The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 17.8: Comparison of Koshtagata Vata, Gulma, Gudagata Vata, Tuni, and Pratituni

Pre learning activity

1. The teacher will discuss Ayurvedic concepts related to Gataavata, followed by a detailed understanding of Koshtagata Vata, Gulma, Gudagata Vata, Tuni, and Pratuni, which includes Paribhasha and Nidana Panchakas.
2. The teacher will then discuss the probable modern correlations of Koshtagata Vata, Gulma, Gudagata Vata, Tuni, and Pratuni, such as Basic understanding of Irritable Bowel Syndrome, Functional Dyspepsia, and Gastroesophageal Reflux Disease (GERD) for Koshtagata Vata.
3. Basic understanding of Benign tumours/cysts, Malignancies for Gulma
4. Basic understanding of Anal fissures, Hemorrhoids, for Gudagata Vata
5. Basic understanding of Dysbiosis, Small Intestinal Bacterial overgrowth (SIBO), Lactose intolerance, or Food sensitivities for Tuni
6. Basic understanding of Chronic Pancreatitis, Inflammatory Bowel disease for Pratuni
7. The teacher will describe the steps of history taking and highlight the differentiating points of these diseases, demonstrating physical examinations and a detailed Gastrointestinal tract examination, along with possible treatment modalities.

Case-based Learning:

1. Divide PG Scholars into small groups
2. PG scholars should be provided with the case/case scenarios of Koshtagata Vata, Gulma, Gudagata Vata, Tuni, and Pratuni.
3. Instruct each group to identify the appropriate clinical findings of each given case.
4. Encourage scholars to discuss their approaches and findings within their groups. Invite each group to present their results.
5. Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol.
6. Assign groups to find out the recent updates on Koshtagata Vata, Gulma, Gudagata Vata, Tuni, and Pratuni. Groups will also explore the contemporary relevance and scientific validation of these practices.
7. The teacher shall summarize the key concepts covered in the practical session and give input for further improvement.

Experiential-Learning Learning 17.9: Justification of the need for Shodhana chikitsa in Koshta-gata, Guda-gata, Amashaya-gata, and Pakwashaya-gata Vata.

Cases-based learning/Case scenario

1. The scholars are divided into small groups and assigned cases or case scenarios of Koshta-gata, Guda-gata, Amashaya-gata, and Pakwashaya-gata Vata.
2. The scholars are asked to take a detailed history and conduct relevant clinical examinations to make an appropriate diagnosis based on the involvement of doshas and dushyas.
3. The scholars may further advise on the relevant investigations needed for the diagnosis of the condition.
4. Justify the need for different Shodhana therapies such as Vamana, Virechana, and Basti based on Nidana, Sthana, Dushya, Vikruti etc.
5. Analyze the medicines, diet, and proper regimen in koshtagata, gudagata, amashayagata, and pakvashayagata vata through research articles.
6. Encourage self-assessment and more profound understanding through reflective learning.
7. The teacher will summarize the key concepts and give input for further improvisation in making accurate diagnoses and formulating effective treatments.

Experiential-Learning Learning 17.10: Treatment Protocol for Neuropathies: Classification(Kevala Nirupasthambha and Sadosha Upasthambha Vatavyadhis) and Therapy Approaches

Case-based learning/Case scenario

The teacher will discuss the recent classification of ICD guidelines for neuropathy under the category of diseases of the Nervous System.

1. The scholars are divided into two groups based on Kevala Nirupasthambha and Sadosha Upasthambha Vatavyadhis, and are assigned different cases of Neuropathies from the IPD/Case scenario.
2. The scholars will conduct detailed histories and perform clinical examinations on five neuropathy cases, categorizing them into two main groups based on their characteristics: Kevala Nirupasthambha and Sadosha Upasthambha Vatavyadhis.
3. The scholars will apply the treatment principles based on the above classification to the underlying doshic imbalances.
4. The scholars will further plan the treatment protocol, including shodhana, Shamana, and Rasyana therapies, along with proper advice on pathya and regular vyayama, and analyze the contemporary treatment, pharmacodynamics, and pharmacokinetics of modern medicine.
5. Assign groups to research recent updates on Neuropathies. Groups will also explore the contemporary relevance and scientific validation of these practices.
6. Furthermore, one scholar from each group will present and discuss the topic with the other groups.
7. A group discussion will be held on case taking, treatment protocols, prognosis, and related procedures in these cases.
8. Encourage self-assessment and more profound understanding through reflective learning
9. The teacher will summarize and conclude key takeaways from the session.

Experiential-Learning Learning 17.11: Distinguishing Parkinson's Disease from Other Parkinsonian and Neuromuscular Disorders: A Focus on Etiopathogenesis

Case-based Learning:

1. Divide PG Scholars into small groups
2. PG scholars will be provided with case/case scenarios of Parkinson's disease and other neuromuscular diseases.

3. Instruct each group to identify the appropriate clinical findings of each given case and discuss regarding Dhatukshaya lakshanas, Kampavata, Sarvangavata, Snayugata vata, and Majjagata Vata.
4. Additionally, understand the Avarana concept in detail, including its types and the importance of Vata Dosha concerning the involvement of different Avaranas in Kampavata.
5. Scholars will conduct assessments, including history taking, physical examinations, investigations, radiological investigations, and pathogenesis, to diagnose the case and formulate a treatment protocol.
6. Encourage students to discuss their approaches and findings within their groups.
7. Invite each group to present their results.
8. Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol
9. Assign groups to research recent updates on Parkinson's disease and various neuromuscular diseases.
10. Groups will also explore the contemporary relevance and scientific validation of these practices
11. The scholars will also emphasize Shodhana therapy (special modifications needed in procedure, dose, patients with comorbidities), Shamana (dose, anupana, bhesaja kala), Rasayana, Satwawajaya chikitsa, pathayapathya, and justify the selection of specific Rasayana Yoga based on Rogabala and Rogi bala
12. The teacher shall summarize the key concepts covered in the practical session and provide feedback for further improvement in useful skills, including making accurate diagnoses and formulating effective treatments.

Experiential-Learning Learning 17.12: Kampavata Treatment Protocol

Pre learning activities

- The teacher will discuss about Kampavata, including Nidana, dhatukshayajanya samprapthi, Avaranajanya samprapthi, Poorvaroopa, Roopa, Sapeksha Nidana, and Chikitsa in detail.
- The Teacher will discuss the ICD classification of Parkinson's disease with its definition, causes, symptoms, diagnostic procedures, Differential diagnosis, and Interventions in detail.
- The Teacher highlights the treatment protocols for Kampavata Avaranajanya chikita based on the involvement of doshas and dushyas
- The Teacher will then demonstrate physical examination, Neurological examination, Special tests for Parkinson's disease such as as Propulsion test and retropulsion tests, Finger tapping or Rapid Alternating Movements (RAM), Timed Up and Go (TUG) test to assess Bradykinesia, Myerson's sign, Pull test for postural stability and discuss regarding the diagnostic scales such a UPDRS and Hoehn and Yahr staging scale.
- Then the teacher highlights the differentiating points of parkinson's disease with other diseases, along with possible treatment modalities based on the dosha, dhatu, and avarana involved.

- Shodhana Chikitsa, such as Niruha and Anuvasana Basti, Nasya, Virechana, and Shamanoushadhis, which are characterized by Vata-kaphahara, balya, and brahmana karma, will be highlighted by the teacher.
- The teacher will also give knowledge on Bahya Chikitsa, such as Sarvanga dhanyamla seka, Sarvanga kashaya seka, Sarvanga Udvaratana, Sarvanga Shashtika Shaali Pinda sweda, Sarvanga Abhyanga, and Nadi sweda to use judiciously, along with the importance of administration of specific Rasayana Yogas.

Case-based Learning:

1. PG Scholars are provided with a case of Parkinson's disease in the IP ward.
2. Instruct to identify appropriate clinical findings.
3. To find out the recent updates on Parkinson's disease and research articles on Kampavata with its treatment updates. Groups will also explore the contemporary relevance and scientific validation of these practices
4. PG Scholars will do an assessment that includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, Shodhana (special modifications needed in procedure, dose, patients with comorbidities), Shamana (dose, anupana, bhesaja kala), Rasayana, Satwawajaya Chikitsa, Pathya-Apathya, and justify the selection of specific Rasayana Yoga based on Rogabala and Rogi bala.
5. Encourage students to discuss their approaches and findings with one another.
6. Invite each group to present their results.
7. Facilitate a discussion on identifying appropriate treatment protocol, including proper shodhana, shamana, rasayana, and pathyapathya for the given case.
8. The teacher shall summarize the key concepts and provide feedback for further improvement in making accurate diagnoses and formulating effective treatments.

Experiential-Learning Learning 17.13: Entrapment Neuripathy and Ayurvedic Management

Pre-clinical learning

- The teacher will discuss the recent classification of ICD on Entrapment Neuropathy.
- Teacher will discuss Vata prakopa, Sroto rodha, Avarana concept with its types in detail, including the importance of Vata Dosha
- The teacher will discuss the probable correlation of Entrapment Neuropathy in Ayurveda concerning involved doshas, dushyas, and avarana.
- The teacher will discuss causes, symptoms, differential diagnosis, which includes Carpal Tunnel syndrome, Ulnar Nerve entrapment, Radial Tunnel syndrome, Common Peroneal nerve entrapment, Thoracic outlet syndrome, Femoral nerve entrapment, and treatment principles.

- The teacher will then discuss the Steps of history taking and demonstrate different examinations needed for diagnosis of Entrapment Neuropathy and Detailed Musculoskeletal examination, Neurological Examination with special tests.
- Guide students with the investigations needed for the diagnosis of different entrapment neuropathies. Explain the medicines, diet, and helpful regimen in the management of Entrapment Neuropathy based on dosha, dhatu, and avarana involved.

Case-based learning

1. Divide the scholars into two groups and assign the different cases of entrapment neuropathies.
2. Students will do an assessment that includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), Rasayana, Satwawajaya, chikitsa, pathyapathya, and justify the selection of specific Rasayana Yoga based on Rogabala and Rogi bala.
3. Encourage self-assessment and more profound understanding through reflective learning.
4. Refer to the medicines, diet, and helpful regimen in Entrapment Neuropathy and analyse the phytoanalytical study of the medication helpful in Entrapment Neuropathy through research articles.
5. Analyse contemporary treatment, pharmacodynamics, and pharmacokinetics of contemporary medicine.
6. Follow up on the patient after treatment to know the effectiveness of the treatment.
7. Assign groups to find out the recent updates on Entrapment neuropathies. Groups will also explore the contemporary relevance and scientific validation of these practices.
8. One scholar from each group will be presenting the important discussions held and the challenges faced during the presentations.
9. The teacher will summarize and conclude key takeaways from the session.

Modular Assessment

Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 75 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern	6

used for assessment. Calculate the Modular grade point as per Table 6C. Three questions can be asked, each carries 25 marks. 1. Explain the Kampavata Chikitsa - chikitsa Sutra, Shamana, Shodhana, and Rasayana chikitsa. Advice Pathya, Apathya, and Anupana - 25 marks 2. Classify the different types of neuropathies into Kevala, Nirupasthambha, and Sadosha Upasthambha Vatavyadhis - 25 marks 3. Develop an Ayurveda treatment protocol to manage an acute condition of sudden obstruction due to urine, including bahya and abhyantara Chikitsa (Real case or case-based scenarios) - 25marks Or Any practical in converted form can be taken for assessment. (40 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (35 marks)	
Semester No : 5	
Module 18 : Vatavyadhi - 3 (Neurodegenerative and Musculoskeletal disorders)	
Module Learning Objectives (At the end of the module, the students should be able to) 1. Describe the fundamentals of neuro degenerative disorders 2. Describe various types treatment for neuro degenerative disorders 3. Identify type of musculoskeletal disorders and their clinical management. 4. Describe the role of Ayurveda in neuro-degenerative disorders and musculo-skeletal disorders.	
Unit 1 Neurodegenerative disorders and Smriti Nasha • Dementia - Understanding the Etiopathogenesis and management of diseases like Dementia – with Functional anatomy, Vascular Dementia, Fronto-temporal Dementia, Parkinson’s Disease Dementia, Dementia with Lewy Bodies, Differential Diagnosis, Treatment. Smriti Nasha/ smriti lopa (Alzheimer’s Disease) – clinical manifestation, epidemiology, pathology and differential diagnosis. • Smriti Nasha/ Smriti lopa – classical references as lakshana, as Chikitsa, as guna, as hetu, as arista	

- Huntington's disease/chorea and other chorea, difference between Chorea, Athetosis and Hemiballismus

References: 1,2,3,15,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2, CO4,CO7	Describe the etiopathogenesis and management of dementia and its differential diagnoses, including functional anatomy-related dementia, vascular dementia, and frontotemporal dementia. Discuss and elaborate on classical references such as lakshana, chikitsa, guna, hetu, and arishta.	1	Lecture	CC	Knows-how	FC,L&PPT
CO1,CO2, CO5,CO7	Describe Parkinson's Disease, Dementia, Dementia with Lewy Bodies, and Prion diseases, including their differential diagnoses and treatment approaches.	1	Lecture	CC	Knows-how	L&PPT ,L_VC,CBL
CO1,CO2, CO7	Assess the importance of various laboratory investigations, imaging modalities, and histopathological examinations in the diagnosis and management of neurodegenerative disorders.	2	Practical18.1	PSY-GUD	Shows-how	CD,PL,CBL,PT ,L&PPT
CO1,CO2, CO5,CO7	Interpret and understand the etiopathogenesis, clinical manifestations, epidemiology, pathology, differential diagnosis, and management of Alzheimer's disease.	1	Lecture	CC	Knows-how	L_VC,L&PPT ,DIS
CO1,CO2, CO5,CO7	Differentiate Huntington's chorea from other types of chorea by interpreting and analyzing relevant investigations, and effectively explain the findings to peers and students.	2	Practical18.2	PSY-GUD	Does	D- BED,PT,PER, CBL

CO1,CO2, CO5,CO7	Assess types of movement disorders based on their characteristics by analyzing and interpreting patients' involuntary movements. Demonstrate Roga-Rogi Pariksha in a movement disorder patient and recommend appropriate investigations with justifications.	2	Practical18.3	PSY-GUD	Does	D- BED,CBL,CD, PT
CO1,CO2, CO4,CO7	Plan a comprehensive treatment protocol, including Pathya-Apathya guidelines, for the management of patients with dementia.	2	Experiential- Learning18.1	PSY-ADT	Shows-how	PER,IBL,PAL
CO1,CO2, CO5,CO7	Describe and understand the etiopathogenesis, clinical manifestations, epidemiology, pathology, differential diagnosis, and management of Parkinson's disease	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO5,CO7	Assess Parkinson's Disease (PD), Parkinsonism, Secondary Parkinsonism, and PD Plus Syndromes by interpreting and analyzing relevant investigations, and effectively explain the findings to peers and students.	2	Practical18.4	PSY-GUD	Shows-how	D- BED,PBL,PER ,CBL,PT
CO1,CO2, CO5,CO7	Interpret MRI and CT brain changes associated with dementia, Parkinsonism, athetosis, chorea, and other neurodegenerative disorders across different age groups.	2	Experiential- Learning18.2	PSY-MEC	Does	CBL,TPW,D- BED,DIS
CO1,CO2, CO5	Discuss the etiopathogenesis, clinical manifestations, epidemiology, pathology, differential diagnosis, and management of tremors, dystonias, choreas, athetosis, tics, myoclonus, hemiballismus, stereotypies, and cerebellar ataxia.	1	Lecture	CAP	Knows-how	L_VC,L&PPT
CO2,CO5, CO7	Design a Panchakarma treatment protocol, including Pathya-Apathya guidelines, for in-patient management of movement disorders.	3	Experiential- Learning18.3	PSY-MEC	Does	CD,L&PPT ,D- BED,PER,CBL
CO1,CO2, CO5,CO7	Interpret the various types of movement abnormalities in Parkinson's disease patients and	2	Practical18.5	PSY-GUD	Shows-how	PAL,D- BED,PBL,CBL

	justify the rationale behind the administered treatment protocol.					
CO1,CO2, CO5,CO7	Assess the severity of Parkinson's disease using the Hoehn and Yahr Rating Scale across various genders and age groups in inpatient settings.	2	Experiential-Learning18.4	PSY-MEC	Does	CBL,L&GD,IBL
CO1,CO2, CO5	Interpret the MRI changes associated with cerebral atrophy, isolated late-onset cerebellar ataxia (ILOCA), and other neurodegenerative disorders. Additionally, recommend prophylactic and preventive strategies for patients, their families, caregivers, and healthcare providers in managing ILOCA and Wilson's Disease.	2	Practical18.6	PSY-GUD	Shows-how	PER,CBL,PBL, PT
CO1,CO2, CO5,CO7	Examine and interpret the influence of inheritance and genetic factors in X-linked cerebellar ataxia and spinocerebellar ataxia, while analyzing the significance of gene mutations and the role of prenatal testing in diagnosing various forms of ataxia.	3	Experiential-Learning18.5	PSY-MEC	Shows-how	PrBL,PER

Unit 2 ALS AND Multiple Sclerosis

- Amyotrophic lateral sclerosis (ALS), Restless leg syndrome.
- Multiple Sclerosis – pathogenesis, clinical manifestations, disease course, diagnosis, prognosis and treatment

References: 15,16,47,54

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2, CO5	Describe the etiopathogenesis, clinical manifestations, epidemiology, pathology,	1	Lecture	CC	Knows-how	L&GD,CBL

	differential diagnosis, and management of Amyotrophic Lateral Sclerosis (ALS) and Restless Leg Syndrome.					
CO1,CO2, CO5,CO7	Assess the pathogenesis, clinical manifestations, and diagnostic findings in patients with Multiple Sclerosis to establish a definitive diagnosis.	3	Practical18.7	PSY-GUD	Shows-how	PBL,PER,D-BED,PL
CO1,CO2, CO5,CO7	Design a comprehensive treatment protocol for in-patient management of Multiple Sclerosis, incorporating appropriate Pathya-Apathya guidelines.	3	Experiential-Learning18.6	PSY-MEC	Shows-how	L_VC,D-BED,CBL,SDL, DIS
CO1,CO2, CO5,CO7	Interpret Amyotrophic Lateral Sclerosis (ALS) and Multiple Sclerosis (MS) based on clinical examinations and MRI/CT imaging findings.	4	Experiential-Learning18.7	PSY-MEC	Shows-how	PAL,CBL,SIM, SDL
CO2,CO5, CO7	Identify the various causes and cardinal symptoms of Restless Leg Syndrome, and develop a comprehensive treatment protocol including Pathya-Apathya guidelines.	4	Experiential-Learning18.8	PSY-MEC	Shows-how	CBL,CD,SDL, D-BED

Unit 3 Musculoskeletal disorders

- Tantrighaata (Motor Neuron Diseases)– Sporadic, Genetic and other motor neuron diseases like selected upper and lower motor neuron disorders,
- Peshi Vikaras (Myopathies) - Janmajata Peshi Vikaras (Congenital myopathies), Mitochondrial myopathies and other Myopathies - Peshi Sosha(Muscular dystrophy), Myotonia.
- Knowledge of Peshi Dourbalya(Myasthenia Gravis)- importance of plasma therapy and immunoglobulin therapy.
- Investigations – MRI/CT Brain, Spine, PET Scan

References: 15,16,47,54

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods

			Experiential Learning			
CO1,CO2, CO5,CO7	Discuss the Etiopathogenesis, clinical manifestation, epidemiology, pathology, differential diagnosis. and management of Motor Neuron Diseases – Sporadic, Genetic and other motor neuron diseases like selected upper and lower motor neuron disorders.	1	Lecture	CAP	Knows-how	L&PPT ,L&GD
CO1,CO2, CO5,CO7	Discuss the etiopathogenesis, clinical manifestations, epidemiology, pathology, differential diagnosis, and management of myopathies, including congenital myopathies, mitochondrial myopathies, muscular dystrophies, and myotonias.	1	Lecture	CAP	Knows-how	L&GD,SIM,FC
CO1,CO2, CO5,CO7	Assess between Upper Motor Neuron (UMN) and Lower Motor Neuron (LMN) conditions, and justify and interpret gait evaluation, spinal reflexes, and deep tendon reflexes in musculoskeletal disorders.	3	Practical18.8	PSY-GUD	Shows-how	D-BED,CBL,SIM
CO1,CO2, CO3,CO7	Interpret MRI findings pertinent to the diagnosis of cervical and lumbar myelopathy.	2	Practical18.9	PSY-GUD	Shows-how	PER,PT,CBL, D-BED
CO1,CO2, CO5,CO7	Diagnose Motor Neuron Disease (MND) and Muscular Dystrophies through comprehensive history taking and clinical examination of in-patient (IPD) cases, and discuss the findings with peers.	3	Experiential-Learning18.9	PSY-MEC	Does	PER,SIM,D-BED,CBL
CO1,CO2, CO5,CO7	Justify the rationale behind the selection of drugs, therapeutic procedures, and Pathya-Apathya guidelines in the management of different types of vertebral disc compressions.	3	Experiential-Learning18.10	PSY-ADT	Does	PAL,PER,CD, PL,CBL
CO1,CO2, CO5,CO7	Perform differential diagnosis and interpret radiological findings associated with various types of vertebral disc compressions.	3	Experiential-Learning18.11	PSY-MEC	Does	DIS,PL,L_VC, PAL,PER

CO1,CO2, CO5,CO7	Describe and understand the etiopathogenesis, clinical manifestations, epidemiology, pathology, differential diagnosis, and management of Myasthenia Gravis, emphasizing the significance of plasma therapy and immunoglobulin therapy	2	Lecture	CC	Knows-how	L_VC,DIS
CO1,CO2, CO5,CO7	Perform a differential diagnosis of Myasthenia Gravis by interpreting and analyzing investigations such as MRI/CT of the brain and spine, PET scans, and effectively explain the findings to peers and scholars.	3	Practical18.10	PSY-MEC	Shows-how	CBL,PT,PER, CD

Unit 4 Myelopathy

- Knowledge of Compressive myelopathy (cervical and lumbar)
- Difference between Ascending versus Descending Paralysis, Botulism, Poliomyelitis, Transverse myelitis
- Knowledge of EMG, EEG and NCV TEST.

References: 15,16,47,54

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2, CO5,CO7	Describe and understand the etiopathogenesis, clinical manifestations, epidemiology, pathology, differential diagnosis, and management of compressive myelopathy involving the cervical and lumbar regions.	2	Lecture	CC	Knows-how	L
CO1,CO2, CO5,CO7	Identify the roles of various Panchakarma procedures, with special reference to Basti Chikitsa and Nasya Karma, in the management of cervical myelopathy.	2	Experiential- Learning18.12	PSY-MEC	Does	SIM,CBL,PER, DIS,TBL

CO1,CO2, CO5,CO7	Assess the significance of EMG, EEG, nerve conduction studies, and NCV tests in the diagnosis and evaluation of myelopathies.	2	Practical18.11	PSY-GUD	Shows-how	BS,D,D-BED,CBL,DIS
CO1,CO2, CO5,CO7	Perform differential diagnosis of ascending paralysis, descending paralysis, and botulism, and carry out appropriate clinical assessment and diagnostic examinations.	2	Practical18.12	PSY-GUD	Shows-how	DIS,CBL,D,D-BED
CO1,CO2, CO5,CO7	Design a comprehensive treatment protocol, including Pathya-Apathya (dietary and lifestyle recommendations), for in-patient management of both Upper Motor Neuron (UMN) and Lower Motor Neuron (LMN) paralysis.	2	Experiential-Learning18.13	PSY-MEC	Does	SDL,CBL,DIS
CO1,CO2, CO5,CO7	Design a comprehensive treatment protocol, including Pathya-Apathya (dietary and lifestyle guidelines), for in-patient management of both ascending and descending paralysis.	2	Experiential-Learning18.14	AFT-SET	Does	D,CBL,D-BED
CO1,CO2, CO5,CO7	Illustrate the therapeutic role of Basti in the management of paraplegia and provide a rational justification for its mode of action based on Ayurvedic principles and contemporary understanding.	2	Practical18.13	PSY-GUD	Shows-how	SIM,D-BED,CBL,PT,B S
CO1,CO2, CO5,CO7	Describe the etiopathogenesis, clinical manifestations, epidemiology, pathology, differential diagnosis, and management of Poliomyelitis and Transverse Myelitis.	1	Lecture	CC	Knows-how	L,L_VC,L&PPT
CO1,CO2, CO5,CO7	Describe the neurological examination techniques across various age groups, and formulate appropriate diagnostic criteria for patients presenting with neurological deficits.	2	Lecture	CAP	Knows-how	FC,L_VC
CO1,CO2, CO5,CO7	Counsel the patient and elaborative condition with patients, relatives, bystanders, or students regarding the condition of a neurological	1	Practical18.14	AFT-SET	Shows-how	PBL,PT,D-BED

	emergency patient, emphasizing the urgency of referral in critical situations.					
CO1,CO2,CO5,CO7	Assess and refer the patient with myelopathy to a specialized center for advanced diagnostic evaluation and management, including potential neurosurgical intervention, due to worsening symptoms.	1	Experiential-Learning18.15	AFT-SET	Does	DIS,CBL,BS

Practical Training Activity

Practical Training 18.1 Importance of Different Lab investigations, Imaging scans, Histopathologic examinations in Neurodegenerative Disorders.

Demonstration by the teacher

- The teacher will tell about the recent classification of Neurodegenerative Disorders.- (ICD 11- 8A20-8A2Z). Teacher will describe about the Neurodegenerative Disorders and different types of scales used in Neurodegenerative Disorders.
- Then the teacher will demonstrate physical examinations and Neurological examinations along with possible treatment modalities.

Case based learning

- Divide scholars into small groups
- The scholars should be provided with a case of Neurodegenerative Disorders.
- Instruct each group to identify appropriate clinical findings in Neurodegenerative Disorders patient.
- Encourage scholars to discuss their approaches and findings within their groups.
- Invite each group to present their results.
- Guide scholars in collecting the informations related to the importance of Different Lab investigations, Imaging scans, Histopathologic examinations in Neurodegenerative Disorders.
- Encourage scholars to discuss their approaches and findings within their groups.
- The detailed interpretation and application of each investigation will be educated in the ward in front of the patient.

- Practical demonstration of interpreting Plasma Biomarkers, CSF examination, neurofilament light chain (NfL), MRI, CT, PET, Histopathological examination of brain tissue in Neuro-degenerative disorders. Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol

Self assessment-

- Encourage self assessment and deeper understanding through reflective learning. Scholars will write a reflection on their experience. Encourage critical thinking and self improvement in interpretation and importance of Different investigations in Neuro-degenerative disorders.

Conclusion and summarization

- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 18.2 Differentially diagnose Huntington's Chorea.

Demonstration by the teacher

- The teacher will tell about the recent classification (ICD 11 -8A01.10) on Huntington's Chorea.
- Teacher will describe about the etiology, pathophysiology, clinical presentations, physical examinations like complete neurological examinations, vision and hearing screening, cardiac and pulmonary evaluation, Investigations like MRI and CSF analysis, Differential diagnosis, complications and treatment protocol.
- Teacher should explain the risk factors associated with Hungtinton's Chorea and related conditions. The teacher should also explain the evaluation required for patients presenting with cognitive decline. Teacher should explain different treatment modalities along with pathyapathya with ahara and vihara.

Case based learning

- Divide scholars into small groups
- The scholars should be provided with a case of Huntington's Chorea (real or simulated patient or video clip)
- Instruct each group to identify appropriate clinical findings of Huntington's Chorea patient
- Encouragescholars to discuss their approaches and findings within their groups.
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol

Self assessment-

- Encourage self assessment and deeper understanding through reflective learning. Scholars will write a reflection on their experience. Encourage critical thinking and self improvement in interpretation and importance of Different investigations in Huntington's Chorea
- Understanding the importance of Investigations and examinations in diagnosis. Learning the correct way of performing the clinical examinations. Enacting the Huntington's / Chorea case and peers demonstrating the examinations on them. Analysing the investigations and understanding the pathophysiology. Correlating the case in Ayurveda based on the symptoms and propose a treatment protocol, Pathyaapathya and they will justify the selection of specific Rasayana Yoga on the basis of Rogabala and Rogi bala.

Conclusion and summarization

- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 18.3 Distinguish types of Movement Disorders.

Demonstration by the teacher

- The teacher will tell about the recent classification of Movement Disorders (ICD 11 - 8A00-8A0Z) and will explain the importance of Roga Rogi pareeksha and types of Roga Rogi pareeksha (Ashta vidha, Dashavidha etc.,)
- Explain the types of Movement Disorders. Explain the examinations and investigations needed in Movement Disorders. Explain the changes which can be seen in laboratory and radiological changes.
- Teacher should explain different treatment modalities along with pathyapathya with ahara and vihara.

Case based learning

- Divide scholars into small groups
- The scholars should be provided with a case of Movement Disorders (real or simulated patient or video clip)
- Instruct each group to identify appropriate clinical findings in Movement Disorders patient
- Encourage scholars to discuss their approaches and findings within their groups.
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol

Self – Assessment

- Encourage self assessment and deeper understanding through reflective learning. Scholars will write a reflection on their experience.
- Refer different samhitas for types of rogarogipareeksha and their utility. Grasp different examinations useful in movement disorders and perform them correctly on fellow students.
- Understand the changes in the investigations and try to identify on their own. Interpret and analyse the symptoms and correlate to ayurvedic lakshanas and justify the investigation needed for that particular case.

Conclusion and summarization

The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 18.4 Differentially diagnosis of PD, Parkinsonism, Secondary Parkinsonism, PD Plus Syndrome.

Demonstration by the teacher

- The teacher will tell about the recent classification of ICD on Parkinsonism (ICD 11- 6D80-8Z etc). Teacher will describe about the etiology, pathophysiology, clinical presentations, physical examinations like complete neurological examinations, Investigations like MRI/CT and CSF analysis, Differential diagnosis, complications and treatment protocol of PD, Parkinsonism, PD Plus Syndrome.
- Teacher should explain the risk factors associated with Parkinsonism and related conditions. The teacher should also explain the evaluation required for patients presenting with cognitive decline. Teacher should explain different treatment modalities along with pathyapathya with ahara and vihara.

Case based learning

- Divide scholars into small groups
- The scholars should be provided with a case of Parkinsonism
- Instruct each group to identify appropriate clinical findings in Parkinsonism patient
- Encourage scholars to discuss their approaches and findings within their groups.
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol

Self-Assessment

- Encourage self assessment and deeper understanding through reflective learning. Scholars will write a reflection on their experience. Encourage critical thinking and self improvement in interpretation and importance of Different investigations in Parkinsonism.

- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Rogi bala.

Conclusion and summarization

- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 18.5 Types of movements in a Parkinson's Disease.

Demonstration by the teacher

- Guide scholars in interpreting the types of movements in Parkinson's Disease and discuss the possible treatment protocol mentioned. Discussion on the most common scales used in parkinson's disease - Unified Parkinson Disease Rating Scale (UPDRS), Hoehn and Yahr staging, and the Schwab and England rating of activities of daily living. Alongwith the MRI changes in Parkinson's Disease. Discuss how these MRI changes are helpful in interpreting the stages of Parkinson's Disease.
- Practical demonstration of treatment measures to be adopted in ayurveda. And make a report on the consecutive follow up of patients on the treatments prescribed and note the improvements and complications.

Case based learning

- Divide scholars into small groups.
- The scholars should be provided with a case of Parkinson's Disease.
- Instruct each group to identify appropriate clinical findings in Parkinson's Disease. patient.
- Encourage scholars to discuss their approaches and findings within their groups.
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol.

Self assessment-

- Encourage self assessment and deeper understanding through reflective learning. After performing a detailed history of the disease the scholar should interpret the MRI Changes, physical examinations etc on types of Parkinson's Disease and interpret the different treatment principles administered for Parkinson's Disease. Also the modern treatment recommendations mentioned has to be reported by the student.

- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Rogi bala.

Conclusion and summarization

- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 18.6 MRI changes in Cerebral Atrophy, ILOCA and other Neuro-degenerative Diseases.

Demonstration by the teacher

- Guide scholars in interpreting the MRI changes in cerebral atrophy, ILOCA and other Neuro-degenerative Diseases. Discuss how these MRI changes are helpful in interpreting the Cerebral Atrophy, ILOCA and other Neuro-degenerative Diseases
- Practical demonstration of prophylactic /preventive measures to be adopted also in Ayurveda treatments for Neuro-degenerative Diseases.

Case based learning

- Divide scholars into small groups
- The scholars should be provided with a case of the MRI changes in cerebral atrophy, ILOCA and other Neuro-degenerative Diseases
- Instruct each group to identify appropriate clinical findings in the MRI changes in cerebral atrophy, ILOCA and other Neuro-degenerative Diseases patient
- Encourage scholars to discuss their approaches and findings within their groups.
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol.

Self assessment-

- Encourage self assessment and deeper understanding through reflective learning. After performing a detailed history of the disease the scholars should interpret the MRI Changes of the Neuro-degenerative Diseases and apply ayurvedic principles in preventing and curing it. Also the modern prophylactic recommendations mentioned has to be reported by the student .
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with

comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Rogi bala.

Conclusion and summarization

- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 18.7 Diagnosis of Multiple Sclerosis.

Demonstration by the teacher

- Guide scholars to diagnose the disease through Neurological examinations, interpret the MRI/CT Scan reports and discuss the possible treatment protocol mentioned. Discussion on the Expanded Disability Status Scale (EDSS), Ambulation Index used along with the MRI changes in Multiple Sclerosis. Discuss how these MRI changes are helpful in interpreting the Disease.
- Practical demonstration of treatment measures to be adopted in ayurveda. And make a report on the consecutive follow up of patients on the treatments prescribed and note the improvements and complications.

Case based learning

- Divide scholars into small groups
- The scholars should be provided with a case of Multiple Sclerosis (real or simulated patient or video clip)
- Instruct each group to identify appropriate clinical findings in Multiple Sclerosis patient.
- Encourage scholars to discuss their approaches and findings within their groups.
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol

Self-assessment-

- Encourage self-assessment and deeper understanding through reflective learning. After taking a detailed history of the disease the student should interpret the MRI Changes, physical examinations, etc., & interpret the different treatment principles administered for movement disorders. Also, the modern treatment recommendations mentioned has to be reported by the scholar.
- Conclusion and summarization
- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 18.8 Differential diagnosis of UMN and LMN Conditions.

Demonstration by the teacher

- Interpretation of the difference between UMN & LMN disorders through signs & symptoms, motor nervous system examinations including Deep Tendon reflexes and discuss the possible treatment protocol mentioned. Discussion on the different types of Gait, muscle tone & bulk, types of spasticity & Reflexes alongwith the MRI, CT, EMG & NCS in UMN & LMN disorders. Discuss how these MRI, CT, EMG & NCS studies are helpful in the differential diagnosis of both the disorders.
- Practical demonstration of treatment measures to be adopted in ayurveda. And make a report on the consecutive follow up of patients on the treatments prescribed and note the improvements and complications.

Case based learning

- Divide scholars into small groups
- The scholars should be provided with a case of UMN or LMN.
- Instruct each group to identify appropriate clinical findings in UMN/LMN patient
- Encourage scholars to discuss their approaches and findings within their groups.
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol

Self-assessment-

- Encourage self-assessment and deeper understanding through reflective learning. After performing a detailed history of the disease, the student should interpret the MRI, CT, EMG changes, Neurological examinations to diagnose the UMN & LMN Disorders and interpret the different treatment principles administered. Also, the modern treatment recommendations mentioned has to be reported by the scholar.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Rogi bala.

Conclusion and summarization

- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 18.9 MRI Changes in the diagnosis of Cervical and Lumbar Myelopathy.

Demonstration by the teacher

- Guide scholars in interpreting the MRI Changes in the Cervical and Lumbar Myelopathies and discuss the possible treatment protocol mentioned. Discussion on the most common changes observed in MRI such as disc bulging, desiccation, extrusion, protrusion, herniation, sequestration, etc., causing spinal nerve compressions. Discuss how these MRI changes are helpful in interpreting the signs and symptoms such as pain, numbness, etc., in Cervical and Lumbar Myelopathies.
- Practical demonstration of treatment measures to be adopted in ayurveda based on the MRI Changes and make a report on the consecutive follow up of patients on the treatments prescribed and note the improvements and complications.

Case based learning

- Divide scholars into small groups
- The scholars should be provided with a case of Cervical and Lumbar Myelopathy
- Instruct each group to identify appropriate clinical findings in Cervical and Lumbar Myelopathy patient (real or simulated patient or video clip)
- Encourage scholars to discuss their approaches and findings within their groups.
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol

Self-assessment-

- Encourage self-assessment and deeper understanding through reflective learning. After performing a detailed history of the disease, the scholars should interpret the MRI Changes, signs & symptoms and interpret the different treatment principles administered for it. Also, the modern treatment recommendations mentioned has to be reported by the scholars.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathyapathya and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Rogi bala.

Conclusion and summarization

- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 18.10 Differential diagnosis of Myasthenia Gravis.

Demonstration by the teacher

- The teacher will discuss about the recent classification of ICD on Myasthenia Gravis(ICD11 - 8C60).Teacher will describe about the steps of history taking and the factors differentiating the disease and the role of EMG and genetic studies such as Sanger gene sequencing, Next generation sequencing (NGS), etc., in diagnosing the diseases. Then the teacher will demonstrate physical examinations and neurological examinations along with possible treatment modalities.

Case based learning

- Divide scholars into small groups
- The scholars should be provided with a case of Myasthenia Gravis (real or simulated patient or video clip)
- Instruct each group to identify appropriate clinical findings of Myasthenia Gravis patient.
- Encourage scholars to discuss their approaches and findings within their groups.
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol

Team project work

- Assign groups to find out the recent updates on Myasthenia Gravis and the role of inheritance and genetics. Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Rogi bala.

Conclusion and summarization

- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 18.11 Importance of EMG, EEG, Nerve conduction and NCV TEST in Myelopathies.

Demonstration by the teacher

- EMG,EEG,Nerve Conduction and NCV Test in Myelopathies to understand its mechanism.Guide scholars in performing. EMG,EEG,Nerve Conduction, NCV Test and audiovisual aids through online sources. Practical demonstration of Ayurveda

treatments for Myelopathies. Demonstrate the preparation and application of Ayurveda therapies used for all Myelopathies and its differential diagnosis. Practical assessment in which pathologies to suggest above tests.

Case based learning

- Divide scholars into small groups
- The scholars should be provided with a case of Myelopathies based on the availability of cases
- Instruct each group to identify appropriate clinical findings in Myelopathy patient.
- Encourage scholars to discuss their approaches and findings within their groups.
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol

Self assessment-

- Encourage self assessment and deeper understanding through reflective learning. After performing assessments and applying ayurvedic or modern treatments plans, scholars will write a reflection on their experience. Encourage critical thinking and self improvement in Myelopathy patients .
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Rogi bala.

Conclusion and summarization

- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 18.12 Ascending, Descending Paralysis and Botulism and perform assessment examinations.

Demonstration by the teacher

- Lecture by teacher about differential diagnosis of Asending and Descending paralysis and Botulism and demonstration by teacher to perform assessment examinations for paralysis and boutilism on real or simulated patient or video clip
- Guide scholars in frame questions to assess symptoms such as restlessness, irritability, fatigue, nausea, paresthesias and possibly ataxia to arrive at diagnosis. Practical demonstration of Ayurveda treatments for paralysis. Demonstrate the preparation and application of Ayurveda therapies used for all paralysis and its differential diagnosis. Practical assessment by questioners.

Case based learning

- Divide scholars into small groups
- The scholars should be provided with a case of of Asending and Descending paralysis and Botulism (real or simulated patient or video clip)
- Instruct each group to identify appropriate clinical findings in of Asending and Descending paralysis and Botulism patient.
- Encourage scholars to discuss their approaches and findings within their groups.
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol

Self assessment-

- Encourage self assessment and deeper understanding through reflective learning. Ater performing clinical assessments and applying ayurvedic treatment plans, scholars will write a reflection on their experience.
- Encourage critical thinking and self improvement in Ascending, Descending Paralysis and Botulism patients ,symptoms include restlessness, irritability, fatigue, nausea, paresthesias and possibly ataxia.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Rogi bala.

Conclusion and summarization

- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 18.13 The role of Basti in Paraplegia and justify its mode of action.

Demonstration by the teacher

- The teacher will tell about the recent classification of ICD of Paraplegia (ICD 11- MB56).The teacher will describe about the signs, symptoms and complications of Paraplegia and how Paraplegia is different from other Hemiplegia and Quadriplegia, then the teacher will demonstrate physical examination and the possible causes and the treatment modalities of paraplegia.
- The teacher will explain about various panchakarma therapies that can be employed in Paraplegia such as different types of Basti.
- The teacher will also educate the scholars about the pathya-apathya to be followed and how it effects in making or breaking the disease pathogenesis.

Case based learning-

- Divide scholars into small groups
- The scholars should be provided with a case of Paraplegia.
- Instruct each group to identify appropriate clinical findings in Paraplegia.
- Encourage students to discuss their approaches and findings within their groups.
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and hands on training in administering basti in Paraplegia patients.
- To develop critical thinking by applying Basti chikitsa principles to the clinical case of Paraplegia.
- Scholars will discuss the appropriate upakrama to be applied based on the investigation and dosha involvement.
- Develop a diet chart based on the dosha- dushya involvement.

Team project work

- Assign groups to find out the recent updates on research and present the applications of specific Basti in various Paraplegia. Scholars can be divided into groups and instructed to prepare various preparations (such as Manda, Peya, Vilepi, etc) for patients of Paraplegia.
- Groups will also explore the contemporary relevance and scientific validation of these practices.

Conclusion and summarization

- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 18.14 Communicate with the patient/ relatives/ bystanders/ students on the condition of the Neurological Emergency patient and need for referral in critical conditions.

Demonstration by the teacher

- The teacher will tell about the recent classification(ICD11 -8B11,8A63,8A00-8A0Y) for Neurological Emergency. Teacher will describe about the signs, symptoms complications of particular case, and how condition of disease is different from one another the necessary investigations to confirm disease-, then the teacher will demonstrate physical examinations like Hoffmans test, babinski test, romberg test, gait and balance neurological examination like glass glow coma scale , CT Brain , Nerve conduction studies and the possible treatment modalities. Stating Explain the Reason for Referral,Discuss Potential Benefits
- The teacher will state the condition when to be referred and why the referral is needed

Case based learning

- To develop critical thinking by generating a referral letter to disease for example
- The contents of the referral letter includes :
 - Demographic details of the patient, clinical history, and present condition, the treatment given to the patient in the hospital.
 - Referral letter has to be typed and verified with the consultant. advanced monitoring and specialized treatments that are critical at this stage is need Recent updates of particular disease for example paralysis knowledge to be recorded in the log book.
 - Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesajala), rasayana, nutritional advice, satwajaya, daiviyapashraya chikitsa, pathyapathy and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Roga bala.

Team project work

- Assign groups to find out the recent updates on Neurological Emergency and present the findings to the teacher.

Conclusion and summarization

- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Experiential Learning Activity

Experiential-Learning Learning 18.1: Treatment protocol for Dementia.

Demonstration by the teacher

- The teacher will tell about the recent classification of ICD on Dementia (ICD 11- 6D80-8Z). Teacher will describe about the etiology, pathophysiology, clinical presentations , seven stages , physical examinations like complete neurological examinations, vision and hearing screening, cardiac and pulmonary evaluation, Investigations like MRI and CSF analysis, Differential diagnosis, complications and treatment protocol of Dementia.
- Teacher should explain the risk factors associated with Dementia and related conditions. The teacher should also explain the evaluation required for patients presenting with cognitive decline. Teacher should explain different treatment modalities along with pathyapathy with ahara and vihara.

Case based learning

- Divide scholars into small groups.
- The scholars should be provided with a case of Dementia
- Instruct each group to identify appropriate clinical findings in Dementia patient
- Encourage scholars to discuss their approaches and findings within their groups.
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesajala), rasayana, nutritional advice, satwawajaya, daivavyapashraya chikitsa, pathyapahtya and they will justify the selection of specific Rasayana Yoga on the basis of Rogabala and Roga bala.

Team project work

- Assign groups to find out the recent updates on Treatment protocol of dementia . Research and present different treatment modalities along with pathyapathya.
- Groups will also explore the contemporary relevance and scientific validation of these practices.

Conclusion and summarization

- The scholar identifies the prerequisite for a case report and observations to be made and documented while dealing with a rare/unique/interesting case.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about Dementia.
- Scholars should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Experiential-Learning Learning 18.2: MRI and CT Changes of Brain in Dementia, Parkinsonism, Athetosis, Chorea and other Neurodegenerative Disorders.

Demonstration by the teacher

- Guide scholars in collecting the informations related to the importance of Different Lab investigations, Imaging scans, Histopathologic examinations in Neurodegenerative Disorders.
- The detailed interpretation and application of each investigation will be educated in the ward in front of the patient.
- The teacher will tell about the recent classification of - (ICD 11- **6D80-6D8Z** etc)

- Practical demonstration of interpreting Plasma Biomarkers, CSF examination, neurofilament light chain (NfL), MRI, CT , PET, Histopathological examination of brain tissue in Neuro-degenerative disorders.

Self assessment-

- Encourage self assessment and deeper understanding through reflective learning. Scholars will write a reflection on their experience. Encourage critical thinking and self improvement in interpretation and importance of Different investigations in Neuro-degenerative disorders.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (Dose, Anupana, Bheshaja kala), Rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Rogi bala.
- The scholars identifies the prerequisite for a case report and observations to be made and documented while dealing with a rare/ unique/interesting case.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about Dementia, Parkinsonism, Athetosis, Chorea and other Neurodegenerative Disorders
- Scholars should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 18.3: Treatment Protocol in IP patient for Movement Disorders.

Demonstration by the teacher

- The teacher will tell about the recent classification of ICD of Movement disorders (ICD 11- 8A00-8A0Z).The teacher will describe about the signs, symptoms complications of Movement Disorders and how each Movement Disorder is different from other Movement Disorders, then the teacher will demonstrate physical and the possible treatment modalities.
- The teacher will explain about various panchakarma therapies that can be employed in Movement Disorders such as Shirodhara and Nasya.
- The teacher will also educate the scholars about the pathya-apathya to be followed and how it effects in making or breaking the disease pathogenesis.

Case based learning

- Develop critical thinking by applying Shirodhara and Nasya principles to the clinical case of Movement Disorders. Present a case of Movement Disorder with relevant investigations and scholars will discuss the appropriate upakrama to be applied based on the investigation and hyperkinetic movement and dosha involvement. Develop a diet chart based on the dosha- dushya involvement.
- Provide hands on experience in executing Shirodhara and Nasya karma techniques. Instruct scholars to perform Nasya and Shirodhara for each Movement Disorder.

Team project work

- Assign groups to find out the recent updates on research and present the applications of specific upakrama (eg. Shirodhara and Nasya) in various movement disorders. Scholars can be divided into groups and instructed to prepare various preparations (such as Manda, Peya, Vilepi, etc) for patients of Movement Disorder.
- The scholars identifies the prerequisite for a case report and observations to be made and documented while dealing with a rare/ unique/interesting case.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the Movement Disorders.
- Scholars should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- Groups will also explore the contemporary relevance and scientific validation of these practices.
- The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 18.4: Assessment of Parkinson's through Hoehn and Yahr Rating Scale.

Demonstration by the teacher

- Guide students in interpreting the types of movements in Parkinson's disease and discuss the possible treatment protocol mentioned. Discussion on the most common scales used in Parkinson's disease - Unified Parkinson Disease Rating Scale (UPDRS), Hoehn and Yahr staging, and the Schwab and England rating of activities of daily living. Alongwith the MRI changes in Parkinson's disease. Discuss how these MRI changes are helpful in interpreting the stages of Parkinson's.

Case Based Learning –

- Encourage self assessment and deeper understanding through reflective learning. Refer different scales used in assessment of Parkinsons. Developing critical thinking on Hoehn and Yahr scale and justifying its usage over other scales. Demonstration of

Hoehn and Yahr scale on IP Patients and justify different scoring. Correlating Domains of assessment scales and Lakshanas of Kampavata and Vatavikara Lakshanas for better understanding of the treatment protocol.

Group project –

- Students will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Rogi bala.
- The student identifies the prerequisite for a case report and observations to be made and documented while dealing with a rare/unique/interesting case.
- Students should interpret the point estimate and confidence interval to draw meaningful conclusions about the assessment scales of Parkinson's Disease.
- Students should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all students and faculty concerned to conclude.
- Instructor will summarize and conclude key takeaways from the session.

Experiential-Learning Learning 18.5: Role of inheritance and genes in X -Linked Cerebellar Ataxia, Spinal Cerebral Ataxia.

Demonstration by the teacher

- The teacher will tell about the recent classification of ICD on Ataxia (ICD-11 code 8A03.Z.) . teacher will describe about the Harding's classification of Spino-cerebellar and how to interpret the MRI, genetic tests like Gene mutations and Pre-natal testing. Then the teacher will demonstrate physical examinations and Neurological examinations along with possible treatment modalities.

Case based learning

- To develop critical thinking of inheritance and genes in the cerebral ataxia. Present a case of cerebral ataxia patient with a specific stage as per the MRI report, genetic reports and scholars will discuss the appropriate upakrama to be applied based on the classification of cerebral Ataxia. Also the scholar should make a report on the ayurvedic principles involved in genetics and Dosha involvement in different types of Ataxia.
- Provide hands on experience in demonstrating the physical examinations. Instruct scholars to perform different types of assessments for different Ataxia.
- Team project work
- Assign groups to find out the recent updates on Cerebral Ataxia and the role of inheritance and genetics.

- The scholar identifies the prerequisite for a case report and observations to be made and documented while dealing with a rare/unique/interesting case.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about X-Linked Cerebellar Ataxia, Spinal Cerebral Ataxia.
- Scholars should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- Groups will also explore the contemporary relevance and scientific validation of these practices.
- The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 18.6: Treatment protocol for Multiple Sclerosis.

Demonstration by the teacher

- The teacher will tell about the recent classification of ICD on multiple sclerosis (ICD-11 8A40). teacher will describe about the classification of Multiple Sclerosis. and how to interpret the MRI. Then the teacher will demonstrate physical examinations like vital signs, temperature, blood pressure etc and other neurological examinations and the possible treatment modalities.

Case based learning

- To develop critical thinking by applying the different principles of chikitsa in ayurveda for the clinical case of multiple sclerosis. Present a case of multiple sclerosis patient with a specific stage of multiple sclerosis as per the MRI changes and students will discuss the appropriate upakrama to be applied based on the multiple sclerosis along with pathyapathya. Also the student should make a report on the ayurvedic treatment principles and dosha involved in the progression of the disease.

Team project work

- Assign groups to find out the recent updates on multiple sclerosis and present the applications of specific upakrama along with pathyapathya in different types of multiple sclerosis. Groups will also explore the contemporary relevance and scientific validation of these practices.
- Students will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Rogi bala.
- Students should interpret the point estimate and confidence interval to draw meaningful conclusions about the Multiple sclerosis.
- Students should conclude the learning achieved through experience.

- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all students and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 18.7: Differential Diagnosis of Amyotrophic lateral sclerosis (ALS) and Multiple Sclerosis.

Demonstration by the teacher

- The teacher will tell about the recent classification of ICD on Amyotrophic lateral sclerosis (ICD-11-CM Diagnosis Code 8A40). teacher will describe about the King's staging system of Amyotrophic Lateral Sclerosis. and how to interpret the EMG. Then the teacher will demonstrate and interpret the role of MRI, radiology in evaluating the ALS along with the possible treatment modalities

Case based learning

- To develop critical thinking on different types of criteriaslike gold coast criteria etc for diagnosing and interpreting the ALS and multiple sclerosis. Present a case of ALS and multiple sclerosis patient with the MRI changes and scholars will discuss and interpret and differentiate the ALS and Multiple Sclerosis with all the possible clinical examinations.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Rogi bala.

Team project work

- Assign groups to find out the recent updates on ALS and Multiple Sclerosis and present the interpretations of ALS and multiple sclerosis with specific treatment protocols. Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the ALS and Multiple Sclerosis.
- Scholars should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 18.8: Restless leg syndrome (RLS).

Demonstration by the teacher

- The teacher will discuss about the recent classification of ICD on Restless Leg Syndrome (ICD-11 code 7A80). Teacher will describe about the classification and how to interpret the EMG & Nerve Conduction Studies, Sleep study & immobilization tests. Then the teacher will demonstrate physical examinations and neurological examinations along with possible treatment modalities.

Case based learning

- To develop critical thinking of signs & symptoms, medical history & neurological examinations done in RLS. Present a case of patient as per the reports of EMG & Nerve Conduction Studies and students will discuss the appropriate upakrama to be applied based on the symptoms of RLS. Also, the student should make a report on the ayurvedic principles involved and Dosha involvement in RLS.
- Students will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advice, satwawajaya, daivivyaashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Rogi bala
- Provide hands on experience in demonstrating the physical examinations. Instruct students to perform different types of assessments.

Team project work

- Assign groups to find out the recent updates on Willis-Ekbom disease and the role of Nerve conduction studies and EMG in the disease. Groups will also explore the contemporary relevance and scientific validation of these practices.
- Students should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all students and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 18.9: Difference between MND and Muscular Dystrophies

Demonstration by the teacher

- The teacher will discuss about the recent classification of ICD on MND (ICD-11 code 8B60.) and Muscular Dystrophies (ICD 11 code 8C70). Teacher will describe about the steps of history taking and the factors differentiating the disease and the role of EMG

and genetic studies such as Sanger gene sequencing, Next generation sequencing (NGS), etc., in diagnosing the diseases. Then the teacher will demonstrate physical examinations and neurological examinations along with possible treatment modalities.

Case based learning

- Divide scholars into small groups
- The scholars should be provided with a case of MND and Muscular Dystrophy
- Instruct each group to identify appropriate clinical findings MND and Muscular Dystrophy patient (real or simulated patient or video clip)
- Encourage scholars to discuss their approaches and findings within their groups.
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol

Team project work

- Assign groups to find out the recent updates on MND & MD and the role of inheritance and genetics. Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Rogi bala.

Conclusion and summarization

- The scholar identifies the prerequisite for a case report and observations to be made and documented while dealing with a rare/ unique/interesting case.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the MND and Muscular Dystrophies.
- Scholars should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Experiential-Learning Learning 18.10: Treatment protocol for Vertebral Disc Compressions.

Demonstration by the teacher

- The teacher will discuss about the recent classification of ICD on Vertebral Disc Compressions(ICD 11- FA80.9)Explain Vertebral Disc Compressions. Demonstrate different examinations needed for diagnosis of v Vertebral Disc Compressions. Guide scholars with the investigations needed for the diagnosis of Vertebral Disc Compressions. Explain the medicines, diet and regimen useful in management of Vertebral Disc Compressions.

Case based learning –

- Encourage self-assessment and deeper understanding through reflective learning .
- Refer the medicines, diet and regimen useful in dementia and analyse the phytoanalytical study of the medicines useful in vertebral disc compressions through research articles.
- Analyse contemporary treatment and pharmaco dynamics and pharmacokinetics of contemporary medicine.
- Take detailed history of vertebral disc compressions case and formulate internal medicines, external therapy and diet and justify the protocol.
- Hands on training with the external treatment and physiotherapy exercises communicate the treatment and diet regimen to patient and bystander.
- Follow up on the patient after treatment to know the effectiveness of the treatment.

Team Work –

- Assign groups to find out the recent updates on vertebral compressions. Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhashajala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Rogi bala.
- Scholars should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 18.11: Differential diagnosis of Vertebral Disc Compressions.

Demonstration by the teacher

- The teacher will discuss about the recent classification of ICD on types of Vertebral Disc Compressions (ICD-11 code FA80.9.). Teacher will describe about the Spengler classification about the types of herniation and how to interpret it through the MRI changes. Then the teacher will demonstrate physical examinations and neurological examinations along with possible treatment modalities.

Case based learning

- To develop critical thinking about the anatomy of vertebral column, vertebral discs and the pathological conditions regarding it. Present a case of disc compression patient with a specific condition as per the MRI reports. Scholars will discuss the appropriate upakrama to be applied based on the classification. Also, the scholar should make a report on the ayurvedic principles involved in Dosha involvement in different types of Vertebral Disc Compressions.

Case based learning

- Provide hands on experience in demonstrating the physical examinations to rule out different disc compression conditions.

Team project work

- Assign groups to find out the recent updates on Vertebral Disc Compressions.
- Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advice, satwawajaya, daivvyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Rogi bala.
- Scholars should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all students and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 18.12: Panchakarma procedures in Cervical Myelopathy WSR to Basti Chikitsa and Nasya karma.

Demonstration by the teacher

- The teacher will tell about the classification of ICD on Cervical Myelopathy (ICD - 11 8B42). teacher will describe about the Nurick classification and Ranawat classification and how to interpret the MRI. Then the teacher will demonstrate physical examinations like

Hoffmans test, babinski test, rhomberg test, gait and balance, CT myelography, Lhermitte sign. Nerve conduction studies and the possible treatment modalities.

Case based learning

- To develop critical thinking by applying vasti and nasya principles to the clinical case of Cervical Myelopathy. Present a case of cervical myelopathy patient with a specific stage as per the MRI report and scholars will discuss the appropriate upakrama to be applied based on the stage Cervical Myelopathy, the nature of the compression and Nurick Classification and based on gait and ambulatory function and dosha involvement. The scholars also understand the prognosis of the disease and also the differential diagnosis of Cervical Myelopathy like Amyotrophic Lateral Sclerosis, Multiple Sclerosis, Syringomyelia, and Spinal tumors by differentiating its clinical features.

Case based learning

- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advice, satwawajaya, daivavyapashraya chikitsa, pathyapahtya and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Rogi bala.
- Provide hands on experience in executing vasti and nasya karma techniques. Instruct scholars to perform Nasya and Vasti karmas for stages of compression as per the Nurik classification.

Team project work

- Assign groups to find out the recent updates on Cervical Myelopathy research and present the applications of specific upakrama (eg. Vasti and Nasya) in different stages of Myelopathy.
- Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 18.13: Treatment protocol along with Pathyaapathya in IP patient for UMN and LMN Paralysis.

Demonstration by Teacher

- The teacher will tell about the recent classification of ICD on Paralysis (ICD - 11 8B60.Z). teacher will describe about the what are basic different between LMN and UMN Paralysis and how to interpret the MRI. Then the teacher will demonstrate physical examinations like increased deep tendon reflexs (DTRs), positive babinski test, Spastic Paralysis with a clap –knife reaction in UMN and LMN, gait and balance, CT Nerve conduction studies and the possible treatment modalities.

Case based learning

- To develop critical thinking of Treatment such as Basti ,Shirodhara
- Abhyanga protocol along with pathyaapathya principles has to be done prior to Basti ,Shirodhara in the clinical case of UMN and LMN paralysis Present a case of paralysis patient with a specific stage as per the MRI report and students will discuss the appropriate diet to be applied based on the UMN and LMN Paralysis.
- Provide hands on experience in executing Panchakarma treatment protocol related to UMN and LMN Paralysis. Instruct Scholars to perform Abhyanga ,Shirodhara and Vasti karmas and prepared diet protocol with Do's and don't format.

Team project work

- Assign groups to find out the recent updates on UMN and LMN Paralysis research and present the applications of specific treatment such as (eg. Vasti and abhyagam ,shirodhara) in different types of paralysis.
- Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all students and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 18.14: Treatment protocol along with Pathyaapathya in IP patient for Ascending and Descending Paralysis.

Demonstration by the teacher

- The teacher will tell about the recent classification of ICD on Asending Paralysis and Desending Paralysis(ICD11-8A21.Y) . Teacher will describe about and how to interpret the MRI. Then the teacher will demonstrate physical examinations like babinski test, rhomberg test, gait and balance, CT, Nerve conduction studies and the possible treatment modalities

Case based learning

- To develop critical thinking of Treatment such as role of Basti ,Shirodhara in Ascending and Descending Paralysis.

- Abhyanga, Swedana protocol along with pathyaapathya principles has to be done prior to Basti and Shirodhara.
- Present a case of paralysis patient with a specific stage as per the MRI report and scholars will discuss the appropriate diet to be applied based on the Ascending And Descending Paralysis
- Provide hands on experience in executing Panchakarma treatment protocol related to Ascending And Descending Paralysis
- Instruct scholars to perform Abhyanga, Shirodhara and Basti karmas.
- Prepared diet protocol with Dos and don'ts related with Dosha Dushya and Prakruti of patients.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advice, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Roga bala.

Team project work

- Assign groups to find out the recent updates on Ascending And Descending Paralysis. and present the to the teacher.
- Group will also explore the contemporary relevance and scientific validation of these practices.
- Instructor will summarize and conclude key takeaways from the session.

Experiential-Learning Learning 18.15: Generate referral letter for a Myelopathy patient to a higher center stating the condition of the patient and reason for referral.

Demonstration by the teacher

1. The teacher will tell about the recent classification of ICD on myelopathy (ICD 11-8B42). teacher will describe about the signs, symptoms and complications of myelopathy, and how Myelopathy is different from myopathy, the necessary investigations to confirm myelopathy -, then the teacher will demonstrate physical examinations like Hoffmann's test, Babinski test, Romberg test, gait and balance, CT Brain, Nerve conduction studies and the possible treatment modalities.
2. The teacher will state the condition when to be referred and why the referral is needed

Case based learning

1. To develop critical thinking by generating a referral letter to a Myelopathy patient.
2. The contents of the referral letter includes :
3. Demographic details of the patient, clinical history, and present condition, the treatment given to the patient in the hospital. Referral letter has to be typed and verified with the consultant. Recent updates of Myelopathy knowledge to be recorded in the log book.
4. Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with

comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Rogabala and Rogi bala.

Team project work

1. Assign groups to find out the recent updates on Myelopathy and present the to the teacher.
2. Groups will also explore the contemporary relevance and scientific validation of these practices.
3. Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the myelopathy.
4. Scholars should conclude the learning achieved through experience.
5. The teacher shall study the submitted report and give feedback.
6. Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
7. The teacher shall discuss, summarize, and conclude the session.

Modular Assessment

Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 75 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Three questions can be asked, each carries 25 marks. 1. Describe etiopathogenesis, clinical manifestations, epidemiology, pathology, differential diagnosis, and management of Amyotrophic Lateral Sclerosis (ALS) and Restless Leg Syndrome - 25 marks 2. Explain the therapeutic role of Basti in the management of paraplegia and write a rational justification for its mode of action based on Ayurvedic principles and contemporary understanding. - 25 marks 3. Design a comprehensive treatment protocol for inpatient management of Multiple Sclerosis, incorporating appropriate Pathya-Apathya guidelines. (Real case or case-based scenarios) - 25marks Or Any practical in converted form can be taken for assessment. (40 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (35 marks)	6

Semester No : 6

Module 19 : Manovaha Sroto Vikara

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describe the fundamentals Manovahasrotovikara and its Chikitsa.
2. Describe the Applied aspect of psychiatry and its clinical management
3. Identify the types of Substance abuse and alcohol misuse, alcohol dependence
4. Describe the Treatment Protocol in Psychological Disorders.
5. Identify the different types of Epileptic disorders and frame a treatment protocol along with Pathyaapathya.
6. Identify the different scales in history taking of Comatose patient.
7. Management of Madatyaya and psychoactive substance abuse.
8. Conduct the awareness programmes in various levels of Manasaroga

Unit 1 Unmada

- Unmada
- Common Psychiatric disorders: Diagnosis and Classification(WHO-ICD 10) of psychiatric ailments.
- Psychiatric history taking and Examination.
- Disorders of thought like Schizophrenia.
- Disorders of Mood like Manic episode, Depressive episode, Bipolar mood(affective) disorder, Recurrent depressive disorder, Persistent mood disorder.

References: 17,47,48

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2, CO5,CO7	Describe the etiopathogenesis and WHO-ICD 10 classification of common psychiatric disorders, along with the methodology of psychiatric history taking; additionally, explain thought disorders such	1	Lecture	CAP	Knows-how	L&PPT ,L&GD

	as schizophrenia, including their etiopathogenesis and various types of thought disturbances.					
CO1,CO2	Describe the management of Unmada, including Shamana, Shodhana, and Rasayana therapies; enumerate the Pathya and Apathya (including Anupana, both drug and non-drug); elaborate on Vyapad Chikitsa, and describe the general treatment principles of common psychiatric disorders.	1	Lecture	CAP	Knows-how	L&GD,L&PPT
CO1,CO2, CO5	Compile and present the types of adravyabhuta chikitsa in a case of Unmada.(ICD-11-TM-SQ03).	2	Practical19.1	PSY-MEC	Shows-how	PER,FV,DIS,B S
CO1,CO2, CO5,CO7	Develop a suitable treatment protocol for a patient with Unmada, based on the involvement of Doshas, incorporating both Shodhana (purification) and Shamana (pacification) therapies.	2	Practical19.2	PSY-MEC	Shows-how	PT,CBL
CO1,CO2, CO5,CO7	Organise a structured counseling session for a patient diagnosed with Schizophrenia (ICD-11-TM-2-SQ03), emphasizing psychoeducation, medication adherence, and lifestyle modifications.	2	Experiential-Learning19.1	AFT-VAL	Does	CD,JC,CBL
CO1,CO2, CO5,CO7	Describe the clinical features, diagnostic criteria, and underlying pathophysiology of panic disorders, somatization disorders, manic episodes, depressive episodes, bipolar mood (affective) disorder, recurrent depressive disorder, persistent mood disorders, and anxiety disorders.	1	Lecture	CC	Knows-how	L&GD,L&PPT
CO1,CO2, CO7	Illustrate panic disorders and depressive conditions through analysis of clinical examination findings and psychological assessment tools.(ICD11-TM- 2-SQ23, ICD-11-6B01).	2	Practical19.3	PSY-GUD	Shows-how	SIM,PT,D-BED
CO1,CO2, CO5,CO7	Illustrate the signs and symptoms of various types of panic disorders, correlating them with possible	2	Experiential-Learning19.2	PSY-GUD	Does	PER,PBL

	Ayurvedic Mano Vikaras as described in classical texts.					
CO1,CO2,CO4,CO7	Differentiate psychiatric disorders from medical disorders based on etiology, clinical presentation, diagnostic criteria, and treatment approach	2	Practical19.4	PSY-MEC	Shows-how	CBL,PT,IBL
CO1,CO2,CO5,CO7	Demonstrate and analyze the signs and symptoms of various types of Unmada, correlating clinical features with classical descriptions for accurate diagnosis and management.	2	Practical19.5	PSY-GUD	Shows-how	SIM,PT
CO1,CO2,CO5,CO7	Create a comprehensive treatment protocol for an in-patient (IPD) with a psychiatric disorder, including discharge planning and Pathya-Apathya guidelines to support continued recovery post-hospitalization.	2	Experiential-Learning19.3	PSY-ADT	Shows-how	IBL,PL,PER

Unit 2 Apasmara and Atatvabhinivesha

- Apasmara
- Knowledge of Epileptic Disorders.
- Atatvabhinivesha
- Neurosis (stress, depression, OCD), Manovikshpta(Psychosis), personality disorders(Samvibhramah), psychosexual disorders

References: 1,10,15,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,CO5,CO7	Describe etiopathogenesis and clinical manifestations of epileptic disorders. Differentiate between epileptic and non-epileptic seizures, including Grand Mal and Petit Mal types, and	1	Lecture	CC	Knows-how	FC

	emphasize the critical role of EEG in diagnosing and classifying epilepsy.					
CO1,CO2,CO5,CO7	Describe the Chikitsa of Apasmara, incorporating Shamana, Shodhana, and Rasayana therapies. List appropriate Pathya and Apathya, including Anupana, and both drug and non-drug interventions. Describe Vyapad Chikitsa and outline the treatment principles for common epileptic disorders.	1	Lecture	CC	Knows-how	L&GD
CO1,CO2,CO5,CO7	Demonstrate comprehensive history taking for an in-patient (IPD) case of Apasmara and present it effectively to peer groups	2	Practical19.6	PSY-GUD	Shows-how	PT,PL,CBL
CO1,CO2,CO5,CO7	Design a comprehensive management protocol for an in-patient (IPD) with Apasmara, incorporating Shamana, Shodhana therapies, and Pathya-Apathya guidelines.	3	Experiential-Learning19.4	CE	Does	PAL,PER,PBL
CO1,CO2,CO7	Prescribe various Bahyachikitsa (external therapies) for the Shiras (head) in patients suffering from Apasmara (epilepsy).	3	Experiential-Learning19.5	PSY-ADT	Does	CBL,PL
CO1,CO2,CO5,CO7	Describe neurosis and psychosis along with their etiopathogenesis. Outline the Chikitsa of Atatvabhinivesha, including Shamana, Shodhana, and Rasayana therapies, as well as the relevant Pathya and Apathya. Detail the treatment principles for neurosis and psychosis.	1	Lecture	CC	Knows-how	CD,CBL,BS
CO1,CO2,CO5,CO7	Interpret a detailed clinical history to diagnose a middle-aged male patient admitted to the IPD with a 5-year history of epilepsy(ICD-11-TM-2-SK30, ICD-11-8A6).	2	Practical19.7	PSY-MEC	Shows-how	PT,SIM
CO1,CO2,CO7	Differentiate between the general and specific etiologies of neurosis and psychosis, and diagnose	2	Practical19.8	PSY-GUD	Shows-how	PL,PSM,CBL

	the case using appropriate mental health assessment scales.					
CO2,CO5	Organise a counseling session for a patient with Atavabhinivesha (ICD-11-TM-2-SQ04), offering guidance on suitable lifestyle modifications to promote holistic recovery.	3	Experiential-Learning19.6	PSY-GUD	Does	PT,CBL,PER

Unit 3 Mada, Moorchha, Sanyasa

- Mada, Moorchha, Sanyasa
- Knowledge of Intoxication, Fainting, Various levels of Consciousness – Lethargy,
- Syncope, Delirium, Stupor, Coma
- Knowledge of Glasgow Coma scale
- Investigations – MRI or CT Brain

References: 1,2,3,10,15,16,47

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2, CO5,CO7	Interpret the Chikitsa Siddhanta of Mada, Murchha, and Sanyasa, incorporating principles of Shamana, Panchakarma, Rasayana, Pathya, Apathya, and Chikitsa Sutra. Define intoxication, fainting, and describe various levels of consciousness, including lethargy, syncope, delirium, stupor, and coma.	1	Lecture	CC	Knows-how	L
CO1,CO2, CO5,CO7	Diagnose between syncope and coma based on etiology, clinical presentation, duration of unconsciousness, and recovery pattern	2	Practical19.9	PSY-GUD	Shows-how	TPW,CBL,SIM
CO1,CO2, CO5,CO7	Demonstrate the application of the Glasgow Coma Scale for assessing consciousness level, and	3	Experiential-Learning19.7	PSY-MEC	Does	D-M,CBL,SIM

	interpret MRI or CT brain investigations to rule out differential clinical conditions.(ICD-11-MB20.1).					

Unit 4 Madatyaya

- Madatyaya
- Alcohol misuse and dependence.
- Substance abuse
- Warning signs and symptoms of Substance abuse like Alcohol, Psychoactive drugs etc.
- Prevention, education, awareness, campaign

References: 1,3,15,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2, CO5,CO7	Describe the Chikitsa of Madatyaya, incorporating Shamana, Shodhana, and Rasayana therapies. Enlist appropriate Pathya and Apathya, including Anupana and both drug and non-drug interventions. Explain Vyapad Chikitsa in detail, and elaborate on the clinical aspects of alcohol intoxication, misuse, and dependence.	1	Lecture	CC	Knows-how	DA,L&PPT ,L_VC
CO1,CO2, CO5,CO7	Interpret the clinical examination findings in a patient with alcohol-induced liver cirrhosis,(ICD-11-DB94.3) focusing on systemic signs, symptoms, and related complications.	2	Practical19.10	PSY-GUD	Shows-how	SIM,CBL,PSM, PT
CO1,CO2, CO5,CO7	Design the treatment protocol for a patient of alcoholic intoxication(ICD-11-6C40.3) including shamana, Shodhana and Satvavaja Chikitsa.	3	Experiential- Learning19.8	PSY-MEC	Does	CBL,PL

CO1,CO2, CO5,CO7	Discuss substance abuse and differentiate between substance abuse, substance dependence, and addiction. Explain the clinical symptoms and diagnostic criteria for patients affected by substance use disorders.	1	Lecture	CC	Knows-how	L

Unit 5 Organic and non-organic Mental(brain) disorders

- Organic mental disorders – due to physical trauma, damage from chemicals or toxins, infection, cancer and such other diseases.
- Non-organic mental disorders – Manovikshipta(Reactive Psychosis),Avasada(Depression), Chittodwega(Anxiety disorders)
- Knowledge of different mental examination scales.
- Knowledge of Rehabilitation Therapies
- GAD-7 Anxiety scale
- Hamilton Depression Rating Scale
- Hamilton Anxiety Rating Scale (HAM-A)
- Mini Mental State Examination(MMSE)

References: 17,48,54

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2, CO6,CO7	Describe organic mental disorders, which arise from physical causes such as trauma, chemical or toxic exposure, infections, malignancies, and other systemic diseases. Also, describe non-organic mental disorders, including conditions like reactive psychosis, depression, and anxiety disorders, which are primarily functional in origin.	1	Lecture	CC	Knows-how	L_VC,L&PPT
CO1,CO2, CO5,CO7	Diagnose between organic and non-organic mental disorders(ICD-11 codes F00-F09) using knowledge of various mental health assessment tools, including the GAD-7 Anxiety Scale, Hamilton	3	Experiential- Learning19.9	PSY-MEC	Does	PL,CBL

	Depression Rating Scale, Hamilton Anxiety Rating Scale (HAM-A), and the Mini-Mental State Examination (MMSE)					
CO1,CO2,CO5,CO7	Construct a comprehensive rehabilitation protocol for patients with drug abuse, incorporating Shamana and Rasayana therapies for holistic management and recovery.(ICD-11,6C40-6C4Z for substance use disorders and 6C50-6C5Z for addictive behaviors)	2	Experiential-Learning19.10	CS	Does	PAL,PL,PBL

Practical Training Activity

Practical Training 19.1 Non pharmacological approach for Unmada.

Demonstration by the teacher

- Guide scholars in interpreting the types of adravyabhuta chikitsa and discuss the types of adravyabhuta chikitsa in unmada mentioned.
- Discussion on the different psychological disorders, positive and negative syndrome scales (PANNS). Deliberate about different scales used in psychiatric disorders like Brief Psychiatric Rating Scale (BPRS), Clinical Global Impression (CGI), Yale-Brown Obsessive Compulsive Scale, Social Phobia and Anxiety Inventory, Clinician-Administered PTSD Scale.

Case based learning-

- Divide scholars into small groups
- The scholars should be provided with a case of Unmada.
- Instruct each group to identify appropriate clinical findings
- Encourage scholars to discuss their approaches and findings within their groups.
- Encourage self assessment and deeper understanding through reflective learning. After performing a detailed history of the disease the scholars should make a report on the different types of Adravyabhuta Chikitsa used in Unmada. Also the different scales that have been learnt in the different psychiatry disorders. Also the modern treatment recommendations for the case of Unmada.
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol

Conclusion and summarization

The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 19.2 Selection of treatment protocol for Unmada

Demonstration by the teacher

- Guide scholars in interpreting appropriate treatment protocol for unmada patient. Discuss the doshas involved in unmada and write a samprapti vighatana.
- Discuss on the treatment principles mentioned in ayurveda as well as in the modern field for unmada. Deliberate different combinations of drugs that can be used for shodhana and shamana for unmada patients. Discuss on different types of chikitsa and choose the appropriate one for the individual patient according to their dosha involvement.

Case based learning

- Divide scholars into small groups
- The scholars should be provided with a case of unmada.
- Instruct each group to identify appropriate clinical findings.
- Encourage scholars to discuss their approaches and findings within their groups.
- Encourage self assessment and deeper understanding through reflective learning. After performing a detailed history of the disease the scholars should make a report on the nidana, rupa, lakshana, samprapti vighatana and possible chikitsa for the patient according to the dosha involvement in unmada. Also the modern treatment recommendations for the case of unmada.
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol

Conclusion and summarization

- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 19.3 Difference between panic disorders and depression.

Demonstration by the teacher

- The teacher will tell about the recent classification according to ICD11-TM- 2-SQ23
- Guide scholars in distinguishing different types of panic disorders by giving the brief knowledge about all the panic disorders like- Generalized Anxiety Disorder (GAD), Obsessive-Compulsive Disorder (OCD), Phobias, Post-Traumatic Stress Disorder (PTSD), with their signs and symptoms and the possible treatment protocols that can be adopted in patients with panic disorders.
- Deliberate the scholars about the physical examination, mental status exams in diagnosing a case of depression and analyzing with the clinical examinations.

- Scales like Beck Depression Inventory, Hamilton Depression Rating Scale etc are discussed and given the practical approach to all the scales in patients with depression.

Case based learning

- Divide scholars into small groups
- The scholars should be provided with the cases of panic disorders and depression.
- Instruct each group to identify appropriate clinical findings
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol.
- Encourage self assessment and deeper understanding through reflective learning. After performing a detailed history of the disease the scholars should get exposed with different rating scales and how to use it in patients with panic disorders and depression under the guidance of the teacher. And must know how to deal with the patients of altered mental status, must make a report study and discuss among the groups for recent updates in the field.

Conclusion and summarization

- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 19.4 Differentiate psychiatric disorders from medical disorders.

Demonstration by the teacher

- The teacher will tell about the ICD classification of Mental, Behavioral and Neurodevelopmental disorders-ICD-11- **6A00-6A0Z etc**
- Guide scholars in interpreting different psychiatric disorders. Differentiate the psychiatric disorders and mental disorders with appropriate scales along with signs and symptoms of the patients.

Self assessment-

- Divide the scholars in 2-3 groups.
- Encourage self assessment and deeper understanding through reflective learning. After performing a detailed history of the disease the student should make a report on the different signs and symptoms that a patient has and different scales used in the mental and psychiatric disorders.

Conclusion and summarization

- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 19.5 Critical analysis of Unmada.

Demonstration by the teacher

- Guide scholar in interpreting different signs and symptoms of different types of unmada and analyse the possible treatment protocols. Alongwith it the different dosha involved in different types oof unmada and frame a samprapti ghataka and treatment protocol for the patient.

Case based learning

- Divide scholar into small groups
- The scholar should be provided with two to three case of Unmada in IPD.
- Instruct each group to identify appropriate clinical findings
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol.
- Encourage self assessment and deeper understanding through reflective learning. After performinga detailed history of the disease the scholars should make a report on the different signs and symptoms that a patient has and different scales used in the mental and psychiatric disorders. Also report the different signs and symptoms recorded in patients of unmada.

Conclusion and summarization

- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 19.6 History taking in a case of Apasmara

Demonstration by the teacher-

- Guide scholar in taking history on real patients.
- Discuss the following points like events provoking attacks ,warnings of attacks, type of movement , distribution of movement ,level of consciousness during attack ,length of attack ,presence of pallor, cyanosis or flushing , characteristics and duration of the recovery phase, predisposing factors:family history of epilepsy ,head trauma or infection.Seizure history, Triggers and medication history.

- Guide the scholar in taking history of the patient's Smrithi (memory), Bibhatsa Chesta (irrelevant behavior), Dhi (thinking capacity) and Sattva (mental strength).

Case based learning

- Divide scholar into small groups
- The scholar should be provided with a case of Apasmara.
- Instruct each group to identify appropriate clinical findings
- Encourage scholars to discuss their approaches and findings within their groups.
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol.

Encourage self-assessment and deeper understanding through reflective learning. After guiding the scholars with history taking, scholars will write a reflection on their experience in their log book.

Conclusion and summarization

- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 19.7 History taking in epilepsy patient

Demonstration by the teacher-

1. The teacher will tell about the ICD classification of epilepsy (ICD-11-TM-2-SK30, ICD-11-8A6)
2. Guide scholars in taking history on real patients. Discuss the following points like events provoking attacks like alcohol consumption & sleep deprivation, predisposing factors: family history of epilepsy, head trauma, developmental disorder, brain tumour or infections like meningitis and HIV. Seizure history; Triggers like lack of sleep, fever, stress, flashing lights, caffeine, alcohol, medications, skipping meals etc and medication history. Warnings of attacks, type of movement, distribution of movement, level of consciousness during attack, length of attack, presence of pallor, cyanosis or flushing, characteristics and duration of the recovery phase,
3. Guide the Scholars in taking history of the patient's Smrithi (memory), Bibhatsa Chesta (irrelevant behavior), Dhi (thinking capacity) and Sattva (mental strength).
4. Case based learning-
5. Divide Scholars into small groups
6. The Scholars should be provided with a case of epilepsy.
7. Instruct each group to identify appropriate clinical findings

8. Encourage Scholars to discuss their approaches and findings within their groups.
9. Encourage self assessment and deeper understanding through reflective learning. After guiding the Scholar with history taking, Scholars will write a reflection on their experience in their log book.
10. Invite each group to present their results.
11. Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol

Practical Training 19.8 Use of mental scales in Neurosis and Psychosis.

Demonstration by the teacher-

- The teacher will tell about the classification of neurosis and psychosis(ICD-11 6A20-6A2Z)
- Guide Scholars in taking psychiatric history from real patients. Discuss the differences in etiology of neurosis and psychosis such as genetic factors, socio-environmental factors, biochemical factors, psychological factors, organic changes, patho-functional and patho-morphological changes.
- Guide the Scholars to use appropriate scales such as Psychotic Symptom Rating Scale (PSYRATS), Brief Psychiatric Rating Scale (BPRS), Clinician-Rated Dimensions of Psychosis Symptom Severity, Global Assessment of Functioning (GAF) Scale, Sixteen Personality Factor Questionnaire (16PF) to diagnose the disease.
- The teacher will tell about the recent classification of Psychosis- (ICD 10-F29) and Neurosis-(ICD 10- F 48.9)

Practical demonstration :

- Guide the Scholars to use appropriate mental scales and interpret the scoring in patients.

Self assessment-

- Encourage self assessment and deeper understanding through reflective learning. After applying different mental scales, scholars will write a reflection on their experience in their log book.

Practical Training 19.9 Differentiate between Syncope and Coma.

Demonstration by the teacher

- Guide Scholars in collecting information regarding Syncope and Coma and ICD classification of syncope and coma(ICD-10 code MB20.1, MG45)

- The teacher will educate the difference between Syncope and Coma. For instance, the syncope episodes are short-lived and have rapid recovery whereas Coma is a persistent state of loss of consciousness temporarily or permanently for a long period of time.
- The teacher will brief the difference in the causative factor of Syncope and Coma and the patho-physiology of both and explain the treatment approach for both the cases.

Case based learning

- Divide Scholars into small groups
- The Scholars should be provided with the cases of syncope and coma (real or simulated patient or video clip)
- Instruct each group to identify appropriate clinical findings
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol.
- Encourage self assessment and deeper understanding through reflective learning. After understanding the differences between Syncope and Coma, students will write a reflection on their experience. Encourage critical thinking and self improvement in Syncope and Coma patients.
- Scholars will be asked to collect information regarding the emergency management of Syncope and Coma in conventional medicine.

Practical Training 19.10 Examination of Liver in liver cirrhosis.

Demonstration by the teacher

- Guide scholars in collecting information regarding the clinical examination of an alcoholic liver cirrhosis patient.
- Practical demonstration of the physical examination of a liver cirrhosis patient will be carried out by the teacher.
- The teacher will justify the presence of each of the findings seen during the physical examination.

Case based learning

- Divide scholars into small groups
- The scholars should be provided with a case of unmada.
- Instruct each group to identify appropriate clinical findings.(real or simulated patient or video clip)
- Encourage scholars to discuss their approaches and findings within their groups.
- Encourage self assessment and deeper understanding through reflective learning. After understanding the clinical examination of an alcoholic liver cirrhosis patient, relevant laboratory investigations like LFT,radiology testing such as computed tomography (CT), ultrasound or magnetic resonance imaging (MRI) , needle biopsy of the liver. students will write a reflection on their experience. Encourage critical thinking and self improvement in liver cirrhosis patients.

- Encourage self assessment and deeper understanding through reflective learning. After performing a detailed history of the disease the student should make a report on the nidana, rupa, lakshana, samprapti vighatana and possible chikitsa for the patient according to the dosha involvement in unmada. Also the modern treatment recommendations for the case of unmada.
- Invite each group to present their results.
- Facilitate a discussion on identifying appropriate pathyapathya and treatment protocol.

Experiential Learning Activity

Experiential-Learning Learning 19.1: Counselling session for a Schizophrenia patient.

Demonstration by the teacher

- The teacher will tell about the recent classification of ICD on schizophrenia(ICD-11-TM-2-SQ03,SQ4Y.) . teacher will describe about the types of schizophrenia and different types of scales used in schizophrenia. Then the teacher will demonstrate physical examinations and neurological examinations along with possible treatment modalities.

Case based learning

- To develop critical thinking of different types of counselling sessions in schizophrenia. Like - Cognitive behavioral therapy (CBT), Family therapy, Psychodynamic therapy, Arts therapy. Also the student should make a report on the ayurvedic principles involved and Dosha involvement in schizophrenia.

Case based learning

- Provide experience in demonstrating the simple counselling sessions for schizophrenia. Instruct scholars to perform different types counselling sessions.

Team project work

- Assign groups to find out the recent updates on different types of counselling in schizophrenia.
- Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the dataset.
- Scholars should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.

- The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 19.2: Signs and symptoms of different types of panic disorders.

Demonstration by the teacher

- The teacher will tell about the recent classification of Manovikaras and Panic Disorders (ICD 11- 6B01).The teacher will describe about the signs, symptoms complications of Manovikaras and Panic Disorders like Unmada, Apasmara and Attatwaabhinesha, then the teacher will demonstrate physical and mental examination and the treatment modalities of Manovikaras and Panic Disorders
- The teacher will explain about various dravya and adravya bhuta chikitsa described in Manovikaras and Panic Disorders and panchakarma therapies that can be employed in Manovikaras and Panic Disorders like Shirodara, Shirovasti, Nasyam.
- The teacher will also educate the scholars about the pathya-apathya to be followed and how it effects in making or breaking the disease pathogenesis.

Case based learning

- To develop critical thinking by applying various Panchakarma procedures and principles to the clinical case of Manovikaras and Panic Disorders. Present a case of Manovikaras and Panic Disorders with relevant investigations and scholars will discuss the appropriate upakrama to be applied based on the investigation and dosha involvement. Develop a diet chart based on the dosha-dushya involvement.

Case based learning

- Provide hands on experience in executing various panchakarma techniques. Instruct scholars to perform them for Manovikaras and Panic Disorders.

Team project work

- Assign groups to find out the recent updates on research and present the applications of various Panchakarma techniques in Manovikaras and Panic Disorders. Scholars can be divided into groups and instructed to prepare various preparations (such as Manda, Peya, Vilepi, etc) for patients of Manovikaras and Panic Disorders.
- Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the Manovikaras and Panic Disorders.
- Scholars should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.

- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 19.3: Treatment protocol for psychiatric disorder.

Demonstration by the teacher

- The teacher will tell about the recent classification of ICD on psychiatry(ICD-11-CM Code range **6A00-6A0Z**: etc.) . teacher will describe about the types of psychiatry disorders and different types of scales used in psychiatry disorders. Discuss on the dosha involved and the propose a treatment based on the doshic involvement in psychiatry disorders patient in IP along with Pathyapathya. Then the teacher will demonstrate physical examinations and neurological examinations along with possible treatment modalities.

Case based learning

- To develop critical thinking of different types of ayurvedic principles on psychiatry disorders. Also scholar should make a report on the detailed history of the psychiatry disorder patients in IPD along with pathyapahtya. The treatemtn protocol should involve the dosha involved in the particular psychiatry diosorder.

Case based learning

- Provide experience in demonstrating the simple counselling sessions for psychiatry disorders. Instruct scholars to perform different types counselling sessions. Frame a protocol for treating different psychiatry disorders alongwith pathyapathya.

Team project work

- Assign groups to find out the recent updates on different types of psychiatric disorders.
- Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholar should interpret the point estimate and confidence interval to draw meaningful conclusions about the dataset.
- Scholar should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 19.4: Design a management protocol for Apasmara.

Demonstration by the teacher

- The teacher will tell about the recent classification of ICD on Epilepsy (ICD 11-8A60-8A6Z). Teacher will describe about the Shamana chikitsa and Shodhana Chikitsa along with pathyapthya. Teacher will describe the use of different shamanaaushadhis (formulations) based on the dosha predominance and lakshana. Teacher will also describe appropriate use of shodhanakarma like Vamana, Virechana, Vasti, Pradeha, Dhupana, Utsadana, Nasya and Anjana after assessing rogi and rogabala.
- Teacher will also describe the Rasayana chikitsa in apasmara along with Raksha karma. Teacher should also impart knowledge about the pathyapthya to the scholars.

Case based learning

- Present a case of Apasmarapatient and scholars will discuss the appropriate upakrama to be applied based on the bheda, dosha predominance, prakrithi of the rogi.

Case based learning

- Provide hands on experience in executing panchakarma techniques. Instruct scholars to perform appropriate panchakarmas .

Team project work

- Assign groups to find out the recent updates on apasmara chikitsa . Research and present the applications of specific upakrama in different types of Apasmara.
- Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the dataset.
- Scholars should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 19.5: bahyachikitsa for Apasmara rogi.

Demonstration by the teacher

- The teacher will tell about the recent classification of ICD on Epilepsy (ICD 11-8A60-8A6Z). Teacher will describe about various bahyachikitsa in shiras such as Shiro Vasti, Shiro Abhyangam, Shiro Dhara and Shiro Pichu and Talam. Teacher will explain about

the Importance of shiras in relation to Apasmara. The teacher will also outline several tailam, kashayam, and churnam that can be correctly selected based on the roga and rogipariksha.

- Teacher will explain the art of choosing the right bahya karma according to the condition of the rogi. Teacher will explain the pre-requisites of the procedure, steps of procedure and post procedure, duration of the procedure, indications and precautions to be taken during the procedure.

Case based learning

- To develop critical thinking by applying bahyachikitsa to the shiras to the clinical case of Apasmara. Present a case of Apasmarapatient and scholars will discuss the appropriateshiroupakrama to be applied based on the Roga and Rogi Pariksha. .

Case based learning

- Provide hands on experience in executing Shiro Vasti, Shiro Abhyangam, Shiro Dhara and Shiro Pichu and Talamtechniques. Instruct students to perform the karmas.

Team project work

- Assign groups to find out the recent updates on Various Bahyachikitsa to the shiras in Apasmara Rogi. Research and present the applications of specific Shiro upakramain different types of Apasmara
- Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the dataset.
- Scholars should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 19.6: Counselling session for a patient of Atavabhinivesha

Demonstration by the teacher

- The teacher will tell about the recent classification of ICD on Obsessive compulsive Disorder (ICD-11-6B20, ICD-11-TM-2-SQ04). Teacher will describe about the need and importance of counselling in attavabhinivesha. Teacher will describe different types of counselling including Cognitive behavioral therapy (CBT) with exposure and response prevention (ERP), Imaginal exposure,Acceptance and commitment therapy (ACT),Animal-assisted therapy and Deep brain stimulation (DBS).

- Teacher will educate the Scholars the importance in breaking the cycle of obsession and compulsion , in developing coping strategies.
- Teacher will educate the lifestyle changes required like high quality sleep, healthy diet, exercise, relaxation techniques, mindfulness, socializing with support groups etc

Case based learning

- Present a case of Attatvabhinivesha patient and discuss the methods of counselling and appropriate lifestyle changes to be applied.

Case based learning

- Provide hands on experience in counselling a attatvabhinivesha patient. Instruct scholars to perform the counselling.

Team project work

- Assign groups to find out the recent updates on the methods of counselling .Research and present the applications of counselling for a patient of attatvabhinivesha
- Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the dataset.
- Scholars should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all Scholars and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 19.7: Glasgow Coma scale.

Demonstration by the teacher

- The teacher will tell about the recent classification of ICD of Syncope (ICD-11-MG45) and Coma (ICD-11-MB20.1) teacher will describe about Glasgow Coma Scale and how to interpret the MRI and CT brain to rule out other conditions. Then the teacher will demonstrate the assessment of the patient with Glasgow Coma scale.

Case based learning

- To develop critical thinking, the Scholars will be asked to carry out the Glasgow Coma Scale on patients with various levels of consciousness and find the probable cause for the same.(real or simulated patient or video clip)

- The scholars will be asked to interpret MRI and CT report along with the findings which will be seen in other causes of Coma or Syncope.

Team project work

- Assign groups to find out the recent updates on Glasgow Coma Scale validation and uses and present the MRI and CT reports of various patients and share their interpretations.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the dataset.
- Scholars should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 19.8: Treatment protocol for alcoholic intoxication.

Demonstration by the teacher

- The teacher will brief the mechanism of alcoholic intoxication in human body and also the ayurvedic samprapti of madatyaya thereby facilitating the scholars to understand the treatment to be given.
- The teacher will explain about the chikitsa siddhanta of Madataya and various pancha karma procedures that can be employed in alcoholic intoxication patients.

Case based learning

- To develop critical thinking by applying various panchakarma therapy principles to the clinical case of alcoholic intoxication. Present a case of alcoholic intoxication patient and scholars will discuss the appropriate upakrama to be applied based on the lakshana and dosha-dushya involvement.

Case based learning

Demonstration by the teacher

- Provide hands on experience in executing appropriate pancha karma techniques in alcoholic intoxication patient. Instruct scholars to perform the procedure on their own.

Team project work

- Assign scholars to groups and ask them to formulate a general treatment protocol in IP patients of alcoholic intoxication.
- Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the dataset.
- Scholars should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 19.9: Differentiate organic and non organic mental disorders

Demonstration by the teacher

- The teacher will brief the etiological factors and their respective patho-physiologies for various organic and inorganic mental disorders.
- The teacher will also explain about the different mental examination scales along with the usage of it. ICD classification of organic and non organic mental disorders. (ICD-11-F00-F09)
- 'Mental disorders' is an umbrella term which has number of conditions categorized under it and there can also be overlapping of clinical features in certain condition hence it is very important to know about the various scales (Hamilton Rating Scale for Depression, GAD scale, HAM A, MMSE) that could facilitate in making the correct diagnosis.
- The Hamilton Rating Scale for Depression is a multiple-item questionnaire used to provide an indication of depression, and as a guide to evaluate recovery.
- The Generalized Anxiety Disorder (GAD) Scale is a widely used self-report questionnaire designed to assess the severity of symptoms associated with generalized anxiety disorder (GAD). It consists of seven items rated on a 0-4 scale (0 = not at all, 4 = very much), with higher scores indicating higher levels of anxiety.

Case based learning

To develop critical thinking by applying these scales to the patient and facilitate in making the correct diagnosis.

Team project work

- Assign scholars to groups and ask them to formulate a general treatment protocol in IP patients of alcoholic intoxication.
- Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the dataset.

- Scholars should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the session.

Experiential-Learning Learning 19.10: Rehabilitation Therapies in for Drug Abuse

Demonstration by the teacher

- The teacher will brief about the Rehabilitation Therapies for a patient of drug abuse including the Shamana and Rasayana Therapy .
- Various types of programs offer help in drug rehabilitation, including residential treatment (in-patient/out-patient), local support groups, extended care centers, recovery or sober houses, addiction counselling, mental health, and medical care. Some rehab centers offer age- and gender-specific programs.
- The teacher will explain in detail about the Shamana and Rasayana therapies which can administered for Drug abusing patients.

Case based learning

- Present a case of alcoholic intoxication patient and scholars will discuss the appropriate management along with rehabilitation to be advised based on the patient's need.

Team project work

- Assign groups to scholars and ask them to formulate a chart of general formulations and Rasayana which can be given in Drug abuse patients.
- Assign groups to find out the recent updates on novel rehabilitation therapies used for drug abuse condition.
- Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the dataset.
- Scholars should conclude the learning achieved through experience.
- The teacher shall study the submitted report and give feedback.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the session.

Modular Assessment

Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Two questions can be asked, each carries 25 marks. 1. Discuss substance abuse and differentiate between substance abuse, substance dependence, and addiction. Explain the clinical symptoms and diagnostic criteria for patients affected by substance use disorders- 25 marks 2. Propose a comprehensive treatment protocol for an inpatient (IPD) with a psychiatric disorder, including discharge planning and Pathya-Apathya guidelines to support continued recovery post-hospitalization (Real case or case-based scenarios) - 25marks Or Any practical in converted form can be taken for assessment. (40 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (35 marks)	4
Module 20 : Shukravaha Srotovikara (Reproductive medicine)	
Module Learning Objectives (At the end of the module, the students should be able to) 1. Describe the fundamentals of Shukra vaha srotas vikaras and their management. 2. Define various types of Psychosexual disorders 3. Assess and Manage the different types of sexually transmitted diseases and their management 4. Assess , Manage and Prescribe different lab investigation in reproductive system disorders. 5. Identify and manage female and male infertility	
Unit 1 Klaibya • Klaibya types and management • Knowledge of Impotence/Erectile dysfunction	

- Reproductive hormones
- Knowledge of Psychosexual disorders
- Gender identity disorders
- Sexual dysfunction - Premature ejaculation, Lack of sexual desire Paraphilia

References: 1,2,3,9,15,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2, CO3,CO5	Discuss the Nidana (causative factors), Samprapti (pathogenesis), Bheda (classification), Lakshanas (clinical features), and Chikitsa sutra (treatment principles) of Klaibya.	1	Lecture	CC	Knows-how	L&GD,L&PPT
CO1,CO2, CO3,CO5	Describe the causes of impotence (erectile dysfunction), premature ejaculation, and loss of libido.	1	Lecture	CC	Knows-how	FC
CO1,CO2, CO3,CO5	Classify the Siddhanta of Klaibya Chikitsa, encompassing Shamana (palliative therapy), Shodhana (purificatory therapy), and Rasayana (rejuvenation therapy). Identify suitable Pathya and Apathya (including Anupana, both drug and non-drug) for the effective management of Klaibya. Discuss Vyapadchikitsa (management of complications) in Klaibya. Develop management strategies for conditions such as impotence, erectile dysfunction, premature ejaculation, and loss of libido.	2	Practical20.1	PSY-GUD	Shows-how	JC,CD,CBL,LR I,PAL

CO1,CO2,CO5	Assess the physiological roles of estrogen, progesterone, prolactin, luteinizing hormone (LH), follicle-stimulating hormone (FSH), and testosterone in reproductive medicine.	2	Practical20.2	PSY-GUD	Shows-how	PER,PT,CBL,IBL,CD
CO1,CO2,CO3,CO5	Perform a clinical examination of the reproductive system, focusing on genital and pelvic examination techniques.(ICD-11-TM-2-SM-94).	3	Experiential-Learning20.1	PSY-MEC	Does	D-BED,CD,SIM,PER
CO1,CO2,CO3,CO5	Describe the various types of psychosexual disorders—including gender identity disorders, sexual dysfunctions, and paraphilias—and discuss their respective management approaches	1	Lecture	CC	Knows-how	L&GD,L
CO1,CO2,CO5,CO7,CO8	Identify a comprehensive prescription compiling all relevant medicines from the Bruhatrayee for managing psychosexual disorders, including appropriate Pathya and Apathya guidelines, along with recent updates in the field of psychosexual disorders.	3	Experiential-Learning20.2	PSY-MEC	Does	PER,L&GD,L&PPT ,CBL
CO1,CO2,CO7	Organize a counseling session for a patient presenting with Premature Ejaculation, focusing on education, psychological support, behavioral techniques, and lifestyle modifications Advise Behavioral Regimen in Premature Ejaculation (ICD-11-HA03)	3	Experiential-Learning20.3	PSY-MEC	Does	CD,CBL,LRI,SIM

Unit 2 Male Reproductive Disorders

- Knowledge of Male reproductive disorders
- Phiranga (Syphilis)
- Understanding the Etiopathogenesis, types, Stages and management of Syphilis
- Upadamsha
- Knowledge of Chancroid/Soft Chancre and its management.
- Puyameha
- Gonorrhea- Understanding the etiopathogenesis and management of Gonorrhea

- Other Sexually transmitted disorders (HPV infection, Genital Herpes, Chlamydia, Trichomoniasis).
- Disorders of glans penis – Balanitis, Balano Posthitis, Lichen Planus, Pilon's disease, Priapism
- Knowledge of Pourush Granthi Vriddhi(BPH-Benign prostatic Hyperplasia), Anda Vriddhi (Varicocele)
- Investigations – VDRL(Venereal Disease Research Laboratory) or RPR(Rapid Plasma Reagin), TP-PA (T pallidum passive particle agglutination).

References: 1,2,3,7,8,9,10,15,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2, CO5	Describe the Chikitsa of Phiranga (Syphilis), including Shamana (palliative therapy), Shodhana (purificatory therapy), and Rasayana (rejuvenation therapy). Enlist the Pathya and Apathya (including Anupana, both drug and non-drug) relevant to Phiranga. Explain Vyapad chikitsa (management of complications) in Phiranga. Outline the comprehensive management strategies for Syphilis	1	Lecture	CAP	Knows-how	L&GD,FC,L&P PT
CO1,CO2, CO5,CO7	Review and Interpret the various diagnostic investigations for Syphilis, including VDRL, RPR, TP-PA (Treponema pallidum Particle Agglutination), and TPHA (Treponema pallidum Hemagglutination Assay), highlighting their principles, sensitivity, specificity, and clinical significance(ICD-11-1A6)	2	Practical20.3	CAN	Shows-how	L&GD,PER,PT ,LRI

CO1,CO2, CO5,CO7	Discuss the Nidana (causative factors), Samprapti (pathogenesis), and Lakshanas (clinical features) of Upadamsha. Explain the etiopathogenesis and classification of Chancroid. Describe the Chikitsa (treatment) of Upadamsha, including Shamana (palliative therapy), Shodhana (purificatory therapy), and Rasayana (rejuvenation therapy). List the Pathya and Apathya (including Anupana, both drug and non-drug) relevant to Upadamsha. Explain Vyapadchikitsa (management of complications) in Upadamsha, and outline the comprehensive management of Chancroid	1	Lecture	CAN	Knows-how	L,L&GD
CO1,CO2, CO7	Describe the Nidana (causative factors), Samprapti (pathogenesis), and Lakshanas (clinical features) of Puyameha. Explain the etiopathogenesis and classification of Gonorrhea. Describe the Chikitsa (management) of Puyameha, including Shamana (palliative therapy), Shodhana (purificatory therapy), and Rasāyana (rejuvenation therapy). Enlist the Pathya and Apathya (including Anupana, both drug and non-drug) relevant to Puyameha.	1	Lecture	CC	Knows-how	FC,L&PPT ,L&GD

	Explain Vyapadchikitsa (management of complications) in Puyameha, and outline the comprehensive management of Gonorrhea.					
CO1,CO2,CO5	Assess the sexually transmitted infections—HPV infection, Genital Herpes, Chlamydia, Lymphogranuloma Venereum (LGV) Chlamydia, Trichomoniasis, and Pubic Lice (Crabs)—by listing their signs, symptoms, and relevant laboratory investigations.	2	Practical20.4	PSY-GUD	Shows-how	CD,SIM,CBL
CO1,CO2,CO5,CO7	Differentiate the disorders of the glans penis—Balanitis, Balanoposthitis, Lichen Planus, Peyronie's Disease, Priapism, Benign Prostatic Hyperplasia (BPH), and Varicocele—by listing their characteristic signs and symptoms	2	Practical20.5	PSY-GUD	Shows-how	L&PPT ,L_VC
CO1,CO2,CO7	Develop a comprehensive prescription for the management of Sexually Transmitted Diseases, incorporating appropriate therapeutic agents along with specified Pathya (wholesome) and Apathya (unwholesome) dietary and lifestyle recommendations	3	Experiential-Learning20.4	PSY-MEC	Does	PBL,PL,RP,PER,JC
CO1,CO2,CO5	Examine the genitalia and rectum to diagnose BPH, Varicocele	2	Practical20.6	PSY-GUD	Shows-how	PBL,PT,SIM
CO1,CO2,CO5,CO7	Perform a digital rectal examination (DRE) to assess the size, shape, and consistency of the prostate gland in a male patient over the age of 50.	2	Practical20.7	PSY-GUD	Shows-how	PBL,SIM,PT
CO1,CO2,CO5,CO7	Demonstrate the procedure of various investigations essential for diagnosing Benign Prostatic Hyperplasia (BPH), including PSA testing, ultrasonography (USG), and transrectal ultrasonography (TRUS).	3	Experiential-Learning20.5	PSY-MEC	Does	CBL,PSM,BS,RLE

CO1,CO2,CO7	Demonstrate the procedure of male catheterization along with the associated risks and potential complications.	2	Practical20.8	PSY-GUD	Shows-how	CD,SIM,PT,CBL
CO1,CO2,CO5,CO7	Review and Propose the essential investigations required for the diagnosis of sexually transmitted diseases and psychosexual disorders in both male and female patients(ICD-11-1A60 to 1A9Z.)	3	Experiential-Learning20.6	CAN	Does	TBL,PER,DIS

Unit 3 Vandyatva and Vajeeekarana

- Knowledge of Vandyatva – Nidana, Samprapti, Beda and management
- Knowledge about infertility
- Causes of Male and female infertility
- Sub fertility – causes, risk and treatment for subfertility,
- Computer assisted semen analysis and DNA fragmentation test and index
- Disorders of micturition – wsr to Storage and Emptying of urine
- Explain etiopathogenesis, signs, symptoms and management of Dhat Syndrome.
- Vajeeekarana and Role of Vajeeekarana in Reproductive health

References: 1,2,3,8,15,16

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,CO5,CO7	Interpret the different types of Vandhyatva (infertility) along with their respective treatments (Chikitsa). Additionally, describe the etiopathogenesis, classification, and management strategies for both male and female infertility.	1	Lecture	CC	Know	PL,L&PPT
CO1,CO2,CO5,CO7	Discuss subfertility by explaining its causes, types, associated risk factors, and available treatment options.	1	Lecture	CAP	Knows-how	L&PPT ,L,L&GD

CO1,CO2, CO5,CO7	Illustrate various parameters of semen analysis to comprehensively assess sperm health and fertility potential. Computer Assisted Semen Analysis (CASA) and DNA fragmentation test and Index (DFI).	2	Practical20.9	PSY-GUD	Knows-how	D- BED,PER,PT
CO1,CO2, CO5,CO7	Diagnose the causes responsible for male and female infertility, subfertility.	2	Practical20.10	PSY-GUD	Shows-how	DIS,PT
CO1,CO2, CO7	Develop a detailed prescription for male and female infertility patients, incorporating appropriate therapeutic measures along with specified Pathya (wholesome) and Apathya (unwholesome) dietary and lifestyle guidelines.(ICD-11-TM-2-SM94).	3	Experiential- Learning20.7	PSY-MEC	Does	TPW,PL,JC,C BL
CO1,CO2, CO5,CO7	Discuss about the various disorders of micturition, including their clinical manifestations and comprehensive approaches to management.	1	Lecture	CAP	Knows-how	L&PPT ,L_VC,L&GD
CO1,CO2, CO5,CO7	Design a comprehensive investigation plan for the diagnosis of infertility and subfertility in both males and females, including relevant laboratory, imaging, and clinical assessments along with necessary interventions.(ICD-11-TM-2-SM94)	3	Experiential- Learning20.8	PSY-MEC	Does	PSM,DIS,JC,C BL
CO1,CO2, CO5,CO7	Assess the etiopathogenesis, clinical features, and management of Dhat Syndrome, including its signs, symptoms, and therapeutic approaches.	1	Lecture	CC	Knows-how	L&GD,L&PPT
CO1,CO2, CO5,CO7	Develop an effective Rasayana therapy protocol for the management of male infertility and the maintenance of reproductive health, and enlist the commonly available Vajeekarana yogas currently marketed for enhancing reproductive vitality.(ICD-11-TM-2-SN0Y).	2	Experiential- Learning20.9	PSY-MEC	Does	IBL,JC,DA
Practical Training Activity						

Practical Training 20.1 Case based clinical study of impotence, erectile dysfunction, premature ejaculation and loss of libido and its management.(ICD-11-TM-2-SN02,SN03)

Demonstration by the teacher

- Teacher will explain the recent ICD classification((ICD-11-TM-2-SN02,SN03)), Will explain the basics of Klaibya along with its Chikitsa and contemporary correlation like Impotence, ED, Premature Ejaculation, loss of libido.
- Teacher will also demonstrate the clinical examination and investigations like Semen Analysis useful in diagnosis and guides in the management of the diseases in Ayurveda and contemporary medicine.
- Teacher will also guide the scholars with assessment scales like Index of Premature Ejaculation (IPE), Premature Ejaculation Diagnostic Tool (PEDT), International Index of Erectile Dysfunction (IIEF) etc.,

Self-Assessment –

- Divide the scholars into 2-3 groups.
- The scholars will thoroughly learn about signs and symptoms and will demonstrate the clinical examinations and assessment scales on the Patients,
- Developing critical skills through detailed history taking and justifying the diagnosis made through appropriate examinations and investigations.
- Improving interpretation and rational thinking by correlating the symptoms to Ayurveda and Justifying the treatment protocol with scientific backup.

Group Assessment –

- Scholars will refer different articles for newer diagnostic scales for Premature Ejaculation, Erectile Dysfunction and Reproductive Health as a whole and understand the importance of them in clinical practice and their practical utility in diagnosing the case and present them to the teacher. They will also refer the newer treatments developed and advantages and disadvantages of them and present it to their peers.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Roga bala and Rogi bala.

Practical Training 20.2 Assessment the role of hormones in reproductive medicine.

Demonstration by the teacher

- The teacher will explain about the production, synthesis and excretion of the hormones in males and females.
- Teacher will also explain the normal ranges of these hormones and the diseases caused by their abnormal ranges.
- They will also teach about the investigations used for studying these hormones and will explain the recent ICD related to the diseases. They will also detailly explain the signs and symptoms of the disease caused due to abnormality.

Self- Assessment –

- Divide the scholars in 2-3 groups.
- The scholars will grasp the fundamental functions of these hormones.
- They will know the importance of the investigations in diagnosis and will learn the normal range and will learn about signs and symptoms.
- They will visit a laboratory to have deeper understanding of the procedure.
- They will learn about medicines, diet and regimen used in normalising and beneficial for the patient.
- Developing analysing skills through interpretation with Ayurvedic fundamental principles and deeper understanding of the treatment protocol told in Ayurvedic texts.

Group Project –

- The scholars will take detailed history of a patient will formulate a treatment protocol along with diet and regimen and justify it with a scientific validation.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Roga bala and Rogi bala.

Practical Training 20.3 Laboratory diagnostic methods for STDs

Demonstration by the teacher

- The Teacher will guide the scholars with basics of Syphilis and its recent classification (ICD-11-1A60, 1A61), Signs and Symptoms along with mode of transmission and risks of Syphilis, approaching the patient and relevant examinations and investigations like VDRL, RPR, TP-PA, TPHA etc.,
- Teacher will organise a day to laboratory to show the procedures of VDRL, RPR, TP-PA, TPHA.

- Teacher will explain possible treatment protocol and formulations.

Self-Assessment -

- Divide the scholars in 2-3 groups.
- Develop critical thinking by helping in coming to a diagnosis through detailed history taking and appropriate clinical examination and relevant investigation in the case.
- Developing rational thinking by interpretation and correlating it in Ayurvedic texts and improving soft skills to communicate the condition to patient in their comfortable language.
- Communicating the treatment protocol, diet and regimen to patients and risks if they fail to do so.

Team Project Work –

- Assign groups to find out the recent updates on Syphilis research in Ayurveda and Contemporary medicine and present them to the teacher.
- Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Roga bala and Rogi bala.

Practical Training 20.4 Differential diagnosis of STDs.

Demonstration by the teacher

- The Teacher will guide the scholars with basics of Sexually Transmitted Diseases and its recent classification,(ICD 11-1A60-1A9Z), identifying type of STD -HPV, Genital Herpes, Chlamydia, LGV Chlamydia, Trichomoniasis, CRABS with relevant examinations, laboratory investigations and assessment like HIV/STD/Hepatitis Risk Assessment Tool etc., and will explain possible treatment protocol and formulations.

Self-Assessment –

- Divide the scholars in 2-3 groups.
- Develop critical thinking by helping in coming to a diagnosis through detailed history taking and appropriate clinical examination. Demonstration of Risk Assessment tool. and other relevant assessment scales useful in differential diagnosis.

- Developing rational thinking by interpretation and correlating it in Ayurvedic texts and improving soft skills to communicate the condition to patient in their comfortable language.
- Understanding the need of counselling and strict regimen in such conditions.

Team Project Work –

- Assign groups to find out the recent updates on STD research and present them to the teacher.
- Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Roga bala and Rogi bala.

Practical Training 20.5 Differential Diagnosis the Disorders of glans penis

Demonstration by the teacher

- The Teacher will guide the scholars with basics of Glans Penis - Balanitis, Balanoposthitis, Lichen Planus, Pyronie's disease, Priapism, BPH and Varicocele and its recent classification(ICD 11-GA90etc.), differentially diagnosing with relevant examinations, laboratory investigations and assessment like PSA, USG, TRUS,International Prostate Symptoms Score (IPSS), American Urological Association (AUA) Symptom Indexetc., and will explain possible treatment protocol and formulations.

Self-Assessment –

- Divide the scholars in 2-3 groups.
- Develop critical thinking by helping in coming to a diagnosis through detailed history taking and appropriate clinical examination. Demonstration of International Prostate Symptoms Score (IPSS), American Urological Association (AUA) Symptom Indexand other relevant assessment scales useful in differential diagnosis.
- Developing rational thinking by interpretation and correlating it in Ayurvedic texts and improving soft skills to communicate the condition to patient in their comfortable language.
- Understanding the need of counselling and strict regimen in such conditions.

Team Project Work –

- Assign groups to find out the recent research updates on Glans Penis disease and present them to the teacher.
- Interpret the symptoms and correlate it in Ayurveda and formulate treatment protocol and justify it.

- Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Roga bala and Rogi bala

Practical Training 20.6 Examination of prostate gland and testis.

- The Teacher will guide the scholars with basics of BPH, varicocele and its recent classification(ICD 11- GA90), identifying a BPH patient, approaching the patient and relevant examinations and investigations like PSA, USG, TRUS,International Prostate Symptoms Score (IPSS), American Urological Association (AUA) Symptom Index etc.,
- Teacher will organise a day to laboratory to show the procedures of PSA, USG and TRUS.
- Teacher will explain possible treatment protocol and formulations.

Case Based Learning-

- Develop critical thinking by helping in coming to a diagnosis through detailed history taking and appropriate clinical examination.
- Scholars will differentially diagnose BPH and Varicocele by demonstrating clinical examination and assessment scales on the patient.
- Developing rational thinking by interpretation and correlating it in Ayurvedic texts and enhancing soft skills to communicate the condition to patient in their comfortable language.

Team Project Work –

- Assign groups to find out the recent research updates on BPH/ Varicocele and present them to the teacher.Groups will also explore the contemporary relevance and scientific validation of these practices.
- Then the scholars will explain the procedures of the Genital examination and Rectal examination to their fellow scholars which will develop their teaching skills and rational thinking.
- Conclusion and summarization
- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 20.7 Examination of Prostate Gland in elderly patients.

- The Teacher will guide the scholars with anatomy of the prostate gland with its normal size and anatomical position along with the functions of Prostate gland. ‘

- They will also explain the physical examination to be done on Prostate gland and will explain the diseases of prostate gland and the signs through which the diseases can be identified. Clinical significance of careful examination of the prostate gland by the index finger to assess or localized areas of softness, induration, or tenderness. The importance of The teacher will also explain about the investigations, kallikrein 3 (KLK3), also known as prostate-specific antigen (PSA), scales like IPSS, Gleason score, AJCC TNM Staging system etc., and treatment protocols used in Prostate gland diseases.

Self – Assessment –

- Develop critical thinking by helping in coming to a diagnosis through detailed history taking.
- Scholars will differentially diagnose prostate gland diseases by demonstrating clinical examination and assessment scales on 50 year old male patient and communicate the changes with his fellow scholars.
- Developing rational thinking by interpretation and correlating it in Ayurvedic texts and enhancing soft skills to communicate the condition to patient in their comfortable language.

Team Project Work –

- Assign groups to find out the recent research updates on Prostate cancer along with its treatment and present them to the teacher. Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars will present the mode of action of Ayurvedic medicines (Rasaushadhis, Rasayanas) in the prostate gland diseases and scientifically back it up.
- Conclusion and summarization
- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 20.8 Catheterization in male patients.

Demonstration by the teacher

- The Teacher will guide the scholars with basics of catheterisation, types of catheter, sizes of catheter and its practical utility in day-to-day practice along with the complication. Urethral catheterization is the standard method of accessing the urinary bladder. Teacher will tell about the requirement of suprapubic catheterization of the bladder.
- Teacher will demonstrate procedure of catheterisation in both males and females (through either video or in a case).

Self – Assessment –

- Divide the scholars in 2-3 groups.

- Hands on training in catheterisation in both males and females and deeper understanding of practical difficulty and utility during the procedure.
- Enhancing communication skills by communicating the risks and complications involved in this procedure in patient friendly language to patient or their bystander.

Team Project Work –

- Assign a group work to refer the researches on complications due to catheterisation and interpret in ayurveda and formulate a treatment protocol and present it to teacher along with scientific justification.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Roga bala and Rogi bala.

Conclusion and summarization

- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Practical Training 20.9 Semen analysis parameters and CASA including DFI.

Demonstration by the teacher

- The Teacher will guide the scholars with the utility of semen analysis and will take to a fertility centre to show the procedure of semen analysis or by video demo
- They will also explain different diseases of sperm and will show the normal and abnormal ranges of sperm analysis report.
- Explain the components of CASA and DFI and demonstrate or video demo

Self – Assessment –

- Divide the scholars in 2-3 groups.
- Scholars will take detailed history of a infertility case and interpret the sperm analysis report and justify the diagnosis.
- They will also propose a treatment protocol with scientific justification.

Team Project Work –

- Assign a group work to interpret the semen analysis report to Shuddha Shukra and Shukra Dosha Lakshana and formulate a possible treatment protocol and present to teacher with scientific validation.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivvyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Roga bala and Rogi bala. Semen analyses help the student to get a more accurate idea of your sperm production.

Conclusion and summarization

- The teacher shall summarize the key concepts like pH scale, semen volume, sperm concentration (density), sperm morphology, sperm motility, time to liquefaction, vitality and presence of white blood cells covered in the practical session and give inputs for further improvisation.

Practical Training 20.10 Enlisting the causes of male and female infertility, subfertility.

Demonstration by the teacher

- The Teacher will guide the students with basics of male and female infertility/subfertility and its recent ICD classification (ICD 11-GB04, GA31), identifying type of infertility, approaching the patient and relevant examinations and investigations like Sexual Function Index (SFI), Infertility related Stress Scale (IRSS), MU- Fertility Knowledge Assessment Scale (MUFKAS), Fertility Problem Inventory Questionnaire (FPI) etc., and will explain possible treatment protocol and formulations.

Self – Assessment –

- Divide the scholars in 2-3 groups.
- Scholars will take detailed history of infertility cases and interpret the causes of the infertility cases.
- They will also propose a treatment protocol with scientific justification.

Team Project Work –

- The scholars will present the most to least common cause of fertility in males and females with statistical graph and propose treatment choices / lifestyle changes in those cases with scientific validation.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with

comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Roga bala and Rogi bala

Conclusion and summarization

- The teacher shall summarize the key concepts covered in the practical session and give inputs for further improvisation.

Experiential Learning Activity

Experiential-Learning Learning 20.1: Genitalia and pelvic examination.

Demonstration by Teacher –

- Create an opportunity to scholars to understand the anatomy of reproductive system of both male and female and learn necessary examinations useful in diagnosing reproductive disorders.

Case based learning –

- Scholars will take brief history of patient and demonstrate the examination relevant to the presenting complaints of the patient and justify the diagnosis.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Roga bala and Rogi bala.

Group projects –

- The scholars will refer textbooks and research article for specific examination or assessment scales with which they can pinpoint a particular reproductive disease.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the Rasayana and Vajeekarana yogas available in the market.
- Scholars should conclude the learning achieved through experience.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the key takeaways the session.

Experiential-Learning Learning 20.2: Understanding of psychosexual disorders.

Demonstration by the teacher

- The Teacher will guide the scholars with basics of psychosexual disorders and its recent classification(ICD 11- 6C70-6C7Z etc.), identifying a psychosexual patient, approaching the patient and relevant examinations and investigations like MMSE (Mini Mental State Examination), Snap guage, Vascular assessment etc., and will explain possible treatment protocol and formulations.

Case Based Learning-

- Develop critical thinking by helping in coming to a diagnosis through detailed history taking and appropriate clinical examination. Demonstration of MMSE and other relevant assessment scales useful in differential diagnosis.
- Prepare a treatment protocol along with Pathyaapathya and Regimen changes and justify the effectiveness of the protocol and pathyaapathya with scientific validation.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Roga bala and Rogi bala.

Team Project Work –

- Assign groups to find out the recent updates on psychosexual disorders research and present them to the teacher.
- Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the psychosexual disorders.
- Scholars should conclude the learning achieved through experience.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the key takeaways the session.

Experiential-Learning Learning 20.3: Counseling session for Premature Ejaculation.

Demonstration by the teacher

- Teacher will explain the recent ICD classification of Premature Ejaculation (ICD 11- HA03.0) along with the fundamental concepts of Premature ejaculation and Erectile Dysfunction along with the diagnostic protocols like clinical examination, investigations and treatment protocol in ayurveda and contemporary medicine and the stigma around them in males and need for counselling.

Case based learning –

- Developing communication skills about the condition to patient in patient – friendly language.
- Developing soft skills to how to approach patient and how to proceed for counselling of such patients.
- Visiting a counseling session and understand the importance of counseling and methods to the destigmatisation of such cases.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Roga bala and Rogi bala
- Group Project –
- Assign groups to formulate a treatment protocol along with Pathyaapathya in Premature ejaculation and Erectile Dysfunction etc., cases and analyse the mode of action of Vajeeekarana Dravya in these medical conditions.
- Justifying the treatment protocol with scientific validation and arrange counseling session for Premature Ejaculation.
- Instructor will summarize and conclude key takeaways from the session.

Experiential-Learning Learning 20.4: Management of STDs.

Demonstration by the teacher

- The Teacher will guide the scholars with basics of Sexually Transmitted Diseases and its recent classification, identifying type of STD, approaching the patient and relevant examinations and investigations like HIV/STD/Hepatitis Risk Assessment Tool etc., and will explain possible treatment protocol and formulations.

Case Based Learning-

- Develop critical thinking by helping in coming to a diagnosis through detailed history taking and appropriate clinical examination. Demonstration of Risk Assessment tool. and other relevant assessment scales useful in differential diagnosis.
- Developing rational thinking by interpretation and correlating it in Ayurvedic texts and improving soft skills to communicate the condition to patient in their comfortable language.
- Understanding the need of counselling in such conditions.

- Prepare a treatment protocol along with Pathyaapathya and Regimen changes and justify the effectiveness of the protocol and pathyaapathya with scientific validation.

Team Project Work –

- Assign groups to find out the recent updates on STD research and present them to the teacher.
- Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the management of STDs.
- Scholars should conclude the learning achieved through experience.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the key takeaways the session.

Experiential-Learning Learning 20.5: Demonstration about procedures used for diagnosis of BPH. (Direct or by Video clips).

Demonstration by the teacher

- The Teacher will guide the scholars with basics of BPH and its recent classification, identifying a BPH patient, approaching the patient and relevant examinations and investigations like PSA, USG, TRUS, International Prostate Symptoms Score (IPSS), American Urological Association (AUA) Symptom Index etc.,
- Teacher will organise a day to laboratory to show the procedures of PSA, USG and TRUS.
- Teacher will explain possible treatment protocol and formulations.

Case Based Learning-

- Develop critical thinking by helping in coming to a diagnosis through detailed history taking and appropriate clinical examination. Demonstration of IPSS, AUA and other relevant assessment scales useful in differential diagnosis.
- Developing rational thinking by interpretation and correlating it in Ayurvedic texts and improving soft skills to communicate the condition to patient in their comfortable language.
- Understanding the need of counselling in such conditions.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Roga bala and Rogi bala

Team Project Work –

- Assign groups to find out the recent updates on BPH research and present them to the teacher. Groups will also explore the contemporary relevance and scientific validation of these practices.
- Then the scholars will explain the procedures of the PSA, USG and TRUS along with clinical examinations to the interns which will develop their teaching skills and rational thinking.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the Diagnosis of BPH.
- Scholars should conclude the learning achieved through experience.
- Each group will present the findings and discussion by all students and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the key takeaways the session.

Experiential-Learning Learning 20.6: Role of investigation and psychotherapy in STDs.

Demonstration by the teacher

- The Teacher will guide the scholars with basics of STD and psychosexual disorders and its recent classification, identifying a STD / psychosexual patient, approaching the patient and relevant examinations and investigations like STD Risk Assessment Tool, MMSE (Mini Mental State Examination), Snap gauge, Vascular assessment etc., and will explain possible treatment protocol and formulations.

Case Based Learning-

- Scholars will take detailed case history of either STD / psychosexual disorder and will suggest relevant investigations and clinical examinations in the case and justify it.
- Develop critical thinking by helping in coming to a diagnosis through detailed history taking and appropriate clinical examination. Demonstration of STD Risk Assessment Tool, MMSE and other relevant assessment scales useful in differential diagnosis.

Team Project Work –

- Scholars will communicate the patient with the condition, treatment protocols available, benefit and risks involved with it and also counsel the patient in the presence of a teacher.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Roga bala and Rogi bala

- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the Role of investigation and psychotherapy in STDs.
- Scholars should conclude the learning achieved through experience.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the key takeaways the session.

Experiential-Learning Learning 20.7: Chikitsa for male and female infertility.

Demonstration by the teacher

- The Teacher will guide the scholars with basics of male and female infertility and its recent ICD 11 code GA31 classification, identifying type of infertility, approaching the patient and relevant examinations and investigations like Infertility related Stress Scale (IRSS), MU- Fertility Knowledge Assessment Scale (MUFKAS), Fertility Problem Inventory Questionnaire (FPI) etc., and will explain possible treatment protocol and formulations.

Case Based Learning-

- Develop critical thinking by helping in coming to a diagnosis through detailed history taking and appropriate clinical examination. Demonstration of IRSS, FPI, MUFKAS and other relevant assessment scales useful in differential diagnosis.
- Developing rational thinking by interpretation and correlating it in Ayurvedic texts and improving soft skills to communicate the condition to patient in their comfortable language.
- Deeper understanding of differences between male and female infertility.
- Understanding the need of counselling and communicating the different options (like adoption etc.,) with the patient.
- Prepare a treatment protocol along with Pathyaapathya and Regimen changes and justify the effectiveness of the protocol and pathyaapathya with scientific validation.

Group Project –

- Assign groups to find out the recent research updates on Infertility and present them to the teacher.
- Groups will also explore the contemporary relevance and scientific validation of these practices.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhojana kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Roga bala and Rogi bala.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the Chikitsa for male and female infertility.

- Scholars should conclude the learning achieved through experience.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the key takeaways the session.

Experiential-Learning Learning 20.8: investigations for diagnosis of infertility and sub fertility.

Demonstration by the teacher

- The Teacher will guide the scholars with basics of male and female infertility/subfertility and its recent ICD -11 code SC22 classification, identifying type of infertility/ subfertility approaching the patient and relevant examinations and investigations like Infertility related Stress Scale (IRSS), MU- Fertility Knowledge Assessment Scale (MUFKAS), Fertility Problem Inventory Questionnaire (FPI) etc., and will explain possible treatment protocol and formulations.

Case Based Learning-

- Develop critical thinking by helping in coming to a diagnosis through detailed history taking and appropriate clinical examination. Demonstration of IRSS, FPI, MUFKAS and other relevant assessment scales useful in differential diagnosis.
- Developing rational thinking by interpretation and correlating it in Ayurvedic texts and improving soft skills to communicate the condition to patient in their comfortable language.
- Deeper understanding of differences between male and female infertility.
- Understanding the need of counselling and communicating the different options (like adoption etc.,) with the patient.
- Prepare a treatment protocol along with Pathyaapathya and Regimen changes and justify the effectiveness of the protocol and pathyaapathya with scientific validation.

Group Project –

- Take a detailed history of a fertility/subfertility case and diagnose with the help on assessments and suggest relevant investigations along with treatment protocol and communicate the same to the patient in the presence of interns and Teacher.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Roga bala and Rogi bala.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the infertility and subfertility in both male and female patients.
- Scholars should conclude the learning achieved through experience.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.

- The teacher shall discuss, summarize, and conclude the key takeaways the session.

Experiential-Learning Learning 20.9: Role of rasayana in male infertility.

Demonstration by the teacher

- The Teacher will guide the scholars with basics of male infertility and its recent ICD -11 code GB04 classification, identifying type of infertility, approaching the patient and relevant examinations and investigations like Sexual Function Index (SFI) Infertility related Stress Scale (IRSS), MU- Fertility Knowledge Assessment Scale (MUFKAS), Fertility Problem Inventory Questionnaire (FPI) etc., and will explain possible treatment protocol and formulations.

Case Based Learning-

- Develop critical thinking by helping in coming to a diagnosis through detailed history taking and appropriate clinical examination. Demonstration of SFT, IRSS, FPI, MUFKAS and other relevant assessment scales useful in differential diagnosis.
- Developing rational thinking by interpretation and correlating it in Ayurvedic texts and improving soft skills to communicate the condition to patient in their comfortable language. Deeper understanding of differences between male and female infertility.
- Propose a treatment protocol along with Pathyaapathya and communicate the effectiveness and regimen to be followed to the patient in patient friendly language.

Group Project –

- Assign groups to enlist the available Vajeeakaranayogas in the market and present with phytoanalytical study and mode of action in management of Infertility and maintenance of Reproductive health with scientific validation and present it to teacher.
- Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya and Justify the selection of specific Rasayana Yoga on the basis of Roga bala and Rogi bala.
- Scholars should interpret the point estimate and confidence interval to draw meaningful conclusions about the Rasayana and Vajeeakaranayogas available in the market.
- Scholars should conclude the learning achieved through experience.
- Each group will present the findings and discussion by all scholars and faculty concerned to conclude.
- The teacher shall discuss, summarize, and conclude the key takeaways the session.

Modular Assessment

Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Two questions can be asked, each carries 25 marks. 1. Discuss subfertility by explaining its causes, types, associated risk factors, and available treatment options.- 25 marks 2. Explain signs & symptoms and the essential investigations required for the diagnosis of sexually transmitted diseases and psychosexual disorders in male patients (Real case or case-based scenarios) - 25marks Or Any practical in converted form can be taken for assessment. (40 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (35 marks)	4

Paper No : 4(Adhyatana Kayachikitsa (Updates in Kayachikitsa))**Semester No : 3****Module 21 : Immunology, Organ transplantation, Gene therapy, radio isotopes****Module Learning Objectives**

(At the end of the module, the students should be able to)

1. Demonstrate comprehensive knowledge of Immunology
2. Demonstrate comprehensive knowledge of Organ transplantation
3. Demonstrate comprehensive knowledge of Gene therapy
4. Demonstrate comprehensive knowledge of radio isotopes
5. Comprehend the role of Organ transplantation, Gene therapy, radio isotopes in Kayachikitsa practice

Unit 1 Immunology

1. Innate and Acquired Immunity
2. Antigens, antibodies, antigen-antibody and antigen-receptor interactions
3. Cytokines, complement activation
4. Applied aspect of Immunology in Vaccines, Tumor Immunology, Autoimmune Diseases, Allergies

References: 62

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO6	Describe the components, cells, tissues and organs of the immune system, Innate and Acquired Immunity	1	Lecture	CC	Knows-how	L&PPT ,L&GD

CO1,CO6	Analyse cells, tissues, and organs of the immune system and understand Innate and Acquired Immunity.	2	Practical21.1	PSY-MEC	Shows-how	JC,DIS
CO4,CO6	Assess the importance of components, cells, tissues, and organs of the immune system.	3	Experiential-Learning21.1	PSY-MEC	Does	FV,RLE
CO6	Describe the properties of antigens, antibodies, antigen-antibody and antigen-receptor interactions.	1	Lecture	CAP	Knows-how	FC,L&GD,L&PPT
CO4,CO6	Demonstrate the properties of antigens, antibodies , antigen-antibody and antigen-receptor interactions	2	Practical21.2	PSY-MEC	Shows-how	JC,DIS
CO6	Analyse the properties of antigens, antibodies , antigen-antibody and antigen-receptor interactions.	3	Experiential-Learning21.2	PSY-ADT	Does	FV
CO6	Describe and discuss the functions of cytokines.	1	Lecture	CC	Knows-how	FC,L&PPT ,L&GD
CO6	Analyze the functions of cytokines and the mechanisms of complement activation.	2	Practical21.3	PSY-MEC	Shows-how	JC
CO2,CO6	Explore and analyze the role of cytokines.	3	Experiential-Learning21.3	PSY-ADT	Does	BL,FV
CO6	Elaborate the hypersensitivity reactions, autoimmune disorders.	1	Lecture	CS	Knows-how	L&PPT ,L&GD
CO6	Analyse hypersensitivity reactions and autoimmune disorders.	2	Practical21.4	PSY-MEC	Shows-how	JC
CO6	Analyze hypersensitivity reactions, autoimmune disorders, immune evasion mechanisms.	3	Experiential-Learning21.4	PSY-ADT	Does	BL,FV,RLE
CO6	Decribe immunological principles in the context of vaccination, cancer immunotherapy,	1	Lecture	CS	Knows-how	L&PPT ,L&GD

	autoimmune pathologies, and allergic responses.					
CO6	Review and recent advances and key publications in the applied aspects of immunology.	2	Practical21.5	PSY-MEC	Shows-how	RLE,JC
CO6	Analyse the recent developments in applied immunology.	3	Experiential-Learning21.5	PSY-MEC	Does	BL,FV,RLE

Unit 2 Organ transplantation

1. Biology of Organ transplantation
2. Indications and importance of Organ transplantation
3. Ethical issues and challenges in Organ transplantation
4. Role of Ayurveda in different stages of Organ transplantation

References: 19

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO6	Describe the principles of transplantation biology, indications and clinical importance of organ transplantation.	1	Lecture	CS	Knows-how	L&GD,L&PPT
CO6	Review recent advances in organ transplantation, including transplantation biology, clinical indications, and the importance of organ transplantation.	2	Practical21.6	PSY-ORG	Shows-how	JC
CO6	Discuss and analyze the indications, procedures, and significance of organ transplantation.	3	Experiential-Learning21.6	PSY-MEC	Does	RLE,BL

CO6	Describe and summarise Ethical and legal issues involved with Organ transplant.	1	Lecture	CS	Knows-how	L&PPT ,L&GD
CO6	Review the recent advances in organ transplantation with a focus on ethical and legal issues.	2	Practical21.7	PSY-GUD	Shows-how	JC
CO6	Explore and understand the ethical and legal dimensions of organ transplantation.	3	Experiential-Learning21.7	AFT-SET	Does	BL,FV,RLE
CO6	Discuss the Organ procurement, Transplant procedure. Role of Ayurveda in different stages of organ transplantation	1	Lecture	CS	Knows-how	L&GD,FC,L&PPT
CO6	Review the organ procurement and transplant procedure. Role of Ayurveda in different stages of organ transplantation	2	Practical21.8	PSY-ORG	Shows-how	JC
CO6	Observe the organ transplant setup and related activities.	3	Experiential-Learning21.8	AFT-SET	Does	FV,BL,RLE

Unit 3 Gene therapy

1. Biology of Gene therapy
2. Indications and importance of Gene therapy
3. Ethical issues and challenges in Gene therapy
4. Role of Ayurveda in different stages of Gene therapy

References: 20

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO6	Describe the principles and applications of gene therapy and explore the integrative role of	1	Lecture	CS	Knows-how	L&GD,L&PPT ,FC

	Ayurveda in the management of genetic and hereditary disorders					
CO6	Review the gene therapy and its recent updates.	2	Practical21.9	PSY-MEC	Shows-how	JC
CO6	Observe and discuss the recent advances in gene therapy.	3	Experiential-Learning21.9	AFT-SET	Does	BL,FV,RLE
CO6	Describe about stem cell therapy and explore the potential role of Ayurveda.	1	Lecture	CS	Knows-how	L&PPT ,L&GD
CO6	Review the concepts of stem cell therapy and its recent developments	2	Practical21.10	PSY-MEC	Shows-how	JC
CO6	Observe and discuss the advances in stem cell therapy.	3	Experiential-Learning21.10	AFT-SET	Does	BL,FV,RLE
CO6	Discuss genetic modelling and chromosomal abnormalities and interpret them in the context of Ayurvedic principles.	1	Lecture	CS	Knows-how	L&GD,L&PPT ,FC
CO6	Review the genetic modelling and chromosomal disorders in various disease conditions and correlation with Ayurvedic concepts	2	Practical21.11	PSY-MEC	Shows-how	JC
CO6	Discuss and Interpret the genetic modelling and chromosomal disorders across various disease conditions.	3	Experiential-Learning21.11	AFT-SET	Does	BL,FV,RLE

Unit 4 Radio isotopes

1. Radio isotopes
2. Utility of radio isotopes in disease and tumour markers
3. Indications and application of Radio isotopes in treatment
4. Utility of Radio isotopes in kayachikitsa practice

References: 21

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO6	Describe the principles, applications, and safety aspects of radioisotopes	1	Lecture	CC	Knows-how	L&PPT ,L&GD
CO6	Comprehend radioisotopes and recent advancements.	2	Practical21.12	PSY- MEC	Shows-how	JC
CO6	Review the clinical applications and recent updates in radioisotope therapy.	3	Experiential- Learning21.12	AFT- SET	Does	RLE,FV,BL
CO6	Describe and analyse the utility of radioisotopes in disease diagnosis and tumour marker identification, and explore the supportive role of Ayurveda in integrative oncology and radioprotection	1	Lecture	CAP	Knows-how	L&PPT ,L&GD
CO6	Review the utility of radioisotopes in disease diagnosis and tumour marker evaluation through clinical report analysis and discussion of case applications	2	Practical21.13	CS	Shows-how	JC
CO6	Describe the indications and applications of radioisotopes in disease treatment, and Describe the role of Ayurveda in radioprotection and post-therapy care	1	Lecture	CS	Knows-how	L&GD,L&PPT
CO6	Review the indications and application of Radio isotopes in treatment	2	Practical21.14	PSY- ORG	Shows-how	JC

CO6	Describe the utility of radioisotopes in Kayachikitsa practice	1	Lecture	CS	Knows-how	L&PPT ,L&GD
CO6	Review the indications and application of Utility of Radio isotopes in Kayachikitsa practice	2	Practical21.15	CS	Shows-how	JC
CO6	Discuss and interpret the utility, indications, and clinical applications of radioisotopes in disease and tumour markers.	3	Experiential-Learning21.13	AFT-SET	Does	RLE,FV,BL

Practical Training Activity

Practical Training 21.1 Journal club on the components, cells, tissues, and organs of the immune system, Innate and Acquired Immunity.

Pre group activity: Give prior information to collect the articles or publications, indexed in WEB OF SCIENCE or SCOPUS based on the topics related to Advances in Immunology.

Group Activity: Divide class into 2-3 groups:

1. Teacher will select the 2-3 most relevant article and divide these articles in to 2-3 groups
2. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion, limitations, strengths, conclusion.). Encourage students to focus on key aspects like the hypothesis, methodology and results.
3. Instruct students to pinpoint how the article adds to the advances in the concerned field
4. Groups will add their own view points, critics and comments to the article.
5. Each group presents, their understanding of aim, objectives, methodology, results, discussion, limitations, strengths, conclusion. Presentations will be critically analyze, how the study adds to the advances of the field
6. Presentations will be critically analyzed by other groups. Looking into strength and limitations of the article. Critically analyze the presentation, inputs and comments made by the presenter.
7. Instructor will summarize and conclude about the article, presentations by different groups, presenter inputs, add own view points.

Practical Training 21.2 Demonstration of the properties of antigens, antibodies , antigen-antibody and antigen-receptor interactions

Pre group activity: Give prior information to collect the articles or publications, indexed in WEB OF SCIENCE or SCOPUS or PUBMED based on the topic related to Advances in in the immunology- understanding of the properties of antigens, antibodies , antigen-antibody and antigen-receptor interactions and indications.

Group Activity: Divide class into 2-3 groups:

1. Teacher will select the 2-3 most relevant article and divide these articles in to 2-3 groups
2. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion, limitations, strengths, conclusion.). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
3. Instruct students to pinpoint how the article adds to the advances in the concerned field
4. Groups will add their own view points, critics and comments to the article.
5. Each group presents, their understanding of aim, objectives, methodology, results, discussion, limitations, strengths, conclusion. Presentations will critically analyze, how the study adds to the advances of the field
6. Presentations will be critically analyzed by other groups. Looking into strength and limitations of the article. Critically analyze the presentation, inputs and comments made by the presenter.
7. Instructor will summarize and conclude about the article, presentations by different groups, presenter inputs, add own view points.

Practical Training 21.3 Group activity/ discussion on comprehend the functions of cytokines, complement activation.

Pre group activity: Give prior information to collect the articles or publications, indexed in WEB OF SCIENCE or SCOPUS or PUBMED based on the topic related to Advances in Immunology- understanding of the functions of cytokines, complement activation.

Group Activity: Divide class into 2-3 groups:

1. Teacher will select the 2-3 most relevant article and divide these articles in to 2-3 groups
2. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion, limitations, strengths, conclusion.). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
3. Instruct students to pinpoint how the article adds to the advances in the concerned field
4. Groups will add their own view points, critics and comments to the article.
5. Each group presents, their understanding of aim, objectives, methodology, results, discussion, limitations, strengths, conclusion. Presentations will critically analyze, how the study adds to the advances of the field
6. Presentations will be critically analyzed by other groups. Looking into strength and limitations of the article. Critically analyze the presentation, inputs and comments made by the presenter.
7. Instructor will summarize and conclude about the article, presentations by different groups, presenter inputs, add own view points.

Practical Training 21.4 Group activity and discussion on hypersensitivity reactions, autoimmunity, evasion of the immune response by pathogens, tumour immunotherapies, and immunodeficiency conditions.

Pre group activity: Give prior information to collect the articles or publications, indexed in WEB OF SCIENCE or SCOPUS or PUBMED based on the topic related to Advances in Immunology- understanding of hypersensitivity reactions, autoimmunity, evasion of the immune response by pathogens, tumour immunotherapies, and immunodeficiency conditions.

Group Activity: Divide class into 2-3 groups:

1. Teacher will select the 2-3 most relevant article and divide these articles in to 2-3 groups
2. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion, limitations, strengths, conclusion.). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
3. Instruct students to pinpoint how the article adds to the advances in the concerned field
4. Groups will add their own view points, critics and comments to the article.
5. Each group presents, their understanding of aim, objectives, methodology, results, discussion, limitations, strengths, conclusion. Presentations will critically analyze, how the study adds to the advances of the field
6. Presentations will be critically analyzed by other groups. Looking into strength and limitations of the article. Critically analyze the presentation, inputs and comments made by the presenter.
7. Instructor will summarize and conclude about the article, presentations by different groups, presenter inputs, add own view points.

Practical Training 21.5 Group activity/discussion- Advances (publications) in the Immunology- Applied aspect of Immunology in Vaccines, Tumour Immunology, Autoimmune Diseases, Allergic disorders.

Pre group activity: Give prior information to collect the articles or publications, indexed in WEB OF SCIENCE or SCOPUS or PUBMED based on the topic related to Advances in Immunology- Applied aspect of Immunology in Vaccines, Tumour Immunology, Autoimmune Diseases, Allergy

Group Activity: Divide class into 2-3 groups:

1. Teacher will select the 2-3 most relevant article and divide these articles in to 2-3 groups
2. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion, limitations, strengths, conclusion.). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
3. Instruct students to pinpoint how the article adds to the advances in the concerned field
4. Groups will add their own view points, critics and comments to the article.
5. Each group presents, their understanding of aim, objectives, methodology, results, discussion, limitations, strengths, conclusion. Presentations will critically analyze, how the study adds to the advances of the field
6. Presentations will be critically analyzed by other groups. Looking into strength and limitations of the article. Critically analyze the presentation, inputs and comments made by the presenter.

7. Instructor will summarize and conclude about the article, presentations by different groups, presenter inputs, add own view points.

Practical Training 21.6 Group activity/discussion-
Advances (publications) in the organ transplantation - Transplantation biology, indications and importance of Organ transplantation

Pre group activity: Give prior information to collect the articles or publications, indexed in WEB OF SCIENCE or SCOPUS based on the topic related to Advances in organ Transplantation, transplantation biology and indications.

Group Activity: Divide class into 2-3 groups:

1. Teacher will select the 2-3 most relevant article and divide these articles in to 2-3 groups
2. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion, limitations, strengths, conclusion.). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
3. Instruct students to pinpoint how the article adds to the advances in the concerned field
4. Groups will add their own view points, critics and comments to the article.
5. Each group presents, their understanding of aim, objectives, methodology, results, discussion, limitations, strengths, conclusion. Presentations will critically analyze, how the study adds to the advances of the field
6. Presentations will be critically analyzed by other groups. Looking into strength and limitations of the article. Critically analyze the presentation, inputs and comments made by the presenter.
7. Instructor will summarize and conclude about the article, presentations by different groups, presenter inputs, add own view points.

Practical Training 21.7 Group activity/discussion- Advances in the organ transplantation - Ethical and legal issues

Pre-Group Activity: Give prior information to collect the articles or publications, indexed in WEB OF SCIENCE or SCOPUS based on the topic related to ethical and legal issues in organ transplantation.

Group Activity: Divide the class into 2-3 groups.

1. The instructor will select 2-3 relevant articles on the ethical and legal aspects of organ transplantation and assign them to the groups.
2. Each group will critically analyze the structure of their assigned article (abstract, introduction, methods, results, discussion, limitations, strengths, and conclusion), with a focus on how the article addresses ethical dilemmas and legal frameworks related to organ transplantation.

3. Instruct students to identify key points like consent issues, allocation policies, and patient rights, and assess how the article contributes to advancements in these areas.
4. Groups will add their own viewpoints, critique, and comments on the article's ethical and legal implications.
5. Each group will present their analysis, covering the article's objectives, methodology, results, discussion, limitations, and conclusion. Presentations will critically assess how the study contributes to the understanding of ethical and legal issues in organ transplantation.
6. Other groups will analyze the presentation, providing feedback on the strengths, limitations about the article, presentations by different groups, presenter inputs, and insights shared by the presenters.
7. Instructor will summarize and conclude about the article, presentations by different groups, presenter inputs, add own view points.

Practical Training 21.8 Group activity/discussion- Organ procurement, Transplant procedure. Role of Ayurveda in different stages of organ transplantation.

Pre-Group Activity: Provide prior instructions to students to collect articles or publications, indexed in Web of Science or Scopus or Pubmed, focused on topics related to organ procurement, the transplant procedure, and the role of Ayurveda in organ transplantation.

Group Activity: Divide the class into 2-3 groups.

1. 1. The instructor will select 2-3 relevant articles related to the transplant procedure, organ procurement, and Ayurveda's role in organ transplantation. These articles will be assigned to the groups.
- 2.
3. 2. Each group will critically analyze the structure of the assigned scientific article (abstract, introduction, methods, results, discussion, limitations, strengths, and conclusion). Encourage students to focus on the hypothesis, methodology, and results, especially regarding the integration of Ayurveda in different stages of transplantation.
- 4.
5. 3. Instruct students to highlight how the article adds to the knowledge of organ transplantation practices and the potential role of Ayurveda in pre- and post-transplant care.
- 6.
7. 4. Groups will add their own view points, critics and comments to the article.
- 8.
9. 5. Each group will present their analysis, focusing on the article's objectives, methodology, results, and conclusions. Presentations should critically assess how the study contributes to the understanding of transplant procedures and the integration of Ayurveda in these stages
- 10.

- 11.6. Presentations will be critically analyzed by other groups. Looking into strength and limitations of the article. Critically analyze the presentation, inputs and comments made by the presenter.
- 12.
- 13.7. Instructor will summarize and conclude about the article, presentations by different groups, presenter inputs, add own view points.

Practical Training 21.9 Group activity/discussion- Gene therapy and its updates.

Pre-Group Activity: Provide prior instructions to students to collect articles or publications, indexed in Web of Science or Scopus, based on topics related to gene therapy and its latest updates.

Group Activity: Divide the class into 2-3 groups.

1. 1. The instructor will select 2-3 relevant articles on gene therapy advancements and assign them to the groups.
- 2.
3. 2. Each group will critically analyze the structure of the assigned scientific article (abstract, introduction, methods, results, discussion, limitations, strengths, and conclusion). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
- 4.
5. 3. Instruct students to identify how the article contributes to the field of gene therapy and its potential in treating genetic disorders.
- 6.
7. 4. Groups will add their own view points, critics and comments to the article.
- 8.
9. 5. Each group will present their analysis, discussing the article's aim, objectives, methodology, results, discussion, limitations, strengths, and conclusions. Presentations will focus on how the study adds to advancements in the field of gene therapy.
- 10.
- 11.6. Other groups will provide feedback on the strengths and limitations of the presentation, critically analyzing the content and inputs provided by the presenting group.
- 12.
- 13.7. Instructor will summarize and conclude about the article, presentations by different groups, presenter inputs, add own view points.

Practical Training 21.10 Group activity/discussion- Stem cell therapy and its updates

Pre-Group Activity: Inform students to gather relevant articles or publications indexed in WEB OF SCIENCE or SCOPUS on the topic of Stem Cell Therapy and its recent updates. Articles should focus on key advancements, therapeutic potential, and clinical applications of stem cell therapy.

Group Activity: Divide the class into 2-3 groups.

1. 1. The instructor will select 2-3 of the most relevant articles and assign one to each group.
- 2.
3. 2. Each group will critically analyze the structure of the article (abstract, introduction, methods, results, discussion, limitations, strengths, and conclusion). Students will be encouraged to focus on crucial elements such as the hypothesis, methodology, and findings.
- 4.
5. 3. Instruct students to identify how the article contributes to advancements in the field of stem cell therapy.
- 6.
7. 4. Groups will add their own view points, critics and comments to the article.
- 8.
9. 5. Each group will present their understanding of the aim, objectives, methodology, results, discussion, limitations, strengths, and conclusion. The presentations will also include a critical analysis of how the study contributes to the advancements in stem cell therapy.
- 10.
11. 6. Presentations will be critically analyzed by other groups. Looking into strength and limitations of the article. Critically analyze the presentation, inputs and comments made by the presenter.
- 12.
13. 7. Instructor will summarize and conclude about the article, presentations by different groups, presenter inputs, add own view points.

Practical Training 21.11 Group activity/discussion- Genetic modelling and chromosomal disorders in different disease

Pre-Group Activity: Inform students to collect articles or publications indexed in WEB OF SCIENCE or SCOPUS on the topic of Genetic Modelling and Chromosomal Disorders in Different Diseases. The focus should be on key advancements in understanding chromosomal abnormalities, genetic mutations, and their implications for various diseases.

Group Activity: Divide the class into 2-3 groups.

1. The instructor will select 2-3 of the most relevant articles and assign one to each group.

2. Each group will critically analyze the article's structure (abstract, introduction, methods, results, discussion, limitations, strengths, and conclusion). Encourage students to focus on essential elements such as the hypothesis, genetic models used, and results.
3. Instruct students to identify how the article contributes to advancing knowledge in genetic modelling and chromosomal disorders.
4. Groups will add their own viewpoints, critiques, and comments on the article.
5. Each group will present their understanding of the aim, objectives, methodology, results, discussion, limitations, strengths, and conclusion. Presentations will include a critical analysis of how the study advances the field of genetic modelling and chromosomal disorder research.
6. Presentations will be critically analyzed by other groups. Looking into strength and limitations of the article. Critically analyze the presentation, inputs and comments made by the presenter.
7. Instructor will summarize and conclude about the article, presentations by different groups, presenter inputs, add own view points.

Practical Training 21.12 Group activity/discussion- (publications) Understanding the Radio isotopes and its updates

Pre-Group Activity: Inform students to collect articles or publications indexed in WEB OF SCIENCE or SCOPUS on the topic of Radioisotopes and Their Latest Advances. The focus should be on key updates related to the use of radioisotopes in medical, industrial, and scientific applications, as well as advancements in radioisotope technology.

Group Activity: Divide the class into 2-3 groups.

1. The instructor will select 2-3 of the most relevant articles and assign one to each group.
2. Each group will critically analyze the article's structure (abstract, introduction, methods, results, discussion, limitations, strengths, and conclusion). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
3. Instruct students to identify how the article contributes to advancing the understanding and application of radioisotopes.
4. Groups will add their own viewpoints, critiques, and comments to the article.
5. Each group will present their understanding of the aim, objectives, methodology, results, discussion, limitations, strengths, and conclusion. Presentations should also critically analyze how the study adds to advancements in the field of radioisotopes.
6. Presentations will be critically analyzed by other groups. Looking into strength and limitations of the article. Critically analyze the presentation, inputs and comments made by the presenter.
7. Instructor will summarize and conclude about the article, presentations by different groups, presenter inputs, add own view points.

Practical Training 21.13 Group activity/discussion- Utility of the Radio isotopes in disease and tumour markers

Pre-Group Activity: Inform students to collect articles or publications indexed in WEB OF SCIENCE or SCOPUS on the topic of Utility of Radioisotopes in Disease and tumour Markers. The focus should be on recent advancements in the use of radioisotopes for diagnosing and monitoring diseases, especially in identifying tumour markers.

Group Activity: Divide the class into 2-3 groups.

1. The instructor will select 2-3 of the most relevant articles and assign one to each group.
2. Each group will critically analyze the structure of the article (abstract, introduction, methods, results, discussion, limitations, strengths, and conclusion). Encourage students to focus on key aspects such as the hypothesis, methodology, and results.
3. Instruct students to pinpoint how the article contributes to advancing the understanding and application of radioisotopes in disease detection and tumor marker identification.
4. Groups will add their own viewpoints, critiques, and comments on the article.
5. Each group will present their understanding of the aim, objectives, methodology, results, discussion, limitations, strengths, and conclusion. The presentations should also critically analyze how the study advances the field of radioisotopes in disease and tumor marker research.
6. Presentations will be critically analyzed by other groups. Looking into strength and limitations of the article. Critically analyze the presentation, inputs and comments made by the presenter.
7. Instructor will summarize and conclude about the article, presentations by different groups, presenter inputs, add own view points.

Practical Training 21.14 Group activity/discussion- Comprehend the indications and application of Radio isotopes in treatment

Pre-Group Activity: Inform students to collect articles or publications indexed in WEB OF SCIENCE or SCOPUS on the topic of Indications and Applications of Radioisotopes in Treatment. The focus should be on the therapeutic uses of radioisotopes, their effectiveness in treating diseases, and advancements in radioisotope therapy.

Group Activity: Divide the class into 2-3 groups.

1. The instructor will select 2-3 of the most relevant articles and assign one to each group.
2. Each group will critically analyze the structure of the article (abstract, introduction, methods, results, discussion, limitations, strengths, and conclusion). Encourage students to focus on key aspects such as the hypothesis, methodology, and results.
3. Instruct students to pinpoint how the article contributes to advancing the understanding and clinical application of radioisotopes in treatments.
4. Groups will add their own viewpoints, critiques, and comments on the article.

5. Each group will present their understanding of the aim, objectives, methodology, results, discussion, limitations, strengths, and conclusion. Presentations should also critically analyze how the study adds to advancements in the field of radioisotope treatment.
6. Presentations will be critically analyzed by other groups. Looking into strength and limitations of the article. Critically analyze the presentation, inputs and comments made by the presenter.
7. Instructor will summarize and conclude about the article, presentations by different groups, presenter inputs, add own view points.

Practical Training 21.15 Group activity/discussion- Comprehend the indications and application of Utility of Radio isotopes in Kayachikitsa practice

Pre-Group Activity: Inform students to collect articles or publications indexed in Web of Science or Scopus on the topic of the utility of radioisotopes in Kayachikitsa practice. The focus should be on how radioisotopes are applied in Ayurvedic internal medicine (Kayachikitsa) for the diagnosis, treatment, and monitoring of diseases.

Group Activity: Divide the class into 2-3 groups.

1. The instructor will select 2–3 of the most relevant articles and assign one to each group.
2. Each group will critically analyze the article's structure, including the abstract, introduction, methods, results, discussion, limitations, strengths, and conclusion. Students should focus on key aspects such as the hypothesis, methodology, and results.
3. Instruct students to identify how the article contributes to advancing the understanding and application of radioisotopes in Kayachikitsa practices.
4. Groups will add their own viewpoints, critiques, and comments to the article.
5. Each group will present their understanding of the aim, objectives, methodology, results, discussion, limitations, strengths, and conclusion. Presentations should also include a critical analysis of how the study advances the use of radioisotopes in Kayachikitsa.
6. Presentations will be critically evaluated by other groups, with a focus on the article's strengths and limitations, as well as the insights and comments provided by the presenters.
7. The instructor will summarize and conclude by discussing the articles, group presentations, presenter inputs, and adding their own viewpoints.

Experiential Learning Activity

Experiential-Learning Learning 21.1: Visit or interaction with clinical Immunology and Rheumatology expert.

Steps for the Activity:**Pre-Activity Preparation**

1. Identify Immunology, Rheumatology centre/Expert in that field.

Visit /Interaction with Expert (online/offline)

1. Visit the Immunology, Rheumatology centre, interaction with experts, online mode or offline
2. Interaction will cover the key areas like - importance of components, cells, tissues, and organs of the immune system, Innate and Acquired Immunity Immunology, Rheumatology centre tour to have the first-hand information of the centre and system followed.
3. Post-Activity Reflection and Assignment: write a Report summarizing the learnings from the visit.
4. Strategize a plan to implement the advances/ learnings in the current institute

Experiential-Learning Learning 21.2: Visit or interaction with clinical Immunology and Rheumatology centre/expert

Steps for the Activity:**Pre-Activity Preparation**

1. Identify Immunology, Rheumatology centre/Expert in that field.

Visit /Interaction with Expert (Online or offline)

1. Visit the Immunology, Rheumatology centre/interaction with experts in online or offline mode as per feasibility.
2. Interaction will cover the key areas like - understanding of the properties of antigens, antibodies , antigen-antibody and antigen-receptor interactions and system followed.
3. Post-Activity Reflection and Assignment: write a Report summarizing the learnings from the visit.
4. Strategize a plan to implement the advances/ learnings in the current institute

Experiential-Learning Learning 21.3: Visit or interaction with clinical Immunology and Rheumatology centre/expert

Steps for the Activity:

Pre-Activity Preparation

1. Identify Immunology, Rheumatology centre/Expert in that field.

Visit /Interaction with Expert (offline or online)

1. Visit the Immunology, Rheumatology centre or interaction with experts online or offline.
2. Interaction will cover the key areas like - understanding of the functions of cytokines, complement activation in Immunology, Rheumatology centre tour to have the first-hand information of the centre and system followed.
3. Post-Activity Reflection and Assignment: write a Report summarizing the learnings from the visit.
4. Strategize a plan to implement the advances/ learnings in the current institute

Experiential-Learning Learning 21.4: Visit or interaction with clinical Immunology and Rheumatology expert

Steps for the Activity:**Pre-Activity Preparation**

1. Identify Immunology, Rheumatology centre/Expert in that field.

Visit /Interaction with Expert

1. Visit the Immunology, Rheumatology centre or interaction with experts online or offline as per feasibility.
2. Interaction will cover the key areas like - understanding of hypersensitivity reactions, autoimmunity, evasion of the Immune response by pathogens, tumour immunotherapies, and immunodeficiency conditions understanding and system followed.
3. Post-Activity Reflection and Assignment: write a Report summarizing the learnings from the visit.
4. Strategize a plan to implement the advances/ learnings in the current institute

Experiential-Learning Learning 21.5: Visit or interaction with Immunology, Rheumatology centre expert. Applied aspect of Immunology in Vaccines, Tumour Immunology, Autoimmune Diseases, Allergic disorders.

Steps for the Activity:**Pre-Activity Preparation**

1. Identify Immunology, Rheumatology centre/Expert in that field.

Visit /Interaction with Expert (Offline or Online)

1. Visit the Immunology, Rheumatology centre or interaction with experts offline or online as per feasibility
2. Interaction will cover the key areas like - Applied aspect of Immunology in Vaccines, Tumour Immunology, Autoimmune Diseases, Allergy understanding and system followed.
3. Post-Activity Reflection and Assignment: write a Report summarizing the learnings from the visit.
4. Strategize a plan to implement the advances/ learnings in the current institute

Experiential-Learning Learning 21.6: Visit or interaction with Organ transplant centre/Expert - indications and importance of Organ transplantation

Steps for the Activity:

Pre-Activity Preparation

1. Identify The Organ transplant centre/Expert in that field.

Visit /Interaction with Expert (Offline or Online)

1. Visit the Organ transplant centre, interaction with experts either offline or online
2. Interaction will cover the key areas like - indications and importance of Organ transplantation, transplantation biology, indications.
3. Organ transplantation centre tour to have the first hand information of the centre and system followed. (subjected to the availability of the facility)
4. Post-Activity Reflection and Assignment: write a Report summarizing the learnings from the visit.
5. Strategize a plan to implement the advances/ learnings in the current institute

Experiential-Learning Learning 21.7: Visit or interaction with Organ transplant centre/Expert - Ethical and legal issues

Steps for the Activity:

Pre-Activity Preparation

1. Identify a suitable organ transplant centre and relevant experts in the field of transplantation.

Visit/Interaction with Experts (Offline or Online)

1. Visit the organ transplant centre, interaction with expert (offline or online)
2. Interaction will cover the key areas like - ethical and legal issues related to organ transplantation, including consent processes, allocation policies, and regulations governing organ donation.
3. Tour the transplant centre to gain firsthand knowledge of the protocols and systems in place regarding ethical considerations and legal frameworks.(subjected to availability of facility)
4. Post-Activity Reflection and Assignment: Write a report summarizing key learnings from the visit, specifically addressing ethical and legal issues encountered.
5. Develop a strategy to incorporate these insights into the current institutional.

Experiential-Learning Learning 21.8: Visit or interaction with Organ transplant centre/Expert - Organ procurement, Transplant procedure

Steps for the Activity:

Pre-Activity Preparation

1. Identify a suitable organ transplant centre and relevant experts in the field of organ procurement and transplantation procedures or by a video demonstration

Visit/Interaction with Experts

1. Visit the organ transplant, interaction with experts (offline or online)
2. Interaction will cover the key areas like - the organ procurement process, criteria for donor selection, and the surgical techniques used in transplantation.
3. Tour of the transplant centre to observe the protocols and systems in place for organ procurement and transplantation procedures (subjected to availability of facility)
4. Post-Activity Reflection and Assignment: Write a report summarizing the key learnings from the visit, specifically focusing on the organ procurement process and transplant procedures.
5. Develop a strategy to implement insights and advancements gained from the visit into current practices at your institution.

Experiential-Learning Learning 21.9: Visit or interaction with Gene therapy centre- Gene therapy and its updates

Steps for the Activity:**Pre-Activity Preparation**

1. Identify a suitable gene therapy centre and relevant experts in the field of gene therapy.

Visit/Interaction with Experts

1. Visit the gene therapy centre and interact with experts (either offline or online)
2. Interaction will cover the key areas like Basics of Gene therapy and recent advancements in gene therapy, applications in various diseases, and ethical considerations surrounding gene editing.
3. Tour of the gene therapy centre to observe the laboratory settings, techniques used in gene therapy, and ongoing clinical trials.
4. Post-Activity Reflection and Assignment: Write a report summarizing the key learnings from the visit, specifically focusing on the updates in gene therapy and its applications.
5. Develop a strategy to incorporate these advancements and insights into current practices at your institution.

Experiential-Learning Learning 21.10: Visit or interaction with Gene therapy centre/Expert - Stem cell therapy and its updates

Steps for the Activity:**Pre-Activity Preparation**

1. Identify a suitable gene therapy centre and relevant experts specializing in stem cell therapy.

Visit/Interaction with Experts

1. Visit the gene therapy centre and and interact with experts (offline or online)
2. Interaction will cover the key areas like the latest advancements in stem cell therapy, applications in regenerative medicine, and ongoing research.
3. Tour of the gene therapy centre to observe laboratory practices, stem cell processing techniques, and any clinical trials currently in progress.
4. Post-Activity Reflection and Assignment: Write a report summarizing the key learnings from the visit, specifically focusing on updates in stem cell therapy and its clinical applications.
5. Develop a strategy to integrate these insights and advancements into current practices at your institution.

Experiential-Learning Learning 21.11: Visit or interaction with Gene therapy centre- Genetic modelling and chromosomal disorders in different disease

Steps for the Activity:

Pre-Activity Preparation

1. Identify a suitable gene therapy centre and relevant experts in the field of genetic modelling and chromosomal disorders.

Visit/Interaction with Experts (offline or online)

1. Visit the gene therapy centre and interact with experts offline or online
2. The interaction will focus on key areas such as the use of genetic models to study diseases, the role of chromosomal abnormalities in various conditions, and the latest updates in research.
3. Tour of the gene therapy centre to gain firsthand insights into the techniques and tools used for genetic modelling, as well as the diagnosis and study of chromosomal disorders.
4. Post-Activity Reflection and Assignment: Write a report summarizing the key learnings from the visit, with a specific focus on genetic modelling techniques and their application to chromosomal disorders.
5. Strategize a plan to integrate these advances and learnings into the current practices of your institution

Experiential-Learning Learning 21.12: Visit or interaction with experts in radio isotopes therapy centre- Radio isotopes therapy and its updates

Steps for the Activity:

Pre-Activity Preparation

1. Identify a suitable radioisotope therapy centre and relevant experts in the field of radioisotope-based treatments.

Visit/Interaction with Experts (offline or online)

1. Visit the radioisotope therapy centre & interact with expert (subjected to availability of the facility)
2. The interaction will cover key areas such as the latest advancements in radioisotope therapy, its applications in treating various cancers and thyroid disorders, and safety protocols.
3. Tour of the radioisotope therapy centre to gain firsthand information about the equipment, treatment processes, and patient management systems used in radioisotope therapy.

4. Post-Activity Reflection and Assignment: Write a report summarizing the key learnings from the visit, specifically focusing on the updates in radioisotope therapy and its clinical applications.
5. Strategize a plan to incorporate these advancements and insights into the current practices at your institution

Experiential-Learning Learning 21.13: Visits or interactions with experts to understand utility, indications, and applications in disease markers

Steps for the Activity:

Pre-Activity Preparation

1. Identify a relevant radioisotope therapy center and experts knowledgeable in the application of radioisotopes in medical practice, specifically in Kayachikitsa (internal medicine).

Visit/Interaction with Experts (offline or online)

- Visit the radioisotope therapy center and interact with experts offline or online
- The interaction will cover key areas such as the use of radioisotopes in diagnosing and managing conditions like cancer, thyroid disorders, and other internal diseases from a Kayachikitsa perspective.
- Take a tour of the center to gain firsthand insights into the techniques, procedures, and systems used for the application of radioisotopes in clinical treatment.
- Post-Activity Reflection and Assignment: Write a report summarizing the key learnings from the visit, focusing particularly on how radioisotopes can be applied within Kayachikitsa practice.
- Develop a strategy to integrate this knowledge and these advancements into current practices at your institute.

Modular Assessment

Assessment

Instructions: Conduct a structured modular assessment. The assessment will be for 75 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Three questions can be asked, each carries 25 marks.

Hour

6

1. Explain the concepts of Ojas and Vyadhikshamatva, compare them with modern immunity (cellular and humoral), and describe the role of Rasayana therapy in enhancing immunity - 25 marks

Assessment Methods:

- a. Class Presentation – 5 marks: Students will present a comparative analysis of Ojas, Vyadhikshamatva, and modern immunity.
- b. Structured Long Answer – 5 marks: A written answer will assess depth of knowledge of concepts and their clinical relevance.
- c. Quiz – 3 marks: A short quiz will test recall of immunity components and Ayurvedic correlations.
- d. Critical Reading of Papers – 4 marks: Students will review and critique research on Rasayana and immunity enhancement.
- e. Theory Case Study – 4 marks: A written case scenario will test application of Rasayana therapy in immunocompromised conditions.
- f. Practical Role Play – 4 marks: Students will simulate counseling a patient on immunity-boosting Ayurvedic practices.

Total = 25 marks

2. Describe the physiological and ethical aspects of organ transplantation, and elaborate on how Ayurveda can offer supportive therapies through Rasayana, Pathya-Apathya, and lifestyle guidance - 25 marks

Assessment Methods:

- a. Structured Long Answer – 5 marks: A written answer will assess understanding of transplantation physiology and ethical considerations.
- b. Class Presentation – 4 marks: Students will present Ayurvedic supportive care strategies for transplant patients.
- c. Case-Based Assessment – 4 marks: A case study will analyze post-transplant supportive Ayurvedic care.
- d. Critical Reading of Papers – 4 marks: Students will review integrative literature on post-transplant care.
- e. Practical Role Play – 4 marks: Students will simulate counseling a transplant patient regarding lifestyle and Pathya-Apathya.

- f. Mini-CEX – 4 marks: A short clinical evaluation will test communication and planning skills for integrative transplant care.

Total = 25 marks

3. Discuss the principles, techniques, and clinical applications of gene therapy and radioisotopes in the diagnosis and treatment of diseases. Highlight recent advancements and safety considerations associated with their use - 25marks

Assessment Methods:

- a. Structured Long Answer – 5 marks: A written answer will assess understanding of theoretical foundations of gene therapy and radioisotopes.
- b. Case-Based Assessment – 4 marks: Students will analyze diagnostic or therapeutic applications.
- c. Class Presentation – 4 marks: A presentation will cover recent advancements and safety protocols.
- d. Critical Reading of Papers – 4 marks: Students will critique integrative studies and innovations.
- e. Quiz – 4 marks: A short quiz will check recall of principles, techniques, and clinical uses.
- f. Scenario-Based Assessment – 4 marks: A hypothetical clinical case will test application of knowledge to real-world settings.

Total = 25 marks

Record of Assessment Pattern

- Practical/Experiential Components are assessed through DOPS, Mini-CEX, Role Play, and Scenario-based tasks.
- Theoretical Components are tested via Structured Long Answer, Case Studies, and Quizzes.
- Research & Critical Thinking are assessed by Critical Reading of Papers.
- Communication & Presentation Skills are assessed through Class Presentations.

Module 22 : National health programmes and emerging diseases

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Review the National health campaigns
2. Describe the Ayush health campaigns
3. Describe the possible role and contributions to the national health campaigns
4. Identify and treat the various emerging diseases
5. Apply the Ayurveda understanding and management of emerging diseases

Unit 1 National health Programmes

1. Understanding the National health campaigns and
2. Comprehend the AYUSH health campaigns
3. Identify the current AYUSH campaigns and health campaigns
4. Constructing the strategy in supporting, participating and executing the AYUSH campaigns and health campaigns

References: 56,57

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO4,CO6,C O7	Elaborate the National health campaigns.	1	Lecture	CC	Knows-how	L&PPT ,FC,L&GD
CO4,CO6,C O7	Present about National health campaigns.	2	Practical22.1	PSY- MEC	Shows-how	DIS,JC,ML
CO4,CO6,C O7	Review the relevant information related to National health campaigns.	3	Experiential- Learning22.1	AFT- SET	Does	FV,D,BL
CO4,CO6,C O7	Describe the Ayush health campaigns.	1	Lecture	CC	Knows-how	L&GD,FV,L&PPT
CO4,CO6,C O7	Review of various Ayush health campaigns.	2	Practical22.2	PSY- MEC	Shows-how	JC,ML,DIS

CO4,CO6,C O7	Present the relevant information related to Ayush health campaigns.	3	Experiential- Learning22.2	AFT- SET	Does	FV,BL,D,DIS

Unit 2 Emerging Health Challenges

1. Identifying the Emerging Health Challenges through various authentic sources
2. Ayurveda understanding of Emerging Health Challenges
3. Planning the possible Ayurveda solutions to the Emerging Health Challenges

References: 56,58

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO5,C O6,CO7,CO 8	Evaluate the emerging health challenges.	1	Lecture	CE	Knows-how	L&PPT ,L&GD,FC
CO1,CO5,C O6,CO7,CO 8	Review and analyse the emerging health challenges.	2	Practical22.3	PSY- MEC	Shows-how	DIS,JC
CO1,CO5,C O6,CO7,CO 8	Analyse and present the relevant information related to emerging health challenges.	3	Experiential- Learning22.3	AFT- SET	Does	PBL,DIS,ML,SDL
CO1,CO5,C O6,CO7,CO 8	Describe the emerging health challenge- Chikungunya.	1	Lecture	CC	Knows-how	L_VC,FC,L&PPT ,L&GD
CO1,CO5,C O6,CO7,CO 8	Identify and present the emerging health challenges- Chikungunya.	2	Practical22.4	CAN	Knows-how	DIS,ML,PBL,JC

CO1,CO5,C O6,CO7,CO 8	Discuss and analyse the relevant information related to emerging health challenges - Chikungunya .	3	Experiential-Learning22.4	AFT-SET	Does	DIS,SDL,ML,PBL
CO1,CO5,C O6,CO7,CO 8	Describe emerging health challenge- HIV/AIDS .	1	Lecture	CAN	Knows-how	L&PPT ,L&GD
CO1,CO5,C O6,CO7,CO 8	Present the emerging health challenges- HIV/AIDS .	2	Practical22.5	CAN	Knows-how	JC,ML
CO1,CO5,C O6,CO7,CO 8	Review the relevant information related to emerging health challenges - HIV/AIDS .	3	Experiential-Learning22.5	AFT-SET	Does	ML,JC
CO1,CO5,C O6,CO7,CO 8	Describe the emerging health challenge- Swine flu .	1	Lecture	CC	Knows-how	L&GD,L&PPT
CO1,CO5,C O6,CO7,CO 8	Analyse the emerging health challenges- Swine flu .	2	Practical22.6	CAN	Knows-how	PBL,DIS,JC
CO1,CO5,C O6,CO7,CO 8	Reviewthe relevant information related to emerging health challenges - Swine flu .	3	Experiential-Learning22.6	AFT-SET	Does	PBL,DIS,ML
CO1,CO5,C O6,CO7,CO 8	Describe the emerging health challenge- Chicken flu .	1	Lecture	CS	Knows-how	L&PPT ,L&GD
CO1,CO5,C O6,CO7,CO 8	Analyze emerging health challenges- Chicken flu relevant sources. Knowing the current status, measures taken by - Possible role of Ayurveda /Integrative protocols in these challenges	2	Practical22.7	CAN	Knows-how	DIS,JC

CO1,CO5,C O6,CO7,CO 8	Review the relevant information related to emerging health challenges - Chicken flu.	2	Experiential- Learning22.7	AFT- SET	Does	ML,D,PBL
CO1,CO5,C O6,CO7,CO 8	Describe and discuss the emerging health challenge- Dengue.	1	Lecture	CC	Knows-how	L&PPT ,L&GD
CO1,CO5,C O6,CO7,CO 8	Analyse the emerging health challenges- Dengue.	2	Practical22.8	CAN	Knows-how	DIS,JC
CO1,CO5,C O6,CO7,CO 8	Present the relevant information related to emerging health challenges - Dengue.	2	Experiential- Learning22.8	AFT- SET	Does	DIS,PBL,SDL
CO1,CO5,C O6,CO7,CO 8	Describe and discuss the emerging health challenge- Sick building syndrome and Fibromyalgia.	1	Lecture	CC	Knows-how	L&PPT ,L&GD,FC,DIS
CO1,CO5,C O6,CO7,CO 8	Analyse the emerging health challenges Sick Building Syndrome and Fibromyalgia.	2	Practical22.9	CAN	Knows-how	JC,DIS
CO1,CO5,C O6,CO7,CO 8	Present the relevant information related to emerging health challenges - Sick building syndrome and Fibromyalgia.	2	Experiential- Learning22.9	AFT- SET	Does	PBL,ML,DIS,JC
CO1,CO5,C O6,CO7,CO 8	Describe the emerging health challenges.- COVID-19	1	Lecture	CC	Knows-how	L&PPT ,L&GD
CO1,CO5,C O6,CO7,CO 8	Demonstrate the emerging health challenges. - COVID-19	2	Practical22.10	CAN	Knows-how	JC,D
CO1,CO5,C O6,CO7,CO 8	Analyse the relevant information related to emerging health challenges. - COVID-19	2	Experiential- Learning22.10	AFT- SET	Does	PBL,DIS,ML

Practical Training Activity

Practical Training 22.1

Group activity/discussion on National health campaigns

Group Activity/ Presentation

1. Instructor will demonstrate the access to websites (National Health campaigns- <https://ihip.mohfw.gov.in/#!/programmes>; National AYUSH Mission- <https://namayush.gov.in/>).
2. Divide students into 3 groups. Each group will identify and select few major National health campaigns.
3. They will work on their objectives, different types, organization structure, plan of execution, level of implementations, interim audits or progress reports or impacts on the public health. Strengths and weakness of national health campaign structure and functioning.
4. One member from each group will present their worked up details.
5. Group discussion is coordinated by the instructor.
6. Instructor will summarize and conclude.

Practical Training 22.2 Group activity/discussion on Ayush health campaigns

Group Activity/ Presentation

1. Instructor will demonstrate the access to websites (National Health campaigns- <https://ihip.mohfw.gov.in/#!/programmes>, National AYUSH Mission- <https://namayush.gov.in/>).
2. Divide students into 3 groups. Each group will identify and select few major AYUSH health campaigns.
3. They will work on their objectives, different types, organization structure, plan of execution, level of implementations, interim audits or progress reports or impacts on the public health. Strengths and weakness of Ayush national health campaign structure and functioning.
4. One member from each group will present their worked up details.
5. Group discussion is coordinated by the instructor.
6. Instructor will summarize and conclude.

Practical Training 22.3 Group activity/discussion- Identifying emerging health challenges through WHO/ICMR/health ministry/AYUSH ministry/ relevant sources. Knowing the current status, measures taken by govt/ relevant agencies - Possible role of Ayurveda /Integrative protocols in these challenges

Group Activity/Presentation

1. Instructor will demonstrate the access to websites (WHO- <https://www.who.int/> /ICMR- <https://www.icmr.gov.in/> /AYUSH ministry- <https://ayush.gov.in/> /health ministry- <https://mohfw.gov.in/>)
2. Divide students into 3 groups each focusing on different aspects of the emerging health challenges. Like global scenario, Indian scenario and evidences of Ayurveda approach in emerging health challenges.
3. They will work on current status of the challenge, measures taken by govt/ relevant agencies and possible role of Ayurveda/ Integrative protocol in these challenges.
4. One member from each group will present their worked up detail.
5. Group discussion is coordinated by the instructor.
6. Instructor will summarize and conclude.

Practical Training 22.4

Group Exploration: Chikungunya – Current Scenario, Government Response, and Integrative Ayurveda Strategies

Group Activity/Presentation

1. Instructor will demonstrate how to access and gather relevant information about health challenges in chikungunya, from authoritative websites (WHO- <https://www.who.int/>/ICMR/ AYUSH Ministry- <https://ayush.gov.in/> / Ministry of health and family welfare- <https://mohfw.gov.in/>)
2. Divide students into 3 groups each focusing on different aspects of the chikungunya health challenge. Like global scenario, Indian scenario and evidences of Ayurveda approach in chikungunya.
3. They will work on current status of the challenge, measures taken by govt/ relevant agencies and possible role of Ayurveda/ Integrative protocol in these challenges.
4. One member from each group will present their worked up detail.
5. Group discussion is coordinated by the instructor.
6. Instructor will summarise and conclude.

Practical Training 22.5 Group Exploration:HIV/AIDS– Current Scenario, Government Response, and Integrative Ayurveda Strategies

Group Activity/Presentation

1. Instructor will demonstrate how to access and gather relevant information about health challenges in HIV/AIDS, from authoritative websites (WHO- <https://www.who.int/>/ICMR- <https://www.icmr.gov.in/> /AYUSH Ministry- <https://ayush.gov.in/> / Ministry of health and family welfare- <https://mohfw.gov.in/>, Indian AIDS programme- <https://naco.gov.in/nacp>)

2. Divide students into 3 groups each focusing on different aspects of the HIV/AIDS health challenge. Like global scenario, Indian scenario and evidences of Ayurveda approach in HIV/AIDS.
3. They will work on current status of the challenge, measures taken by govt/ relevant agencies and possible role of Ayurveda/ Integrative protocol in these challenges.
4. One member from each group will present their worked up detail.
5. Group discussion is coordinated by the instructor.
6. Instructor will summarize and conclude.

Practical Training 22.6 Module 2:Unit 2:Objective

Discussion: Swine flu as an Emerging Health Challenge – Status, Interventions, and Ayurvedic Perspectives

Group Activity/Presentation

1. Instructor will demonstrate how to access and gather relevant information about health challenges in Swine flu, from authoritative websites (WHO- <https://www.who.int/ICMR-https://www.icmr.gov.in/> / AYUSH Ministry- <https://ayush.gov.in/> / Ministry of health and family welfare- <https://mohfw.gov.in/>)
2. Divide students into 3 groups each focusing on different aspects of the Swine flu health challenge. Like global scenario, Indian scenario and evidences of Ayurveda approach in Swine flu.
3. They will work on current status of the challenge, measures taken by govt/ relevant agencies and possible role of Ayurveda/ Integrative protocol in these challenges.
4. One member from each group will present their worked up detail.
5. Group discussion is coordinated by the instructor.
6. Instructor will summarize and conclude.

Practical Training 22.7 Discussion: Chicken flu as an Emerging Health Challenge – Status, Interventions, and Ayurvedic Perspectives

Group Activity/Presentation

1. Instructor will demonstrate how to access and gather relevant information about health challenges in Chicken flu , from authoritative websites (WHO- <https://www.who.int/ICMR-https://www.icmr.gov.in/> / AYUSH Ministry- <https://ayush.gov.in/> / Ministry of health and family welfare- <https://mohfw.gov.in/>)
2. Divide students into 3 groups each focusing on different aspects of the Chicken flu health challenge. Like global scenario, Indian scenario and evidences of Ayurveda approach in Chicken flu.
3. They will work on current status of the challenge, measures taken by govt/ relevant agencies and possible role of Ayurveda/ Integrative protocol in these challenges.
4. One member from each group will present their worked up detail.

5. Group discussion is coordinated by the instructor.
6. Instructor will summarize and conclude.

Practical Training 22.8 Discussion: **Dengue** as an Emerging Health Challenge – Status, Interventions, and Ayurvedic Perspectives

Steps for the Activity :

Collection and Presentation -

1. Divide the students into 3 groups. Students will collect the relevant information related to emerging health challenges and evidences in Dengue from agencies like WHO- <https://www.who.int/> /ICMR- <https://www.icmr.gov.in/> /health ministry- <https://mohfw.gov.in/> /AYUSH ministry- <https://ayush.gov.in/> /relevant sources.
2. Each group will focus on different aspects of emerging health challenges in Dengue. Like global scenario, Indian scenario and evidence of Ayurveda approach in emerging health challenges in Dengue.
3. They will work on current status of the challenge, measures taken by govt/ relevant agencies and possible role of Ayurveda/ Integrative protocol in these challenges.
4. One member from each group will present their worked up detail.
5. Group discussion is coordinated by the instructor.
6. Instructor will summarize and conclude.

Practical Training 22.9 Discussion: Sick building syndrome and Fibromyalgia as an Emerging Health Challenge – Status, Interventions, and Ayurvedic Perspectives

Group Activity/Presentation

1. Instructor will demonstrate how to access and gather relevant information about health challenges in Sick building syndrome and Fibromyalgia, from authoritative websites (WHO- <https://www.who.int/> /ICMR- <https://www.icmr.gov.in/> / AYUSH Ministry- <https://ayush.gov.in/> / Ministry of health and family welfare- <https://mohfw.gov.in/>)
2. Divide students into 3 groups each focusing on different aspects of the Sick building syndrome and Fibromyalgia health challenge. Like global scenario, Indian scenario and evidences of Ayurveda approach in Sick building syndrome and Fibromyalgia.
3. They will work on current status of the challenge, measures taken by govt/ relevant agencies and possible role of Ayurveda/ Integrative protocol in these challenges.
4. One member from each group will present their worked up detail.
5. Group discussion is coordinated by the instructor.

6. Instructor will summarize and conclude.

Practical Training 22.10 Discussion: COVID-19 as an Emerging Health Challenge – Status, Interventions, and Ayurvedic Perspectives

Group Activity/Presentation:

1. Instructor will demonstrate how to access and gather relevant information about health challenges in COVID-19, from authoritative websites (WHO- <https://www.who.int/> /IMR <https://www.icmr.gov.in/>, Indian COVID programme- <https://nsdcindia.org/covid-19-healthcare-program> / AYUSH Ministry- <https://ayush.gov.in/> / Ministry of health and family welfare- <https://mohfw.gov.in/>)
2. Divide students into 3 groups each focusing on different aspects of the COVID-19 health challenge. Like global scenario, Indian scenario and evidences of Ayurveda approach in COVID-19.
3. They will work on current status of the challenge, measures taken by govt/ relevant agencies and possible role of Ayurveda/ Integrative protocol in these challenges.
4. One member from each group will present their worked up detail.
5. Group discussion is coordinated by the instructor.
6. Instructor will summarize and conclude.

Experiential Learning Activity

Experiential-Learning Learning 22.1: National health campaigns, Site visit/Interaction with experts

Steps for the Activity :

Pre-visit Preparation-

1. Students with the help of instructor, will identify the Primary health centre / Community health centre /District hospital/ medical officer/nodal officer.
2. Students will take the required permission / approval for their visit or interaction with expert

Visit & Interaction with Expert

1. Visit the District health officer/ Primary health centre / Community health centre and learn about structure and planning process.

2. Appraising will be of National health campaigns, objectives, different types, organization structure, plan of execution, level of implementations, interim audits or progress reports or impacts on the public health. Uprising of region/season specific programs.
3. Students can write a report of the activity

Experiential-Learning Learning 22.2: Visit or interaction with District Ayush officer/CHC/PHC/Govt Ayurveda dispensary and appraising of Ayush health campaigns

Steps for the Activity :

Pre-visit Preparation-

1. Students with the help of instructor, will identify the Primary health centre / Community health centre /District Hospital/Govt Ayurveda dispensary.
2. Students will take the required permission/ approval for their visit or interaction with expert

Visit & Interaction with Expert

1. Visit the District Ayush officer/ Primary health centre / Community health centre /Govt Ayurveda dispensary and learn about structure and planning process.
2. Appraising will be of Ayush health campaigns, objectives, different types, organization structure, plan of execution, level of implementations, interim audits or progress reports or impacts on the public health. Uprising of region/season specific programs.
3. Students can write a report of the activity.

Experiential-Learning Learning 22.3: A Review of Global and National Health Challenges with Insights from Ayurveda

Steps for the Activity :

1. Divide the students into 3 groups. Students will collect the relevant information related to emerging health challenges and evidences from agencies like WHO- <https://www.who.int/> /ICMR- <https://www.icmr.gov.in/> /health ministry- <https://mohfw.gov.in/> /AYUSH ministry- <https://ayush.gov.in/> /relevant sources.
2. Each group will focus on different aspects of emerging health challenges. Like global scenario, Indian scenario and evidence of Ayurveda approach in emerging health challenges.

3. They will work on current status of the challenge, measures taken by govt/ relevant agencies and possible role of Ayurveda/ Integrative protocol in these challenges.
4. One member from each group will present their worked up detail.
5. Group discussion is coordinated by the instructor.
6. Instructor will summarize and conclude.

Experiential-Learning Learning 22.4: Group Exploration: Chikungunya – Current Scenario, Government Response, and Integrative Ayurveda Strategies

Steps for the Activity :

Collection and Presentation -

1. Divide the students into 3 groups. Students will collect the relevant information related to emerging health challenges and evidences in chikungunya from agencies like WHO- <https://www.who.int/> /ICMR- <https://www.icmr.gov.in/> /health ministry- <https://mohfw.gov.in/> /AYUSH ministry- <https://ayush.gov.in/> /relevant sources.
2. Each group will focus on different aspects of emerging health challenges in chikungunya. Like global scenario, Indian scenario and evidence of Ayurveda approach in emerging health challenges in chikungunya.
3. They will work on current status of the challenge, measures taken by govt/ relevant agencies and possible role of Ayurveda/ Integrative protocol in these challenges.
4. One member from each group will present their worked up detail.
5. Group discussion is coordinated by the instructor.
6. Instructor will summarize and conclude.

Experiential-Learning Learning 22.5: Group Exploration: HIV/AIDS – Current Scenario, Government Response, and Integrative Ayurveda Strategies

Steps for the Activity :

Collection and Presentation -

1. Divide the students into 3 groups. Students will collect the relevant information related to emerging health challenges and evidences in HIV/AIDS from agencies like WHO- <https://www.who.int/> /ICMR- <https://www.icmr.gov.in/> /health ministry- <https://mohfw.gov.in/> /AYUSH ministry- <https://ayush.gov.in/> /relevant sources.
2. Each group will focus on different aspects of emerging health challenges in HIV/AIDS. Like global scenario, Indian scenario and evidence of Ayurveda approach in emerging health challenges in HIV/AIDS.

3. They will work on current status of the challenge, measures taken by govt/ relevant agencies and possible role of Ayurveda/ Integrative protocol in these challenges.
4. One member from each group will present their worked up detail.
5. Group discussion is coordinated by the instructor.
6. Instructor will summarize and conclude.

Experiential-Learning Learning 22.6: Group Exploration: Swine flu – Current Scenario, Government Response, and Integrative Ayurveda Strategies

Steps for the Activity :

Collection and Presentation -

1. Divide the students into 3 groups. Students will collect the relevant information related to emerging health challenges and evidences in Swine flu from agencies like WHO- <https://www.who.int/> /ICMR- <https://www.icmr.gov.in/> /health ministry- <https://mohfw.gov.in/> /AYUSH ministry- <https://ayush.gov.in/> /relevant sources.
2. Each group will focus on different aspects of emerging health challenges in Swine flu. Like global scenario, Indian scenario and evidence of Ayurveda approach in emerging health challenges in Swine flu.
3. They will work on current status of the challenge, measures taken by govt/ relevant agencies and possible role of Ayurveda/ Integrative protocol in these challenges.
4. One member from each group will present their worked up detail.
5. Group discussion is coordinated by the instructor.
6. Instructor will summarize and conclude.

Experiential-Learning Learning 22.7: Group Exploration: Chicken flu – Current Scenario, Government Response, and Integrative Ayurveda Strategies

Steps for the Activity :

Collection and Presentation -

1. Divide the students into 3 groups. Students will collect the relevant information related to emerging health challenges and evidences in Chicken flu from agencies like WHO- <https://www.who.int/> /ICMR- <https://www.icmr.gov.in/> /health ministry- <https://mohfw.gov.in/> /AYUSH ministry- <https://ayush.gov.in/> /relevant sources.
2. Each group will focus on different aspects of emerging health challenges in Chicken flu. Like global scenario, Indian scenario and evidence of Ayurveda approach in emerging health challenges in Chicken flu.

3. They will work on current status of the challenge, measures taken by govt/ relevant agencies and possible role of Ayurveda/ Integrative protocol in these challenges.
4. One member from each group will present their worked up detail.
5. Group discussion is coordinated by the instructor.
6. Instructor will summarize and conclude.

Experiential-Learning Learning 22.8: Group Exploration:Dengue – Current Scenario, Government Response, and Integrative Ayurveda Strategies

Steps for the Activity :

Collection and Presentation -

1. Divide the students into 3 groups. Students will collect the relevant information related to emerging health challenges and evidences in Dengue from agencies like WHO- <https://www.who.int/> /ICMR- <https://www.icmr.gov.in/> /health ministry- <https://mohfw.gov.in/> /AYUSH ministry- <https://ayush.gov.in/> /relevant sources.
2. Each group will focus on different aspects of emerging health challenges in Dengue. Like global scenario, Indian scenario and evidence of Ayurveda approach in emerging health challenges in Dengue.
3. They will work on current status of the challenge, measures taken by govt/ relevant agencies and possible role of Ayurveda/ Integrative protocol in these challenges.
4. One member from each group will present their worked up detail.
5. Group discussion is coordinated by the instructor.
6. Instructor will summarize and conclude.

Experiential-Learning Learning 22.9: Group Exploration: Sick building syndrome and Fibromyalgia – Current Scenario, Government Response, and Integrative Ayurveda Strategies

Steps for the Activity :

Collection and Presentation -

1. Divide the students into 3 groups. Students will collect the relevant information related to emerging health challenges and evidences in Sick building syndrome and Fibromyalgia from agencies like WHO- <https://www.who.int/> /ICMR- <https://www.icmr.gov.in/> /health ministry- <https://mohfw.gov.in/> /AYUSH ministry- <https://ayush.gov.in/> /relevant sources.

2. Each group will focus on different aspects of emerging health challenges in Sick building syndrome and Fibromyalgia. Like global scenario, Indian scenario and evidence of Ayurveda approach in emerging health challenges in Sick building syndrome and Fibromyalgia.
3. They will work on current status of the challenge, measures taken by govt/ relevant agencies and possible role of Ayurveda/ Integrative protocol in these challenges.
4. One member from each group will present their worked up detail.
5. Group discussion is coordinated by the instructor.
6. Instructor will summarize and conclude.

Experiential-Learning Learning 22.10: Group Exploration: COVID-19 – Current Scenario, Government Response, and Integrative Ayurveda Strategies

Collection and Presentation -

1. Divide the students into 3 groups. Students will collect the relevant information related to emerging health challenges and evidences in COVID-19 from agencies like WHO- <https://www.who.int/> /ICMR- <https://www.icmr.gov.in/> /health ministry- <https://mohfw.gov.in/> /AYUSH ministry- <https://ayush.gov.in/> /relevant sources.
2. Each group will focus on different aspects of emerging health challenges in COVID-19. Like global scenario, Indian scenario and evidence of Ayurveda approach in emerging health challenges in COVID-19.
3. They will work on current status of the challenge, measures taken by govt/ relevant agencies and possible role of Ayurveda/ Integrative protocol in these challenges.
4. One member from each group will present their worked up detail.
5. Group discussion is coordinated by the instructor.
6. Instructor will summarize and conclude.

Modular Assessment

Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome-Based Assessment: 02 credits x 04 hours x 50 marks	4

1. Discuss the objectives and key features of National Health Campaigns such as the National AYUSH Mission and Ayushman Bharat. Explain the role of Ayurveda in contributing to these national health initiatives. [25 marks x 2 hour]

Assessment Methods

- a. Scenario-Based Assessment (5 marks)
 - Apply AYUSH concepts in real-world health campaign scenarios.
- b. Class Presentation (5 marks)
 - Present objectives, structure, and role of Ayurveda in campaigns.
- c. Practical Role Play (5 marks)
 - Simulate the role of an Ayurveda physician in a public health initiative.
- d. Structured Long Answer (5 marks)
 - Written explanation of campaign features & Ayurveda's contribution.
- e. Quiz (3 marks)
 - Short factual recall (AYUSH Mission goals, Ayushman Bharat features).
- f. Logbook / Compilation (2 marks)
 - Record of field visits, awareness drives, or campaign participation.

Total = 25 marks

2. Select any two diseases (e.g., Chikungunya, Dengue, COVID-19, or Fibromyalgia) and explain their basic pathology and clinical features. Describe their Ayurvedic understanding and integrative management strategies. [25 marks x 2 hour]

Assessment Methods

- a. Case-Based Assessment (5 marks)
 - Analyze an integrative management plan.
- b. Theory Case Study (5 marks)
 - Write detailed Ayurvedic & modern perspectives.
- c. Direct Observation of Procedural Skills – DOPS (4 marks)
 - Demonstrate diagnostic or therapeutic steps.
- d. Critical Reading of Papers (3 marks)
 - Review of integrative clinical research on the disease.
- e. Class Presentation (4 marks)
 - Pathology & Ayurveda-based management explanation.
- f. Mini-CEX (4 marks)
 - Short clinical evaluation exercise (history-taking, diagnosis, plan).

Total = 25 marks

Record of Assessment Pattern (Conversion of Practical/Experiential Learning)

• Field Visits / Campaign Exposure → Logbook Compilation • Clinical Examination / Therapy Practice → DOPS & Mini-CEX • Seminars / Presentations → Class Presentation & Case-Based Assessments • Community Role-Play / Simulation → Role Play Assessment • Research Paper Review → Critical Reading Assessment • Written Long Answers / Case Study → Structured Written Assessments • MCQs / Short Quizzes → Quick Recall Assessments						
Semester No : 4						
Module 23 : Advances in kayachikitsa						
Module Learning Objectives (At the end of the module, the students should be able to) 1. Review and analyse the advances in sciences that contribute to Kayachikitsa practice 2. Review and implement the recent advances in kayachikitsa practice 3. Reconstruct/modify Kayachikitsa practices after incorporating advances in sciences 4. Collaborate, design and demonstrate the efficacy of newer Ayurveda protocols/Integrative medicine protocols incorporating the updates 5. Collaborate, design and execute the integrative medicine protocols						
Unit 1 Advances in Kayachikitsa 1. Advances in sciences that contribute to kayachikitsa practice 2. advances in Ayurveda sciences that contribute to kayachikitsa practice 3. Design and develop Ayurveda protocols, assessment tools needed for Kayachikitsa practices 4. Execute the advances in kayachikitsa /Ayurveda protocols, evidence based medicine in Kayachikitsa practices References: 16,18						
3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential	3C Notional learning Hours	3D Lecture/ Practical Training/	3E Domain/ Sub Domain	3F Level (Does/Shows	3G Teaching Learning Methods

	learning) session, the students should be able to)		Experiential Learning		how/Knows how/Know)	
CO1,CO5,C O6,CO8	Describe the advances in kayachikitsa and evidence based Medicine that contributes to kayachikitsa practise.	1	Lecture	CC	Knows-how	FC,L&PPT
CO1,CO4,C O5,CO6,CO 7	Discuss and analyse the advances in kayachikitsa and evidence based Medicine that contributes to kayachikitsa practise.	2	Practical23.1	CAN	Knows-how	JC,DIS
CO1,CO4,C O5,CO6,CO 7	Review and document the advances in kayachikitsa and evidence based Medicine that contributes to kayachikitsa practise.	1	Experiential- Learning23.1	AFT- CHR	Does	FV,DIS
CO1,CO4,C O5,CO6,CO 7	Describe the Chikitsa Sootra (Treatment algorithm), Treatment protocol, Integrative protocols, Shamana Chikitsa, Rasayana Chikitsa and Pathya-Apathya.	1	Lecture	CC	Knows-how	L&PPT ,FC
CO1,CO4,C O5,CO6,CO 7	Discuss and analyse the Chikitsa Sootra (Treatment algorithm), Treatment protocol, Integrative protocols, Shamana Chikitsa, Rasayana Chikitsa and Pathya-Apathya.	1	Practical23.2	PSY- ORG	Shows-how	DIS,JC
CO1,CO4,C O5,CO6,CO 7	Analyse, discuss and present the Chikitsa Sootra (Treatment algorithm), Treatment protocol, Integrative protocols, Shamana Chikitsa, Rasayana Chikitsa and pathya-Apathya.	3	Experiential- Learning23.2	CAN	Knows-how	FV,DIS
CO1,CO4,C O5,CO6,CO 7	Apply the research methods in development of Ayurveda treatment protocols, complementary protocols, severity and efficacy assessment tools, prognostic assessment tools.	1	Lecture	CAP	Knows-how	FC,L&PPT
CO1,CO4,C O5,CO6,CO 7	Analyse, present and discuss the publication related to Ayurveda treatment protocols.	2	Practical23.3	CAN	Knows-how	JC,DIS

CO1,CO4,C O5,CO6,CO 7	Review and analyse to design and develop Ayurveda treatment protocol/ severity assessment tools/ prognostic assessment tools contributing to kayachikitsa practice	3	Experiential-Learning23.3	AFT-CHR	Does	DIS,TBL
CO1,CO4,C O5,CO6,CO 7	Describe and discuss the scope and methods of independent and collaborative research in Kayachikitsa	1	Lecture	CC	Knows-how	L&PPT ,FC
CO1,CO4,C O5,CO6,CO 7	Analyze and discuss on publications related independent and collaborative research in Kayachikitsa.	2	Practical23.4	CAN	Knows-how	DIS,JC
CO1,CO4,C O5,CO6,CO 7	Review and interpret the publications related independent and collaborative research in Kayachikitsa.	3	Experiential-Learning23.4	CS	Does	FV,DIS
CO1,CO4,C O5,CO6,CO 7	Describe the advances in complementary and alternative medicine	1	Lecture	CAN	Knows-how	FC,L&PPT
CO1,CO4,C O5,CO6,CO 7	Analyze and discuss on advances in complementary and alternative medicine	2	Practical23.5	CAN	Knows-how	JC,DIS
CO1,CO4,C O5,CO6,CO 7	Review, interpret and discuss the publications related to advances in complementary and alternative medicine.	3	Experiential-Learning23.5	AFT-CHR	Does	DIS,FV
CO1,CO4,C O5,CO6,CO 7	Analyse the pharmacovigilance in Ayurveda, AyushSuraksha, structure and functioning of AyushSuraksha	1	Lecture	CS	Knows-how	L&PPT ,FC
CO1,CO4,C O5,CO6,CO 7	Demonstrate the hands on experience on identifying, recording, analysing, causality assessment and reporting of adverse events	2	Practical23.6	PSY-MEC	Shows-how	D,DIS

CO1,CO4,C O5,CO6,CO 7	Analyse and interpret different aspects of Pharmacovigilance and Pharmacodynamics relevant to Kayachikitsa	3	Experiential-Learning23.6	PSY-ADT	Does	D,DIS,PT
CO1,CO4,C O5,CO6,CO 7	Apply the advances in the Vajikarana Chikitsa that contributes to Kayachikitsa practise	2	Experiential-Learning23.7	CS	Does	DIS,D

Unit 2 Integrative Medicine

1. Understanding the Principle and practice of Integrative medicine.
2. Comprehending the strengths of different systems of medicine like Ayurveda, yoga, physiotherapy, physical medicine and rehabilitation and conventional medicines in a management of different diseases
3. Development of Integrative medicine protocol comprising of different systems of medicine.
4. Developing strategies to address issues/challenges in executing Integrative medicine protocols
5. Execution of Integrative medicine protocol in different diseases

References: 18

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO4,C O5,CO6,CO 7	Describe the principle and practice of Integrative medicine. Theoretical basis and application of Integrative Medicine	1	Lecture	CC	Knows-how	L&PPT ,FC
CO1,CO4,C O5,CO6,CO 7	Apply the current scientific evidence/publication in the Integrative Medicine protocols	2	Practical23.7	CAP	Knows-how	JC

CO1,CO4,C O5,CO6,CO 7	Council the patients visiting ayurveda hospital - Integrative medicine	3	Experiential-Learning23.8	AFT-CHR	Does	DIS,FV
CO1,CO4,C O5,CO6,CO 7	Describe the strengths and limitation of different systems of medicine like Ayurveda and conventional medicine	1	Lecture	CC	Knows-how	L&PPT ,FC
CO1,CO4,C O5,CO6,CO 7	Analyze the Current scientific evidence/publication/guest lecture planning of the Integrative Medicine protocols.	2	Practical23.8	CAN	Knows-how	JC,DIS
CO1,CO4,C O5,CO6,CO 7	Discuss with experts of Integrative medicine (Ayurveda and Conventional medicine)	3	Experiential-Learning23.9	AFT-CHR	Does	DIS
CO1,CO4,C O5,CO6,CO 7	Describe the strengths and limitation of different systems of medicine like Ayurveda and physiotherapy, physical medicine and rehabilitation	1	Lecture	CC	Knows-how	FC,L&PPT
CO1,CO4,C O5,CO6,CO 7	Analyse and demonstrate the current scientific evidence/publication/guest lecture related to planning of the integrative medicine protocols (Ayurveda and physiotherapy, physical medicine and rehabilitation)	2	Practical23.9	CAN	Knows-how	DIS,JC
CO1,CO4,C O5,CO6,CO 7	Discuss with experts of different fields for integration related to integrative medicine (Ayurveda and physiotherapy, physical medicine and rehabilitation)	3	Experiential-Learning23.10	AFT-CHR	Does	DIS
CO1,CO4,C O5,CO6,CO 7	Describe the strengths and limitation of different systems of medicine like Ayurveda and Yoga	1	Lecture	CC	Knows-how	L&PPT ,FC
CO1,CO4,C O5,CO6,CO 7	Analyze the scientific evidence/publication/guest lecture on planning of the Integrative Medicine protocols (Ayurveda & Yoga)	2	Practical23.10	CAN	Knows-how	DIS,JC

CO1,CO4,C O5,CO6,CO 7	Discuss with experts of different fields for integration on Integrative medicine (Ayurveda and Yoga)	3	Experiential-Learning23.11	AFT-CHR	Does	DIS

Unit 3 Advances in Rasayana, Vajikarana, Manasaroga

1. Advances in the field of Rasayana
2. Advances in the field of Vajikarana
3. Advances in the field of Manasaroga
4. Integrating advances in Rasayana, Vajikarana, Manasaroga components in Kayachikits practice

References: 10,16,17

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO4,C O5,CO6,CO 7	Discuss the advances in the Rasayana Chikitsa that contributes to Kayachikitsa practise	1	Lecture	CAP	Knows-how	FC,L&PPT
CO1,CO4,C O5,CO6,CO 7	Analyze the advances in the Rasayana Chikitsa (publications) that contributes to Kayachikitsa practise	3	Practical23.11	CAN	Knows-how	JC
CO1,CO4,C O5,CO6,CO 7	Apply the advances in the Rasayana Chikitsa that contributes to Kayachikitsa practise.	3	Experiential-Learning23.12	CS	Does	DIS,D
CO1,CO4,C O5,CO6,CO 7	Review and discuss the advances in the Vajikaran chikitsa that contributes to Kayachikitsa	1	Lecture	CAP	Knows-how	FC,L&PPT
CO1,CO4,C O5,CO6,CO 7	Analyse the advances in the Vajikarana Chikitsa (publications) that contributes to Kayachikitsa practise	2	Practical23.12	CAN	Knows-how	JC

CO1,CO4,C O5,CO6,CO 7	Summarise the advances in the Manasaroga Chikitsa that contributes to Kayachikitsa practise	1	Lecture	CC	Knows-how	L&PPT ,FC
CO1,CO4,C O5,CO6,CO 7	Analyse the advances (publications) in the Manasaroga Chikitsa that contributes to Kayachikitsa practise	2	Practical23.13	CAN	Knows-how	DIS,JC
CO1,CO4,C O5,CO6,CO 7	Discuss the advances (in selected diseases) in the Manasaroga Chikitsa that contributes to Kayachikitsa practise	2	Experiential- Learning23.13	CS	Does	DIS,D

Unit 4 Advances in Panchakarma

- 1.Advances in the field of Shodhana chikitsa
2. Advances in the field of Bahiparmiarjana chikitsa
3. Advances in the field of Technology in panchakarma practice
4. Integrating advances in panchakarma components in Kayachikits practise

References: 10

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO4,C O5,CO6,CO 7	Elaborate the advances in Panchakarma procedures, Yogya-Ayogya, precautions, Bhesaja, Matra, Anupana, efficacy, SOPs and adverse events.	1	Lecture	CC	Knows-how	L&PPT ,FC

CO1,CO4,C O5,CO6,CO 7	Analyse the advances (publications) in the Panchakarma Chikitsa that contributes to Kayachikitsa practise	2	Practical23.14	CAN	Knows-how	JC
CO1,CO4,C O5,CO6,CO 7	Analyse the Panchakarma Chikitsa that contributes to Kayachikitsa practise.	2	Experiential- Learning23.14	PSY- MEC	Does	DIS,D
CO1,CO4,C O5,CO6,CO 7	Identify the advances in Panchakarma that contribute to Kayachikitsa practice.	1	Lecture	CC	Knows-how	L&PPT ,FC
CO1,CO4,C O5,CO6,CO 7	AnalySe the advances (publications) in the Panchakarma Chikitsa, that contribute to Kayachikitsa practice.	2	Practical23.15	CAN	Knows-how	JC
CO1,CO4,C O5,CO6,CO 7	Apply the advances in Panchakarma that contribute to Kayachikitsa practice.	2	Experiential- Learning23.15	PSY- MEC	Does	D,DIS

Practical Training Activity

Practical Training 23.1 Group activity/discussion on advances in Kayachikitsa in vyadhi nidana

Instructions for Group Activity/Discussion

1. Instructor will give guidance on accessing research databases (e.g., PubMed, Scopus, Web of Science) to find articles related to advances (Last 5 years) in science, Ayurveda, Kayachikitsa and its integration with modern sciences contributing to Kayachikitsa fundamentals, disease diagnosis, classification, staging, severity assessment, and prognosis. Emphasize selecting peer-reviewed and evidence-based publications. Instructions will be given 2 days prior.
2. Students will download and come with these publications.
3. Instructor will identify the relevant 3 publications.
4. Students will be divided into 3 groups. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
5. **Identifying Key Aspects:** Instruct students to pinpoint how the article discusses or contributes to kayachikitsa fundamentals, disease diagnosis, classification, staging, severity assessment, prognosis
6. **Students needs to summarize** the key points of the article in a brief review. Encourage them to critique the article's relevance to Kayachikitsa practice, considering clinical applicability, evidence support, and practical integration of modern science.

7. **Group Discussion:** Students will do group discussion, where students share their findings, highlighting the integration of science, Ayurveda, and evidence-based medicine in Kayachikitsa practice.
8. **Feedback and Conclusion:** Instructor will Conclude with feedback on students' analyzes and encourage continuous engagement with scientific literature to enhance their understanding of modern and Ayurvedic approaches in Kayachikitsa practice.

Practical Training 23.2 Journal club on advances in chikitsa perspective of Kayachikitsa

Instructions for Group Activity/Discussion

1. Instructor will give guidance on accessing research databases (e.g., PubMed, Scopus, Web of Science) to find articles related to advances in science, Ayurveda, Kayachikitsa and its integration with modern sciences contributing to Kayachikitsa practise like Chikitsa sootra (Treatment algorithim), Treatment protocol, Integrative protocols, Shamana chikitsa, Rasayana chikitsa, pathyapathya. Emphasize selecting peer-reviewed and evidence-based publications. Instructions will be given 2 days prior.
2. Students will download and come with these publications.
3. Instructor will identify the relevant 3 publications.
4. Students will be divided into 3 groups. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
5. Identifying Key Aspects: Instruct students to pinpoint how the article discusses or contributes to kayachikitsa practise like Chikitsa sootra (Treatment algorithim), Treatment protocol, Integrative protocols, Shamana chikitsa, Rasayana chikitsa, pathyapathya:
6. Students needs to summarize the key points of the article in a brief review. Encourage them to critique the article's relevance to Kayachikitsa practice, considering clinical applicability, evidence support, and practical integration of modern science.
7. Group Discussion: Students will do group discussion, where students share their findings, highlighting the integration of science, Ayurveda, and evidence-based medicine in Kayachikitsa practice.
8. Feedback and Conclusion: Instructor will Conclude with feedback on students' analyzes and encourage continuous engagement with scientific literature to enhance their understanding of modern and Ayurvedic approaches in Kayachikitsa practice

Practical Training 23.3 Journal club to critically understand, analyze the publication related to Ayurveda treatment protocols

Instructions for Group Activity/Discussion

1. Instructor will give guidance on accessing research databases (e.g., PubMed, Scopus, Web of Science) to find articles related to Ayurveda treatment protocols, CCRAS disease management protocols, complementary protocols, severity and efficacy assessment tools, Emphasize selecting peer-reviewed and evidence-based publications. Instructions will be given 2 days prior.
2. Students will download and come with these publications.
3. Instructor will identify the relevant 3 publications.
4. Students will be divided into 3 groups. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
5. Identifying Key Aspects: Instruct students to pinpoint how the article discusses Ayurveda treatment protocols, CCRAS disease management protocols, complementary protocols, severity and efficacy assessment tools, prognostic assessment tools
6. Students needs to summarize the key points of the article in a brief review. Encourage them to critique the article's relevance to Kayachikitsa practice, considering clinical applicability, evidence support, and practical integration of modern science.
7. Group Discussion: Students will do group discussion, where students share their findings, highlighting the integration of science, Ayurveda, treatment protocols, severity and efficacy assessment tools, prognostic assessment tools and evidence-based medicine in Kayachikitsa practice.
8. Feedback and Conclusion: Instructor will Conclude with feedback on students' analyzes and encourage continuous engagement with scientific literature to enhance their understanding of modern and Ayurvedic approaches in Kayachikitsa practice.

Practical Training 23.4 Journal club on independent and collaborative research in Kayachikitsa

Instructions for Group Activity/Discussion

1. Instructor will give guidance on accessing research databases (e.g., PubMed, Scopus, Web of Science) to find articles related to independent and collaborative research in Kayachikitsa. Emphasize selecting peer-reviewed and evidence-based publications. Instructions will be given 2 days prior.
2. Students will download and come with these publications.
3. Instructor will identify the relevant 3 publications.
4. Students will be divided into 3 groups. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
5. Identifying Key Aspects: Instruct students to pinpoint how the article Publications related independent or collaborative research in Kayachikitsa. Find out the study design and methods adopted. If collaborative research then state role of collaborator, advantages and challenges related to collaboration, ethical/intellectual issues related to collaboration in repective publication.

6. Students needs to summarize the key points of the article in a brief review. Encourage them to critique the article's study design, methods, role of collaborators, advantages and challenges related to collaboration, ethical/intellectual issues related to collaboration and articles relevance to Kayachikitsa practice, considering clinical applicability, evidence support, and practical integration of modern science.
7. Group Discussion: Students will do group discussion, where students share their findings, highlighting the study design, methods, role of collaborators, advantages and challenges related to collaboration, ethical/intellectual issues related to collaboration
8. Feedback and Conclusion: Instructor will Conclude with feedback on students' analyzes and encourage continuous engagement with scientific literature to enhance their understanding of modern and Ayurvedic approaches in Kayachikitsa practice.

Practical Training 23.5 Group activity / discussion on advances in Complementary and alternative medicine

Instructions for Group Activity/Discussion

1. Instructor will give guidance on accessing research databases (e.g., PubMed, Scopus, Web of Science) to find articles related to Advances in Complementary and alternative medicine, contemporary medicine, sciences, physiotherapy, Yoga, technology, gadgets, devices, Artificial Intelligence, that aids/contribute to principles and practice of Kayachikitsa Emphasize selecting peer-reviewed and evidence-based publications. Instructions will be given 2 days prior.
2. Students will download and come with these publications.
3. Instructor will identify the relevant 3 publications.
4. Students will be divided into 3 groups. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
5. Identifying Key Aspects: Instruct students to pinpoint how the article/Publications related to or contribute to principles and practice of Kayachikitsa through advances in Complementary and alternative medicine, contemporary medicine, sciences, physiotherapy, Yoga, technology, gadgets, devices, Artificial Intelligence independent and identify and analyzes this advances.
6. Students needs to summarize the key points of the article in a brief review. Encourage them to critique the article's contribute to principles and practice of Kayachikitsa through advances in Complementary and alternative medicine, contemporary medicine, sciences, physiotherapy, Yoga, technology, gadgets, devices, Artificial Intelligence independent and articles relevance to Kayachikitsa practice, considering clinical applicability, evidence support, and practical integration of modern science.
7. Group Discussion: Students will do group discussion, where students share their findings, highlighting advances in Complementary and alternative medicine, contemporary medicine, sciences, physiotherapy, Yoga, technology, gadgets, devices, Artificial Intelligence independent

8. Feedback and Conclusion: Instructor will Conclude with feedback on students' analyzes and encourage continuous engagement with scientific literature to enhance their understanding of modern and Ayurvedic approaches in Kayachikitsa practice.

Practical Training 23.6 Hands on experience on identifying, recording, analyzing, causality assessment and reporting of adverse events

Instructions for Group Activity/Discussion

1. Instructor will demonstrate on a patient (With adverse event), components of pharmacovigilance, identifying adverse events, types of adverse events, causality assessment, assessment tools for like Naranjo scale, Ayurveda specific pharmacovigilance components, ADR reporting.
2. Students will be divided into 3 groups. Each group will screen for the pharmacovigilance in the hospital IPD settings. In patients with adverse event they will identifying adverse events, types of adverse events, causality assessment.
3. Details of the Adverse Event: Date, time, description of symptoms, and duration, Suspected Medication, Drug Interactions
4. Assessment tools for like Naranjo scale, WHO-UMC causality assessment, Ayurveda specific pharmacovigilance components, ADR reporting of adverse events with Ayurveda medications and drug- drug, drug-food,
5. One student from each group will present. where students share their findings, highlighting adverse events with Ayurveda medications and drug- drug, drug-food interactions and challenges faced.
6. Group discussion is encouraged and coordinated by instructor.
7. Instructor will summarize and conclude.

Practical Training 23.7 Current scientific evidence/publication in the Integrative Medicine protocols

Instructions for Group Activity/Discussion

1. Instructor will give guidance on accessing research databases (e.g., PubMed, Scopus, Web of Science) to find Current scientific evidence/publication in the Integrative Medicine protocols. Emphasize selecting peer-reviewed and evidence-based publications. Instructions will be given 2 days prior.
2. Students will download and come with these publications.
3. Instructor will identify the relevant 3 publications.
4. Students will be divided into 3 groups. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
5. Identifying Key Aspects: Instruct students to pinpoint how the current scientific evidence/publication related to or contribute to Integrative Medicine protocols, design, different systems of medicine used, strengths identified, challenges faced, reporting.

6. Students needs to summarize the key points of the article in a brief review. Encourage them to critique the article's Integrative Medicine protocols, design, different systems of medicine used, strengths identified, challenges faced, reporting relevance to Kayachikitsa practice, considering clinical applicability, evidence support, and practical integration of modern science.
7. Group Discussion: Students will do group discussion, where students share their findings, highlighting Integrative Medicine protocols, design, different systems of medicine used, strengths identified, challenges faced, reporting.
8. Feedback and Conclusion: Instructor will Conclude with feedback on students analyzes and encourage continuous engagement with scientific literature to enhance their understanding of modern and Ayurvedic approaches in Kayachikitsa practice.

Practical Training 23.8 Comprehend the Current scientific evidence/publication/guest lecture planning of the Integrative Medicine protocols (Ayurveda & Conventional Medicine)

Instructions for Group Activity/Discussion

- **Instructor will give guidance on accessing research databases** (e.g., PubMed, Scopus, Web of Science) to find Current scientific evidence/publication in the Integrative Medicine protocols (Ayurveda & physiotherapy, physical medicine and rehabilitation), Emphasize selecting peer-reviewed and evidence-based publications. Instructions will be given 2 days prior.
- Students will download and come with these publications.
- Instructor will identify the relevant 3 publications.
- Students will be divided into 3 groups. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
- **Identifying Key Aspects:** Instruct students to identify design, strengths, and how the current scientific evidence/publication related to or contribute to Integrative Medicine protocols (Ayurveda & physiotherapy, physical medicine and rehabilitation), design, different systems of medicine used, strengths identified, challenges faced, reporting.
- **Students needs to summarize** the key points of the article in a brief review. Encourage them to critique the article's Integrative Medicine protocols (Ayurveda & physiotherapy, physical medicine and rehabilitation), design, strengths identified, challenges faced, reporting relevance to Kayachikitsa practice, considering clinical applicability, evidence support, and practical integration of modern science.
- **Group Discussion:** Students will do group discussion, where students share their findings, highlighting Integrative Medicine protocols (Ayurveda & physiotherapy, physical medicine and rehabilitation), design, strengths identified, challenges faced, reporting .

- **Feedback and Conclusion:** Instructor will Conclude with feedback on students' analyzes and encourage continuous engagement with scientific literature to enhance their understanding of modern and Ayurvedic approaches in Kayachikitsa practice.

- **Instructions for expert interaction: (if conducted)**
 - Identifying and Inviting guest speaker- Speaker will be invited who is expert in Planning of the Integrative Medicine protocols (Ayurveda & physiotherapy, physical medicine and rehabilitation)
 - Choose the format – Appropriate and reliable method or platform will be finalised (Virtual or Offline)
 - Provide clear agenda and ensure speaker should cover design adopted, methodology, results, strengths identifying, challenges faced, reporting in different diseases in planning of the Integrative Medicine protocols (Ayurveda & physiotherapy, physical medicine and rehabilitation).
 - Question and answer and interaction – Session will run as question and answer, students are encouraged to raise the query regarding planning of the Integrative Medicine protocols (Ayurveda & physiotherapy, physical medicine and rehabilitation).

Practical Training 23.9 Understanding Current Scientific Evidence in Planning Integrative Medicine Protocols: Ayurveda with Physiotherapy and Rehabilitation Sciences

Instructions for Group Activity/Discussion

1. Instructor will give guidance on accessing research databases (e.g., PubMed, Scopus, Web of Science) to find Current scientific evidence/publication in the Integrative Medicine protocols (Ayurveda & physiotherapy, physical medicine and rehabilitation), Emphasize selecting peer-reviewed and evidence-based publications. Instructions will be given 2 days prior.
2. Students will download and come with these publications.
3. Instructor will identify the relevant 3 publications.
4. Students will be divided into 3 groups. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
5. Identifying Key Aspects: Instruct students to identify design, strengths, and how the current scientific evidence/publication related to or contribute to Integrative Medicine protocols (Ayurveda & physiotherapy, physical medicine and rehabilitation), design, different systems of medicine used, strengths identified, challenges faced, reporting.
6. Students needs to summarize the key points of the article in a brief review. Encourage them to critique the article's Integrative Medicine protocols (Ayurveda & physiotherapy, physical medicine and rehabilitation), design, strengths identified, challenges

faced, reporting relevance to Kayachikitsa practice, considering clinical applicability, evidence support, and practical integration of modern science.

7. Group Discussion: Students will do group discussion, where students share their findings, highlighting Integrative Medicine protocols (Ayurveda & physiotherapy, physical medicine and rehabilitation), design, strengths identified, challenges faced, reporting .
8. Feedback and Conclusion: Instructor will Conclude with feedback on students' analyzes and encourage continuous engagement with scientific literature to enhance their understanding of modern and Ayurvedic approaches in Kayachikitsa practice.

Instructions for expert interaction: (if conducted)

1. Identifying and Inviting guest speaker- Speaker will be invited who is expert in Planning of the Integrative Medicine protocols (Ayurveda & physiotherapy, physical medicine and rehabilitation)
2. Choose the format – Appropriate and reliable method or platform will be finalised (Virtual or Offline)
3. Provide clear agenda and ensure speaker should cover design adopted, methodology, results, strengths identifying, challenges faced, reporting in different diseases in planning of the Integrative Medicine protocols (Ayurveda & physiotherapy, physical medicine and rehabilitation).
4. Question and answer and interaction – Session will run as question and answer, students are encouraged to raise the query regarding planning of the Integrative Medicine protocols (Ayurveda & physiotherapy, physical medicine and rehabilitation).

Practical Training 23.10 Scientific evidence/publication/guest lecture on planning of the Integrative Medicine protocols (Ayurveda & Yoga)

Instructions for Group Activity/Discussion

1. Instructor will give guidance on accessing research databases (e.g., PubMed, Scopus, Web of Science) to find Current scientific evidence/publication in the Integrative Medicine protocols (Ayurveda & Yoga), Emphasize selecting peer-reviewed and evidence-based publications. Instructions will be given 2 days prior.
2. Students will download and come with these publications.
3. Instructor will identify the relevant 3 publications.
4. Students will be divided into 3 groups. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion). Encourage students to focus on key aspects like the hypothesis, methodology, and results.

5. Identifying Key Aspects: Instruct students to identify design, strengths, and how the current scientific evidence/publication related to or contribute to Integrative Medicine protocols (Ayurveda & Yoga), design, different systems of medicine used, strengths identified, challenges faced, reporting.
6. Students needs to summarize the key points of the article in a brief review. Encourage them to critique the article's Integrative Medicine protocols (Ayurveda & Yoga), design, strengths identified, challenges faced, reporting relevance to Kayachikitsa practice, considering clinical applicability, evidence support, and practical integration of modern science.
7. Group Discussion: Students will do group discussion, where students share their findings, highlighting Integrative Medicine protocols (Ayurveda & Yoga), design, strengths identified, challenges faced, reporting .
8. Feedback and Conclusion: Instructor will Conclude with feedback on students' analyzes and encourage continuous engagement with scientific literature to enhance their understanding of modern and Ayurvedic approaches in Kayachikitsa practice.

Instructions for expert interaction: (if conducted)

1. Identifying and Inviting expert speaker- Speaker will be invited who is expert in Planning of the Integrative Medicine protocols Ayurveda & Yoga.
2. Choose the format – Appropriate and reliable method or platform will be finalised (Virtual or Offline)
3. Provide clear agenda and ensure speaker should cover design adopted, methodology, results, strengths identifying, challenges faced, reporting in different diseases in planning of the Integrative Medicine protocols (Ayurveda & Yoga).
4. Question and answer and interaction – Session will run as question and answer interactions, students are encouraged to raise the query regarding planning of the Integrative Medicine protocols (Ayurveda & Yoga).

Practical Training 23.11 Advances in the Rasayana chikitsa (publications) that contributes to kayachikitsa practise

Instructions for Group Activity/Discussion

1. Instructor will give guidance on accessing research databases (e.g., PubMed, Scopus, Web of Science) to find publications related to Advances in the Rasayana chikitsa that contributes to kayachikitsa practise. Emphasize selecting peer-reviewed and evidence-based publications. Instructions will be given 2 days prior.
2. Students will download and come with these publications.
3. Instructor will identify the relevant 3 publications.

4. Students will be divided into 3 groups. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
5. Identifying Key Aspects: Instruct students to identify how the publication related to Advances in the Rasayana chikitsa contributes to kayachikitsa practise like kayachikitsa fundamentals, Chikitsa sootra (Treatment algorithm), Treatment protocol, Integrative protocols, Rasayana chikitsa, posology, anupana, pathyapathyadesign.
6. Students needs to summarize the key points of the article in a brief review. Encourage them to critique the article's advances in the Rasayana chikitsa that contributes to kayachikitsa practise like kayachikitsa fundamentals, Chikitsa sootra (Treatment algorithm), Treatment protocol, Integrative protocols, Rasayana chikitsa, posology, anupana, pathyapathya and its relevance to Kayachikitsa practice, considering clinical applicability, evidence support, and practical integration of modern science.
7. Group Discussion: Students will do group discussion, where students share their findings, highlighting advances in the Rasayana chikitsa that contributes to kayachikitsa practise .
8. Feedback and Conclusion: Instructor will Conclude with feedback on students analyzes and encourage continuous engagement with scientific literature to enhance their understanding of modern and Ayurvedic approaches in Kayachikitsa practice.

Practical Training 23.12 Advances in the Vajikarana chikitsa (publications) that contributes to kayachikitsa practise

Instructions for Group Activity/Discussion

1. Instructor will give guidance on accessing research databases (e.g., PubMed, Scopus, Web of Science) to find publications related to Advances in the Vajikarana chikitsa that contributes to kayachikitsa practise. Emphasize selecting peer-reviewed and evidence-based publications. Instructions will be given 2 days prior.
2. Students will download and come with these publications.
3. Instructor will identify the relevant 3 publications.
4. Students will be divided into 3 groups. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
5. Identifying Key Aspects: Instruct students to identify how the publication related to Advances in the Vajikarana chikitsa contributes to kayachikitsa practise like kayachikitsa fundamentals, Chikitsa sootra (Treatment algorithm), Treatment protocol, Integrative protocols, Vajikarana chikitsa, posology, anupana, pathyapathyadesign.
6. Students needs to summarize the key points of the article in a brief review. Encourage them to critique the article's advances in the Vajikarana chikitsa that contributes to kayachikitsa practise like kayachikitsa fundamentals, Chikitsa sootra (Treatment algorithm), Treatment protocol, Integrative protocols, Vajikarana chikitsa, posology, anupana, pathyapathya and its relevance to Kayachikitsa practice, considering clinical applicability, evidence support, and practical integration of modern science.

7. Group Discussion: Students will do group discussion, where students share their findings, highlighting advances in the Vajikarana chikitsa that contributes to kayachikitsa practise .
8. Feedback and Conclusion: Instructor will Conclude with feedback on students' analyzes and encourage continuous engagement with scientific literature to enhance their understanding of modern and Ayurvedic approaches in Kayachikitsa practice.

Practical Training 23.13 Advances (publications) in the manasaroga chikitsa that contributes to kayachikitsa practise

Instructions for Group Activity/Discussion

- **Instructor will give guidance on accessing research databases** (e.g., PubMed, Scopus, Web of Science) to find publications related to Advances in the manasaroga chikitsa that contributes to kayachikitsa practise. Emphasize selecting peer-reviewed and evidence-based publications. Instructions will be given 2 days prior.
- Students will download and come with these publications.
- Instructor will identify the relevant 3 publications.
- Students will be divided into 3 groups. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
- **Identifying Key Aspects:** Instruct students to identify how the publication related to Advances in the manasaroga chikitsa contributes to kayachikitsa practise like kayachikitsa fundamentals, Chikitsa sootra (Treatment algorithm), Treatment protocol, Integrative protocols, Shamana, Rasayana chikitsa, posology, anupana, satwawajaya chikitsa, daivivyapashraya chikitsa, pathyapathya.
- **Students needs to summarize** the key points of the article in a brief review. Encourage them to critique the article's advances in the manasaroga chikitsa that contributes to kayachikitsa practise like kayachikitsa fundamentals, Chikitsa sootra (Treatment algorithm), Treatment protocol, Integrative protocols, Shamana, Rasayana chikitsa, posology, anupana, satwawajaya chikitsa, daivivyapashraya chikitsa, pathyapathya.and its relevance to Kayachikitsa practice, considering clinical applicability, evidence support, and practical integration of modern science.
- **Group Discussion:** Students will do group discussion, where students share their findings, highlighting advances in the manasaroga chikitsa that contributes to kayachikitsa practise .
- **Feedback and Conclusion:** Instructor will Conclude with feedback on students' analyzes and encourage continuous engagement with scientific literature to enhance their understanding of modern and Ayurvedic approaches in Kayachikitsa practice.

Practical Training 23.14 Advances (publications) in the panchakarma chikitsa that contributes to kayachikitsa practise

Instructions for Group Activity/Discussion

1. Instructor will give guidance on accessing research databases (e.g., PubMed, Scopus, Web of Science) to find publications related to Advances in the panchakarma chikitsa that contributes to kayachikitsa practise. Emphasize selecting peer-reviewed and evidence-based publications. Instructions will be given 2 days prior.
2. Students will download and come with these publications.
3. Instructor will identify the relevant 3 publications.
4. Students will be divided into 3 groups. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
5. Identifying Key Aspects: Instruct students to identify how the publication related to Advances in the panchakarma chikitsa contributes to kayachikitsa practise like kayachikitsa fundamentals, Chikitsa sootra (Treatment algorithm), Treatment protocol, Integrative protocols, Shodhana chikitsa, posology, anupana, shamana chikitsa, pathyapathya.
6. Students needs to summarize the key points of the article in a brief review. Encourage them to critique the article's advances in the panchakarma chikitsa that contributes to kayachikitsa practise like kayachikitsa fundamentals, Chikitsa sootra (Treatment algorithm), Treatment protocol, Integrative protocols, Shodhana chikitsa, posology, anupana, shamana chikitsa, pathyapathya .and its relevance to Kayachikitsa practice, considering clinical applicability, evidence support, and practical integration of modern science.
7. Group Discussion: Students will do group discussion, where students share their findings, highlighting advances in the panchakarma chikitsa that contributes to kayachikitsa practise .
8. Feedback and Conclusion: Instructor will Conclude with feedback on students' analyzes and encourage continuous engagement with scientific literature to enhance their understanding of modern and Ayurvedic approaches in Kayachikitsa practice.

Practical Training 23.15 Comprehend tha advances (publications) in the panchakarma chikitsa -Technology, gadgets, equipment, instruments that contribute to kayachikitsa practice

Instructions for Group Activity/Discussion

1. Instructor will give guidance on accessing research databases (e.g., PubMed, Scopus, Web of Science) to find publications related to Advances in the panchakarma chikitsa (Technology, gadgets, equipment, instruments) that contributes to kayachikitsa practise. Emphasize selecting peer-reviewed and evidence-based publications. Instructions will be given 2 days prior.
2. Students will download and come with these publications.
3. Instructor will identify the relevant 3 publications.
4. Students will be divided into 3 groups. Each group will critically analyze the structure of a scientific article (abstract, introduction, methods, results, discussion). Encourage students to focus on key aspects like the hypothesis, methodology, and results.
5. Identifying Key Aspects: Instruct students to identify how the publication related to Advances in the panchakarma chikitsa - Technology, gadgets, equipment, instruments that contribute to kayachikitsa practice.
6. Students needs to summarize the key points of the article in a brief review. Encourage them to critique the article's advances in the the panchakarma chikitsa -Technology, gadgets, equipment, instruments that contribute to kayachikitsa practice .and its relevance to Kayachikitsa practice, considering clinical applicability, evidence support, and practical integration of modern science.
7. Group Discussion: Students will do group discussion, where students share their findings, highlighting advances in the panchakarma chikitsa -Technology, gadgets, equipment, instruments that contributes to kayachikitsa practise .
8. Feedback and Conclusion: Instructor will Conclude with feedback on students' analyzes and encourage continuous engagement with scientific literature to enhance their understanding of modern and Ayurvedic approaches in Kayachikitsa practice.

Experiential Learning Activity

Experiential-Learning Learning 23.1: Expert Interaction: Advances in Science and Ayurveda Enhancing Evidence-Based Kayachikitsa Practice – From Fundamentals to Prognosis

Steps for the Activity:

1. Pre-Activity Preparation:

- Identify Experts and Institutions: Students will Coordinate with instructor to identify experts in the fields of Ayurveda, Kayachikitsa, modern diagnostics, and evidence-based medicine. Experts/institution should have implemented/published advances (diagnostic) in Sciences, Ayurveda, kayachikitsa, Evidence based Medicine that contributes to kayachikitsa practise

like kayachikitsa fundamentals, disease diagnosis, classification, staging, severity assessment, prognosis. These may include Ayurvedic Vaidyas, modern doctors, and clinical researchers.

2. Visit or Interaction with Experts:

- Organize the Visit/ Interaction with the expert in physical or online mode
- Plan a visit to hospitals, Ayurveda centres, or research institutions where you can interact with experts of either Ayurveda and or modern medicine.
- Interaction will cover key areas like disease diagnosis, classification, and prognosis in both Ayurveda and modern medicine.
- Hands-on Learning and Observation on their expertise related to disease diagnosis, classification, and prognosis.
- Case Study: Participate in real or mock case study analysis where diseases are diagnosed, staged, and treated using advances from Ayurvedic and or modern approaches.
- Patient Interaction: Engage with patients undergoing treatments in the centre to learn about their treatment experiences and outcomes.
- Post-Activity Reflection and Assignment: write a Report summarizing the learnings from the visit.
- Strategize a plan to implement the advances/ learnings in the current institute

Experiential-Learning Learning 23.2: Visit or interaction with contributors/experts-Advances in Sciences, Ayurveda, kayachikitsa

Step 1: Pre-Visit Preparation

1. Identify Key Experts/Institutions: Identify Experts and Institutions: Students will Coordinate with instructor to identify experts in the fields of Ayurveda, Kayachikitsa, modern diagnostics, and evidence-based medicine. Experts/institution should have implemented/published advances in Sciences, Ayurveda, kayachikitsa, Evidence based Medicine that contributes to kayachikitsa practise like Chikitsa sootra, integrative treatment protocol combining ayurveda and modern treatments, shaman chikitsa and rasayana therapies. These may include Ayurvedic Vaidyas, modern doctors, and clinical researchers.

Step 2: Visit or Interaction with Experts

1. Organize the Visit/ Interaction with the expert in physical or online mode
2. Plan a visit to hospitals, Ayurveda centres, or research institutions where you can interact with experts of either Ayurveda and or modern medicine.
3. Interaction will cover key areas like Chikitsa sootra, treatment protocol, integrative protocol, shaman chikitsa, rasayana chikitsa and pathyapathya.
4. Hands-on Learning and Observation on their expertise related to patient evaluation, diagnosis, treatment, follow-up.

5. Case Study: Participate in a case study session where a patient's treatment plan is discussed. Focus on how Shamana Chikitsa and Rasayana Chikitsa are applied based on the patient's condition. Evaluate how Pathyapathya is tailored for the individual patient and how it supports the overall treatment protocol.
6. Patient Interaction: Engage with patients undergoing Shamana or Rasayana treatments and learn about their experiences. Understand how integrative protocols are improving their health and wellbeing.
7. Post-Activity Reflection and Assignment: write a Report summarizing the learnings from the visit.
8. Strategize a plan to implement the Shamana and Rasayana Chikitsa in Kayachikitsa practice.

Experiential-Learning Learning 23.3: Design and develop Ayurveda treatment protocol/ severity assessment tools/ prognostic assessment tools contributing to kayachikitsa practice

Step 1: Pre-Activity Preparation

1. Students will go through the various publication related to protocol development, process of development, methods used, reliability, validity measures.

Step 2: Design and Development

1. Students can be divided into 2-3 groups. Different domains can be identified like development of treatment protocol in different diseases, severity assessment tools, prognostic assessment tools.
2. Each group will work on
3. Area Selection: protocol can be developed on disease diagnosis, management, also on clinical assessment tools like severity, prognosis etc.
4. Develop Treatment Protocol: Protocol development process of literature search, identification of experts, interview or survey, using methods like Delphi. Content development, item generation, refining items, grading of items.
5. Simulation of the process of Content validity, reliability. Using various statistical tools like Cronbach's alpha for internal consistency, factor analysis and other relevant methods and analysis needed.
6. One member of each group will present the protocol developed, process, design, methods, statistical tools used, challenges faced.
7. Instructor will summarise and conclude.

Experiential-Learning Learning 23.4: Interact/visit- Experts/authors of publications related independent and collaborative research in Kayachikitsa

Step 1: Pre-interaction preparation

1. Study the basics of research in Ayurveda: Identify key experts or authors known for contribution to Kayachikitsa research. Study their published work to understand their research focus, collaborative efforts and findings. Review key concepts of research methodology, including independent and collaborative research models in Ayurvedic medicine, particularly in Kayachikitsa. Familiarize with evidence-based research methods and Ayurvedic research approaches like Prakriti-based trials, clinical observations and dosha-specific interventions.

Step 2: Visit or Interaction with Experts

1. Organize the Visit/ Interaction with the expert in physical or online mode
2. Plan a visit to hospitals, Ayurveda centres, or research institutions where you can interact with experts of either Ayurveda and or modern medicine.
3. Interaction with the experts will cover key areas like study design, methods, role of collaborators, advantages and challenges related to collaboration, ethical/intellectual issues related to collaboration.
4. Hands-on Learning and Observation on their expertise related to study design, methods, role of collaborators, advantages and challenges related to collaboration, ethical/intellectual issues related to collaboration
5. Case study analysis: Review one or more case studies presented by the expert, focusing on: how the study design was structured, how collaboration influenced the study's outcomes, ethical and intellectual property issues faced during the research process.
6. Post-Activity Reflection and Assignment: write a Report summarizing the learnings.
7. Strategize a plan to implement the collaborative research and its impact in current settings.

Experiential-Learning Learning 23.5: Interact/visit- Experts/authors of publications related advances in Complementary and alternative medicine

Step 1: Pre-Interaction Preparation

1. Identify Relevant Experts and Publications: Research and shortlist experts or authors who specialize in areas like Yoga therapy, physiotherapy, AI in healthcare, or medical devices that can integrate with Kayachikitsa. Review their published work to understand their research focus and how their innovations contribute to the holistic approach of Ayurveda.

Step 2: Hands-On Observation (if applicable)

- Organize the Visit/ Interaction with the expert in physical or online mode

- Plan a visit to healthcare centres where CAM therapies, physiotherapy, Yoga, or modern technology are being integrated into Ayurvedic treatments.
- Interaction will cover key areas like advances in Complementary and alternative medicine, contemporary medicine, sciences, physiotherapy, Yoga, technology, gadgets, devices, Artificial Intelligence, that aids/contribute to principles and practice of Kayachikitsa.
- Hands-on Learning and Observation on their expertise related to application of Yoga or physiotherapy in managing chronic conditions alongside Kayachikitsa treatments, AI applications.
- Observe AI or Technology in Action: Watch how AI systems analyze patient data or assist in Ayurvedic diagnoses. Study how devices and gadgets are used in conjunction with traditional treatment protocols to enhance patient care.
- Post-Activity Reflection and Assignment: write a Report summarizing the learnings from the visit.
- Strategize a plan to implement the use of Yoga, physiotherapy, or technology in Ayurvedic practice.

Experiential-Learning Learning 23.6: Hands on experience on identifying, recording, analysing, causality assessment and reporting of adverse events with Ayurveda medications and drug- drug, drug-food interactions relevant to Kayachikitsa practice

Step 1: Pre-Activity Preparation

1. Students will screen the Hospital IPD for patients with adverse events. At least 3 patients will be identified priorly

Step 2: Hands-On Experience in the Hospital IPD Wards

1. Instructor will demonstrate on a patient (With adverse event), components of pharmacovigilance, identifying adverse events, types of adverse events, causality assessment, assessment tools for like Naranjo scale, Ayurveda specific pharmacovigilance components, ADR reporting.
2. Students will be divided into 3 groups. Each group will screen for the pharmacovigilance in the hospital IPD settings. In patients with adverse event they will identifying adverse events, types of adverse events, causality assessment.
3. Details of the Adverse Event: Date, time, description of symptoms, and duration, Suspected Medication, Drug Interactions
4. Assessment tools for like Naranjo scale, WHO-UMC causality assessment, Ayurveda specific pharmacovigilance components, ADR reporting of adverse events with Ayurveda medications and drug- drug, drug-food,
5. One student from each group will present. where students share their findings, highlighting adverse events with Ayurveda medications and drug- drug, drug-food interactions and challenges faced.
6. Group discussion is encouraged and coordinated by instructor.
7. Instructor will summarize and conclude.

Experiential-Learning Learning 23.7: Interacting with experts/executing advances (in selected diseases)- Advances in the vajikarana chikitsa that contributes to kayachikitsa practise

Step 1: Pre-activity Preparation

1. Identify the experts executing the Advances in the Vajikarana that contributes to kayachikitsa. Visit can also be planned

Step 2: Interacting with Experts

1. Organize the Visit/ Interaction with the expert in physical or online mode
2. Organize the interaction with the expert in physical or online mode. Visit to the expert's hospital can also be planned.
3. Interaction will cover key areas like Advances in the vajikarana chikitsa that contributes to kayachikitsa practise like kayachikitsa fundamentals, Chikitsa sootra (Treatment algorithm), Treatment protocol, Integrative protocols, vajikarana chikitsa, posology, anupana, pathyapathya.
4. Hands-on Learning and Observation on their expertise related to advances in Vajikarana protocols and their integration into the Kayachikitsa framework
5. Patient Interaction: Engage with patients receiving Vajikarana treatments. Ask about their experiences with the treatment and their compliance with dietary and lifestyle recommendations (pathyapathya).
6. Post-Activity Reflection and Assignment: write a report summarizing Key advances in Vajikarana Chikitsa, treatment algorithms, posology, and anupana.
7. Strategize a plan to implement how Vajikarana integrates with other treatments and the role of pathyapathya in enhancing health outcomes

Experiential-Learning Learning 23.8: Interact with experts/survey of patients visiting ayurveda hospital -Integrative medicine

Step 1: Pre-Activity Preparation

1. Survey the hospital/ departments/consultants for the integrative medicine protocol developed, followed. Identify the 2-3 areas of integrative protocols used.

Step 2: Conducting survey in hospital IPD/OPD/interacting with the expert

1. Engage with Healthcare Experts: Conduct face-to-face interviews with healthcare professionals, including Ayurvedic practitioners, integrative medicine specialists, and hospital administrators.

2. Identify the systems used in integration. Basis of integrations, strengths of systems of medicine used in integrations, expert members involved, process of protocol development, implementation, issue faced during execution, modifications of the protocol and the basis behind it.
3. Identify the patients undergoing the integrative protocol, interact with them for the advantages, disadvantage, issues faced etc.
4. Students will present their findings, view points, challenges faced.
5. Discussion will be encouraged by the instructor / or with expert
6. Expert/ Instructor will summarise and conclude

Experiential-Learning Learning 23.9: Interact with experts of Integrative medicine (Ayurveda and Conventional medicine)

Step 1: Pre-Activity Preparation

1. Survey the hospital/ departments/consultants for the integrative medicine protocol (Ayurveda and Conventional medicine) developed, followed. Identify the 2-3 areas of integrative protocols used.

Step 2: Conducting survey in hospital IPD/OPD/interacting with the expert

1. Engage with Healthcare Experts: Conduct face-to-face interviews with healthcare professionals, including Ayurvedic practitioners, integrative medicine specialists, and hospital administrators.
2. Identify the systems used in integration. Basis of integrations, strengths of systems of medicine used in integrations, expert members involved, process of protocol development, implementation, issue faced during execution, modifications of the protocol and the basis behind it.
3. Identify the patients undergoing the integrative protocol, interact with them for the advantages, disadvantage, issues faced etc.
4. Students will present their findings, view points, challenges faced.
5. Discussion will be encouraged by the instructor / or with expert
6. Expert/ Instructor will summarise and conclude
7. Plan and execute an integrative protocol (Ayurveda and Conventional medicine) under supervision of the faculty in the current hospital

Experiential-Learning Learning 23.10: Interact with experts related to Integrative medicine (Ayurveda and physiotherapy, physical medicine and rehabilitation)

Step 1: Pre-Activity Preparation

1. Survey the hospital/ departments/consultants for the integrative medicine protocol (Ayurveda and physiotherapy, physical medicine and rehabilitation) developed, followed. Identify the 2-3 areas of integrative protocols used.

Step 2: Conducting survey in hospital IPD/OPD/interacting with the expert

1. Engage with Healthcare Experts: Conduct face-to-face interviews with healthcare professionals, including Ayurvedic practitioners, integrative medicine specialists, and hospital administrators.
2. Identify the systems used in integration. Basis of integrations, strengths of systems of medicine used in integrations, expert members involved, process of protocol development, implementation, issue faced during execution, modifications of the protocol and the basis behind it.
3. Identify the patients undergoing the integrative protocol, interact with them for the advantages, disadvantage, issues faced etc.
4. Students will present their findings, view points, challenges faced.
5. Discussion will be encouraged by the instructor / or with expert
6. Expert/ Instructor will summarise and conclude
7. Plan and execute an integrative protocol (Ayurveda and Conventional medicine) under supervision of the faculty in the current hospital

Experiential-Learning Learning 23.11: Interacting with experts on Integrative medicine (Ayurveda and Yoga)

Step 1: Pre-Activity Preparation

1. Survey the hospital/ departments/consultants for the integrative medicine protocol (Ayurveda and Yoga) developed, followed. Identify the 2-3 areas of integrative protocols used.

Step 2: Conducting survey in hospital IPD/OPD/interacting with the expert

1. Engage with Healthcare Experts: Conduct face-to-face interviews with healthcare professionals, including Ayurvedic practitioners, integrative medicine specialists, and hospital administrators.
2. Identify the systems used in integration. Basis of integrations, strengths of systems of medicine used in integrations, expert members involved, process of protocol development, implementation, issue faced during execution, modifications of the protocol and the basis behind it.
3. Identify the patients undergoing the integrative protocol, interact with them for the advantages, disadvantage, issues faced etc.
4. Students will present their findings, view points, challenges faced.
5. Discussion will be encouraged by the instructor / or with expert
6. Expert/ Instructor will summarise and conclude

7. Plan and execute an integrative protocol (Ayurveda and Conventional medicine) under supervision of the faculty in the current hospital

Experiential-Learning Learning 23.12: Interact with experts/executing advances (in selected diseases)- Advances in the Rasayana chikitsa that contributes to kayachikitsa practise

Step 1: Pre-activity Preparation

1. Identify the experts executing the Advances in the Rasayana chikitsa that contributes to kayachikitsa. Visit can also be planned

Step 2: Interacting with Experts

1. Organize the interaction with the expert in physical or online mode. Visit to the expert's hospital can also be planned.
2. Interaction will cover key areas like Advances in the Rasayana chikitsa that contributes to kayachikitsa practise like kayachikitsa fundamentals, Chikitsa sootra (Treatment algorithm), Treatment protocol, Integrative protocols, Rasayana chikitsa, posology, anupana, pathyapathya.
3. Hands-on Learning and Observation on their expertise related to advances in Rasayana protocols and how they contribute to improving disease outcomes and patient care
4. Patient Interaction: Engage with patients undergoing treatments with Rasayana therapy. Ask about their experiences with the treatment and their compliance with dietary and lifestyle recommendations (pathyapathya).
5. Post-Activity Reflection and Assignment: write a report summarizing how Rasayana treatments are impacting the patient's overall health, especially in terms of disease progression, immunity, and vitality, integration of Kayachikitsa fundamentals with Rasayana therapy.
6. Strategize a plan to implement how Rasayana therapy is contributing to modern Kayachikitsa practice.

Experiential-Learning Learning 23.13: Interact with experts/executing advances (in selected diseases) in the manasaroga chikitsa that contributes to kayachikitsa practise

Step 1: Pre-activity Preparation

1. Identify Experts and Institutions: Students will Coordinate with instructor to identify experts in the fields of Ayurveda and Manasa roga.

Step 2: Interaction with Experts

1. Organize the Visit/ Interaction with the expert in physical or online mode
2. Plan a visit to hospitals, Ayurveda centres or research institutions where you can interact with Ayurvedic physicians and psychiatrists, and clinical psychologists in hospital IPD/OPD settings to understand the latest advances in treatment protocols for selected diseases.
3. Interaction will cover key areas like Advances in the manasaroga chikitsa that contributes to kayachikitsa practise like kayachikitsa fundamentals, Chikitsa sootra (Treatment algorithm), Treatment protocol, Integrative protocols, Shamana, Rasayana chikitsa, posology, anupana, satwawajaya chikitsa, daivivyapashraya chikitsa, pathyapathya.
4. Hands-on Learning and Observation on their expertise related to how mental health conditions are managed using Ayurvedic approaches in current hospital practice
5. Patient Interaction: Engage with patients undergoing treatment for mental health issues, ask them about their experiences with different therapies (Shamana, Rasayana, Satwawajaya, etc.) and pathyapathya guidelines
6. Post-Activity Reflection and Assignment: write a report summarizing Key advances in Manasaroga Chikitsa and its practical applications. Integration of different treatment protocols and their impact on mental health. Patient experiences and adherence to treatment protocols, including pathyapathya
7. Strategize a plan to implement the role of spiritual therapies and mental resilience techniques in mental health management

Experiential-Learning Learning 23.14: Interact with experts/executing advances (in selected diseases)- panchakarma chikitsa that contributes to kayachikitsa practise

Step 1: Pre-activity Preparation

1. Identify Experts and Institutions: Students will Coordinate with instructor to identify experts in the fields of Ayurveda, panchakarma.

Step 2: Interaction with Experts

1. Organize the Visit/ Interaction with the expert in physical or online mode.
2. Plan a visit to hospitals, Ayurveda centres with panchakarma setups, or research institutions where you can interact with Panchakarma specialists, Ayurvedic physicians, and therapists working in the IPD/OPD and Panchakarma section.
3. Interaction will cover key areas like panchakarma chikitsa that contributes to Kayachikitsa, chikitsa sootra, treatment protocol, Integrative protocols, Shodhana chikitsa, posology, anupana, shamana chikitsa, pathyapathya.
4. Hands-on Learning and Observation on their expertise related to Panchakarma procedures like Vamana, Virechana, Basti, Nasya, and Raktamokshana being performed on patients in the hospital's Panchakarma section
5. Case Study: Participate in real or mock case study analysis where diseases are diagnosed, staged, and treated using Panchakarma therapies.

6. Patient Interaction: Engage with patients undergoing Panchakarma therapies. Ask about their treatment experiences, the effectiveness of the therapies, and their adherence to pathyapathya recommendations.
7. Post-Activity Reflection and Assignment: write a report summarizing recent advances in Panchakarma and their application in Kayachikitsa. Insights from expert interactions regarding Shodhana and Shamana therapies
8. Strategize a plan for integration of Panchakarma with other Ayurvedic therapies. Focus on understanding how advances in Panchakarma are applied in current hospital practice.

Experiential-Learning Learning 23.15: Interacting with experts/executing advances (in selected diseases)- panchakarma chikitsa Technology, gadgets, equipment, instruments that contribute to kayachikitsa practice

Step 1: Pre-activity Preparation

1. **Research Technological Advances:** Conduct a preliminary survey of hospital IPD/panchakarma centres for innovations such as: Modern Basti equipment for precision in enemas. Shirodhara machines for consistent oil flow. Automated Svedana (steam therapy) devices for controlled heat application. Newer tools for Nasya and Raktamokshana (bloodletting).

Step 2: Interaction with Experts

1. Organize the Visit/ Interaction with the expert in physical or online mode
2. Plan a visit to hospitals, Ayurveda centres with panchakarma setups, or research institutions where you can interact with Panchakarma specialists, Ayurvedic physicians, and therapists working in the IPD/OPD and Panchakarma section.
3. Interaction will cover key areas like panchakarma chikitsa Technology, gadgets, equipment, instruments that contribute to kayachikitsa practice.
4. Hands-on Learning and Observation on their expertise related to demonstrations on the proper use and maintenance of Panchakarma devices under expert supervision
5. Case Study: Participate in real or mock case study analysis where diseases are diagnosed, staged, and treated using Panchakarma therapies.
6. Patient Interaction: Engage with patients undergoing treatment using advanced Panchakarma equipment to understand their experiences, the comfort level with modern technology, and any noticeable differences in treatment outcomes.
7. Post-Activity Reflection and Assignment: write a report summarizing Key technological advancements in Panchakarma, observations from clinical practice on the use of modern gadgets and equipment
8. Strategize a plan for future improvements in integrating technology with traditional Panchakarma practices.

Modular Assessment

Assessment

Hour

Instructions: Conduct a structured modular assessment. The assessment will be for 75 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.

Outcome Based Assessment: 03 credits x 06 hours x 75 marks

1. Critically evaluate the role of recent innovations in Rasayana, Panchakarma, and Satwavajaya chikitsa in reshaping treatment protocols for chronic and lifestyle disorders – 25 marks.

Assessment Method:

- a. A case-based assessment will be used to apply recent innovations to chronic and lifestyle disease scenarios (05 marks).
- b. Critical reading of research papers will evaluate the evidence base for Rasayana, Panchakarma, and Satwavajaya chikitsa in chronic care (04 marks).
- c. A theory case study will assess the evolution of integrative treatment protocols (05 marks).
- d. Mini-CEX will test planning and decision-making in designing updated treatment protocols (04 marks).
- e. A class presentation will evaluate explanation of modified chikitsa sootra based on advancements (03 marks).
- f. DOPS will assess the ability to demonstrate relevant Panchakarma procedures (04 marks).

Total: 25 marks.

2. Develop an integrative Ayurvedic treatment plan for a chronic disorder by incorporating classical treatment protocols along with recent advancements in Rasayana therapy, Pathya-Apathya, and Panchakarma – 25 marks.

Assessment Method:

- a. A case-based assessment will evaluate formulation of an individualized integrative treatment plan (05 marks).
- b. A theory case study will require documentation and justification of protocol components (05 marks).
- c. Mini-CEX will assess clinical decision-making for integrative care (04 marks).
- d. A class presentation will test the ability to present updated Ayurvedic management approaches (03 marks).
- e. DOPS will evaluate demonstration of Panchakarma procedures relevant to the case (04 marks).

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f. A logbook or compilation will record the implementation steps and rationale of the plan (04 marks).

Total: 25 marks.

3. Explain a collaborative clinical scenario involving integrative medicine, and discuss key aspects such as safety, use of technology, interdisciplinary coordination, and standardization of such models in Kayachikitsa practice – 25 marks.

Assessment Method:

1. A scenario-based assessment will simulate collaborative clinical situations (05 marks).
2. A class presentation will highlight safety aspects, technology integration, and interdisciplinary coordination (04 marks).
3. Critical reading of papers will evaluate published integrative care models (04 marks).
4. A theory case study will involve writing a detailed interdisciplinary care narrative (04 marks).
5. A practical role play will demonstrate team-based patient management (04 marks).
6. A logbook or compilation will record key observations from integrative clinical setups (04 marks).

Total: 25 marks.

Record of Assessment Pattern

- Field visits or clinical exposure are recorded through logbook compilations.
- Practical demonstrations and therapy practice are assessed through DOPS and Mini-CEX.
- Seminars and discussions are evaluated through class presentations and case-based assessments.
- Community role-plays or simulations are assessed through scenario-based and role-play methods.
- Research evidence appraisal is assessed through critical reading of papers.
- Written knowledge and protocol justification are assessed through theory case studies and structured answers.

Or

Any practical in converted form can be taken for assessment. (40 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (35 marks)

Semester No : 5

Module 24 : Jaraja Vyadhi (Geriatric medicine)

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Discuss and apply the Geriatric care through Ayurveda
2. Assess and manage jaraja diseases according to different srotas and their comprehensive management
3. Assess and apply the palliative care principles and practises in Kayachikitsa practise

Unit 1 Jaraja Vyadhi

1. Knowledge of Geriatric Care
2. Ayurveda Biology of Aging and Geriatrics
3. Understanding of jaraja diseases according to different srotas and their comprehensive management
4. Panchakarma Procedures and Shamana Chikitsa in Context of Jara in various diseases
5. Optimizing Care and Pain Management through Ayurvedic Approaches
6. Knowledge and application of palliative care in Kayachikitsa practises

References: 16,17,38,39,44

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO3,CO4,CO5	Describe geriatric care	1	Lecture	CS	Knows-how	L&GD,FC,L&PPT
CO2,CO4	Demonstrate the basic physical examinations, assessments in geriatric care	2	Practical24.1	PSY-MEC	Shows-how	D-BED,CBL
CO1,CO4	Perform physical examination and assessment of geriatric patients	3	Experiential-Learning24.1	PSY-ADT	Does	FV,RLE,PL

CO1,CO4,C O5	Discuss the management of Annavaha srotas vikara in jara	1	Lecture	CS	Knows-how	FC,L&PPT
CO1,CO4,C O5	Demonstrate the assessment and management of Annavaha srotas vikara in Jara	2	Practical24.2	PSY- MEC	Shows-how	CBL,D-BED
CO1,CO4,C O5	Perform the assessment and management of Annavaha srotas vikara in Jara	3	Experiential- Learning24.2	PSY- ADT	Does	D-BED,PAL
CO1,CO4,C O5	Describe the assessment and management of Vatavyadhi (Neurological disorders) in Jara.	1	Lecture	CS	Knows-how	FC,L&PPT
CO1,CO4,C O5	Demonstrate the assessment and management of Vatavyadhi (Neurological disorders) vikara in Jara.	2	Practical24.3	PSY- MEC	Shows-how	CBL,D-BED
CO1,CO4,C O5	Perform the assessment and management of Vatavyadhi (Neurological disorders) in Jara	3	Experiential- Learning24.3	PSY- ADT	Does	D-BED,CBL
CO1,CO4,C O5	Describe the assessment and management of Vatavyadhi (Musculoskeletal disorders) in Jara	1	Lecture	CS	Knows-how	FC,L&PPT
CO1,CO4,C O5	Demonstrate the assessment and management of Vatavyadhi (Musculoskeletal disorders) in Jara	2	Practical24.4	PSY- MEC	Shows-how	D-BED,CBL
CO1,CO4,C O5	Perform the assessment and management of Vatavyadhi (Musculoskeletal disorders) in Jara	3	Experiential- Learning24.4	PSY- ADT	Does	D-BED,CBL
CO1,CO4,C O5	Describe the assessment and management of mano vyadhi (Mental health and Psychiatric disorders) in Jara	1	Lecture	CS	Knows-how	L&PPT ,FC
CO1,CO4,C O5	Demonstrate the assessment and management of mano vyadhi (Mental health and Psychiatric disorders)	2	Practical24.5	PSY- MEC	Shows-how	D-BED,CBL
CO1,CO4,C O5	Perform the assessment and management of mano vyadhi (Mental health and Psychiatric disorders)	3	Experiential- Learning24.5	PSY- ADT	Does	D-BED,PAL

CO1,CO4,C O5	Describe the assessment and management of Arbuda in Jara	1	Lecture	CS	Knows-how	FC,L&PPT
CO1,CO4,C O5	Demonstrate the assessment and management of Arbuda in Jara	2	Practical24.6	PSY- MEC	Shows-how	CBL,D-BED
CO1,CO4,C O5	Perform the assessment and management of Arbuda in Jara	3	Experiential- Learning24.6	PSY- ADT	Does	PAL,D-BED
CO1,CO4,C O5	Describe the assessment and management of Raktavaha sroto vikara in Jara	1	Lecture	CS	Knows-how	FC,L&PPT
CO1,CO4,C O5	Demonstrate the assessment and management of Raktavaha sroto vikara in Jara	2	Practical24.7	PSY- MEC	Shows-how	CBL,D-BED
CO1,CO4,C O5	Perform the assessment and management of Raktavaha sroto vikara in Jara	3	Experiential- Learning24.7	PSY- ADT	Does	CBL,D-BED
CO1,CO4,C O5	Describe the assessment and management of Medovaha sroto vikara in Jara	1	Lecture	CS	Knows-how	L&PPT ,FC
CO1,CO4,C O5	Demonstrate the assessment and management of Medovaha sroto vikara in Jara.	2	Practical24.8	PSY- MEC	Shows-how	D-BED,CBL
CO1,CO4,C O5	Perform the assessment and management of Medovaha sroto vikara in Jara	3	Experiential- Learning24.8	PSY- ADT	Does	D-BED,CBL
CO1,CO4,C O5	Interpret the assessment and management of Purishavaha sroto vikara in Jara	1	Lecture	CS	Knows-how	L&PPT ,FC
CO1,CO4,C O5	Demonstrate the assessment and management of Purishavaha sroto vikara in Jara	2	Practical24.9	PSY- MEC	Shows-how	D-BED,CBL
CO1,CO4,C O5	Describe the overview of palliative medicine	1	Lecture	CS	Knows-how	FC,L&PPT
CO1,CO4	Demonstrate the application of palliative care tools in Jara chikitsa	2	Practical24.10	PSY- MEC	Shows-how	D-BED,CBL
CO1,CO4	Perform the application of palliative care tools in Jara chikitsa.	2	Experiential- Learning24.9	PSY- ADT	Does	D-BED,CBL

Practical Training Activity

Practical Training 24.1 Physical examinations and assessments in geriatric care

1. Teacher will demonstrate of the Case taking in geriatric condition, symptoms, history taking, general assessments, special assessments in geriatric care. Familiarize students with common issues in geriatrics, including cognitive decline, functional limitations, and chronic illnesses. Discuss common challenges in assessing elderly patients, such as sensory impairments and communication difficulties.
2. Students in divided into 2-3 groups on the basis different systemic illness
3. Students will thoroughly take history, do general physical examination, and do the special assessments like
4. Cognitive assessment- Mini-Mental State Examination (MMSE), Montreal Cognitive Assessment (MoCA),
5. Assessing Mood and Depression. Assessing Geriatric Depression Scale (GDS) Cornell Scale for Depression in Dementia
6. Students will do the Functional Assessments to evaluate activities of daily living (ADLs) and instrumental activities of daily living (IADLs). Katz Index of Independence in Activities of Daily Living, Lawton Instrumental Activities of Daily Living Scale (IADL)
7. Students will assess the mobility, balance, and fall risk etc through Timed Up and Go (TUG) Test
8. Students will work on Communication Skills needed in Geriatric Care like Active Listening, Empathy, and maintaining eye contact during communication, Teach-Back Method (For example, after explaining medication instructions, ask the patient to repeat the information in their own words)
9. one member of each group will present. Discuss the challenges encountered during the assessments.
10. Group discussion will be coordinated by instructor.
11. Instructor will summarize key points and conclude.

Practical Training 24.2 Assessment and management of Annavaha srotas vikara in Jara

1. Teacher will demonstrate the special considerations needed for assessment of annavaha sroto vikara in geriatric patients like history taking, examination, special assessments, investigations, treatment protocol, shodhana, shamana.
2. Scholars will be divided into 2-3 groups. And work on patients with different diseases related to annavaha srotas
3. Scholars in group will perform a complete gastrointestinal assessment on a simulated or real geriatric patient, focusing on Annavaha Srotas (digestive system) examination.
4. Group of students will perform Prakriti and Vikriti Assessment, Agni Pariksha, Tongue Examination, examine the tongue for signs of Ama (white coating) and check for digestive sluggishness, Stool Examination: Ask about the frequency, consistency, and colour of the stool and match findings to Vata, Pitta, or Kapha imbalances.
5. Student will do General Gastrointestinal Examination
6. Plan comprehensive management including treatment protocols, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daiviyapashraya chikitsa, pathayapahtya
7. Further one student from each group will present and discuss among groups

8. Teacher will give feedback on assessment and interpretation and summarize key points.

Practical Training 24.3 Assessment and management of Vatavyadhi (Neurological disorders) vikara in Jara.

1. Teacher will demonstrate to students for conducting the assessment in patients of Vatavyadhi (Neurological disorders, Mobility disorders) and Managements.
2. Scholars will divide into 3 groups in accordance to various disease.
3. Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, electrophysiological tests, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya.
4. Students will do hands on training on Panchakarma procedures for Vatavyadhi in Geriatric Patients Perform modified Panchakarma procedures like Basti, Nasya, and Virechana, Shamana Therapy and all treatment modalities, Discuss the challenges encountered during the assessments.
5. Further one student from each group will present and discuss among groups
6. Group discussion will be made on case taking, treatment protocol, prognosis and related procedures
7. Teacher will summarize and conclude key takeaways from the session.

Practical Training 24.4 Assessment and management of Vatavyadhi (Musculoskeletal disorders) in Jara

1. Teacher will demonstrate to students for conducting the assessment in patients of Vatavyadhi (Musculoskeletal disorders) and Managements.
2. Scholars will divide into 3 groups in accordance to various disease.
3. Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya.
4. Students will do hands on training on Panchakarma procedures for Vatavyadhi in Geriatric Patients Perform modified Panchakarma procedures like Basti, Nasya, and Virechana, Shamana Therapy and all treatment modalities, Discuss the challenges encountered during the assessments.
5. Further one student from each group will present and discuss among groups
6. Group discussion will be made on case taking, treatment protocol, prognosis and related procedures
7. Teacher will summarize and conclude key takeaways from the session.

Practical Training 24.5 Assessment and management of mano vyadhi (Mental health and Psychiatric disorders)

Demonstration of the case by teacher in hospital IPD/OPD. Instructor will demonstrate to students for conducting the assessment in patients of mano vyadhi (Mental health and Psychiatric disorders) and Managements.

1.

1. Divide the scholars into group on the basis patients with different psychiatric disorders
2. Scholars will do assessment and demonstrate examination related to Mano Vyadhi. Demonstrate about specific geriatric assessments- Conduct a Mini-Mental State Examination (MMSE) or Montreal Cognitive Assessment (MoCA) to assess cognitive function.
3. Scholars will plan comprehensive management including treatment protocols, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahtya
4. Scholars will do hands on training on panchakarma procedures like Shirodhara, Shiro-talam, shiro-pichu, lepa, nasya, Dhupana etc like procedure.
5. Further one student from group will present the and discuss among groups.
6. Group discussion will be made on case taking, treatment protocol, prognosis and related procedures.
7. Teacher will give feedback on assessment, summarize and conclude key takeaways from the session.

Practical Training 24.6 Assessment and managment of Arbuda in Jara

Demonstration of the case by teacher in hospital IPD/OPD. Teacher will demonstrate to students for conducting the assessment in patients of Arbuda (Cancer) and Managements.

1. Divide the scholars into group on the basis patients with different psychiatric disorders
2. Scholars will conduct and demonstrate examination related to Concern Disease. Investigations like blood examination, tumour markers, markers for different cancers, biopsy and histopathological reports, radiological investigations.
3. Scholars will plan treatment protocols, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapathy
4. Scholars will do hands on training on various panchakarma procedures like basti, lepa, parisheka etc
5. A scholar from each group will present, discuss the examination done, Pathogenesis, Treatment protocol.
6. Teacher will facilitate discussion on the different approaches taken by groups and any challenges encountered.
7. Teacher will give feedback on assessment, summarize and conclude key takeaways from the session.

Practical Training 24.7 Assessment and managment of Raktavaha sroto vikara in Jara

Demonstration of the case by teacher in hospital IPD/OPD. Instructor will demonstrate to students for conducting the assessment in patients of Rakta vaha (vascular diseases) and Managements.

1. Divide the scholar into group on the basis patients with different psychiatric disorders
2. Scholars will conduct and demonstrate examination related to Concern Disease like peripheral vascular examinations, homan's sign test, etc. Investigations like doppler test, blood examination, tumour markers, markers for different cancers, biopsy and histopathological reports, radiological investigations.
3. Scholars will plan treatment protocols, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahty
4. Scholars will do hands on training on various panchakarma procedures like basti, lepa, parisheka etc
5. A scholar from each group will present, discuss the examination done, Pathogenesis, Treatment protocol.
6. Facilitate a discussion on the different approaches taken by groups and any challenges encountered.
7. Teacher will give feedback on assessment, summarize and conclude key takeaways from the session.

Practical Training 24.8 Assessment and managment of Medovaha sroto vikara in Jara.

Demonstration of the case by teacher in hospital IPD/OPD. Instructor will demonstrate to students for conducting the assessment in patients of Meda vaha and Managements.

1. Divide the scholars into group on the basis patients with different psychiatric disorders
2. Scholars will conduct and demonstrate examination related to Concern Disease, Investigations like anthropometric assessments, lipid profile, appropriate hormonal assessments, blood examination, radiological investigations.
3. Scholars will plan treatment protocols, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahty
4. Scholars will do hands on training on various panchakarma procedures like udwartana, basti, lepa, parisheka etc
5. A scholar from each group will present, discuss the examination done, Pathogenesis, Treatment protocol.
6. Facilitate a discussion on the different approaches taken by groups and any challenges encountered.
7. Teacher will give feedback on assessment, summarize and conclude key takeaways from the session.

Practical Training 24.9 Assessment and managment of Purishavaha sroto vikara in Jara

Demonstration of the case by teacher in hospital IPD/OPD. Teacher will demonstrate to students for conducting the assessment in patients of Purisha vaha and Managements.

1. Divide the scholars into groups on the basis patients with different psychiatric disorders
2. Scholars will conduct and demonstrate examination related to Concern Disease, Investigations like rectal examination, barium enema, endoscopy, blood examination, biopsies, radiological investigations.
3. Scholars will plan treatment protocols, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapahty
4. Scholars will do hands on training on various panchakarma procedures like basti, lepa, parisheka etc
5. A scholar from each group will present, discuss the examination done, Pathogenesis, Treatment protocol.
6. Facilitate a discussion on the different approaches taken by groups and any challenges encountered.
7. Teacher will give feedback on assessment, summarize and conclude key takeaways from the session.

Practical Training 24.10 Application of palliative care tools in Jara chikitsa

1. Demonstration of case by Teacher in OPD/IPD settings on application of palliative care in geriatric patients.
2. Scholars will be divided into 3 groups on the basis different palliative care techniques applicable to different diseases.
3. Scholars will do geriatric assessment
4. Demonstrate standardized tools to evaluate symptoms and quality of life, Palliative Care Outcome Scale (POS etc)
5. Scholars will plan palliative care techniques
6. Scholars will demonstrate/hands on training various Rehabilitation Techniques to the groups.
7. A scholar from each group will present, discuss the examination done, Pathogenesis, Treatment protocol.
8. Facilitate a discussion on the different approaches taken by groups and any challenges encountered.
9. Teacher will give feedback on assessment, summarize and conclude key takeaways from the session.

Experiential Learning Activity

Experiential-Learning Learning 24.1: Physical examination and assessment of geriatric patients and old age home visit

1. Scholars are divided into 2-3 groups on the basis different systemic illness either in hospital or in old age homes.
2. Students will thoroughly take history, do general physical examination, and do the special assessments like
3. Cognitive assessment- Mini-Mental State Examination (MMSE), Montreal Cognitive Assessment (MoCA),
4. Assessing Mood and Depression. Assessing Geriatric Depression Scale (GDS) Cornell Scale for Depression in Dementia
5. Students will do the Functional Assessments to evaluate activities of daily living (ADLs) and instrumental activities of daily living (IADLs). Katz Index of Independence in Activities of Daily Living, Lawton Instrumental Activities of Daily Living Scale (IADL)
6. Students will assess the mobility, balance, and fall risk etc through Timed Up and Go (TUG) Test

7. Students will work on Communication Skills needed in Geriatric Care like Active Listening, Empathy, and maintaining eye contact during communication, Teach-Back Method (For example, after explaining medication instructions, ask the patient to repeat the information in their own words)
8. one member of each group will present. Discuss the challenges encountered during the assessments.
9. Group discussion will be coordinated by instructor.
10. Teacher will summarize key points and conclude.

Experiential-Learning Learning 24.2: Assessment and management of Annavaha srotas vikara in Jara

1. Scholars will be divided into 2-3 groups on the basis of different annavaha sroto vikara.
2. Scholars in group will perform a complete gastrointestinal assessment on a simulated or real geriatric patient, focusing on Annavaha Srotas (digestive system) examination.
3. Group of students will perform a thorough history taking, assessments, specific examinations like Murphy's sign, Cullen sign, McBurney's point assessment, and investigations like haematological, radiological and Stool Examination.
4. Students will plan management including treatment protocols, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhashajala), rasayana, nutritional advice, satwajaya, daiviyapashraya chikitsa, pathayapahtya.
5. Student will demonstrate panchakarma procedures like Vamana, Virechana, basti, lepa etc, and techniques of satwajaya chikitsa.
6. Further one student from each group will present, viewpoints and challenges
7. Teacher will coordinate group discussion
8. Teacher will give feedback on assessment and interpretation and summarize key points.

Experiential-Learning Learning 24.3: Performance of assessment and management of Vatavyadhi (Neurological disorders) in Jara

1. Scholars will be divided into 3 groups in accordance to various disease of Vatavyadhi (Neurological disorders)
2. Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, electrophysiological tests, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhashajala), rasayana, nutritional advice, satwajaya, daiviyapashraya chikitsa, pathayapahtya.
3. Students will do hands on training/demonstrate on Panchakarma procedures for Vatavyadhi in Geriatric Patients Perform modified Panchakarma procedures like Basti, Nasya, and Virechana, Shamana Therapy and all treatment modalities, Discuss the challenges encountered during the assessments.
4. Further one student from each group will present and discuss among groups
5. Group discussion will be made on case taking, treatment protocol, prognosis and related procedures

6. Teacher will summarize and conclude key takeaways from the session.

Experiential-Learning Learning 24.4: Performance of assessment and management of Vatavyadhi (Musculoskeletal disorders) in Jara

1. Scholars will be divided into 3 groups in accordance to various disease of Vatavyadhi (Musculo skeletal and Mobility disorders)
2. Scholars will do assessment includes history taking, physical examinations, investigations, radiological investigations, electrophysiological tests, diagnosis, pathogenesis, discussion, treatment protocol, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daiviyapashraya chikitsa, pathayapahtya.
3. Scholars will do hands on training/demonstrate on Panchakarma procedures for Vatavyadhi in Geriatric Patients Perform modified Panchakarma procedures like Basti, Nasya, and Virechana, Shamana Therapy and all treatment modalities, Discuss the challenges encountered during the assessments.
4. Further one scholar from each group will present and discuss among groups
5. Group discussion will be made on case taking, treatment protocol, prognosis and related procedures
6. Teacher will summarize and conclude key takeaways from the session.

Experiential-Learning Learning 24.5: Performance of assessment and management of mano vyadhi (Mental health and Psychiatric disorders)

1.
 1. Divide the scholars into group on the basis patients with different psychiatric disorders
 2. Scholars will do assessment and demonstrate examination related to Mano Vyadhi. Demonstrate about specific geriatric assessments- Conduct a Mini-Mental State Examination (MMSE) or Montreal Cognitive Assessment (MoCA) to assess cognitive function.
 3. Scholars will plan comprehensive management including treatment protocols, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daiviyapashraya chikitsa, pathayapahtya
 4. Scholars will do hands on training on panchakarma procedures like Shirodhara, Shiro-talam, shiro-pichu, lepa, nasya, Dhupana etc like procedure.
 5. Further one scholar from group will present the and discuss among groups.
 6. Group discussion will be made on case taking, treatment protocol, prognosis and related procedures.
 7. Teacher will give feedback on assessment, summarize and conclude key takeaways from the session.

Experiential-Learning Learning 24.6: Performance of assessment and management of Arbuda in Jara

Teacher will divide the student into 3 group on the basis patients with different psychiatric disorders

1. Scholars will conduct and demonstrate examination related to Concern Disease. Investigations, tumour markers, markers for different cancers, biopsy and histopathological reports, radiological investigations.
2. Scholars will plan treatment protocols, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapathy
3. Scholars will do hands on training on various panchakarma procedures like basti, lepa, parisheka etc
4. A scholar from each group will present, discuss the examination done, Pathogenesis, Treatment protocol.
5. Facilitate a discussion on the different approaches taken by groups and any challenges encountered.
6. Teacher will summarize and conclude key takeaways from the session.

Experiential-Learning Learning 24.7: Performance of assessment and management of Raktavaha sroto vikara in Jara

1. Divide the scholars into group on the basis patients with different psychiatric disorders
2. Scholars will conduct and demonstrate examination related to Concern Disease like peripheral vascular examinations, homan's sign test, etc. Investigations like doppler test, blood examination, tumour markers, markers for different cancers, biopsy and histopathological reports, radiological investigations.
3. Scholars will plan treatment protocols, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapathy
4. Scholars will do hands on training on various panchakarma procedures like basti, lepa, parisheka etc
5. A scholar from each group will present, discuss the examination done, Pathogenesis, Treatment protocol.
6. Facilitate a discussion on the different approaches taken by groups and any challenges encountered.
7. Teacher will give feedback on assessment, summarize and conclude key takeaways from the session.

Experiential-Learning Learning 24.8: Performance of assessment and management of Medovaha sroto vikara in Jara

1. Divide the scholars into group on the basis patients with different psychiatric disorders
2. Scholars will conduct and demonstrate examination related to Concern Disease, Investigations like anthropometric evaluations, concerned endocrinal assessment, blood examination and radiological investigations.
3. Scholars will plan treatment protocols, panchakarma (special modifications needed in procedure, dose, patients with comorbidities), shamana (dose, anupana, bhesaja kala), rasayana, nutritional advise, satwawajaya, daivivyapashraya chikitsa, pathayapathy
4. Scholars will do hands on training on various panchakarma procedures like basti, lepa, parisheka etc

5. A scholar from each group will present, discuss the examination done, Pathogenesis, Treatment protocol.
6. Facilitate a discussion on the different approaches taken by groups and any challenges encountered.
7. Teacher will give feedback on assessment, summarize and conclude key takeaways from the session.

Experiential-Learning Learning 24.9: Performance of application of palliative care tools in Jara chikitsa.

1. Scholars will be divided into 3 groups on the basis different palliative care techniques applicable to different diseases.
2. Scholars will do geriatric assessment
3. Demonstrate standardized tools to evaluate symptoms and quality of life, Palliative Care Outcome Scale (POS etc), communication skills, counselling, end of life care
4. Scholars will plan palliative care techniques
5. Scholars will demonstrate/hands on training various Rehabilitation Techniques to the groups.
6. A scholar from each group will present, discuss the examination done, Pathogenesis, diagnosis and Treatment protocol.
7. Facilitate a discussion on the different approaches taken by groups and any challenges encountered.
8. Teacher will give feedback on assessment, summarize and conclude key takeaways from the session.

Modular Assessment

Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome-Based Assessment: 02 credits x 04 hours x 50 marks • Practical Learning Outcome Assessment: Application of Ayurved Principles in Diagnosis and Management of any one Jaraja disease. [25 marks x 2 hour] Instructions: The instructor shall provide real/ simulated case or case scenario of Jaraja vyadhi to each scholar. The scholars will be instructed to : ○ Analyze the case using Roga-Rogi Pariksha and Nidana Panchaka. ○ Evaluate Samprapti ghataka, determine Roganirnaya and Sadhyasadhyata. ○ Advice and Interpret lab investigations in line with clinical presentation.	4

- Propose a treatment plan incorporating appropriate Shodhana, Shamana, Rasayana, Aushadha, Kriyakramas, palliative care principles and Pathya-Apathya. - Justify chikitsā siddhānta with classical reasoning. Assessment Method: Mini-CEX / OSCE – Rubric-Based Evaluation (Clinical Evaluation [History & Examination]) Investigations (Lab & Radiological), Understanding Samprapti, Sadhyasadyata & Roga Nirnaya, Propose the Chikitsa Plan, Justification with respect to classical reference, Communication & Presentation Skills) - Structured viva (10 marks x 1 hour) - Experiential Learning Outcome Assessment: [15 marks x 1 hour] Eg: What were the most frequent Ayurvedic signs and symptoms you observed in patients with Jaraja Vayadhi ? What part of the clinical reasoning or decision-making process did you find most challenging while dealing with Jaraja rogi? Or Any practical in converted form can be taken for assessment. (25 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (25 marks)	
Module 25 : Atyayika Avastha and Chikitsa -Pranavaha Srotasa and Hridroga (Respiratory and Cardiovascular Emergencies), udaka vaha srotasa, Sanyasa ,Moorcha, Marmabhighata.	
Module Learning Objectives (At the end of the module, the students should be able to) - Describe and discuss the atyayika avastha in diseases of Pranavaha srotasa - Plan and execute the atyayika chikitsa in atyayika avastha of Pranavaha sroto vikara - Describe and discuss the atyayika avastha in diseases of Hrudroga - Plan and implement the atyayika chikitsa in atyayika avastha of Hrudroga - Plan and implement the atyayika chikitsa in Sanyasa ,Moorcha, - Plan and implement the atyayika chikitsa in Marmabhighata and Udaka vaha srotas vikara.	
Unit 1 Basics of Emergency medicine and Atyayika chikitsa - What is Atyaya and Atyayika Chikitsa - Important aspects of Atyayika Chikitsa like Pranarakshana, Oja Rakshana, Agni Rakshana, Indriya Rakshana	

References: 22,23,24,25

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,C O3	Elaborate the understanding of Emergency medicine, critical care and ICU care	1	Lecture	CC	Knows-how	L&PPT ,FC
CO1,CO2,C O3	Observe of ICU Layout, Essential Staff Roles, Equipment/devices/ IT tools, patient care protocols	2	Practical25.1	PSY- MEC	Shows-how	DIS,D
CO1,CO2,C O3	Experiance the ICU Layout, Essential Staff Roles, Equipment/devices/ IT tools, patient care protocols	3	Experiential- Learning25.1	AFT- CHR	Does	D-M,D
CO1,CO2,C O3	Determine the Atyaya and Atyayika Chikitsa	2	Lecture	CS	Knows-how	FC,L&PPT
CO1,CO2,C O3	Demonstration of Pranarakshana, Oja Rakshana, Agni Rakshana, Indriya Rakshana	2	Practical25.2	PSY- MEC	Shows-how	D-BED,CBL
CO1,CO2,C O3	Perform the Prana Rakshana, Oja Rakshana, Agni Rakshana, Indriya Rakshana	3	Experiential- Learning25.2	PSY- ADT	Does	D,CBL
CO1,CO2,C O3	Discuss the lifesaving treatment in patients on the verge of death-Sanyasa and Murcha Chikitsa (including treatment for comatose patients),	1	Lecture	CS	Knows-how	L&PPT ,FC
CO1,CO2,C O3	Demonstrate the life saving treatment in Avastha of Sanyasa and Murccha	2	Practical25.3	PSY- MEC	Shows-how	D,RLE,CBL

Unit 2 ICU care devices, instruments and procedures

1. ICU care devices, instruments and procedures
2. Endotracheal intubation, Cardiopulmonary resuscitation techniques, defibrillator, pulse oximetry, Inhaler therapy, oxygen delivery, nebulization

References: 22,23

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,C O3	Perform the endotracheal intubation and usage of defibrillator	3	Experiential- Learning25.3	PSY- ADT	Does	SIM,D,D-M
CO1,CO2,C O3	Perform the cardiopulmonary resuscitation techniques	3	Experiential- Learning25.4	PSY- ADT	Does	SIM,D,CBL
CO1,CO2,C O3	Describe the understanding of devices like pulse oximetry, Inhaler therapy, oxygen delivery, nebulization	1	Lecture	CAN	Knows-how	FC,L_VC
CO1,CO2,C O3	Demonstrate the usage of devices like pulse oximetry, Inhaler therapy, oxygen delivery, nebulization	2	Practical25.4	PSY- MEC	Shows-how	D,SIM
CO1,CO2,C O3	Describe the understanding of devices like ICU monitors, Respiratory support devices like ventilators, defibrillators	1	Lecture	CAN	Knows-how	FC,L&PPT ,L_VC
CO1,CO2,C O3	Demonstrate the usage of devices like ICU monitors, Respiratory support devices like ventilators, defibrillators	2	Practical25.5	PSY- MEC	Shows-how	SIM,D-M,D

Unit 3 Teevra Shwasa and Hikka Vegavastha Respiratory emergencies- Introduction, approach of respiratory emergency, anaphylaxis, acute severe asthma, exacerbation of chronic obstructive airways disease, acute exacerbations of chronic respiratory disease, pneumonia, pneumothorax, pleural effusions, respiratory failure **References:** 10,22,23

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,C O3	Understand the assessment and management of Teevra Shwasa and Hikka Vegavastha	1	Lecture	CS	Knows-how	FC,L&PPT
CO1,CO2,C O3	Comprehensively understand and plan atyayika chikitsa in Pranavaha sroto vikara like respiratory emergency, anaphylaxis, acute severe asthma, exacerbation of chronic obstructive airways disease, acute exacerbations of chronic respiratory disease.	1	Lecture	CS	Knows-how	L_VC,L&PPT ,FC
CO1,CO2,C O3	Demonstrate the assessment and management of Anaphylaxis	2	Practical25.6	PSY- MEC	Shows-how	SIM,D,D-M
CO1,CO2,C O3	Perform the assessment and management of anaphylaxis	3	Experiential- Learning25.5	PSY- ADT	Does	SIM,D
CO1,CO2,C O3	Demonstration of the assessment and management of emergency in acute severe asthma, exacerbation of chronic obstructive airways disease, acute exacerbations of chronic respiratory disease	2	Practical25.7	PSY- MEC	Shows-how	D-M,SIM,D
CO1,CO2,C O3	Perform the assessment and atyayika chikitsa in Pranavaha sroto vikara like acute severe asthma, exacerbation of chronic obstructive airways disease, acute exacerbations of chronic respiratory disease.	3	Experiential- Learning25.6	PSY- ADT	Does	SIM,D,D-M

CO1,CO2,C O3	Describe atyayika chikitsa in Pranavaha sroto vikara like pneumonia, pneumothorax, pleural effusions, respiratory failure	1	Lecture	CS	Knows-how	L&PPT ,FC
CO1,CO2,C O3	Demonstration of assessment and management of atyayika chikitsa in Pranavaha sroto vikara like pneumonia, pneumothorax, pleural effusions, respiratory failure	2	Practical25.8	PSY- MEC	Shows-how	D-BED,SIM
CO1,CO2,C O3	Perform the assessment and atyayika chikitsa in Pranavahasroto vikara like pneumonia, pneumothorax, pleural effusions, respiratory failure	3	Experiential- Learning25.7	PSY- ADT	Does	CBL,SIM,D

Unit 4 Svatantra and Paratantra Hridroga severe hypertension, acute heart failure, acute coronary syndrome, arrhythmias, thromboembolic disease, cardiac arrest, oxygen therapy-oxygen delivery devices, Adult basic life support training

References: 10,22,23

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,C O3	Describe and plan atyayika chikitsa in Svatantra and Paratantra Hridroga	1	Lecture	CS	Knows-how	L&PPT ,FC
CO1,CO2,C O3	Demonstrate the assessment and management of Svatantra and Paratantra Hridroga including severe hypertension, acute heart failure, acute coronary syndrome	2	Practical25.9	PSY- ORG	Shows-how	D,CBL,SIM
CO1,CO2,C O3	Perform the assessment and atyayika chikitsa in Svatantra and Paratantra Hridroga including severe hypertension, acute heart failure, acute coronary syndrome	3	Experiential- Learning25.8	AFT- CHR	Does	D,SIM

CO1,CO2,C O3	Describe and plan atyayika chikitsa in Svatantra and Paratantra Hridroga including arrhythmias, thromboembolic disease, cardiac arrest	1	Lecture	CS	Knows-how	SIM,FC
CO1,CO2,C O3	Demonstrate the assessment and management of Svatantra and Paratantra Hridroga including arrhythmias, thromboembolic disease, cardiac arrest.	2	Practical25.10	PSY- MEC	Shows-how	CBL,SIM,D-BED
CO1,CO2,C O3	Perform the Adult basic life support training.	3	Experiential- Learning25.9	PSY- ADT	Does	SIM,D
Unit 5 Teevra Jwara Saamajwara Jeernajwara, Jwara with Dhatupaka Jwara with Indriya and Mana Santapa and Vishajanya Jwara, vishama jawara, Sannipatika Jwara Sannipatika Jwara - Pradhana Upadrava References: 10,22,23						
3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,C O3	Describe the management of teevra jwara in conditions due to Saamajwara Jeernajwara, Jwara with Dhatupaka Jwara	1	Lecture	CS	Knows-how	FC,L&PPT
CO1,CO2,C O3	Demonstrate the assessment and management of teevra jwara in conditions due to Saamajwara Jeernajwara, Jwara with Dhatupaka	2	Practical25.11	PSY- ORG	Shows-how	D-BED,SIM
CO1,CO2,C O3	Perform the assessment and management of teevrajwara in conditions due to Saamajwara Jeernajwara, Jwara with Dhatupaka	3	Experiential- Learning25.10	AFT- CHR	Does	SIM,D-M,D
CO1,CO2,C O3	Describe the management of teevra jwara in conditions due to vishama jawara, Sannipatika Jwara	1	Lecture	CS	Knows-how	FC,L&PPT

CO1,CO2,C O3	Demonstrate the assessment and management of teevra jwara in conditions due to vishama jawara, Sannipatika Jwara	2	Practical25.12	PSY- MEC	Shows-how	D,SIM
CO1,CO2,C O3	Perform the assessment and management of teevrajwara in conditions due to vishamajawara, Sannipatika Jwara	3	Experiential- Learning25.11	PSY- ADT	Does	D,SIM,D-M
Unit 6 Marmabhighata Chikitsa Septic shock, cardiogenic shock, Hypovolemic shock and Udakavaha sroto dusthi like electrolyte imbalance – Hyponatremia, Hypernatremia, hypocalcaemia, Hypercalcemia, Hyperkalaemia, Hypokalaemia) and haemorrhagic shock, obstructive (pulmonary embolism, tamponade), anaphylaxis References: 1,22,23						
3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,C O3	Comprehensively understand and plan atyayika chikitsa in Marmabhighata (medical management) including septic shock	1	Lecture	CS	Knows-how	FC,L&PPT
CO1,CO2,C O3	Demonstrate the assessment and management of Marmabhighata Chikitsa (medical management) including septic shock	2	Practical25.13	PSY- MEC	Shows-how	D,SIM
CO1,CO2,C O3	Perform the assessment and management of Marmabhighata Chikitsa (medical management) including septic shock	3	Experiential- Learning25.12	PSY- ADT	Does	D,SIM,D-BED
CO1,CO2,C O3	Demonstrate the assessment and management of Marmabhighata Chikitsa (medical management) including Udakavaha sroto dusthi like Hypovolemic shock and electrolyte imbalance	2	Practical25.14	PSY- MEC	Shows-how	SIM,D-BED,D

CO1,CO2,C O3	Comprehensively understand and plan atyayika chikitsa in Marmabhighata (medical management) including cardiogenic shock	1	Lecture	CS	Knows-how	SIM,FC
CO1,CO2,C O3	Demonstrate the assessment and management of Marmabhighata Chikitsa (medical management) including cardiogenic shock	2	Practical25.15	PSY- MEC	Shows-how	D-BED,SIM,D
CO1,CO2,C O3	Perform the assessment and management of Marmabhighata Chikitsa (medical management) including cardiogenic shock	3	Experiential- Learning25.13	PSY- ADT	Does	D-BED,SIM
Practical Training Activity						
Practical Training 25.1 ICU Layout, Essential Staff Roles, Equipment/devices/ IT tools, patient care protocols						
Video/ Demonstration by teacher on simulator/mannequins/ Student will perform under guidance/ Interaction with the intensivist to get a first hand view/physical tour of 1. ICU Layout- basic layout of the ICU, including patient areas and nursing stations. 2. Essential Staff Roles- Looking into human resources like Medical staff (critical care specialists), Paramedical staff like Nurses, etc (trained in critical care), Support staff (respiratory therapists, etc.).Work schedules of ICU staff 3. Equipment/devices/ IT tools used - Identification of equipment like Ventilators, defibrillators, ECG monitors, etc. Electronic Health Records (EHR), monitoring systems linked to patient beds. Hospital management software's 4. Assessing the patient Care Protocols - Explain how to care for critically ill patients, Monitor vital signs and manage fluids, Demonstration pain management techniques and control infections.						
Practical Training 25.2 Pranarakshana, Oja Rakshana, Agni Rakshana, Indriya Rakshana						
Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance. Teacher will demonstrate assessment of Atyaya and atyaya chikitsa techniques like Pranarakshana, Oja Rakshana, Agni Rakshana, Indriya Rakshana to students. Prana Rakshana: Practical demonstration of life-saving techniques, , including making use of Pottali or other medicines for application on tongue or on gums in case of unconscious patients <i>Nasya</i> (nasal application) with medicated oils or Pradhamana Nasya, Lepa, Udgharshana for unconscious patients or breathing difficulties.						

Oja Rakshana: Use of Abhyantara Aushadha which will increase Oja instantaneously, like Mahalakshmi Vilasa, Sahasraputi Abhraka, Suvarnamalini Vasant. How to apply *Rasayana* therapy to improve vitality during recovery phases of critical conditions (e.g., using *Chyawanprash* or *Ashwagandha*).

Agni Rakshana: Guidance on simple, nourishing diet interventions to preserve *Agni* (digestive fire) during emergencies, such as using *Peya*.Yusha, and specific preparations with additions of Deepana medicines like Ajamoda, Ardraka, Matulunga etc., avoiding Ati Sheeta Ahara Vihara

Indriya Rakshana: Use of of Abhyantara Aushadha which will activate and maintain functions of Indriya like Hemagarbha, Trailokyachintamani, Suvarna Sootashekharā Demonstrating Ayurvedic techniques for activating the senses during shock or trauma, such as *Shirodhara*, *Shiro Pichu*, Pradhamana nasya, and the application of Anjana to eyes.

1. Scholars will be divided into 3 Groups depending on different medical emergency scenarios, they will demonstrate the atyayikachikitsas techniques like Pranarakshana, Oja Rakshana, Agni Rakshana, Indriya Rakshana
2. Hands on training will give to respective groups.
3. Group Discussion :Invite member from each group to discuss the given topic
4. Conclusion and summarization of the given topic by teacher.

Practical Training 25.3 Life saving treatment in Avastha of Sanyasa and Murccha

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance the following techniques to the scholars:

Further scholars will be divided in groups and they will practice the following techniques on the simulator

Demonstration by scholars of assessing the Avastha of Sanyasa and Murccha And Also assessing the comatose scales like Glasgow Coma Scale (GCS), Full Outline of Unresponsiveness Score (FOUR), Coma Recovery Scale Revised (CRS-R), etc

Basic Diagnostic Steps (Nidana): Focus on Nadi Pariksha (pulse diagnosis), Shvasakriccha (dyspnea) and Shiroroga Lakshanas (head injury or consciousness disorders), with demonstrations on detecting weak pulse and shallow breathing.

Sanyasa Chikitsa (Comatose Management): Therapies including making use of Pottali for application on gums , application of medicines in Muhurmuhu kala , use of Arishta Kalpana like Mritasanjeevani, Pradhamana Nasya , Udgharshana, Snehana (oleation), Dhuma Pana (fumigation), and Basti (enema) with practical demonstrations using for e.g Mahanarayan Taila, Anu Taila, etc.

Murcha Chikitsa (Syncope Management): Techniques including making use of Pottali for application on gums , Pradhamana Nasya , Udgharshana Sheeta Jal Sinchan, Dhoompana with Vacha, Nasya with Shadbindu or Anu Taila, and Aushadi Siddha Taila Abhyanga, etc

Integration of Ayurveda intervention with Modern Support: Shodhana and Samshamana therapies alongside modern measures like airway management and oxygen therapy

One scholar from each group will present the findings, view point, challenges et

Group discussion will be coordinated by teacher

Teacher will summarize and conclude

Practical Training 25.4 Pulse oximetry, Inhaler therapy, oxygen delivery, nebulization

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance

Teacher will make the 2-3 groups, Scholars will practice the handling of devices and adopting the technique :

1. Pulse Oximetry: Hands-on training in using pulse oximeters to monitor oxygen saturation and pulse rate. Selecting appropriate site and duration and assessing the fluctuation in SPO₂
2. Inhaler Therapy: Practice correct techniques for administering medication through Metered Dose Inhalers and Dry Powder Inhalers.
3. Oxygen Delivery: Handling different types of Oxygen masks like Nasal O₂, Non Re-Breather Mask (NRBM), Venturi Mask, etc. Learn the use of various oxygen delivery systems, adjusting flow rates and ensuring safety.
4. Nebulization: Set up and administer nebulization therapy with different types of nebulizers like Jet nebulizer, Mesh nebulizer, etc. with care and hygiene.
5. One from each group can explain the procedure adopted and the real case decision planning with the faculty.
6. Group discussion will be coordinated by teacher
7. Instructor will summarize and conclude

Practical Training 25.5 ICU monitors, Respiratory support devices like ventilators, defibrillators

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance. Teacher will make the 2-3 groups, Scholars will practice the handling of devices and adopting the technique :

1. ICU monitors: demonstration of the components like Display screen (ECG, SpO₂, BP, RR, Temp), Cables/leads (ECG electrodes, SpO₂ probe, NIBP cuff, invasive lines), Alarms and controls etc. Hands-on training related to attaching leads, recording readings, changing alarm limits and Interpreting displayed values.
2. Respiratory support devices like ventilators- Demonstration of the components like Display screen (waveforms, numerical data), Control knobs/touch panel (settings), Tubing (inspiratory, expiratory limbs), Humidifier/filters, alarms etc. Hand on practise of Selecting a ventilator mode, set tidal volume, rate, FiO₂, PEEP, read and interpret waveforms, adjust settings for a scenario (e.g., hypoxemia-increase FiO₂/PEEP).
3. Defibrillators- Demonstration of the components like display screen (ECG rhythm), control panel (energy selection, sync mode, charge, shock button), paddles/electrodes, gel pads/defibrillation pads, charging indicator, alarm system etc
4. Hands on practise like setting of power on device, place pads correctly on manikin, select energy level, perform safety checks, deliver simulated shock and resume CPR.
5. One from each group can explain the procedure adopted and the real case decision planning with the faculty.
6. Group discussion will be coordinated by teacher
7. Teacher will summarize and conclude

Practical Training 25.6 Anaphylaxis

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance

1. Respiratory emergency in case of Anaphylaxis: Airway (Patency), Breathing, Respiratory Rate, Breathing Sounds, Oxygen Saturation) Circulation (Cyanosis, Pulse Rate)
2. Assessment through spirometry, arterial blood gas, radiological investigations etc
3. Management of Anaphylaxis : As per the emergency guidelines like IV Infusion, Elective Intubation, Syringe Pump Infusion.
4. Divide students in Groups and make them Demonstrate of treatment procedures (abhyantara chikitsa, including making use of Pottali or other medicines for application on tongue or on gums in case of unconscious patients , application of medicines in Muhurmuhu kala Nasya, bahyasneha, Swedana, Basti poorana, Dhooma/ Aghrapana, Viddha, Agnbikarma)
5. Execution of Treatment Plan on Simulators
6. One from each group can explain the procedure adopted and the real case decision planning with the faculty.
7. Group discussion will be coordinated by teacher
8. Teacher will summarize and conclude

Practical Training 25.7 Assessment and management of emergency in acute severe asthma, exacerbation of chronic obstructive airways disease, acute exacerbations of chronic respiratory disease

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance

1. Divide scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations and perform assessment on Airway, Breathing, Circulation approach as per the disease
3. Assessment through spirometry, arterial blood gas, radiological investigations etc
4. Diagnosing the respiratory emergency like acute severe asthma, exacerbation of chronic obstructive airways disease, acute exacerbations of chronic respiratory disease etc
5. Demonstration of the management as per the emergency guidelines like IV Infusion, Elective Intubation, Bronchodilators, Corticosteroids, Syringe Pump Infusion, etc.
6. Demonstration of treatment procedures by students (abhyantara chikitsa, including making use of Pottali or other medicines for application on tongue or on gums in case of unconscious patients, application of medicines in Muhurmuhu kala ,Nasya, bahyasneha, Swedana, Basti poorana, Dhooma/ Aghrapana, Viddha, Agnbikarma
7. One from each group can explain the procedure adopted and the real case decision planning with the faculty.
8. Group discussion will be coordinated by teacher
9. Teacher will summarize and conclude

Practical Training 25.8 Assessment and management of atyayika chikitsa in Pranavaha srota vikara like pneumonia, pneumothorax, pleural effusions, respiratory failure

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance-

1. Students will conduct case taking, physical examinations and perform assessment on Airway, Breathing, Circulation approach as per following conditions:
2. Assessment through spirometry, arterial blood gas, radiological investigations etc
3. Diagnosing the respiratory emergency like pneumonia, pneumothorax, pleural effusions, respiratory failure (respiratory examination).
4. Planning of treatment protocol by Students like IV Fluid Access, Bronchodilators, Corticosteroids, Ventilator Monitoring, Antibiotics, Thoracocentesis etc.
5. Planning of treatment procedures by Students like abhyantara chikitsa, including making use of Pottali or other medicines for application on tongue or on gums in case of unconscious patients, application of medicines in Muhurmuhu kala Nasya, bahyasneha, Swedana, Basti poorana, Dhooma/ Aghrapana, Viddha, Agnbikarma
6. One from each group can explain the procedure adopted and the real case decision planning with the faculty.

7. Group discussion will be coordinated by teacher
8. Teacher will summarize and conclude

Practical Training 25.9 Assessment and management of Svatantra and Paratantra Hridroga including severe hypertension, acute heart failure, acute coronary syndrome

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance (Svatantra and paratantrahridroga including severe hypertension, acute heart failure, acute coronary syndrome) in ICU unit/Hospital IPD/ simulators

1. Divide scholars into small groups on the basis of different disease
2. Students will conduct case taking, physical examinations, Assessment of hypertension(Signs and Symptoms, BP readings, Category of HTN, ECG findings) acute heart failure(Signs and Symptoms, BP readings ,ECG findings), acute coronary syndrome (Signs and Symptoms, BP readings, Identification of its Classification , ECG findings).
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable,
4. Managing the Treatment protocol like Antihypertensive drug management like ACE inhibitors, Beta Blockers, Calcium Channel Blockers etc. BP monitoring, Input Output Charting, etc. and prognosis.
5. In relation the designed treatment protocol, demonstration of procedure like , including making use of Pottali or other medicines for application on tongue or on gums in case of unconscious patients shiropichu, hridbasti, Yoga and Pranayama procedures under the guidance of instructor by each groups.
6. Invite each student from group to present the case
7. Group discussion will be done on the basis of disease, case taking,assessment, diagnosis, treatment protocol planned, procedures.
8. Conclusion and Summarization of the case by teacher

Practical Training 25.10 Assessment and management of Svatantra and Paratantra Hridroga including arrhythmias, thromboembolic disease, cardiac arrest.

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance - (Svatantra and paratantra hridroga including arrhythmias, thromboembolic disease, cardiac arrest) in ICU unit/Hospital IPD/ simulators

1. Divide students into small groups on the basis of different disease
2. Students will conduct case taking, physical examinations, Assessment of arrhythmias (ECG and Monitor Readings, Rate, Rhythm, Pattern And Its Management) thromboembolic disease(Sign, Symptoms, ECG Findings, Lab Investigation and Management) ,cardiac arrest(Sign and Symptoms, ECG Findings, Lab Investigation and Management).

3. Each group will discuss diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol like Defibrillator, Emergency Drug Administration with its Dosage like Antithrombolytic Agents, Ecosprin, Digoxin etc and prognosis.
4. In relation the designed treatment protocol, demonstration of procedure like shiropichu, hridbasti procedures under the guidance of instructor by each group.
5. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
6. Conclusion and Summarization of the case by teacher

Practical Training 25.11 Assessment and management of teevra jwara in conditions due to Saamajwara Jeernajwara, Jwara with Dhatupaka

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance- Saamajwara, Jeernajwara, Jwara with Dhatupaka, Jwara with Indriya and Mana Santapa VishajanyaJwara)

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of Lakshana of Saamajwara, Assessment of Jeernajwaralakshana, Assessment of Jwara with Dhatupaaka, Assessment of Jwara with indriya and mana santapa, Assessment of Vishajanyajwara and their Vititiating Dosha and Its Avastha through contemporary understanding.
3. Each group will discuss on diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable
4. Each Group will select the Investigations Like CBC, CRP, ESR ,etc.
5. In relation the designed treatment protocol like Abhyantara Jwaraghna Aushadha like Jayamangal Rasa, Lakshminarayan Rasa, Mahajwarankush Rasa, Dhoopana, Basti, Shodhana(Swedana, Lepa,etc), demonstration of procedure and planning for aushadhaprayoga under the guidance of instructor by each groups.
6. Invite each student from group to present the case
7. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
8. Conclusion and Summarization of the case by teacher

Practical Training 25.12 Assessment and management of teevra jwara in conditions due to vishama jawara, Sannipatika Jwara

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance- Vishamajwara, Sannipatikajwara, its pradhanaupadrava

1. Divide scholars into small groups on the basis of different disease

2. scholars will conduct case taking, physical examinations, Assessment of Lakshana of Vishamajwara, Assessment of Sannipatikajwara, Assessment of sannipatikajwara with pradhanaupadrava, and Vititiating Dosha and its Avastha and their contemporary understanding.
3. Each group will discuss on diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. Each Group will select the Investigations Like CBC, CRP, ESR, etc
5. In relation the designed treatment protocol like Abhyantara Jwaraghna Aushadha like Jayamangal Rasa, Lakshminarayan Rasa, Mahajwarankush Rasa, Dhoopana, Basti, Shodhana Basti, Lepa, etc. demonstration of procedure and planning for aushadhaprayoga under the guidance of instructor by each groups.
6. In relation the designed treatment protocol like Antipyretic management like Antipyretic drug with dosage, cold sponging etc.
7. Invite each scholar from group to present the case
8. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
9. Conclusion and Summarization of the case by teacher at the end and give the inputs

Practical Training 25.13 Assessment and management of Marmabhighata Chikitsa (medical management) including septic shock

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance- Marmabhighata and its management including septic shock by the teacher in ICU unit/Hospital Unit/simulators

1. Divide scholars into small groups on the basis of different stages of disease
2. scholars will conduct case taking, physical examinations,
3. Assessment of Septic shock: Symptoms, Severity and SOFA (Sequential Organ Failure Assessment) Score and Assess the Marmabhighata Lakshana
4. Each group will discuss on diagnosis and differential diagnosis, radio-diagnosis of the concerned case if applicable, treatment protocol and prognosis.
5. In relation the designed treatment protocol, demonstration of procedure like IV Antibiotics, Oxygen Therapy, Ventilator Settings, Syringe Pump Infusion emergency management of the disease under the guidance of instructor by each group.
6. In relation the designed treatment protocol like Marmabhighat chikitsa as per Samhita, Abhyantara Aushadha which protect Marma like Mahalakshmvilasa, Siddha Makaradhvaja, Lepa, , Nasya, Agnikarma, Viddhakarma, etc
7. Invite each scholar from group to present the case
8. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.

Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation

Practical Training 25.14 Assessment and management of Marmabhighata Chikitsa (medical management) including Udakavaha sroto dusthi like Hypovolemic shock and electrolyte imbalance

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance- Marmabhighata and its management including udakavahasrotodusthi like hypovolemic shock and electrolyte imbalance by the teacher in ICU unit/Hospital Unit/simulators

1. Divide scholars into small groups on the basis of different stages of disease
2. scholars will conduct case taking, physical examinations,
3. Assessment of Hypovolemic shock (Vitals, Input-Output Charting, Skin Turgor test, etc) assessments of electrolyte imbalance with hyponatremia, hypocalcaemia, hypercalcemia, hyperkalaemia, hypokalaemia' Assessment of hemorrhagic shock
4. Each group will discuss on diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
5. In relation designed treatment protocol, demonstration like IV Fluid infusions, blood transfusions, Fresh Frozen Plasma, And Monitoring Vitals
6. In relation the designed treatment protocol, demonstration of procedure like Abhyantara, shamanachikitsa, Nasya, Dhara, Lepa, Pratisrana, Viddhakarma procedures under the guidance of instructor by each group.
7. Invite each scholar from group to present the case
8. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.

Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation

Practical Training 25.15 Assessment and management of Marmabhighata Chikitsa (medical management) including cardiogenic shock

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance- Marmabhighata and its management including cardiogenic shock, obstructive(pulmonary embolism, tamponade), anaphylaxis

1. Divide scholars into small groups on the basis of different stages of disease
2. Scholars will conduct case taking, physical examinations, Assessment of cardiogenic shock: (Signs and Symptoms, Severity, CSP score), assessments of obstructive pathologies like pulmonary embolism, tamponade (Signs and Symptoms, Severity, ECG Findings, etc), ' Assessment of anaphylaxis.
3. Each group will discuss on diagnosis and differential diagnosis, radio-diagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, demonstration of emergency management of the disease like Oxygen administration, IV Diuretics, Vasoconstrictors with its Dosage And Syringe Pump Infusion Settings, Ventilator Settings

5. In relation the designed treatment protocol, demonstration of procedures like marmaparipalana chikitsa, samgyaprabodhana under the guidance of instructor by each group.
6. Invite each scholar from group to present the case
7. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.

Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation

Experiential Learning Activity

Experiential-Learning Learning 25.1: Performance on Equipment/devices/ IT tools, patient care protocols

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients/ ICU set up. Students will experience/perform

1. ICU Layout- basic layout of the ICU, including patient areas and nursing stations.
2. Essential Staff Roles- Looking into human resources like medical staff (critical care specialists), Paramedical staff like Nurses, etc. (trained in critical care), Support staff (respiratory therapists, etc.). Work schedules of ICU staff
3. Equipment/devices/ IT tools used - Identification of equipment like Ventilators, defibrillators, ECG monitors, etc. Electronic Health Records (EHR), Monitoring systems linked to patient beds. Hospital management software's
4. Assessing the patient care protocols, explain how to care for critically ill patients, monitor vital signs and manage fluids, Demonstration pain management techniques and control infections.
5. Will assist in various functioning of the ICU set up like use of Equipment/devices/ IT tools, monitoring the patient Care Protocols.

Experiential-Learning Learning 25.2: Performance of Prana Rakshana, Oja Rakshana, Agni Rakshana, Indriya Rakshana

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Scholars will be divided in to groups and will be given different scenarios of medical emergency.
2. Scholars will demonstrate assessment of Atyaya and atyaya chikitsa techniques like Pranarakshana, Oja Rakshana, Agni Rakshana, Indriya Rakshana to students.
3. Prana Rakshana: Practical demonstration of life-saving techniques, including making use of Pottali or other medicines for application on tongue or on gums in case of unconscious patients Pradhamana Nasya, Lepa, Udgharshana Nasya (nasal application) with medicated oils for unconscious patients or breathing difficulties.

4. Oja Rakshana: Use of Abhyantara Aushadha which will increase Oja instantaneously, like Mahalakshmvilasa, Sahasraputi Abhraka, Suvarnamalini Vasant. How to apply *Rasayana* therapy to improve vitality during recovery phases of critical conditions (e.g., using *Chyawanprash* or *Ashwagandha*).
5. Agni Rakshana: Guidance on simple, nourishing diet interventions to preserve *Agni* (digestive fire) during emergencies, such as using. Yusha, and specific preparations with additions of Deepana medicines like Ajamoda, Ardraka, Matulunga etc., avoiding Ati Sheeta Ahara Vihara
6. Indriya Rakshana: Use of of Abhyantara Aushadha which will activate and maintain functions of Indriya like Hemagarbha, Trailokyachintamani, Suvarna Sootashekhara Demonstrating Ayurvedic techniques for activating the senses during shock or trauma, such as Pradhamana nasya, *Shirodhara*, *Shiro Pichu*, and the application of Anjana to eyes.
7. Group Discussion : Invite member from each group to discuss the given topic
8. Conclusion and summarization of the given topic by teacher.

Experiential-Learning Learning 25.3: Endotracheal intubation and usage of defibrillator

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

Scholars will be divided in groups and they will assist the following techniques on the Simulator/Patients

Demonstration by students of assessing the Avastha of Sanyasa and Murcha And Also Assesing the comatose scales like Glasgow Coma Scale (GCS), Full Outline of Unresponsiveness Score (FOUR), Coma Recovery Scale Revised (CRS-R), etc

Endotracheal Intubation: Selection of ET Tubes, patient positioning, laryngoscope handling, and intubation techniques using manikins, with focus on tube confirmation methods (auscultation.)

Defibrillator Usage: Demonstration of cardiac arrest management, recognition of shockable rhythms, proper electrode pad placement, energy selection, and safe defibrillation techniques, followed by CPR and rhythm re-assessment.

Simulation Practice & Assessment: Hands-on practice in simulated ICU settings, with real-time feedback and evaluation on procedural accuracy, safety protocols, and effective operation of equipment.

Students will Assisst the instructor, for the techniques like Endotracheal intubation, Defibrillator usage, Simulation practice and assessment.

Groups are made, discussion of the techniques among the groups, individual practice of the techniques on mannequines

- Real life case scenarios given to groups
- Planning for the relatable simulations in a real life case scenario among the group
- Discussion of the case with the specialist
- Teacher will summarise and conclude

Experiential-Learning Learning 25.4: Cardiopulmonary resuscitation techniques

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

Scholars will be divided in teams/groups and they will perform:

- CPR Basics & Technique: Students will learn proper hand placement, compression depth/rate (2-2.4 inches, 100-120/min), and rescue breaths (2 after 30 compressions), including airway management with head-tilt, chin-lift.
- Hands-on Simulation: Practice CPR techniques (single-rescuer/team-based), using an AED, and handling special cases like infants or pregnant women, in ICU and emergency settings.
- Evaluation & Proficiency: Students will be assessed on CPR skills, AED usage, and teamwork coordination to ensure they can perform independently in real-life scenarios.
- Students will Assisst the instructor, for the techniques like Endotracheal intubation, Defibrillator usage, Simulation practice and assessment.
- Groups are made, Discussion of the techniques among the groups, individual practice of the techniques on mannequins
 - Real life case scenarios given to groups
 - Planning for the relatable simulations in a real life case scenario among the group
 - Discussion of the case with the specialist
 - Corrections and Summarization by the Instructor

Experiential-Learning Learning 25.5: Performance of anaphylaxis managment

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

Divide scholars into small groups on the basis of different disease related to Pranavaha srotas.

Scholars will conduct case taking, physical examinations and assessment or management of Respiratory emergency in case of Anaphylaxis : Airway(Patency), Breathing(Respiratory Rate, Breathing Sounds, Oxygen Saturation) Circulation (Cynosis, Pulse Rate).

And management of Anaphylaxis : As per the emergency guidelines like as per the emergency guidelines like IV Infusion, Elective Intubation, Syringe Pump Infusion, etc.

Each group will discuss on diagnosis and differential diagnosis, radiodiagnosis of the concerned case/ scenario, treatment protocol and prognosis.

In relation the designed treatment protocol, demonstration of procedure like Abhyantara Chikitsa, Nasya, Bahya Snehana, Swedana, Basti, Nabhi Poorana, Dhooma/ Aghrapana , Viddha , Agnikarma

Students can assist in the various procedures being followed in the ICU settings.

Invite each student from group to present the case

Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.

Conclusion and Summarization of the case by teacher

Experiential-Learning Learning 25.6: Performance of the assessment and atyayika chikitsa in Pranavaha sroto vikara like acute severe asthma, exacerbation of chronic obstructive airways disease, acute exacerbations of chronic respiratory disease.

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients-

1. Divide scholars into small groups on the basis of different disease
2. Students will conduct case taking, physical examinations and perform assessment on Airway, Breathing, Circulation approach as per following conditions :
3. The respiratory emergency like acute severe asthma, exacerbation of chronic obstructive airways disease, acute exacerbations of chronic respiratory disease(respiratory examination)
4. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
5. In relation the designed treatment protocol, demonstration of procedure like IP procedures under the guidance of instructor by each groups.

6. In relation the designed treatment protocol, demonstration of procedure, demonstration of the management as per the emergency guidelines like IV Infusion, Antibiotics, Elective Intubation, Syringe Pump Infusion, etc
7. Students can assist in the various procedures Abhyantara Chikitsa, Nasya, BahyaSnehana,Swedana, Basti, Nabhi Poorana, Dhooma/ Aghrapana , Viddha , Agnikarma and being followed in the ICU settings.
8. Invite each student from group to present the case
9. Group discussion will be done on the basis of disease, case taking,assessment, diagnosis, treatment protocol planned, procedures.
10. Conclusion and Summarization of the case by teacher

Experiential-Learning Learning 25.7: Performance of the assessment and atyayika chikitsa in Pranavahasrotovikara like pneumonia, pneumothorax, pleural effusions, respiratory failure

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide scholars into small groups on the basis of different disease Students will conduct case taking, physical examinations and perform assessment on Airway, Breathing, Circulation approach as per following conditions :
2. The respiratory emergency like pneumonia, pneumothorax, pleural effusions, respiratory failure (respiratory examination)
3. Each group will discuss on diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. Planning of treatment protocol by Students like IV Fluid Access, Ventilator Monitoring, Atibiotics, Thoracocentesis,etc
5. Planning of treatment procedures by Students like abhyantara chikitsa, Nasya, bahyasneha, Swedana, Basti poorana, Dhooma/ Aghrapana, Viddha, Agnbikarma
6. Students can assist in the various procedures being followed in the ICU settings.
7. Invite each student from group to present the case
8. Group discussion will be done on the basis of disease, case taking,assessment, diagnosis, treatment protocol planned, procedures.
9. Conclusion and Summarization of the case by teacher

Experiential-Learning Learning 25.8: Performance of the assessment and atyayika chikitsa in Svatantra and Paratantra Hridrogaincluding severe hypertension, acute heart failure, acute coronary syndrome

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide scholars into small groups on the basis of different disease

2. Scholars will conduct case taking, physical examinations, Assessment of hypertension(Signs and Symptoms, BP readings, Category of HTN, ECG findings) acute heart failure(Signs and Symptoms, BP readings, ECG findings), acute coronary syndrome (Signs and Symptoms, BP readings, Identification of its Classification , ECG findings).
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol like Antihypertensive drug management, BP monitoring, Input Output Charting, etc and prognosis
4. In relation the designed treatment protocol, use of Abhyantara Aushadha like Trailokyachitamani, Hemagarbha, Suvarna Sootashekhara, siddha Makaradhvaja, Brihat Vata Chintamani, using medicines in Muhurmuhu kala, demonstration of procedure like hrudabasti, lepa, Abhyanga, etc under the guidance of instructor by each groups.
5. Students can assist in the various procedures being followed in the ICU settings.
6. Invite each student from group to present the case
7. Group discussion will be done on the basis of disease, case taking,assessment, diagnosis, treatment protocol planned, procedures.
8. Conclusion and Summarization of the case by teacher

Experiential-Learning Learning 25.9: Adult basic life support training.

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Scholars will Assist the practitioners during ethical and legal consideration during the emergency.
2. Scholars are divided in to small groups and perform following activity:
 1. Scene Safety & Response: Ensure scene safety, check victim's responsiveness, and call emergency services if unresponsive.
 2. Breathing& Pulse Assessment: Check for normal breathing and carotid pulse; if absent, begin CPR.
 3. Chest Compressions: Perform 30 compressions at 2-inch depth, 100-120 per minute, allowing full recoil.
 4. Rescue Breaths: After compressions, give 2 breaths using the head-tilt, chin-lift technique, ensuring visible chest rise.
 5. AED Use & Continuous CPR: Apply AED if available, follow prompts, and continue CPR without interruption until help arrives.
 6. Hands on training on manequerfor scene safety, recognition of cardiac arrest and acting for the condition
3. Group discussion for real time decision making for the scenario
4. Corrections And Summarization by teacher

Experiential-Learning Learning 25.10: Performance of assessment and management of teevrajwara in conditions due to Saamajwara Jeernajwara, Jwara with Dhatupaka

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of Lakshana of Saamajwara, assessment of jeernajwara, assessment of jwara with dhatupaka, assessment of jwara with indriya and manasantapa, assessment of vishajanyajwara.
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, Planning the investigations like CBC, CRP, ESR and FEVER Profile ,radio-diagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, planning for various aushadhaprayoga Like Abhyantara Jwaraghna Aushadha like Jayamangal Rasa, Lakshminarayan Rasa, Mahajwarankush Rasa, Dhoopana, Basti, Jwarahara Kashaya prayoga, Lepa, Virechana etc and related procedures under the guidance of instructor by each groups
5. In relation the designed treatment protocol like Antipyretic management and Temp. charting
6. Students can assist in the various procedures being followed in the ICU settings.
7. Invite each student from group to present the case
8. Group discussion will be done on the basis of disease, case taking,assessment, diagnosis, treatment protocol planned, procedures.
9. Conclusion and Summarization of the case by teacher at the end and give the inputs

Experiential-Learning Learning 25.11: Performance of the assessment and management of teevrajwara in conditions due to vishamajawara, Sannipatika Jwara

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide scholars into small groups on the basis of different disease
2. scholars will conduct case taking, physical examinations, Assessment of teevrajwara due to pulmonary embolism, assessment of teevrajwara due to vishamajawara, SannipatikaJwara, SannipatikaJwara - Pradhana Upadrava
3. Each group will discuss on pathophysiology of disease, investigationsdiagnosis and differential diagnosis and Planning the investigations like CBC, CRP, ESR and FEVER Profile radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, planning for various aushadhaprayoga Abhyantara Jwaraghna Aushadha like Jayamangal Rasa, Lakshminarayan Rasa, Mahajwarankush Rasa, Dhoopana, Basti, Jwarahara Kashaya prayoga, Lepa, Virechana and related procedures under the guidance of instructor by each groups.
5. In relation the designed treatment protocol like Antipyretic management, Cold Sponging and Temp. charting, etc
6. scholars can assist in the various procedures being followed in the ICU settings.
7. Invite each scholar from group to present the case

8. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
9. Conclusion and Summarization of the case by teacher at the end and give the inputs

Experiential-Learning Learning 25.12: Performance of the assessment and management of Marmabhighata Chikitsa (medical management) including septic shock

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations.
3. Assessment of Septic shock: Symptoms, Severity and SOFA (Sequential Organ Failure Assessment) Score and Assess the Marmabhighata Lakshana
4. Each group will discuss on diagnosis and differential diagnosis, radio-diagnosis of the concerned case if applicable, treatment protocol and prognosis.
5. In relation the designed treatment protocol, demonstration of procedure like IV Antibiotics, Oxygen Therapy, Ventilator Settings, Syringe Pump Infusion emergency management of the disease under the guidance of instructor by each groups.
6. In relation the designed treatment protocol like Marmabhighat chikitsa, Nasya, Agnikarma, Viddhakarma, etc
7. Scholars can assist in the various procedures being followed in the ICU settings.
8. Invite each scholar from group to present the case
9. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
10. Conclusion and Summarization of the case by teacher at the end and give the inputs

Experiential-Learning Learning 25.13: Performance of the assessment and management of Marmabhighata Chikitsa (medical management) including cardiogenic shock

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations
3. Scholars will conduct case taking, physical examinations, Assessment of cardiogenic shock: (Signs and Symptoms, Severity, CSP score), assessments of obstructive pathologies like pulmonary embolism, tamponade (Signs and Symptoms, Severity, ECG Findings), Assessment of anaphylaxis.

4. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable.
5. In relation the designed treatment protocol, demonstration of emergency management of the disease like Oxygen administration, IV Diuretics, Vasoconstrictors etc. with its Dosage and Syringe Pump Infusion Settings, Ventilator Settings
6. In relation the designed treatment protocol, demonstration of procedures like marmaparipalana chikitsa, samjnabodhana, Nasya, etc. under the guidance of instructor by each group.
7. Scholars can assist in the various procedures being followed in the ICU settings.
8. Invite each Scholar from group to present the case
9. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
10. Conclusion and Summarization of the case by teacher at the end and give the inputs

Modular Assessment

Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 75 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome-Based Assessment: 03 credits x 06 hours x 75 marks Practical Learning Outcome Assessment: Application of Ayurvedic Principles in Atyayika Avastha Diagnosis and Management of Pranavaha Srotasa and Hridroga (Respiratory and Cardiovascular Emergencies), udaka vaha srotasa, Sanyasa ,Moorcha, Marmabhighata [40 marks x 4 hour] Station 1: Identification of ICU Care devices (30 minutes) Activity: Scholars will be shown 5 images/videos of different ICU Care devices and asked to identify them, method of use, and mention its application Assessment Method: OSPE (Objective Structured Practical Examination)	6

Rubrics (Total: 10 marks): Criteria includes Identification (5x1=5 marks), method of use (5x0.5=2.5 marks) and mention its application (5x0.5=2.5 marks)

Station 2: Clinical Examination & Diagnosis (90 minutes)

Activity: One real or standardized patient in atyayika avastha of any one of the Pranavaha Srotasa and Hridroga (Respiratory and Cardiovascular Emergencies), udaka vaha srotasa, Sanyasa ,Moorcha, Marmabhighata will be provided to each scholar. They will be instructed to conduct Roga-Rogi pariksha, note symptoms, assess Samprapti ghataka, and present probable diagnosis (Ayurvedic & modern).

Assessment Method: Mini-CEX (Mini Clinical Evaluation Exercise)/ Viva with examiner (observation checklist)

Rubrics (Total: 9 marks): Criteria includes Rogi pariksha (2 marks), Roga Pariksha (2 marks), Samprapti ghataka (3 marks), Differential Diagnosis and Final diagnosis (2 marks)

Station 3: Samana or Shodhana Decision Making (90 minutes)

Activity: 3 case scenarios/ real cases of different avasthika avastha of any one of the Pranavaha Srotasa and Hridroga (Respiratory and Cardiovascular Emergencies), udaka vaha srotasa, Sanyasa ,Moorcha, Marmabhighata will be presented. Each student should suggest, whether Shodhana or Samana is appropriate in each case and justify with treatment plan (Antaparimarjana, Bahiparimarjana chikitsa, Aushadha and Pathya-apathya).

Assessment Method: Written response or oral presentation

Rubrics (Total: 12 marks): Criteria includes Choice of Chikitsa (3x1=3marks), appropriate medicine selection (3x1=3marks), justification (3x1=3marks), Pathya-apathya (3x1=3marks)

Station 4: Pharmacological knowledge of key medicines (30 minutes)

Activity: From a list of any five commonly used drugs in avasthika avastha of any one of the Pranavaha Srotasa and Hridroga (Respiratory and Cardiovascular Emergencies), udaka vaha srotasa, Sanyasa ,Moorcha, Marmabhighata, choose any three, and mention the ingredients, indications, Anupana, and mode of administration.

Assessment Method: Oral or written response

Rubrics (Total: 9 marks): Criteria includes Ingredients (3x1 =3 marks), Indications (3 x1=3 marks), Anupana if any and Usage (3x1=3 marks) • Structured viva (15 marks x 1 hour) • Experiential Learning Outcome Assessment: [20 marks x 1 hour] Eg: Simulate a patient/Patient attender counselling session, to explain the patient//Patient attender on the importance of Shodhana shamana, Panchakarma procedures, Pathya-apathya in accordance with their clinical condition. Assessment Method: Checklist evaluation (15 marks) – Criteria includes Empathetic communication (5 marks), Content and clarity in explanation (10 marks) and Ensuring patient understanding/ compliance (5 marks). Or Any practical in converted form can be taken for assessment. (40 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (35 marks)	
Semester No : 6	
Module 26 : Vata Vyadhi (Neurological Emergency), Mootravaha sroto vyadhi, Annavaha, purishavaha, (Gastroenterological Emergencies), Udakavaha (fluid and electrolyte imbalance), Toxicological Emergencies (Visha)	
Module Learning Objectives (At the end of the module, the students should be able to) 1. Describe the atyayika avastha in diseases of Vata Vyadhi (Neurological Emergency), 2. Plan and execute the atyayika chikitsa in atyayika avastha of Vata Vyadhi (Neurological Emergency), 3. Describe the atyayika avastha in diseases of Mootravaha sroto vyadhi 4. Plan and execute the atyayika chikitsa in atyayika avastha of Mootravaha sroto vyadhi 5. Describe the atyayika avastha in diseases of Koshthagata(Annavaaha, purishavaha) (Gastroenterological Emergencies) 6. Plan and execute the atyayika chikitsa in atyayika avastha of Koshthagata(Annavaaha, purishavaha) (Gastroenterological Emergencies) 7. Describe the atyayika avastha in diseases of Toxicological Emergencies (Visha) 8. Plan and execute the atyayika chikitsa in atyayika avastha of Toxicological Emergencies (Visha)	
Unit 1 Vegavastha of Pakshaghata, Ardita, Ekanga-Sarvanga Roga Vatavyadhi (Including Meningitis, Status Epilepticus, Acute Ischemic Stroke, Cerebral Haemorrhage and Haematomas), Teevra Shoola (Acute Neuronopathies, Acute musculoskeletal pain, visceral pain- Raktamokshana, Agnikarma, cupping etc) References: 1,2,22,23	

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,C O3,CO5	Describe Vegavastha and atyayika chikitsa in Pakshaghata, (Acute Ischemic Stroke, Cerebral Haemorrhage and Haematomas), Ardita (Facial palsy).	1	Lecture	CS	Knows-how	L&PPT ,L_VC,FC
CO1,CO2,C O3,CO5	Demonstrate the assessment of Vegavastha and atyayika chikitsa in Pakshaghata, (Acute Ischemic Stroke, Cerebral Haemorrhage and Haematomas), Ardita (Facial palsy).	2	Practical26.1	PSY- MEC	Shows-how	D-BED,SIM
CO1,CO2,C O3,CO5	Perform the assessment and management of Vegavastha of Pakshaghata, (Acute Ischemic Stroke, Cerebral Haemorrhage and Haematomas), Ardita (Facial palsy).	3	Experiential- Learning26.1	PSY- ADT	Does	D-BED,SIM
CO1,CO2,C O3,CO5	Describe atyayika chikitsa in Ekanga-Sarvanga Roga (G B Syndrome, Acute Poly Neuronopathies).	1	Lecture	CS	Knows-how	FC,L&PPT
CO1,CO2,C O3,CO5	Deminstrate the assessment and managment of atyayika chikitsa in Ekanga-Sarvanga Roga (GB Syndrome, Acute Poly Neuronopathies).	2	Practical26.2	PSY- MEC	Shows-how	CBL,SIM,D-BED
CO1,CO2,C O3,CO5	Perfrom the assessment and management of Ekanga-Sarvanga Roga (G B Syndrome, Acute Poly Neuronopathies).	3	Experiential- Learning26.2	PSY- ADT	Does	SIM,D-BED
CO1,CO2,C O3,CO5	Describe atyayika chikitsa in Vatavyadhi including Mastiṣkāvaraṇaśoṭhaḥ (Meningitis), Mastiṣkaśoṭhaḥ (Encephalitis)	1	Lecture	CS	Knows-how	L&PPT ,FC

CO1,CO2,C O3,CO5	Demonstrate the assessment and management of Vatavyadhi including Mastiskavaranasothha (Meningitis), Mastiskashotha (Encephalitis)	2	Practical26.3	PSY- MEC	Shows-how	SIM,D-BED
CO1,CO2,C O3,CO5	Perform the assessment and management of Vatavyadhi including Mastishkavarana shotha (Meningitis), Mastiskashotha (Encephalitis)	3	Experiential- Learning26.3	PSY- ADT	Does	SIM,D-BED,CBL
CO1,CO2,C O3,CO5	Describe atyayika chikitsa in Teevra Apasmara (Status Epilepticus)	1	Lecture	CS	Knows-how	FC,L&PPT
CO1,CO2,C O3,CO5	Demonstrate the assessment and management of Teevra Apasmara (Status Epilepticus)	2	Practical26.4	PSY- MEC	Shows-how	D-BED,SIM
CO1,CO2,C O3,CO5	Perform the assessment and management of Teevra Apasmara (Status Epilepticus)	3	Experiential- Learning26.4	PSY- ADT	Does	SIM,D-BED
CO1,CO2,C O3,CO5	Describe Ayurvedic management of Pain (Acute Neuronopathies, Acute musculoskeletal pain, visceral pain) Raktamokshana, Agnikarma, cupping	1	Lecture	CS	Knows-how	FC,L&PPT ,L_VC
CO1,CO2,C O3,CO5	Demonstrate the assessment and Ayurvedic management of Pain (Acute Neuronopathies, Acute musculoskeletal pain, visceral pain), Raktamokshana, Agnikarma, cupping	2	Practical26.5	PSY- MEC	Shows-how	D-BED,SIM
CO1,CO2,C O3,CO5	Perform the assessment and Ayurvedic management of Pain (Acute Neuronopathies, Acute musculoskeletal pain, visceral pain), Raktamokshana, Agnikarma, cupping	3	Experiential- Learning26.5	PSY- ADT	Does	D-BED,SIM
CO1,CO2,C O3,CO5	Perform the assessment and atyayika chikitsa in Thyrotoxicosis, Adrenal crisis	3	Experiential- Learning26.6	PSY- ADT	Does	D-BED,SIM
Unit 2 Atyayika chikitsa in Mootrakricchra and Mutraghata Mootrakricchra and Mutraghata (including Acute Kidney Injury, Diabetic Ketoacidosis, Hypoglycaemia, Hyperosmolar Non-Ketosis, Acute Hypercalcaemia, Thyrotoxicosis, Hypocalcaemia, Adrenal crisis) References: 1,2,10,22,23						

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,C O3,CO5	Describe atyayika chikitsa in Mutraghata and Mootrakricchra including Acute Kidney Injury, Durmeḥaḥ (Diabetic Ketoacidosis)	1	Lecture	CS	Knows-how	FC,L&PPT
CO1,CO2,C O3,CO5	Perform the assessment and atyayika chikitsa in Mutraghata and Mootrakricchra including Acute Kidney Injury, Durmeḥaḥ (Diabetic Ketoacidosis)	2	Practical26.6	PSY- MEC	Shows-how	D-BED,SIM
CO1,CO2,C O3,CO5	Perform the assessment and atyayika chikitsa in Mutraghata and Mootrakricchra including Acute Kidney Injury, Diabetic Ketoacidosis.	3	Experiential- Learning26.7	PSY- ADT	Does	SIM,D-BED
CO1,CO2,C O3,CO5	Describe atyayika chikitsa in Prameha atyayika Avastha like Diabetic complications like Hypoglycaemia, Hyperosmolar Hyperglycemia, diabetic keto acidosis	1	Lecture	CS	Knows-how	L&PPT ,FC,L_VC
CO1,CO2,C O3,CO5	Demonstrate the assessment and atyayika chikitsa in Prameha atyayika Avastha like Diabetic complications like Hypoglycaemia, Hyperosmolar Hyperglycemia, diabetic keto acidosis	2	Practical26.7	PSY- MEC	Shows-how	SIM,D-BED
CO1,CO2,C O3,CO5	Perform the assessment and atyayika chikitsa in Prameha atyayika Avastha like Diabetic complications like Hypoglycaemia, Hyperosmolar Hyperglycemia, Durmeḥaḥ (Diabetic Ketoacidosis)	3	Experiential- Learning26.8	PSY- ADT	Does	CBL,SIM,D-BED
CO1,CO2,C O3,CO5	Describe atyayika chikitsa in Thyrotoxicosis, Adrenal crisis	1	Lecture	CS	Knows-how	FC,L&PPT

CO1,CO2,C O3,CO5	Demonstrate the assessment and atyayika chikitsa in Thyrotoxicosis, Adrenal crisis	2	Practical26.8	PSY- MEC	Shows-how	SIM,D-BED
Unit 3 Atyayika chikitsa in Annavaha, purishvaha and Udakavaha srotas. Teevra Chardi, Sarakta Chardi(including Upper GI Haemorrhage, Acute Intractable Vomiting), Teevra Atisara, Raktatisara (Including conditions due to , GI Infections (such as Dysentery and Gastroenteritis), Grahani (Inflammatory Bowel Disease), Kamala (Acute Liver Disease), Udara Shoola, Udara (Hepatic Encephalopathy, Cirrhosis), GI Malignancy References: 1,2,22,23						
3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,C O3,CO5	Describe atyayika chikitsa in Teevra Chardi, Sarakta Chardi	1	Lecture	CS	Knows-how	FC,L&PPT
CO1,CO2,C O3,CO5	Demonstrate the assessment and atyayika chikitsa in Teevra Chardi, Sarakta Chardi	2	Practical26.9	PSY- MEC	Shows-how	SIM,D-BED
CO1,CO2,C O3,CO5	Perform the assessment and atyayika chikitsa in Teevra Chardi, Sarakta Chardi	2	Experiential- Learning26.9	PSY- ADT	Does	D-BED,SIM
CO1,CO2,C O3,CO5	Describe atyayika chikitsa in Teevra Atisara, Raktatisara	1	Lecture	CS	Knows-how	FC,L&PPT
CO1,CO2,C O3,CO5	Demonstrate the assessment and atyayika chikitsa in Teevra Atisara, Raktatisara, Grahani	2	Practical26.10	PSY- MEC	Shows-how	SIM,D-BED
CO1,CO2,C O3,CO5	Perform the assessment and atyayika chikitsa in Teevra Atisara, Raktatisara,Grahani	2	Experiential- Learning26.10	PSY- ADT	Does	SIM,D-BED
CO1,CO2,C O3,CO5	Describe atyayika chikitsa in Kamala (Acute Liver Disease), Udara (Hepatic Encephalopathy, Cirrhosis), Gastro intestinal Malignancy.	1	Lecture	CS	Knows-how	L&PPT ,FC
CO1,CO2,C O3,CO5	Demonstrate the assessment and atyayika chikitsa in Kamala (Acute Liver Disease), Udara (Hepatic Encephalopathy, Cirrhosis)	2	Practical26.11	PSY- MEC	Shows-how	D-BED,SIM

CO1,CO2,C O3,CO5	Perform the assessment and atyayika chikitsa in Kamala (Acute Liver Disease), Udara (Hepatic Encephalopathy, Cirrhosis)	2	Experiential- Learning26.11	PSY- ADT	Does	D-BED,SIM
Unit 4 Panchakarma Vyapad Panchakarma Vyapad Vamana, virechana, Basti, Nasya, Raktamokshana, Bahi parimarjana chikitsa References: 1,2,22,23						
3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,C O3,CO5	Describe atyayika chikitsa in Raktamokshana and Nasya vyapad	1	Lecture	CS	Knows-how	L&PPT ,FC
CO1,CO2,C O3,CO5	Demonstrate the assessment and atyayika chikitsa in Raktamokshana and Nasya vyapad	2	Practical26.12	PSY- MEC	Shows-how	L&PPT ,D- M,SIM,D-BED
CO1,CO2,C O3,CO5	Perform the assessment and atyayika chikitsa in Raktamokshana and Nasya vyapad	2	Experiential- Learning26.12	PSY- ADT	Does	D-BED,SIM
CO1,CO2,C O3,CO5	Describe atyayika chikitsa in Basti vyapada like gudagata, urethral (uttarabasti), vaginal (uttarabasti). Bahi parimarjana chikitsa vyapada like sneha-swedana janya (upanaha, abhyanga etc)	1	Lecture	CS	Knows-how	SIM,FC
CO1,CO2,C O3,CO5	Demonstrate the assessment and atyayika chikitsa in Basti vyapada like gudagata, urethral (uttarabasti), vaginal (uttarabasti). Bahi parimarjana chikitsa vyapada like sneha-swedana janya (upanaha, abhyanga etc)	2	Practical26.13	PSY- MEC	Shows-how	SIM,D-BED
CO1,CO2,C O3,CO5	Perform the assessment and atyayika chikitsa in Basti vyapada like gudagata, urethral (uttarabasti), vaginal (uttarabasti). Bahi	2	Experiential- Learning26.13	PSY- ADT	Does	SIM,D-BED

	parimarjana chikitsa vyapada like sneha-swedana janya (upanaha, abhyanga etc)					
Unit 5 Drug overdoses and poisoning Drug overdoses (both accidental and non-accidental), acute drug reactions and anaphylaxis. Poisonings. References: 1,2,22,23						
3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
CO1,CO2,C O3,CO5	Describe atyayika chikitsa in Drug overdoses (both accidental and non-accidental), acute drug reactions and anaphylaxis.	1	Lecture	CS	Knows-how	L&PPT ,FC
CO1,CO2,C O3,CO5	Demonstrate the assessment and atyayika chikitsa in Drug overdoses (both accidental and non-accidental), acute drug reactions and anaphylaxis	2	Practical26.14	PSY-MEC	Shows-how	D-BED,SIM
CO1,CO2,C O3,CO5	Perform the assessment and atyayika chikitsa in Drug overdoses (both accidental and non-accidental), acute drug reactions and anaphylaxis	2	Experiential-Learning26.14	PSY-ADT	Does	D-BED,SIM
CO1,CO2,C O3,CO5	Describe atyayika chikitsa in Poisonings.	1	Lecture	CS	Knows-how	FC,L&PPT
CO1,CO2,C O3,CO5	Demonstrate the assessment and atyayika chikitsa in Poisonings	2	Practical26.15	PSY-MEC	Shows-how	SIM,D-BED
CO1,CO2,C O3,CO5	Perform the assessment and atyayika chikitsa in Poisonings	3	Experiential-Learning26.15	PSY-ADT	Does	D-BED,SIM
Practical Training Activity						
Practical Training 26.1 Assessment of Vegavastha and atyayika chikitsa in Pakshaghata, (Acute Ischemic Stroke, Cerebral Haemorrhage and Haematomas), Ardita (Facial palsy).						

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance

1. Divide scholars into small groups on the basis of different disease
2. scholars will conduct case taking, physical examinations, Assessment of Pakshaghata -vega awastha. Assessment of Stage of stroke As Ischemic and haemorrhagic. Assessment of Cerebral hematomas.
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis. Will do the clinical assessment through tools like Barthel Index (activities of daily leaving), Modified Rankin Scale (comprehensive disability assessments), NIH Stroke scale (quantitative measure of neurological deficit) etc.
4. In relation the designed treatment protocol, demonstration of procedure like nasya, bahya snehana, Swedana, dhara basti nabhi poorna lepa pratisarana viddha and agnikarma procedures under the guidance of instructor by each group.
5. Invite each scholars from group to present the case
6. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
7. Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation.

Practical Training 26.2 Assessment and management of atyayika chikitsa in Ekanga-Sarvanga Roga (GB Syndrome, Acute Poly Neuronopathies).

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance- Ekanga-Sarvanga Roga (GB Syndrome, Acute Poly Neuronopathies) in ICU unit/Hospital Unit/simulators

- Divide scholars into small groups on the basis of different disease
- scholars will conduct case taking, physical examinations, Assessment of Pakshaghata -vega awastha. Assessment of Stage of GB syndrome. Assessment of Acute Polyneuropathies.
- Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, Nerve conduction studies, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis. Will do the clinical assessment through tools like Barthel Index (activities of daily leaving), Modified Rankin Scale (comprehensive disability assessments), NIH Stroke scale (quantitative measure of neurological deficit) etc.
- In relation the designed treatment protocol, demonstration of procedure like nasya, bahya snehana, Swedana, dhara basti nabhi poorna lepa pratisarana viddha and agnikarma procedures under the guidance of instructor by each group.
- Invite each scholar from group to present the case
- Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
- Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation

Practical Training 26.3 Assessment and management of Vatavyadhi including Mastiskavaranasothha (Meningitis), Mastiskashotha (Encephalitis)

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance -Vatavyadhi including Meningitis, Encephalitis)

1. Divide scholars into small groups on the basis of different disease
2. scholars will conduct case taking, physical examinations, Assessment of Pakshaghata -vega awastha. Assessment of Stage of stroke As Ischemic and hemorrhagic. Assessment of Cerebral hematomas.
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, investigations like CSF analysis, blood investigations, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, demonstration of procedure like nasya, bahya snehana, Swedana, dhara basti nabhi poorna lepa pratisarana viddha and agnikarma procedures under the guidance of instructor by each group.
5. Invite each scholar from group to present the case
6. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
7. Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation

Practical Training 26.4 Assessment and management of Teevra Apasmara (Status Epilepticus)

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance

1. Divide scholars into small groups on the basis of different stages of disease
2. scholars will conduct case taking, physical examinations, Assessment of Status epilepticus.
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, Investigations like CSF and blood assessments, EEG reports, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, demonstration of procedure like emergency management of the disease with standard treatment care, IP procedures like Abhyantara Aushadha applied on gums, Pradhamana, Anjana, lepa, shirodhara, dhooana karma, shritalam, under the guidance of instructor by each groups.
5. Invite each scholar from group to present the case
6. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
7. Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation

Practical Training 26.5 Assessment and Ayurvedic management of Pain (Acute Neuronopathies, Acute musculoskeletal pain, visceral pain), Raktamokshana, Agnikarma, cupping

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance- Acute Neuronopathies, Acute musculoskeletal pain, visceral pain

1. Divide scholars into small groups on the basis of different disease
2. scholars will conduct case taking, physical examinations, Assessment of Acute Neuronopathies, visceral pain. Assessment of Stage of stroke As Acute musculoskeletal pain. Assessment of visceral pain.
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, electro physiological studies like nerve conduction studies and Electro myograms, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, demonstration of procedure like raktamokshana ,agnikarma and cupping procedures under the guidance of instructor by each groups.
5. Invite each scholar from group to present the case
6. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
7. Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation.

Practical Training 26.6 Assessment and atyayika chikitsa in Mutraghata and Mootrakricchra including Acute Kidney Injury, Diabetic Ketoacidosis

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance -Mootraghata moottrakrcichra including acute kidney injury diabetic ketoacidosis

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of Acute Neuronopathies, visceral pain. Assessment of Stage of stroke As Acute musculoskeletal pain. Assessment of visceral pain.
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, investigation like renal function test, blood assessments for electrolytes, pH, arterial blood gas levels, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, demonstration of procedure like dhara, lepa,viddha agnikarma procedures under the guidance of instructor by each groups.
5. Following emergency procedure for diabetic ketoacidosis like Fluid therapy, insulin loading dose administration etc
6. Invite each Scholar from group to present the case
7. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.

8. Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation.

Practical Training 26.7 Assessment and atyayika chikitsa in Prameha atyayika Avastha like Diabetic complications like Hypoglycaemia, Hyperosmolar Hyperglycemia, diabetic keto acidosis

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance - Prameha atyayika Avastha like Diabetic complications like Hypoglycaemia, Hyperosmolar Hyperglycaemia, diabetic keto acidosis) in ICU unit/Hospital IPD/ simulators

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of hypoglycaemia. Assessment of Stages of hyperosmolar hyperglycaemia. Assessment of diabetic ketoacidosis.
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. Management protocol considering the diagnosis and stage of the disease like
 1. **Hypoglycemia**: Managed through immediate glucose administration (oral or IV) and continuous glucose monitoring to prevent recurrent episodes. The goal is to stabilize blood sugar levels and identify the underlying cause.
 2. **Hyperosmolar Hyperglycaemic State (HHS)**: Characterized by extreme hyperglycaemia and dehydration without ketoacidosis. Management includes aggressive IV fluid resuscitation, insulin infusion, and electrolyte replacement, especially potassium.
 3. **Diabetic Ketoacidosis (DKA)**: Marked by hyperglycaemia, metabolic acidosis, and ketonemia. Treatment involves IV fluids, insulin, and electrolyte correction (notably potassium), with close monitoring of blood glucose and acid-base status demonstration of procedure under the guidance of instructor by each group.
5. Invite each Scholar from group to present the case
6. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
7. Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation.

Practical Training 26.8 Assessment and atyayika chikitsa in Thyrotoxicosis, Adrenal crisis

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance - Acute hypercalcemia, thyrotoxicosis, hypocalcaemia, adrenal crises)

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of acute hypercalcemia. Assessment of Stage of thyrotoxicosis. Assessment of Hypocalcaemia and adrenal crisis.

3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, demonstration of procedure or the possible Ayurvedic treatments
5. Thyrotoxicosis : A life-threatening condition treated with beta-blockers (e.g., propranolol), antithyroid drugs (propylthiouracil or methimazole), and steroids. Supportive care, including fluids and temperature control, is critical.
6. Adrenal Crisis: An emergency requiring immediate IV hydrocortisone and aggressive fluid resuscitation. Electrolyte imbalances, particularly hyperkalemia and hyponatremia, need to be corrected under the guidance of instructor by each group.
7. Invite each Scholar from group to present the case
8. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
9. Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation.

Practical Training 26.9 Assessment and atyayika chikitsa in Teevra Chardi, Sarakta Chardi

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance- Teevra chardi ,sarakta chardi
Upper GI haemorrhage, acute intractable vomiting

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of Stage of teevra chardi . Assessment of sarakta chardi including GI haemorrhage and acute intractable vomiting.
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, demonstration of procedure like IP procedures
5. Upper GI Haemorrhage: Management focuses on resuscitation with IV fluids and blood transfusions if needed, alongside proton pump inhibitors (PPIs) and vasoactive medications like octreotide. Endoscopic intervention is crucial to identify and treat the source of bleeding, with surgical consultation if necessary. Monitoring for re-bleeding is essential.
6. Acute Intractable Vomiting: Treatment involves addressing dehydration with IV fluids and correcting electrolyte imbalances. Anti-emetics (e.g., ondansetron, metoclopramide) are given to control vomiting. Identifying and treating the underlying cause, such as obstruction or infection, is key.
7. Intervention with Ayurvedic managements like Abhyantara Aushadha like Shankha Bhasma, Mayurapiccha Mashi, Shubhra Bhasma etc given slowly licking for around 20-30 minutes, Laja, Tarpan Siddha Jala, etc.
8. All these procedures can be performed under the guidance of instructor by each group.
9. Invite each Scholar from group to present the case
10. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.

11. Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation.

Practical Training 26.10 Assessment and atyayika chikitsa in Teevra Atisara, Raktatisara, Grahani

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance- Teevraa atisara, raktaatisara, (Including conditions due to Gastro intestinal Infections (such as Dysentery and Gastroenteritis), Grahani (Inflammatory Bowel Disease)

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of Stage of teevra atisara . Assessment of Raktatisara (Including conditions due to Gastro intestinal Infections (such as Dysentery and Gastroenteritis). Assessment of Grahani (Inflammatory Bowel Disease) .
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, demonstration of procedure like IP procedures
5. Dysentery: Typically caused by bacterial or parasitic infections, management focuses on fluid resuscitation, electrolyte replacement, and antibiotics based on the suspected organism. Monitoring for dehydration and septic complications is essential.
6. Inflammatory Bowel Disease (IBD): Severe flares (e.g., Crohn's disease or ulcerative colitis) are managed with corticosteroids, immunosuppressants, and supportive care including fluids, nutrition, and possibly antibiotics. Surgery may be needed for complications like perforation.
7. Gastroenteritis: In cases of severe dehydration or shock, aggressive fluid resuscitation is key. Electrolyte imbalances are corrected, and in bacterial cases, antibiotics may be administered. Anti-emetics and supportive care are used to manage symptoms.
8. Intervention with Ayurvedic managements like Abhyantara Chikitsa, Viddha, Agnikarma under the guidance of instructor by each group.
9. Invite each student from group to present the case
10. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
11. Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation.

Practical Training 26.11 Assessment and atyayika chikitsa in Kamala (Acute Liver Disease), Udara (Hepatic Encephalopathy, Cirrhosis)

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance-Kamala (Acute Liver Disease), Udara (Hepatic Encephalopathy, Cirrhosis), Gastro intestinal Malignancy

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of Kamala (Acute Liver Disease). Assessment of Udara (Hepatic Encephalopathy, Cirrhosis), Gastro intestinal Malignancy.
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, demonstration of procedure like IP procedures
5. Acute Liver Disease: This includes conditions like acute liver failure or severe hepatitis. Management focuses on supportive care with IV fluids, correction of electrolyte imbalances, management of coagulopathy, and treatment of the underlying cause (e.g., antiviral or antidote therapy in acetaminophen toxicity). Monitoring for complications like cerebral edema and multiorgan failure is essential. Liver transplantation may be considered in severe cases.
6. Hepatic Encephalopathy and Cirrhosis: These patients require supportive care with lactulose or rifaximin to reduce ammonia levels, control of fluid overload with diuretics, and management of variceal bleeding with beta-blockers or endoscopic therapy. For cirrhotic patients, liver transplantation may be considered in end-stage disease. Frequent monitoring of mental status, electrolytes, and coagulation is crucial.
7. Gastrointestinal Malignancy: In the ICU, patients with GI malignancies may present with complications like bleeding, obstruction, or perforation. Management involves stabilization with fluid resuscitation, blood transfusions if needed, and surgical or endoscopic intervention. Palliative care or chemotherapy may be initiated depending on the stage and prognosis
8. Ayurvedic management for kamala and udara roga like Abhyantara Aushadha, nitya virechana, Siravedha, kshira prayoga, lepa, takra prayoga, ksheera prayoga ,etc
9. All procedures can be carried out under the guidance of instructor by each group.
10. Invite each Scholar from group to present the case
11. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures
12. Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation.

Practical Training 26.12 Assessment and atyayika chikitsa in Raktamokshana and Nasya vyapad

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance- Raktamokshana and Nasya vyapad

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of nasya vyapad.

3. Each group will discuss on identification of the upadrava, pathophysiology, severity, investigations, treatment protocol and prognosis.
4. In relation the designed treatment protocol, demonstration of procedures as per Samhita like Pachana, sandhan, skandan, dahan etc under the guidance of instructor by each group.
5. Invite each Scholar from group to present the case
6. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
7. Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation

Practical Training 26.13 Assessment and atyayika chikitsa in Basti vyapada like gudagata, urethral (uttarabasti), vaginal (uttarabasti). Bahi parimarjana chikitsa vyapada like sneha-swedana janya (upanaha, abhyanga etc)

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance- Basti vyapada like gudagata, urethral (uttarabasti), vaginal (uttarabasti). Bahi parimarjana chikitsa vyapada like sneha-swedana janya (upanaha, abhyanga, bhaspa sweda, lepa, avagaha, kati basti etc)

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of in Basti vyapada like gudagata, urethral (uttarabasti), vaginal (uttarabasti). Assessment of Bahi parimarjana chikitsa vyapada like sneha-swedana janya (upanaha, abhyanga, bhaspa sweda, lepa, avagaha, kati basti etc)
3. Each group will discuss on identification of the upadrava, pathophysiology, severity, investigations, treatment protocol and prognosis.
4. In relation the designed treatment protocol, demonstration of procedure like IP procedures under the guidance of instructor by each group.
5. Invite each Scholar from group to present the case.
6. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
7. Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation.

Practical Training 26.14 Assessment and atyayika chikitsa in Drug overdoses (both accidental and non-accidental), acute drug reactions and anaphylaxis

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance- Drug overdoses (both accidental and non-accidental), acute drug reactions and anaphylaxis

1. Divide Scholars into small groups on the basis of different disease

2. Scholars will conduct case taking, physical examinations, Assessment Drug overdoses (both accidental and non-accidental), Assessment of acute drug reactions and anaphylaxis.
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, demonstration of procedure like IP procedures
5. Drug Overdoses (Accidental and Non-Accidental):
6. Management: Stabilization begins with airway protection, breathing, and circulation (ABCs). Activated charcoal may be used if the ingestion is recent. Specific antidotes (e.g., naloxone for opioid overdose, N-acetylcysteine for acetaminophen overdose) are administered. Continuous monitoring, IV fluids, and correction of electrolyte imbalances are critical. In severe cases, hemodialysis or extracorporeal removal may be required.
7. Acute Drug Reactions management like discontinuation of the offending drug immediately. Supportive care includes antihistamines, corticosteroids, and IV fluids to manage symptoms. Monitoring for progression to more severe reactions, such as Stevens-Johnson syndrome or toxic epidermal necrolysis, is crucial. Critical organ function support may be needed.
8. Anaphylaxis Management: As it is a medical emergency. Immediate administration of intramuscular epinephrine is the first-line treatment. IV fluids, oxygen, and airway management are essential. Adjunct therapies include antihistamines, corticosteroids, and bronchodilators. Close monitoring for recurrent symptoms and stabilization of vital signs is required in the ICU, under the guidance of instructor by each group.
9. Invite each Scholar from group to present the case
10. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
11. Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation.

Practical Training 26.15 Assessment and atyayika chikitsa in Poisonings

Video/ Demonstration by teacher on simulator/mannequins/ Scholars will perform under guidance- Poisonings.

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, cause of poisoning, Assessment of Stage of Poisonings, complications.
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, investigations, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, demonstration of procedure like IP procedures like Initial Assessment and Stabilization:
5. ABCs (Airway, Breathing, Circulation): Ensure the patient has a patent airway, adequate ventilation, and stable hemodynamics. Intubation may be necessary for compromised airways.
6. Vital Signs: Continuous monitoring of heart rate, blood pressure, and oxygen saturation.

7. Gastrointestinal Decontamination: through activated charcoal in the acute poisoning, if substance is amenable to charcoal absorption (generally within 1-2 hours of ingestion). Gastric lavage may be considered in certain cases but is less common.
8. Skin and Eye Decontamination: Remove contaminated clothing and irrigate skin or eyes with copious amounts of water for chemical exposures.
9. Antidote Administration: Identify the poison and administer specific antidotes as appropriate (e.g., naloxone for opioids, atropine for organophosphate poisoning, N-acetylcysteine for acetaminophen).
10. Ensure that the administration is timely and follows established protocols for dosage and monitoring.
11. Supportive Care: IV fluids to maintain hydration and electrolyte balance.
12. Symptomatic treatment for specific complications (e.g., antiemetics for nausea, bronchodilators for respiratory distress).
13. Monitoring and Observation: Continuous monitoring of vital signs, neurological status, and laboratory values (electrolytes, liver function tests, renal function).
14. Regular reassessment for any changes in the patient's condition.
15. Specialized Treatments: In some cases, advanced treatments like hemoperfusion or dialysis may be indicated for substances that are not effectively cleared by conventional means.
16. Consult poison control centres for guidance on specific poisons and management protocols.
17. Psychiatric Evaluation: In cases of intentional poisoning (overdose), a psychiatric assessment is essential for safety and long-term management.
18. Ayurveda Interventions like agada prayoga, nasya, hriduyavarna chikitsa, mantra prayoga, venika bandhana etc
19. Complying the medico legal rules and regulations concerned to the poisoning.
20. Procedures by Scholars can be carried out the guidance of instructor by each group.
21. Invite each Scholar from group to present the case
22. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
23. Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation.

Experiential Learning Activity

Experiential-Learning Learning 26.1: Performance of the assessment and management of Vegavastha of Pakshaghata, (Acute Ischemic Stroke, Cerebral Haemorrhage and Haematomas), Ardita (Facial palsy).

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of Pakshaghata -vega awastha. Assessment of Stage of stroke As Ischemic and haemorrhagic. Assessment of Cerebral hematomas.

3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis. Will do the clinical assessment through tools like Barthel Index (activities of daily leaving), Modified Rankin Scale(comprehensive disability assessments), NIH Stroke scale (quantitative measure of neurological deficit) etc
4. In relation the designed treatment protocol, demonstration of procedure like nasya, bahya snehana, Swedana, dhara basti nabhi poorna lepa pratisarana viddha and agnikarma procedures under the guidance of instructor by each groups.
5. Students can assist in the various procedures being followed in the ICU settings.
6. Invite each Scholar from group to present the case
7. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
8. Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation.

Experiential-Learning Learning 26.2: Performance of the assessment and management of Ekanga-Sarvanga Roga (G B Syndrome, Acute Poly Neuronopathies).

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of Pakshaghata -vega awastha. Assessment of S and haemorrhagic. Assessment of Cerebral hematomas.
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis. Will do the clinical assessment through tools like Barthel Index (activities of daily leaving), Modified Rankin Scale(comprehensive disability assessments), NIH Stroke scale (quantitative measure of neurological deficit) etc.
4. In relation the designed treatment protocol, demonstration of procedure like nasya, bahya snehana, Swedana, dhara basti nabhi poorna lepa pratisarana viddha and agnikarma procedures under the guidance of instructor by each group.
5. Students can assist in the various procedures being followed in the ICU settings.
6. Invite each Scholar from group to present the case
7. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
8. Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation.

Experiential-Learning Learning 26.3: Performance of the assessment and management of Vatavyadhi including Mastishkavarana shotha (Meningitis), Mastiskashotha (Encephalitis)

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide scholars into small groups on the basis of different disease
2. scholars will conduct case taking, physical examinations each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, investigations like CSF analysis, blood investigations, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
3. In relation the designed treatment protocol, demonstration of procedure like nasya, bahya snehana, Swedana, dhara basti nabhi poorna lepa pratisarana viddha and agnikarma procedures under the guidance of instructor by each group.
4. Scholars can assist in the various procedures being followed in the ICU settings.
5. Invite each scholar from group to present the case
6. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
7. Conclusion and Summarization of the case by teacher at the end and give the inputs

Experiential-Learning Learning 26.4: Performance of the assessment and management of Teevra Apasmara (Status Epilepticus)

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of status epilepticus.
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, Investigations like CSF and blood assessments, EEG reports, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis. treatment protocol and prognosis.
4. In relation the designed treatment protocol, demonstration of procedure like Ip procedures under the guidance of instructor by each group.
5. Scholars can assist in the various procedures being followed in the ICU settings.
6. Invite each Scholar from group to present the case
7. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
8. Conclusion and Summarization of the case by teacher at the end and give the inputs

Experiential-Learning Learning 26.5: Performance of the assessment and Ayurvedic management of Pain (Acute Neuronopathies, Acute musculoskeletal pain, visceral pain), Raktamokshana, Agnikarma, cupping

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of acute neuropathies. Assessment of Acute musculoskeletal pain. Assessment of visceral pains.
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, electro physiological studies like nerve conduction studies and Electro myograms, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, demonstration of procedure like raktamokshana cupping and agnikarma procedures under the guidance of instructor by each group.
5. Scholars can assist in the various procedures being followed in the ICU settings.
6. Invite each Scholar from group to present the case
7. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
8. Conclusion and Summarization of the case by teacher at the end and give the inputs

Experiential-Learning Learning 26.6: Performance of the assessment and atyayika chikitsa in Thyrotoxicosis, Adrenal crisis

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of atyayika Avastha like hypercalcemia , assessment of thyrotoxicosis, assessment of hypocalcaemia and adrenal crisis.
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. With possible Ayurvedic treatment and in relation the designed treatment protocol, performing of Ip procedure by each groups.
5. Scholars can assist in the various procedures being followed in the ICU settings.
6. Invite each Scholar from group to present the case
7. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
8. Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation.

Experiential-Learning Learning 26.7: Performance of the assessment and atyayika chikitsa in Mutraghata and Mootrakricchra including Acute Kidney Injury, Diabetic Ketoacidosis.

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide Scholars into small groups on the basis of different disease

2. Scholars will conduct case taking, physical examinations, Assessment of mutraaghata awastha. Assessment of Stage of mutrakrichra including acute kidney injury, Assessment of diabetic ketoacidosis.
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, investigation like renal function test, blood assessments for electrolytes, pH, arterial blood gas levels, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, diabetic ketoacidosis like Fluid therapy, insulin loading dose administration etc
5. Demonstration of procedure like dhara lepa, viddha and agnikarma procedures under the guidance of instructor by each groups.
6. Scholars can assist in the various procedures being followed in the ICU settings.
7. Invite each Scholar from group to present the case
8. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
9. Conclusion and Summarization of the case by teacher at the end and give the inputs

Experiential-Learning Learning 26.8: Performance of the assessment and atyayika chikitsa in Prameha atyayika Avastha like Diabetic complications like Hypoglycaemia, Hyperosmolar Hyperglycemia, Durmehaḥ (Diabetic Ketoacidosis)

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of Prameha atyayika Avastha like Diabetic complications like Hypoglycaemia, assessment of Hyperosmolar Hyperglycaemia, assessment of diabetic keto acidosis.
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. With possible Ayurvedic treatment and in relation the designed treatment protocol, performing of ip procedure procedures
Hypoglycemia: Managed with immediate glucose administration (oral or IV) and continuous glucose monitoring to prevent recurrent episodes. The goal is to stabilize blood sugar levels and identify the underlying cause.
5. Hyperosmolar **Hyperglycemic State (HHS):** Characterized by extreme hyperglycemia and dehydration without ketoacidosis. Management includes aggressive IV fluid resuscitation, insulin infusion, and electrolyte replacement, especially potassium.
6. Diabetic **Ketoacidosis (DKA):** Marked by hyperglycaemia, metabolic acidosis, and ketonemia. Treatment involves IV fluids, insulin, and electrolyte correction (notably potassium), with close monitoring of blood glucose and acid-base status under the guidance of by each group.
7. Scholars can assist in the various procedures being followed in the ICU settings.
8. Invite each Scholar from group to present the case
9. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.

10. Conclusion and Summarization of the case by teacher at the end and give the inputs

Experiential-Learning Learning 26.9: Performance of the assessment and atyayika chikitsa in Teevra Chardi, Sarakta Chardi

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of Prameha atyayika Avastha like teerya chardi , assessment of sarakata chardi including upper GI haemorrhage , assessment of acute intractable vomiting .
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, performing of Ip procedure procedures under the guidance of instructor by each groups.
5. Scholars can assist in the various procedures being followed in the ICU settings.
6. Invite each Scholar from group to present the case
7. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned
8. Upper GI Hemorrhage: Management focuses on resuscitation with IV fluids and blood transfusions if needed, alongside proton pump inhibitors (PPIs) and vasoactive medications like octreotide. Endoscopic intervention is crucial to identify and treat the source of bleeding, with surgical consultation if necessary. Monitoring for re-bleeding is essential.
9. Acute Intractable Vomiting: Treatment involves addressing dehydration with IV fluids and correcting electrolyte imbalances. Anti-emetics (e.g., ondansetron, metoclopramide) are given to control vomiting. Identifying and treating the underlying cause, such as obstruction or infection, is key.
10. Intervention with Ayurvedic managements like Abhyantara Aushadha like Shankha Bhasma, Mayurapiccha Mashi, Shubhra Bhasma etc given slowly licking for around 20-30 minutes, Laja, Tarpan Siddha Jala, etc.
11. All these procedures can be performed under the guidance of instructor by each group.
12. Followed by post Ayurvedic management Tarpan peya administration etc.
13. Invite each Scholar from group to present the case
14. Teacher will summarize and conclude

Experiential-Learning Learning 26.10: Performance of the assessment and atyayika chikitsa in Teevra Atisara, Raktatisara, Grahani

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide Scholars into small groups on the basis of different disease

2. Scholars will conduct case taking, physical examinations, Assessment of atyayika avastha in Teevra Atisara, Raktatisara (Including conditions due to Gastro intestinal Infections (such as Dysentery and Gastroenteritis), Grahani (Inflammatory Bowel Disease).
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, performing of Abhyantara Chikitsa Viddha, Agnikarma .
5. Scholars can assist in the various procedures being followed in the ICU settings.
6. Invite each Scholar from group to present the case
7. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures
8. Dysentery: Typically caused by bacterial or parasitic infections, management focuses on fluid resuscitation, electrolyte replacement, and antibiotics based on the suspected organism. Monitoring for dehydration and septic complications is essential.
9. Inflammatory Bowel Disease (IBD): Severe flares (e.g., Crohn's disease or ulcerative colitis) are managed with corticosteroids, immunosuppressants, and supportive care including fluids, nutrition, and possibly antibiotics. Surgery may be needed for complications like perforation.
10. Gastroenteritis: In cases of severe dehydration or shock, aggressive fluid resuscitation is key. Electrolyte imbalances are corrected, and in bacterial cases, antibiotics may be administered. Anti-emetics and supportive care are used to manage symptoms.
11. Intervention with Ayurvedic managements like Abhyantara Chikitsa, Viddha, Agnikarma under the guidance of instructor by each group.
12. Invite each student from group to present the case
13. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures
14. Teacher will summarize and conclude

Experiential-Learning Learning 26.11: Performance of the assessment and atyayika chikitsa in Kamala (Acute Liver Disease), Udara (Hepatic Encephalopathy, Cirrhosis)

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of atyayika Avastha in in Kamala (Acute Liver Disease), Udara (Hepatic Encephalopathy, Cirrhosis), Gastro intestinal Malignancy.

3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, performing of Ip procedure:
5. Acute Liver Disease: This includes conditions like acute liver failure or severe hepatitis. Management focuses on supportive care with IV fluids, correction of electrolyte imbalances, management of coagulopathy, and treatment of the underlying cause (e.g., antiviral or antidote therapy in acetaminophen toxicity). Monitoring for complications like cerebral edema and multiorgan failure is essential. Liver transplantation may be considered in severe cases.
6. Hepatic Encephalopathy and Cirrhosis: These patients require supportive care with lactulose or rifaximin to reduce ammonia levels, control of fluid overload with diuretics, and management of variceal bleeding with beta-blockers or endoscopic therapy. For cirrhotic patients, liver transplantation may be considered in end-stage disease. Frequent monitoring of mental status, electrolytes, and coagulation is crucial.
7. Gastrointestinal Malignancy: In the ICU, patients with GI malignancies may present with complications like bleeding, obstruction, or perforation. Management involves stabilization with fluid resuscitation, blood transfusions if needed, and surgical or endoscopic intervention. Palliative care or chemotherapy may be initiated depending on the stage and prognosis Followed by add on ayurvedic management for kamala and udara roga like Tarpana medication, peya medication, udara lepa ,etc
8. Ayurvedic management for kamala and udara roga like Abhyantara Aushadha, Siravedha, nitya virechana, kshira prayoga, lepa, takra prayoga, ksheera prayoga ,etc
9. All procedures can be carried out under the guidance of instructor by each group.
10. Scholars can assist in the various procedures being followed in the ICU settings.
11. Invite each Scholar from group to present the case
12. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
13. Conclusion and Summarization of the case by teacher at the end and give the inputs for the further improvisation.

Experiential-Learning Learning 26.12: Performance of the assessment and atyayika chikitsa in Raktamokshana and Nasya vyapad

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of atyayika chikitsa in Raktamokshana and Nasya vyapad .
3. Each group will discuss on identification of the upadrava, pathophysiology, severity, investigations, treatment protocol and prognosis.
4. In relation the designed treatment protocol based on Samhita, demonstration of procedure like Pachana, sandhan, skandan, dahan etc under the guidance of instructor by each group.

5. Scholars can assist in the various procedures being followed in the ICU settings.
6. Invite each student from group to present the case
7. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.

Experiential-Learning Learning 26.13: Performance of the assessment and atyayika chikitsa in Basti vyapada like gudagata, urethral (uttarabasti), vaginal (uttarabasti). Bahi parimarjana chikitsa vyapada like sneha-swedana janya (upanaha, abhyanga etc)

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of atyayika Avastha in Basti vyapada like gudagata, urethral (uttarabasti), vaginal (uttarabasti). Bahi parimarjana chikitsa vyapada like sneha-swedana janya (upanaha, abhyanga, bhaspa sweda, lepa, avagaha, kati basti etc)
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol based on samhita, demonstration of Ip sheetal seka ,shetala praseka sthanika tail pichu procedure procedures under the guidance of instructor by each group.
5. Scholars can assist in the various procedures being followed in the ICU settings.
6. Invite each Scholar from group to present the case
7. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
8. Teacher will summarise and conclude

Experiential-Learning Learning 26.14: Performance of the assessment and atyayika chikitsa in Drug overdoses (both accidental and non-accidental), acute drug reactions and anaphylaxis

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of atyayika Avastha in Drug overdoses (both accidental and non-accidental), acute drug reactions and anaphylaxis.
3. of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, performing of Ip procedure like Drug Overdoses (Accidental and Non-Accidental):

5. Management: Stabilization begins with airway protection, breathing, and circulation (ABCs). Activated charcoal may be used if the ingestion is recent. Specific antidotes (e.g., naloxone for opioid overdose, N-acetylcysteine for acetaminophen overdose) are administered. Continuous monitoring, IV fluids, and correction of electrolyte imbalances are critical. In severe cases, hemodialysis or extracorporeal removal may be required.
6. Acute Drug Reactions management: Discontinue the offending drug immediately. Supportive care includes antihistamines, corticosteroids, and IV fluids to manage symptoms. Monitoring for progression to more severe reactions, such as Stevens-Johnson syndrome or toxic epidermal necrolysis, is crucial. Critical organ function support may be needed.
7. Anaphylaxis management: This is a medical emergency. Immediate administration of intramuscular epinephrine is the first-line treatment. IV fluids, oxygen, and airway management are essential. Adjunct therapies include antihistamines, corticosteroids, and bronchodilators. Close monitoring for recurrent symptoms and stabilization of vital signs is required in the ICU, under the guidance of instructor by each group.
8. Under the guidance of instructor by each group Scholars can assist in the various procedures being followed in the ICU settings.
9. Invite each Scholar from group to present the case
10. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
11. Teacher will summarise and conclude

Experiential-Learning Learning 26.15: Performance of the assessment and atyayika chikitsa in Poisonings

Student perform on simulator/ mannequins on different conditions of patients/Scholars will perform under guidance on patients-Poisonings

1. Divide Scholars into small groups on the basis of different disease
2. Scholars will conduct case taking, physical examinations, Assessment of atyayika Avastha in Poisonings.
3. Each group will discuss on pathophysiology of disease, diagnosis and differential diagnosis, radiodiagnosis of the concerned case if applicable, treatment protocol and prognosis.
4. In relation the designed treatment protocol, performing of IP procedures like Initial
5. Assessment and Stabilization:ABCs (Airway, Breathing, Circulation): Ensure the patient has a patent airway, adequate ventilation, and stable hemodynamics. Intubation may be necessary for compromised airways.
6. Vital Signs: Continuous monitoring of heart rate, blood pressure, and oxygen saturation.
7. Gastrointestinal Decontamination: Activated charcoal is administered if the poisoning is acute and the substance is amenable to charcoal absorption (generally within 1-2 hours of ingestion). Gastric lavage may be considered in certain cases but is less common.
8. Skin and Eye Decontamination: Remove contaminated clothing and irrigate skin or eyes with copious amounts of water for chemical exposures.

9. Antidote Administration: Identify the poison and administer specific antidotes as appropriate (e.g., naloxone for opioids, atropine for organophosphate poisoning, N-acetylcysteine for acetaminophen).
10. Ensure that the administration is timely and follows established protocols for dosage and monitoring.
11. Supportive Care: IV fluids to maintain hydration and electrolyte balance.
12. Symptomatic treatment for specific complications (e.g., antiemetics for nausea, bronchodilators for respiratory distress).
13. Monitoring and Observation: Continuous monitoring of vital signs, neurological status, and laboratory values (electrolytes, liver function tests, renal function).
14. Regular reassessment for any changes in the patient's condition.
15. Specialized Treatments: In some cases, advanced treatments like hemoperfusion or dialysis may be indicated for substances that are not effectively cleared by conventional means.
16. Consult poison control centres for guidance on specific poisons and management protocols.
17. Psychiatric Evaluation: In cases of intentional poisoning (overdose), a psychiatric assessment is essential for safety and long-term management.
18. Ayurveda Interventions like agada prayoga, nasya, hrduyavarna chikitsa, mantra prayoga, venika bandhana etc
19. Under the guidance of instructor, each group students can assist in the various procedures being followed in the ICU settings.
20. Invite each student from group to present the case
21. Group discussion will be done on the basis of disease, case taking, assessment, diagnosis, treatment protocol planned, procedures.
22. Teacher will summarize and conclude

Modular Assessment

Assessment	Hour
Instructions: Conduct a structured modular assessment. The assessment will be for 75 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome-Based Assessment: 03 credits x 06 hours x 75 marks Practical Learning Outcome Assessment: Application of Ayurvedic Principles in Atyayika Avastha Diagnosis and Management of Vata Vyadhi (Neurological Emergency), Mootravaha sroto vyadhi, Koshthagata (Annavaha, purishavaha) (Gastroenterological Emergencies), Toxicological Emergencies (Visha) [40 marks x 4 hour]	6

Station 1: Identification of Manifestations of Vata Vyadhi (Neurological Emergency), Mootravaha sroto vyadhi, Koshthagata(Annavaaha, purishavaha) (Gastroenterological Emergencies), Toxicological Emergencies (Visha) (30 minutes)

Activity: Scholars will be shown 5 images/videos of different Vata Vyadhi (Neurological Emergency), Mootravaha sroto vyadhi, Koshthagata(Annavaaha, purishavaha) (Gastroenterological Emergencies), Toxicological Emergencies (Visha) and asked to identify the manifestation, mention the differential diagnose (Ayurveda and modern correlation), and mention disease name(Ayurveda and modern correlation).

Assessment Method: OSPE (Objective Structured Practical Examination)

Rubrics (Total: 10 marks): Criteria includes Identification of manifestation (5x1=5 marks), differential diagnoses (5x0.5=2.5 marks) and diagnosis (5x0.5=2.5 marks)

Station 2: Clinical Examination & Diagnosis (90 minutes)

Activity: One real or standardized patient in atyayika avastha of any one of the Vata Vyadhi (Neurological Emergency), Mootravaha sroto vyadhi, Koshthagata(Annavaaha, purishavaha) (Gastroenterological Emergencies), Toxicological Emergencies (Visha) will be provided to each scholar. They will be instructed to conduct Roga-Rogi pariksha, note symptoms, assess Samprapti ghataka, and present probable diagnosis (Ayurvedic & modern).

Assessment Method: Mini-CEX (Mini Clinical Evaluation Exercise)/ Viva with examiner (observation checklist)

Rubrics (Total: 9 marks): Criteria includes Rogi pariksha (2 marks), Roga Pariksha (2 marks), Samprapti ghataka (3 marks), Differential Diagnosis and Final diagnosis (2 marks)

Station 3: Samana or Shodhana Decision Making (90 minutes)

Activity: 3 case scenarios/ real cases of different avasthika avastha of any one of the Vata Vyadhi (Neurological Emergency), Mootravaha sroto vyadhi, Koshthagata(Annavaaha, purishavaha) (Gastroenterological Emergencies), Toxicological Emergencies (Visha) will be presented. Each student should suggest, whether Shodhana or Samana is appropriate in each case and justify with treatment plan (Antaparimarjana, Bahiparimarjana chikitsa, Aushadha and Pathya-apathya).

Assessment Method: Written response or oral presentation

Rubrics (Total: 12 marks): Criteria includes Choice of Chikitsa (3x1=3marks), appropriate medicine selection (3x1=3marks), justification (3x1=3marks), Pathya-apathya (3x1=3marks)

Station 4: Pharmacological knowledge of key medicines (30 minutes)

Activity: From a list of any five commonly used drugs in avasthika avastha of any one of the Vata Vyadhi (Neurological Emergency), Mootravaha sroto vyadhi, Koshthagata(Annavaaha, purishavaha) (Gastroenterological Emergencies), Toxicological Emergencies (Visha), choose any three, and mention the ingredients, indications, Anupana, and mode of administration.

Assessment Method: Oral or written response

Rubrics (Total: 9 marks): Criteria includes Ingredients (3x1 =3 marks), Indications (3 x1=3 marks), Anupana if any and Usage (3x1=3 marks)

- Structured viva (15 marks x 1 hour)
- Experiential Learning Outcome Assessment: [20 marks x 1 hour] Eg: Simulate a patient/Patient attender counselling session, to explain the patient/Patient attender on the importance of Shodhana shamana, Panchakarma procedures, Pathya-apathya in accordance with their clinical condition.

Assessment Method: Checklist evaluation (15 marks) – Criteria includes Empathetic communication (5 marks), Content and clarity in explanation (10 marks) and Ensuring patient understanding/ compliance (5 marks).

Or

Any practical in converted form can be taken for assessment. (40 marks) And any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (35 marks)

Table 4 : Practical Training Activity

(*Refer table 3 of similar activity number)

Practical No*	Practical name	Hours
1.1	Designing of special treatment for different types of Kasa (SL41)	2
1.2	Clinical Understanding and Management of Parshwashoola	2
1.3	Application of chikitsa for different types of Parshwashoola	2
1.4	Laboratory investigation of Jirna Shwasakrichchhanika (COPD)	2
1.5	Laboratory diagnosis of Vispharah (Bronchiectasis) and Klomanalika nishkramana (cystic fibrosis)	2
1.6	Demonstration of special treatment methods in Vispharah (Bronchiectasis)	2
1.7	Laboratory investigations for obstructive lung diseases	2
1.8	Laboratory diagnosis of ILD, Phuphphusajanita Hridroga Vikara (cor pulmonale), respiratory acidosis and alkalosis	2
1.9	Treatment Schedule of Hikka (SM74) and Swarabheda	2
1.10	Demonstration of diagnostic approaches of patients of asthma COPD overlapping syndrome (ACOS)	2
2.1	Formulating Ayurvedic treatment algorithm of Rajayakshma	2
2.2	Laboratory interpretation of Shwasanaka Jwara (pneumonia)	2
2.3	Special Treatment Protocol of Urakshata	2
2.4	Special Treatment Schedule on Hridroga (SL61)	3
2.5	Diagnosis of Hridroga (SL61)	2
2.6	Treatment protocol designing for Hritkapatika Vikara (valvular heart diseases)	3
2.7	Interpretation of ECG findings	3
2.8	Diagnostic methods in Cardio-respiratory diseases	3
3.1	Treatment modalities for Ama Dosha Vikara	2
3.2	Chikitsa Upakram of Alasaka, Vishuchika and Vilambika	2
3.3	Pathyapathya for Alasaka, Vishuchika and Vilambika	2
3.4	Ama chikitsa	2
3.5	Aanaha, Aadhmana, Aatopa chikitsa (SM31)	2
3.6	Gulma Chikitsa	2
3.7	Chikitsa Upakrama for Amlapitta	2

3.8	Laboratory investigations for Amlapitta (SM39)	2
3.9	Chikitsa Yojana of Ajeerna, Agnimandya, Aruchi and Chhardi	2
3.10	Protocol for vishishta chikitsa of Amlapitta	2
4.1	Planning for Treatment Methods in Annadrava Shula	2
4.2	Practical Training on treatment methods and differential diagnosis in Annadrava and Parinama Shoola	2
4.3	Practical training on associated treatments methods in Parinama shula	2
4.4	Interpretation of laboratoy investigation in Agnasayagata Chirakari Pradaha	2
4.5	Treatment and differential diagnosis of Grahani	3
4.6	Vishistata Chikitsa of Grahani	3
4.7	Laboratory Diagnosis of Ahara Poshana Shosana Avaghata (malabsorption syndrome)	2
4.8	Radio-imaging and other tests for diagnosis of diseases of Annavaha srotas	2
4.9	Interpretation of USG and HRCT in Annavaha Srotas diseases	2
5.1	Diagnosis and application of principles of treatment for Trishna	2
5.2	Analysing clinical signs, symptoms and investigation findings of a patient presenting with Trishna.	2
5.3	Shodhana, Shamana and Pathyapathya recommendation for Trishna	2
5.4	Demonstration of clinical significance, risk factors, complications, differential diagnosis of oedema.	2
5.5	Examination of Shotha patient	2
5.6	Treatment protocols with appropriate Ayurvedic medicines, prescriptions, and Pathya–Apathya based on the specific Avastha (stage) of the Roga and the condition of the Rogi of Shotha	2
5.7	Demonstration on prevention and management strategies for different types of oedema	2
5.8	Water and Electrolyte imbalance management	2
5.9	Management of electrolyte imbalances	2
5.10	Diagnosis and management approach to systemic acidosis and alkalosis	2
5.11	Interpretation of key electrolyte imbalances	2
5.12	Udara roga diagnosis and management	2
5.13	Treatment protocol preparation for Udara	2
5.14	Selection of drugs and procedures for Udara patient based on different stages	2

5.15	Intestinal perforation diagnosis	2
6.1	Application of International prostrate symptom score (IPSS) for Diagnostic Purpose	2
6.2	Treatment algorithm of BPH	2
6.3	Evaluation Criteria for Mootrashmari	2
6.4	Compilation of research based articles on guideline preparation for the management of urolithiasis and nephrolithiasis .	2
6.5	Application of diagnostic tools to assess different avastha of Vrikka Roga	3
6.6	Guideline preparation for clinical examination of Chirakari Vrikka Vikara (chronic kidney disease)	3
6.7	Detection of Sadhyasadhyatva of Chirakari Vrikka Vikara (CKD)	2
6.8	Categorization of treatment in Chirakari Vrikka Vikara (CKD)	2
6.9	Protocol for early referral of Chirakari Vrikka Vikara (CKD)	2
6.10	Diagnosis of Ajnata Chirakari Vrikka Vikara (CKDu)	2
6.11	Protocol for diagnosis and treatment schedule for Vrikka koshika shotha (Nephritis)	2
6.12	Preventive protocol for Vrikka koshika sothah (Nephritis)	2
6.13	Diagnosis and treatment protocol of Vrikkakoshika kshaya (Nephritic syndrome), Apavrukkatva (Nephrotic syndrome) and Bastisotha(Cystitis)	2
6.14	Preventive protocol of Vrukkakosiksayah (Nephritic Syndrome) and Apavrukkatva (Nephrotic Syndromes) and Bastisotha (Cystitis).	2
7.1	Demonstration of the chikitsa sutra of Pravahika	2
7.2	Appraise the treatment procedures of Dysentery(Amoebic/Bacillary)	2
7.3	Demonstrate the treatment protocols of Purishaja Krimi	2
7.4	Appraise the importance of Rasayan in Purishaja krimi Chikitsa	3
7.5	Application of colonoscopy for Diagnostic Purpose	2
7.6	Hands on training process of colonoscopy	3
7.7	Planning and treating the patients affected from food poisoning	2
7.8	formulate supportive management of Asatmya Ahara janya vikara (food poisoning)	1
7.9	Interpret appropriate diagnostic tests to identify common pathogenic bacteria	3
8.1	Diagnostic tools for Fever.	2
8.2	Treatment plan in Jvara rogi.	2

8.3	Case diagnosis - Fever of Infective origin.	2
8.4	Ayurveda management of Infectious fever	2
8.5	Clinical Examination - Pidaka Janya Jvara	2
8.6	Ayurvedic diagnosis of Pidaka Janya Jvara (infectious fever with rash)	2
8.7	Clinical Examination - Sankramaka Jvara (Parasitic Fevers)	2
8.8	Ayurvedic diagnosis of Fever of Parasitic origin	2
8.9	Ayurvedic diagnose of Hyperthermia and Heat Stroke	2
8.10	Clinical Examination - Hyperthermia and Heat Stroke	2
9.1	Clinical Examination - Anaemia	2
9.2	Treatment plan in Pandu	2
9.3	Differential diagnosis of Anaemia due to Hypoproliferative disorder	2
9.4	Ayurvedic management of Anaemia due to Hypoproliferative disorders	2
9.5	Aushadha prayoga in hypoproliferative anaemia.	2
9.6	Diagnosing Pandu Vikara due to Maturation defect.	2
9.7	Interpret investigations in Pandu Vikara due to Maturation defect	2
9.8	Case taking in Pandu Vikara due to Hemolysis	2
9.9	Aushadha prayoga in anaemia due to Hemolysis/ Hemorrhage.	2
9.10	Application of Ayurvedic principles in the management of Pandu Vikara due to Hemolysis.	2
10.1	Case taking in Bleeding and Coagulation disorders	2
10.2	Practical session on management of bleeding and coagulation disorders	2
10.3	Practical session on Aushadha prayoga in bleeding and coagulation disorders.	2
10.4	Practical session on interpreting Investigations in Yakrit roga	3
10.5	Practical session on diagnosing and managing acute hepatobiliary disorders.	3
10.6	Practical session on diagnosing and managing chronic hepatobiliary disorders.	2
10.7	Practical session on Aushadha prayoga in Hepatobiliary disorders	2
10.8	Case taking in Pleeha roga	2
10.9	Practical session on management of Pleeha roga	2
11.1	Case taking - Tvak vikara	3
11.2	Case taking in Tvak roga of infective origin.	2
11.3	Ayurvedic diagnosis of Infective Skin disorders.	2

11.4	Identification of Tvak roga - Infestations.	3
11.5	Practical session on management of Tvak roga due to Infestation.	2
11.6	Case taking of Tvak roga due to inflammation	3
11.7	Ayurvedic diagnosis of Tvak vikara due to Inflammation.	3
11.8	Case taking in Pigmentation disorders and Keratinization disorders	2
11.9	Practical session on management of Pigmentation disorders and Keratinization disorders	2
11.10	Diagnosing Hair problem.	2
11.11	Diagnosing Cosmetic Problems.	2
11.12	Case taking in Autoimmune disorders of Raktavaha Srotas.	2
11.13	Practical session on management of Autoimmune disorders of Raktavaha Srotas.	2
12.1	Clinical examination and diagnostic investigations in goitre	1
12.2	Differential diagnosis and prognosis of goitre	1
12.3	Diagnostic approach to lymphadenitis cases.	1
12.4	Differential diagnosis, staging and prognostic assessment of lymphadenitis	1
12.5	Prognostic assessment using TNM staging in Granthi	1
12.6	Interpretation of tumour markers and diagnostic investigations in malignancy	3
12.7	Differential diagnosis of Granthi and Arbuda	3
12.8	Diagnostic and prognostic assessment in Granthi	3
12.9	Case-based diagnostic approach for Carcinoma	2
12.10	Diagnostic reasoning and staging in Carcinoma	1
12.11	Ayurvedic diagnostic and prognostic assessment in Carcinoma	1
12.12	Diagnostic evaluation of Sarcoma	2
12.13	Clinical approach to Sarcoma – Diagnosis, Staging, and Prognostic interpretation	1
12.14	Ayurvedic prognostic assessment of Sarcoma	1
12.15	Ayurvedic clinical diagnosis of Blood cancer	2
12.16	Diagnostic differentiation and staging of Blood cancer	1
12.17	Prognostic evaluation and referral decision-making in blood cancer cases.	1
12.18	Clinical assessment and investigation planning of Arbuda of brain and Spinal cord.	2
12.19	Differential diagnosis and staging of Brain and Spinal cord tumours.	1

12.20	Ayurvedic diagnostic application in cases of Brain and Spinal cord tumours.	1
13.1	Clinical examination of dyslipidemia cases, interpretation of findings, and recommendation of relevant investigations for diagnostic confirmation	2
13.2	Case-based interpretation of lipid profiles and related investigations to enhance clinical reasoning and peer-level academic exchange.	2
13.3	Case-based clinical evaluation of obesity and its systemic complications using Ayurvedic and approaches of modern medical science.	2
13.4	Assess Diabetes cases from OPD/IPD, interpret investigations to diagnose and evaluate prognosis, and discuss findings in academic forums or peer groups.	2
13.5	Clinical examination of Diabetes cases in OPD/IPD, illustrates history, demonstrates clinical methods, and advises investigations	2
13.6	Application of Ayurvedic diagnostic methods in Diabetes cases from OPD/IPD to assess Dosha, Dushya, and disease stage, and evaluate Sadhyasadhyata.	2
13.7	Assessment of Dermatological Manifestations of Diabetes Mellitus	2
13.8	Case-Based Diagnostics for acute diabetic complications	2
13.9	Case-Based clinical diagnostics and prognosis of Diabetes Mellitus	2
13.10	Ayurvedic diagnosis and prognosis in acute complications of Diabetes Mellitus.	2
14.1	Case-based exploration of clinical history, examination findings, and relevant investigations to support accurate diagnosis of Chaya–Apachaya Janya Roga.	3
14.2	Case-based interpretation and discussion of investigation reports to differentiate Chaya–Apachaya Janya Roga and explain diagnostic reasoning.	2
14.3	Diagnostic and screening investigations used for various endocrine disorders.	1
14.4	Diagnostic evaluation of pituitary gland disorders	2
14.5	Interpretation of investigations to distinguish pituitary disorders and discuss findings with peers	2
14.6	History taking and examination-based diagnostic planning in thyroid and parathyroid disorders.	3
14.7	Interpretation-based differentiation of thyroid and parathyroid disorders.	2
14.8	Clinical reasoning for adrenal gland disorder diagnosis.	1
14.9	Interpretation and peer-level communication of adrenal disorder investigations.	1
14.10	Clinical evaluation and diagnostic planning in reproductive hormone disorders.	2
14.11	Differential diagnosis of reproductive hormonal disorders using investigation analysis.	1
15.1	Administration of Rasayana drugs in a case of Sandivata	2
15.2	Case scenario-Asthimajjavaha Srotovikara emergencies	2

15.3	Identification of the most suitable diagnostic investigations for Osteopenia and Osteoporosis.	2
15.4	Clinical Examination Protocol for Differential Diagnosis of Sandhigatavata (Osteoarthritis)	2
15.5	Differentiation of Normal and Abnormal Joints through Clinical Examination to distinguish various types of Arthritis.	2
15.6	Ayurvedic Management of Carpal Tunnel Syndrome, Ganglion Cyst, Bursitis, and Tendonitis	2
15.7	Administration of Bahiparimarjana Chikitsa in a case of Sandivata/Amavata	2
15.8	Comparison of Osteomyelitis, Myeloproliferative Disorders, and Suppression Disorders with management.	2
15.9	Clinical joint examination methods and differential diagnosis analyses.	2
15.10	Practical Steps for Vatarakta Management: Basti as the Best Chikitsa.	2
15.11	Exploring External Therapies for Urustambha	2
15.12	Clinical Assessment of Avasthabheda and Eranda Prayoga for Amavata	2
15.13	Assessing Amavata and Analyzing Ksharabasti and Vaitaranabasti ingredients	2
15.14	Evaluating the Contraindications of Panchakarma in Urustambha.	2
15.15	Diagnostic Approaches for Lower Limb Muscle Disorders.	2
16.1	Enumeration of Nanatmaja Vyadhis and the Impact of Dosha in Disease Manifestations	2
16.2	Case Study of Vataja Nanatmaja Vyadhi: A Critical Analysis	2
16.3	Diagnosis of Cervical Spine Conditions: Interpretation and Case Analysis	2
16.4	Understanding Spinal Conditions and Back Pain	2
16.5	Assessing Low Back Pain: Oswestry & Aberdeen Scales	2
16.6	Holistic Ayurveda Plan for Managing Lower Back Pain (Spondylolisthesis, Spondylosis, Ankylosing Spondylitis)	2
16.7	Acute Spinal Conditions: Diagnosis, Treatment Principles & Dietary Guidelines	2
16.8	Spinal Cord Diseases: Key Differences - in adapting suitable Treatment Principles.	2
16.9	Bahiparimarjana Chikitsa in Cervical Radiculopathy.	2
16.10	Assessment of Shoulder Joints in Avabahuka for Tailored Chikitsa.	2
16.11	Knee Pain and Swelling(single knee): Differential Diagnosis and Treatment Principles.	2
16.12	Current Medications for Convulsive Disorders: Overview and Insights	2

16.13	Examination of the impact of convulsive disorders on daily life and planning appropriate treatment.	2
16.14	Differentiating Seizure Types: Febrile, Focal, and Status Epilepticus	2
16.15	Interpret EEG and low sodium levels in convulsive disorder patients	2
17.1	Assessment of Cranial Nerves in Hemiplegic Patients for Treatment Planning	2
17.2	Assessment of Reflexes in Pakshaghata/Hemiplegia: Ayurveda understanding	2
17.3	Interpretation and assessment of a hemiplegic patient, with the MRI/CT Brain report and the clinical signs and symptoms.	2
17.4	Understanding Hemiplegia, Paraplegia, Monoplegia, and Quadriplegia: Causes and Treatments.	2
17.5	ROSIER Assessment Scale in Diagnosis of CVA/Stroke	2
17.6	Understanding Brain Stroke based on Signs, Symptoms, and Affected Lobes.	2
17.7	Demonstration of the examination of a patient with Bell's palsy.	2
17.8	Chart of Gatavata Lakshanas and Scientific Correlations.	2
17.9	Assess House- Brackmann Facial Nerve Grading in Diagnosis of Facial Palsy.	2
17.10	Recent Advances in Facial Palsy Diagnosis and Management	2
17.11	Outcomes of Virechana Yogas in Gata Vata Management	2
17.12	Diagnostic Approaches for Renal and Ureteric Colic	2
17.13	Classification of Neuropathies under Kevala Nirupasthambha and Sadosha Upasthambha Vatavyadhis	2
17.14	Ayurvedic Diagnosis of Parkinson's Disease with the Extrapyrmidal System Examination.	2
17.15	Comparison and Ayurvedic Perspectives on Hyperkinetic Conditions	2
18.1	Importance of Different Lab investigations, Imaging scans, Histopathologic examinations in Neurodegenerative Disorders.	2
18.2	Differentially diagnose Huntington's Chorea.	2
18.3	Distinguish types of Movement Disorders.	2
18.4	Differentially diagnosis of PD, Parkinsonism, Secondary Parkinsonism, PD Plus Syndrome.	2
18.5	Types of movements in a Parkinson's Disease.	2
18.6	MRI changes in Cerebral Atrophy, ILOCA and other Neuro-degenerative Diseases.	2
18.7	Diagnosis of Multiple Sclerosis.	3
18.8	Differential diagnosis of UMN and LMN Conditions.	3

18.9	MRI Changes in the diagnosis of Cervical and Lumbar Myelopathy.	2
18.10	Differential diagnosis of Myasthenia Gravis.	3
18.11	Importance of EMG, EEG, Nerve conduction and NCV TEST in Myelopathies.	2
18.12	Ascending, Descending Paralysis and Botulism and perform assessment examinations.	2
18.13	The role of Basti in Paraplegia and justify its mode of action.	2
18.14	Communicate with the patient/ relatives/ bystanders/ students on the condition of the Neurological Emergency patient and need for referral in critical conditions.	1
19.1	Non pharmacological approach for Unmada.	2
19.2	Selection of treatment protocol for Unmada	2
19.3	Difference between panic disorders and depression.	2
19.4	Differentiate psychiatric disorders from medical disorders.	2
19.5	Critical analysis of Unmada.	2
19.6	History taking in a case of Apasmara	2
19.7	History taking in epilepsy patient	2
19.8	Use of mental scales in Neurosis and Psychosis.	2
19.9	Differentiate between Syncope and Coma.	2
19.10	Examination of Liver in liver cirrhosis.	2
20.1	Case based clinical study of impotence, erectile dysfunction, premature ejaculation and loss of libido.and its management.(ICD-11-TM-2-SN02,SN03)	2
20.2	Assessment the role of hormones in reproductive medicine.	2
20.3	Laboratory diagnostic methods for STDs	2
20.4	Differential diagnosis of STDs.	2
20.5	Differential Diagnosis the Disorders of glans penis	2
20.6	Examination of prostate gland and testis.	2
20.7	Examination of Prostate Gland in elderly patients.	2
20.8	Catheterization in male patients.	2
20.9	Semen analysis parameters and CASA including DFI.	2
20.10	Enlisting the causes of male and female infertility, subfertility.	2
21.1	Journal club on the components, cells, tissues, and organs of the immune system, Innate and Acquired Immunity.	2
21.2	Demonstration of the properties of antigens, antibodies , antigen-antibody and antigen-receptor interactions	2

21.3	Group activity/ discussion on comprehend the functions of cytokines, complement activation.	2
21.4	Group activity and discussion on hypersensitivity reactions, autoimmunity, evasion of the immune response by pathogens, tumour immunotherapies, and immunodeficiency conditions.	2
21.5	Group activity/discussion- Advances (publications) in the Immunology- Applied aspect of Immunology in Vaccines, Tumour Immunology, Autoimmune Diseases, Allergic disorders.	2
21.6	Group activity/discussion- Advances (publications) in the organ transplantation - Transplantation biology, indications and importance of Organ transplantation	2
21.7	Group activity/discussion- Advances in the organ transplantation - Ethical and legal issues	2
21.8	Group activity/discussion- Organ procurement, Transplant procedure. Role of Ayurveda in different stages of organ transplantation.	2
21.9	Group activity/discussion- Gene therapy and its updates.	2
21.10	Group activity/discussion- Stem cell therapy and its updates	2
21.11	Group activity/discussion- Genetic modelling and chromosomal disorders in different disease	2
21.12	Group activity/discussion- (publications) Understanding the Radio isotopes and its updates	2
21.13	Group activity/discussion- Utility of the Radio isotopes in disease and tumour markers	2
21.14	Group activity/discussion- Comprehend the indications and application of Radio isotopes in treatment	2
21.15	Group activity/discussion- Comprehend the indications and application of Utility of Radio isotopes in Kayachikitsa practice	2
22.1	Group activity/discussion on National health campaigns	2
22.2	Group activity/discussion on Ayush health campaigns	2
22.3	Group activity/discussion- Identifying emerging health challenges through WHO/ICMR/health ministry/AYUSH ministry/ relevant sources. Knowing the current status, measures taken by govt/ relevant agencies - Possible role of Ayurveda /Integrative protocols in these challenges	2
22.4	Group Exploration: Chikungunya – Current Scenario, Government Response, and Integrative Ayurveda Strategies	2
22.5	Group Exploration:HIV/AIDS– Current Scenario, Government Response, and Integrative Ayurveda Strategies	2
22.6	Module 2:Unit 2:Objective Discussion: Swine flu as an Emerging Health Challenge – Status, Interventions, and Ayurvedic Perspectives	2

22.7	Discussion: Chicken flu as an Emerging Health Challenge – Status, Interventions, and Ayurvedic Perspectives	2
22.8	Discussion: Dengue as an Emerging Health Challenge – Status, Interventions, and Ayurvedic Perspectives	2
22.9	Discussion: Sick building syndrome and Fibromyalgia as an Emerging Health Challenge – Status, Interventions, and Ayurvedic Perspectives	2
22.10	Discussion: COVID-19 as an Emerging Health Challenge – Status, Interventions, and Ayurvedic Perspectives	2
23.1	Group activity/discussion on advances in Kayachikitsa in vyadhi nidana	2
23.2	Journal club on advances in chikitsa perspective of Kayachikitsa	1
23.3	Journal club to critically understand, analyze the publication related to Ayurveda treatment protocols	2
23.4	Journal club on independent and collaborative research in Kayachikitsa	2
23.5	Group activity / discussion on advances in Complementary and alternative medicine	2
23.6	Hands on experience on identifying, recording, analyzing, causality assessment and reporting of adverse events	2
23.7	Current scientific evidence/publication in the Integrative Medicine protocols	2
23.8	Comprehend the Current scientific evidence/publication/guest lecture planning of the Integrative Medicine protocols (Ayurveda & Conventional Medicine)	2
23.9	Understanding Current Scientific Evidence in Planning Integrative Medicine Protocols: Ayurveda with Physiotherapy and Rehabilitation Sciences	2
23.10	Scientific evidence/publication/guest lecture on planning of the Integrative Medicine protocols (Ayurveda & Yoga)	2
23.11	Advances in the Rasayana chikitsa (publications) that contributes to kayachikitsa practise	3
23.12	Advances in the Vajikarana chikitsa (publications) that contributes to kayachikitsa practise	2
23.13	Advances (publications) in the manasaroga chikitsa that contributes to kayachikitsa practise	2
23.14	Advances (publications) in the panchakarma chikitsa that contributes to kayachikitsa practise	2
23.15	Comprehend the advances (publications) in the panchakarma chikitsa - Technology, gadgets, equipment, instruments that contribute to kayachikitsa practice	2
24.1	Physical examinations and assessments in geriatric care	2
24.2	Assessment and management of Annavaha srotas vikara in Jara	2

24.3	Assessment and management of Vatavyadhi (Neurological disorders) vikara in Jara.	2
24.4	Assessment and management of Vatavyadhi (Musculoskeletal disorders) in Jara	2
24.5	Assessment and management of mano vyadhi (Mental health and Psychiatric disorders)	2
24.6	Assessment and management of Arbuda in Jara	2
24.7	Assessment and management of Raktavaha sroto vikara in Jara	2
24.8	Assessment and management of Medovaha sroto vikara in Jara.	2
24.9	Assessment and management of Purishavaha sroto vikara in Jara	2
24.10	Application of palliative care tools in Jara chikitsa	2
25.1	ICU Layout, Essential Staff Roles, Equipment/devices/ IT tools, patient care protocols	2
25.2	Pranarakshana, Oja Rakshana, Agni Rakshana, Indriya Rakshana	2
25.3	Life saving treatment in Avastha of Sanyasa and Murccha	2
25.4	Pulse oximetry, Inhaler therapy, oxygen delivery, nebulization	2
25.5	ICU monitors, Respiratory support devices like ventilators, defibrillators	2
25.6	Anaphylaxis	2
25.7	Assessment and management of emergency in acute severe asthma, exacerbation of chronic obstructive airways disease, acute exacerbations of chronic respiratory disease	2
25.8	Assessment and management of atyayika chikitsa in Pranavaha sroto vikara like pneumonia, pneumothorax, pleural effusions, respiratory failure	2
25.9	Assessment and management of Svatanttra and Paratantra Hridroga including severe hypertension, acute heart failure, acute coronary syndrome	2
25.10	Assessment and management of Svatanttra and Paratantra Hridroga including arrhythmias, thromboembolic disease, cardiac arrest.	2
25.11	Assessment and management of teevra jwara in conditions due to Saamajwara Jeernajwara, Jwara with Dhatupaka	2
25.12	Assessment and management of teevra jwara in conditions due to vishama jawara, Sannipatika Jwara	2
25.13	Assessment and management of Marmabhighata Chikitsa (medical management) including septic shock	2
25.14	Assessment and management of Marmabhighata Chikitsa (medical management) including Udakavaha sroto dusthi like Hypovolemic shock and electrolyte imbalance	2

25.15	Assessment and management of Marmabhighata Chikitsa (medical management) including cardiogenic shock	2
26.1	Assessment of Vegavastha and atyayika chikitsa in Pakshaghata, (Acute Ischemic Stroke, Cerebral Haemorrhage and Haematomas), Ardita (Facial palsy).	2
26.2	Assessment and management of atyayika chikitsa in Ekanga-Sarvanga Roga (GB Syndrome, Acute Poly Neuronopathies).	2
26.3	Assessment and management of Vatavyadhi including Mastiskavaranasothha (Meningitis), Mastiskashotha (Encephalitis)	2
26.4	Assessment and management of Teevra Apasmara (Status Epilepticus)	2
26.5	Assessment and Ayurvedic management of Pain (Acute Neuronopathies, Acute musculoskeletal pain, visceral pain), Raktamokshana, Agnikarma, cupping	2
26.6	Assessment and atyayika chikitsa in Mutraghata and Mootrakricchra including Acute Kidney Injury, Diabetic Ketoacidosis	2
26.7	Assessment and atyayika chikitsa in Prameha atyayika Avastha like Diabetic complications like Hypoglycaemia, Hyperosmolar Hyperglycemia, diabetic keto acidosis	2
26.8	Assessment and atyayika chikitsa in Thyrotoxicosis, Adrenal crisis	2
26.9	Assessment and atyayika chikitsa in Teevra Chardi, Sarakta Chardi	2
26.10	Assessment and atyayika chikitsa in Teevra Atisara, Raktatisara, Grahani	2
26.11	Assessment and atyayika chikitsa in Kamala (Acute Liver Disease), Udara (Hepatic Encephalopathy, Cirrhosis)	2
26.12	Assessment and atyayika chikitsa in Raktamokshana and Nasya vyapad	2
26.13	Assessment and atyayika chikitsa in Basti vyapada like gudagata, urethral (uttarabasti), vaginal (uttarabasti). Bahi parimarjana chikitsa vyapada like sneha-swedana janya (upanaha, abhyanga etc)	2
26.14	Assessment and atyayika chikitsa in Drug overdoses (both accidental and non-accidental), acute drug reactions and anaphylaxis	2
26.15	Assessment and atyayika chikitsa in Poisonings	2

Table 5 : Experiential learning Activity

(*Refer table 3 of similar activity number)

Experiential learning No*	Experiential name	Hours
1.1	Formulation of specific treatment in varieties of Kasa (SL41)	2
1.2	Development of standard treatment schedule for Parshwashoola	3
1.3	Development of methods for diagnosis of Jirna Shwasakrichchhanika (COPD)	3
1.4	Standardization of differential diagnosis of Vispharah (Bronchiectasis) and Klomanalika Niskramana (cystic fibrosis)	2
1.5	Standard procedures for identification and differential diagnosis of Phupphusasruti (pleural effusion)	3
1.6	Mapping of special treatment for Vispharah (Bronchiectasis)	3
1.7	Rationalization of Shodhana, Shamana and Rasayana Chikitsa of Hikka (SM74) and Swarabheda	3
1.8	Mapping for differential diagnosis of Tamaka Shwasa (bronchial asthma) (SL40)	3
1.9	Teaching capacity development in Shwasa (SL42) with special reference to Tamaka Shwasa (SL40)	2
1.10	Diagnosis and stadardization of treatment protocol of Phupphusajanita Hridroga Vikara (cor pulmonale)	2
2.1	Shodhana and Shamana Chikitsa in Rajayakshma	2
2.2	Development of Schedule for Palliative management of Urakshata	3
2.3	Differential diagnosis and selectivity of treatment schedule in Shwasanaka Jwara (pneumonia)	2
2.4	Diagnosis and Selectivity of Treatment Schedule for other infectious lung diseases	3
2.5	Evidence based medicine analysis on Rajayakshama and Urakshata	2
2.6	Shodhana and Shamana Chikitsa in Hridroga	3
2.7	Diagnosis of Kapatika and Peshi Vikriti Janya Hridroga (SL61)	2
2.8	Methods for differential diagnosis of Hritkapatika Vikara (valvular heart diseases)	3
2.9	Utility of ECHO and CAG for diagnosis of Hridroga (SL61)	3

2.10	Justification of diagnostic tools and treatment protocol for diseases under Pranavaha Srota	3
3.1	Rationalization of treatment protocol for Ama Dosha Vikara	3
3.2	Justification of Shodhana and Shamana Treatment of Alasaka, Vishuchika and Vilambika. (SM 3A, 3B)	3
3.3	Chikitsa Upakram for Ama.	3
3.4	Management of Annavaha srotogat Ama.	3
3.5	Chikitsa upakram, Kalpa and pathyapathya for Aanaha, Aadhmana, Aatopa (SM31)	3
3.6	Dravya and Kalpa analysis for mode of action	2
3.7	Selection of Shodhana and Shamana Chikitsa in Ajeerna, Agnimandya, Aruchi and Chhardi	3
3.8	Chikitsa Upakram with Shodhana, Shamana and Rasayana Cikitsa in Amlapitta	3
3.9	Management of Gulma	3
4.1	Shodhana, Shamana and Rasayana Chikitsa in Annadrava shoola	3
4.2	Calculate Shodhana and Shamana Chikitsa in Parinama Shoola	3
4.3	Differential diagnosis on Amashaya-Grahanigata Vrana	3
4.4	Teaching capacity on comparative analysis of Annadrava Shoola, Parinama Shoola and Agnasayagata Chirakari Pradaha	3
4.5	Dietetics in Grahani	2
4.6	Application of Shodhana and Shamana treatment in Grahani	2
4.7	Diagnosis of Grahani (irritable bowel syndrome or IBS) on the basis of criteria of conventional procedures	3
4.8	Diagnosis and differential diagnosis of Ahara Poshana Shosana Avaghata (malabsorption syndrome)	3
4.9	Knowledge of USG and HRCT in Annavaha Srotas diseases	2
4.10	Demonstration of lectures regarding selectivity of investigations in Annavaha Srotas	2
5.1	Treatment protocol generation of a case of Trishna	3
5.2	Management plan for patient of Trishna	3
5.3	Research updates on Trishna	2
5.4	Mapping of causes and Ayurvedic guidelines for management of Trishna	2
5.5	Handling case of edema	2

5.6	Discussion at bedside on the gradation, diagnostic approach of oedema.	2
5.7	Assessment and emergency management of fluid and electrolyte imbalance	2
5.8	Interpretation of diagnostic laboratory values	2
5.9	Assessment of Acidosis and Alkalosis	2
5.10	Approach to electrolyte imbalance and its consequences	2
5.11	Medical management including emergency of a case of intestinal obstruction	2
5.12	Elucidate the laboratory investigations, prognosis, complications, and management and rehabilitation strategies in patients with intestinal perforation.	2
5.13	Demonstrate Rapid diagnosis, resuscitation, evaluation, and management of patients with intestinal perforation.	2
5.14	Establish Principles and interpretation of abdominal X-rays. Indications, techniques, and interpretation of CECT scans	2
5.15	Management strategies for Ascites	3
5.16	Performing paracentesis	3
5.17	Interpretation of lab investigations and management of Hepatosplenomegaly	3
6.1	Treatment algorithm development for Mootrakricchra	3
6.2	Protocol for diagnosis and algorithm in Mutranalika shotha	2
6.3	Algorithm development for identification of risk factor and complication detection of Pourusha granthi vridhhi(BPH)	2
6.4	Advanced competency on Mootravaha Srota Vikaras.	2
6.5	Posts-therapeutic Module of Mootravaha Srotas	2
6.6	Protocol on Ashukari Vrikka Vikara and its Management	3
6.7	Protocol Development for Special Treatment in Mootrashmari.	2
6.8	Protocol development for diagnosis and treatment of Vasti Ashmari (Urolithiasis)	2
6.9	Protocol for general Ayurvedic Treatment in Mootrashmari	2
6.10	Protocol Development on Diagnosis and Mapping of Treatment of urolithiasis and nephrolithiasis .through Ayurveda	2
6.11	Justifications on Chikitsa Siddhanta in Vrikka Roga	3
6.12	Diagnostic protocol development for Vrikka Roga	3
6.13	Recent Updates of Diagnosis and Ayurvedic Management of Chirakari Vrikka Vikara (CKD)	3
6.14	Capacity building on Vrikkaroga	2

6.15	Techniques on urinary catheterization	2
6.16	Standardization of diagnosis and treatment of Vrikkakoshika kshaya (Nephritic syndrome)	2
6.17	Diagnosis and mapping of treatment protocol of Apavrukkatva (Nephrotic syndrome)	2
7.1	Protocol development for management of Pravahika	2
7.2	Treatment protocol of Udavarta	2
7.3	Analyze the clinical features of Udavarta	2
7.4	Protocol development for the management of Atisara	2
7.5	Formulate an individualized treatment protocol for Raktatisara (ulcerative colitis / Crohns disease)	2
7.6	Protocol development for treatment of Diarrhoea	2
7.7	Analyze the effectiveness of various medicines and treatment procedures for IBD, based on evidence from research articles.	2
7.8	identification, interpretation and formulation of individualized treatment protocol for Purishaja krimi	2
7.9	Interpret the treatment protocol of Intestinal Helminthiasis	3
7.10	Interpretation of Stool examination with clinical features and Ayurvedic parameters such as Mala Pariksha and Dosha involvement	2
7.11	integrative assessment approach of Purishavaha Srotas Vikara	2
7.12	Diagnosis and mapping of treatment protocol of Viruddha and Asatmya Ahara Janya Vikara (Food poisoning)	3
8.1	Treatment Protocol for FUO	2
8.2	Treatment protocol for Jvara Rogi.	3
8.3	Managing Ayoga-Atiyoga lakshana of Kriyakrama in Jvara	2
8.4	Managing Jvara in immunocompromised patients.	3
8.5	Management of Jvara Upadrava vikara	2
8.6	Management of Infectious fevers	3
8.7	Compilation - Research findings on Fever management	2
8.8	Management of Pidaka janya Jvara	3
8.9	Scientific Advances in Management of Pidaka Janya Jvara	2
8.10	Management of Sankramaka Jvara - Parasitic Fever.	2
8.11	Management - Hyperthermia/ Heatstroke	2

9.1	Management of Pandu Rogi	2
9.2	Monitoring Pandu management.	3
9.3	Reflection on clinical encounters in Pandu roga	3
9.4	Evidence Based medicine - Pandu	3
9.5	Treatment protocol for Pandu Rogi due to hypoproliferative disorder.	3
9.6	Avasthanusari Chikitsa in Pandu rogi due to hypo proliferative disorder.	3
9.7	Rationale of management in Pandu Vikara of Maturation defect.	2
9.8	Management of Pandu Vikara of Maturation defect	2
9.9	Monitor Chikitsa of Pandu Vikara due to Hemolysis.	2
9.10	Management of Pandu vikara due to Hemolysis	3
10.1	Management of Raktapitta	3
10.2	Rationale of treatment in Raktapitta	3
10.3	Recent evidence based management of Raktapitta (Bleeding and Coagulation disorders).	3
10.4	Advancement in Yakrut roga Aushadha Prayoga	3
10.5	Management of acute hepatobiliary disorders	3
10.6	Management of Chronic hepatobiliary disorders.	3
10.7	Monitoring and adjusting the management of Yakrit roga.	3
10.8	Management of Pleeha roga	2
10.9	Advancement in Pleeha roga Aushadha prayoga	3
11.1	Management of Tvak roga	3
11.2	Aushadha praoga in Tvak rogas	3
11.3	Management of Infective Skin Disorders.	3
11.4	Management of Tvak roga due to Infestation.	2
11.5	Advancement in management of Tvak Vikara due to Infestations	3
11.6	Management of Tvak vikara due to Inflammation	3
11.7	Monitoring management of Tvak Vikara of inflammatory origin.	3
11.8	Management of Pigmentation disorders	2
11.9	Management of Keratinization disorders.	2
11.10	Management of Hair Problem	2
11.11	Management of Cosmetic issues.	2

11.12	Recent evidence based management in Autoimmune disorders of Raktavaha Srotas.	3
11.13	Management of Autoimmune disorders of Raktavaha Srotas.	2
11.14	Avasthanusari chikitsa of Autoimmune disorders of Raktavaha srotas.	3
11.15	Managing unexpected Outcomes in Autoimmune disorders of Raktavaha Srotas.	3
12.1	Dosha and Vyadhi-specific treatment planning in Galaganda	1
12.2	Justification of Oushadha and Kriyakrama in Galaganda management	1
12.3	Dosha and Vyadhi-specific treatment in Apachi	1
12.4	Treatment rationale in Apachi based on Avastha Bheda.	1
12.5	Evidence-based evaluation of Ayurvedic interventions in Galaganda, Gandamala, Apachi	2
12.6	Treatment protocol formulation for Granthi.	1
12.7	Clinical identification and management of adverse/unexpected outcomes in Arbuda care	1
12.8	Justificatory analysis of formulations and procedures in Granthi management	1
12.9	Evidence-based review of Ayurvedic management of Granthi	1
12.10	Community-based cancer prevention	4
12.11	Clinical communication in malignancy care	1
12.12	Comprehensive Ayurvedic care planning in Carcinoma	2
12.13	Stage-wise therapeutic justification in Carcinoma	2
12.14	Critical review of Ayurvedic evidence in Carcinoma	2
12.15	Comprehensive care planning for Sarcoma	2
12.16	Stage-based therapeutic planning for Sarcoma.	2
12.17	Evidence-based appraisal of Ayurvedic treatment protocols for Sarcoma Cases in indexed journals	2
12.18	Comprehensive cancer care planning for blood cancer.	2
12.19	Case-based therapeutic planning for blood cancer.	2
12.20	Journal-based evidence appraisal of published blood cancer cases	2
12.21	Integrated oncological care planning for Brain and Spinal Cord tumours	2
12.22	Case-based therapeutic reasoning in Brain and Spinal cord tumours.	2
12.23	Journal-based critical appraisal of Ayurvedic treatment protocols for Brain and Spinal Cord cancers	2

13.1	Planning and implementation of treatment for Dyslipidemia cases, monitoring outcomes, and documenting findings for academic discussion or publication	2
13.2	Case-based clinical training to plan and justify personalised interventions in Medoroga based on disease staging and therapeutic principles	2
13.3	Critical review of evidence-based literature on Medoroga management and interpretation of clinical outcomes for academic dissemination	2
13.4	Case-based clinical learning approach to develop individualised treatment strategies for Sthoulya using Ayurvedic principles and therapeutic modalities	2
13.5	Critically analyse recent evidence on the management of Sthoulya/Atisthoulya and develop context-appropriate treatment recommendations.	2
13.6	Case-based integrative planning for Type 1 Diabetes Mellitus with Ayurvedic approaches	1
13.7	Case-based integrative management planning for Type 2 Diabetes Mellitus using Ayurvedic principles.	2
13.8	Case-based protocol planning and preventive approach in pre-diabetes.	1
13.9	Critical Appraisal of Evidence-Based Therapies for Prameha Roga	2
13.10	Rational Therapeutics in Acute Diabetic Complications	2
13.11	Disease and Patient-Specific Intervention Planning for the management of Diabetic retinopathy through interdepartmental cooperation	2
13.12	Disease and Patient-Specific Intervention Planning for the management of Diabetic neuropathy	2
13.13	Disease and Patient-Specific Intervention Planning for the management of Prameha Roga	2
13.14	Critical Evaluation and Management of Prameha Roga	2
14.1	Application of Ayurvedic principles in the diagnosis and management of Chaya–Apachaya Janya Roga.	4
14.2	Evaluation of treatment selection based on Avasthabheda and Rogi Bala	2
14.3	Review of research articles to analyse the effectiveness of medicines and treatment procedures in managing metabolic disorders.	2
14.4	Review of published research to analyse treatment outcomes of medicines and procedures used in managing endocrine gland disorders.	2
14.5	Application of Ayurvedic principles in diagnosing and managing pituitary disorders	2
14.6	Rationale of drug selection in Pituitary gland disorders	2
14.7	Ayurvedic integration in thyroid disorder management using stage-specific interventions.	4

14.8	Rational selection of Ayurvedic treatments in endocrine disorders based on avasthabheda.	2
14.9	Case-based analysis and synthesis of Ayurvedic management for adrenal disorders.	1
14.10	Stage-based treatment rationale in adrenal disorders.	1
14.11	Integration of Ayurvedic principles in reproductive hormonal disorder - diagnosis and management.	2
14.12	Rationale for selecting medicines and procedures in reproductive hormonal disorders.	2
15.1	Treatment Protocol for Osteopenia/Osteoporosis	3
15.2	Preparation of treatment protocol for Joint pain based on Guna Siddhanta.	3
15.3	Construction of the treatment Principle of Osteoporosis and Osteopenia.	3
15.4	Treatment Protocol and Discharge Advice for Sandhivata	3
15.5	Recent updates in Asthi-Majjavidradhi management and pathyapathya.	3
15.6	Outpatient Treatment Protocol for a Chronic Osteomyelitis case	3
15.7	Recent updates in the diagnosis and treatment of Vatarakta (Gouty Arthritis)	3
15.8	Post-Discharge Care Plan for Vatarakta Patients: Prescription and Vyayama	3
15.9	Unraveling Avasthanusara Bahiparimarjana Chikitsa in Amavata	3
15.10	Post-Discharge Care Plan for Amavata Patient	3
15.11	Urustambha treatment protocol	3
15.12	Prescription for Severe Pain and Muscle Stiffness in Lower Limbs	3
15.13	Report interpretation in Joint disorder	3
16.1	Assessment of Doshaja Nanatmaja Viara	3
16.2	Chikitsa Siddhanta of Nanatmaja Vata Vikara to differentiate the role of doshas	3
16.3	Interpretation of Chikitsa Siddhanta and Samanyachikitsa in Vatavyadhi	3
16.4	Diagnosis and Treatment Plan for Vishwachi/Manyastambha in Outpatient Care	3
16.5	Holistic Treatment Protocol for Vishwachi	3
16.6	Treatment Protocol for Manyastambha	3
16.7	Comprehensive Treatment Protocol for Gradhrasi.	3
16.8	Role of Nasya (Bahushhershagate nasyam) in Apabahuka	3
16.9	Evaluation and Management of Frozen Shoulder	3

16.10	Kroshtukasheersha Treatment Protocol	3
16.11	Ayurveda Treatment Protocol for Febrile and Afebrile Convulsions	3
16.12	Vega Kaleena Vyadhis: Symptoms and Treatment Correlations	3
16.13	Visit to the ED Hospital: Tetanus and Convulsive Disorders Update	3
17.1	Comprehensive Medical History and Clinical Diagnosis in Pakshaghata for treatment interpretation.	3
17.2	Comprehensive treatment protocol for Pakshaghata following Ischemic Stroke: Shodhana, Shamana, and Rasayana Approaches.	3
17.3	Comprehensive Treatment Protocol for Sarvangavata: Aushadhaprayoga, Shodhana, and Rasayana	3
17.4	Justification of Virechana Karma in Pakshaghata: A Review of Research and Classical Insights	3
17.5	Significance of Anulomana Chikitsa in Vata Vyadhi Treatment.	3
17.6	Critical Role of Basti Chikitsa in Vatavyadhi Treatment	3
17.7	Ayurveda Management Protocol for Acute Urinary Obstruction	3
17.8	Comparison of Koshtagata Vata, Gulma, Gudagata Vata, Tuni, and Pratituni	3
17.9	Justification of the need for Shodhana chikitsa in Koshta-gata, Guda-gata, Amashaya-gata, and Pakwashaya-gata Vata.	3
17.10	Treatment Protocol for Neuropathies: Classification(Kevala Nirupasthambha and Sadosha Upasthambha Vatavyadhis) and Therapy Approaches	3
17.11	Distinguishing Parkinson's Disease from Other Parkinsonian and Neuromuscular Disorders: A Focus on Etiopathogenesis	3
17.12	Kampavata Treatment Protocol	3
17.13	Entrapment Neuripathy and Ayurvedic Management	3
18.1	Treatment protocol for Dementia.	2
18.2	MRI and CT Changes of Brain in Dementia, Parkinsonism, Athetosis, Chorea and other Neurodegenerative Disorders.	2
18.3	Treatment Protocol in IP patient for Movement Disorders.	3
18.4	Assessment of Parkinson's through Hoehn and Yahr Rating Scale.	2
18.5	Role of inheritance and genes in X -Linked Cerebellar Ataxia, Spinal Cerebral Ataxia.	3
18.6	Treatment protocol for Multiple Sclerosis.	3
18.7	Differential Diagnosis of Amyotrophic lateral sclerosis (ALS) and Multiple Sclerosis.	4
18.8	Restless leg syndrome (RLS).	4

18.9	Difference between MND and Muscular Dystrophies	3
18.10	Treatment protocol for Vertebral Disc Compressions.	3
18.11	Differential diagnosis of Vertebral Disc Compressions.	3
18.12	Panchakarma procedures in Cervical Myelopathy WSR to Basti Chikitsa and Nasya karma.	2
18.13	Treatment protocol along with Pathyaapathya in IP patient for UMN and LMN Paralysis.	2
18.14	Treatment protocol along with Pathyaapathya in IP patient for Ascending and Descending Paralysis.	2
18.15	Generate referral letter for a Myelopathy patient to a higher center stating the condition of the patient and reason for referral.	1
19.1	Counselling session for a Schizophrenia patient.	2
19.2	Signs and symptoms of different types of panic disorders.	2
19.3	Treatment protocol for psychiatric disorder.	2
19.4	Design a management protocol for Apasmara.	3
19.5	bahyachikitsa for Apasmara rogi.	3
19.6	Counselling session for a patient of Atatvabhinivesha	3
19.7	Glasgow Coma scale.	3
19.8	Treatment protocol for alcoholic intoxication.	3
19.9	Differentiate organic and non organic mental disorders	3
19.10	Rehabilitation Therapies in for Drug Abuse	2
20.1	Genitalia and pelvic examination.	3
20.2	Understanding of psychosexual disorders.	3
20.3	Counseling session for Premature Ejaculation.	3
20.4	Management of STDs.	3
20.5	Demonstration about procedures used for diagnosis of BPH. (Direct or by Video clips).	3
20.6	Role of investigation and psychotherapy in STDs.	3
20.7	Chikitsa for male and female infertility.	3
20.8	investigations for diagnosis of infertility and sub fertility.	3
20.9	Role of rasayana in male infertility.	2
21.1	Visit or interaction with clinical Immunology and Rheumatology expert.	3
21.2	Visit or interaction with clinical Immunology and Rheumatology centre/expert	3

21.3	Visit or interaction with clinical Immunology and Rheumatology centre/expert	3
21.4	Visit or interaction with clinical Immunology and Rheumatology expert	3
21.5	Visit or interaction with Immunology, Rheumatology centre expert. Applied aspect of Immunology in Vaccines, Tumour Immunology, Autoimmune Diseases, Allergic disorders.	3
21.6	Visit or interaction with Organ transplant centre/Expert - indications and importance of Organ transplantation	3
21.7	Visit or interaction with Organ transplant centre/Expert - Ethical and legal issues	3
21.8	Visit or interaction with Organ transplant centre/Expert - Organ procurement, Transplant procedure	3
21.9	Visit or interaction with Gene therapy centre- Gene therapy and its updates	3
21.10	Visit or interaction with Gene therapy centre/Expert - Stem cell therapy and its updates	3
21.11	Visit or interaction with Gene therapy centre- Genetic modelling and chromosomal disorders in different disease	3
21.12	Visit or interaction with experts in radio isotopes therapy centre- Radio isotopes therapy and its updates	3
21.13	Visits or interactions with experts to understand utility, indications, and applications in disease markers	3
22.1	National health campaigns, Site visit/Interaction with experts	3
22.2	Visit or interaction with District Ayush officer/CHC/PHC/Govt Ayurveda dispensary and appraising of Ayush health campaigns	3
22.3	A Review of Global and National Health Challenges with Insights from Ayurveda	3
22.4	Group Exploration: Chikungunya – Current Scenario, Government Response, and Integrative Ayurveda Strategies	3
22.5	Group Exploration: HIV/AIDS – Current Scenario, Government Response, and Integrative Ayurveda Strategies	3
22.6	Group Exploration: Swine flu – Current Scenario, Government Response, and Integrative Ayurveda Strategies	3
22.7	Group Exploration: Chicken flu – Current Scenario, Government Response, and Integrative Ayurveda Strategies	2
22.8	Group Exploration:Dengue – Current Scenario, Government Response, and Integrative Ayurveda Strategies	2
22.9	Group Exploration: Sick building syndrome and Fibromyalgia – Current Scenario, Government Response, and Integrative Ayurveda Strategies	2

22.10	Group Exploration: COVID-19 – Current Scenario, Government Response, and Integrative Ayurveda Strategies	2
23.1	Expert Interaction: Advances in Science and Ayurveda Enhancing Evidence-Based Kayachikitsa Practice – From Fundamentals to Prognosis	1
23.2	Visit or interaction with contributors/experts-Advances in Sciences, Ayurveda, kayachikitsa	3
23.3	Design and develop Ayurveda treatment protocol/ severity assessment tools/ prognostic assessment tools contributing to kayachikitsa practice	3
23.4	Interact/visit- Experts/authors of publications related independent and collaborative research in Kayachikitsa	3
23.5	Interact/visit- Experts/authors of publications related advances in Complementary and alternative medicine	3
23.6	Hands on experience on identifying, recording, analysing, causality assessment and reporting of adverse events with Ayurveda medications and drug- drug, drug-food interactions relevant to Kayachikitsa practice	3
23.7	Interacting with experts/executing advances (in selected diseases)- Advances in the vajiakarana chikitsa that contributes to kayachikitsa practise	2
23.8	Interact with experts/survey of patients visiting ayurveda hospital -Integrative medicine	3
23.9	Interact with experts of Integrative medicine (Ayurveda and Conventional medicine)	3
23.10	Interact with experts related to Integrative medicine (Ayurveda and physiotherapy, physical medicine and rehabilitation)	3
23.11	Interacting with experts on Integrative medicine (Ayurveda and Yoga)	3
23.12	Interact with experts/executing advances (in selected diseases)- Advances in the Rasayana chikitsa that contributes to kayachikitsa practise	3
23.13	Interact with experts/executing advances (in selected diseases) in the manasaroga chikitsa that contributes to kayachikitsa practise	2
23.14	Interact with experts/executing advances (in selected diseases)- panchakarma chikitsa that contributes to kayachikitsa practise	2
23.15	Interacting with experts/executing advances (in selected diseases)- panchakarma chikitsa Technology, gadgets, equipment, instruments that contribute to kayachikitsa practice	2
24.1	Physical examination and assessment of geriatric patients and old age home visit	3
24.2	Assessment and management of Annavaha srotas vikara in Jara	3
24.3	Performance of assessment and management of Vatavyadhi (Nuerological disorders) in Jara	3

24.4	Performance of assessment and management of Vatavyadhi (Musculoskeletal disorders) in Jara	3
24.5	Performance of assessment and management of mano vyadhi (Mental health and Psychiatric disorders)	3
24.6	Performance of assessment and management of Arbuda in Jara	3
24.7	Performance of assessment and management of Raktavaha sroto vikara in Jara	3
24.8	Performance of assessment and management of Medovaha sroto vikara in Jara	3
24.9	Performance of application of palliative care tools in Jara chikitsa.	2
25.1	Performance on Equipment/devices/ IT tools, patient care protocols	3
25.2	Performance of Prana Rakshana, Oja Rakshana, Agni Rakshana, Indriya Rakshana	3
25.3	Endotracheal intubation and usage of defibrillator	3
25.4	Cardiopulmonary resuscitation techniques	3
25.5	Performance of anaphylaxis management	3
25.6	Performance of the assessment and atyayika chikitsa in Pranavaha sroto vikara like acute severe asthma, exacerbation of chronic obstructive airways disease, acute exacerbations of chronic respiratory disease.	3
25.7	Performance of the assessment and atyayika chikitsa in Pranavahasroto vikara like pneumonia, pneumothorax, pleural effusions, respiratory failure	3
25.8	Performance of the assessment and atyayika chikitsa in Svatantra and Paratantra Hridrogaincluding severe hypertension, acute heart failure, acute coronary syndrome	3
25.9	Adult basic life support training.	3
25.10	Performance of assessment and management of teevrajwara in conditions due to Saamajwara Jeernajwara, Jwara with Dhatupaka	3
25.11	Performance of the assessment and management of teevrajwara in conditions due to vishamajawara, Sannipatika Jwara	3
25.12	Performance of the assessment and management of Marmabhighata Chikitsa (medical management) including septic shock	3
25.13	Performance of the assessment and management of Marmabhighata Chikitsa (medical management) including cardiogenic shock	3
26.1	Performance of the assessment and management of Vegavastha of Pakshaghata, (Acute Ischemic Stroke, Cerebral Haemorrhage and Haematomas), Ardita (Facial palsy).	3

26.2	Performance of the assessment and management of Ekanga-Sarvanga Roga (G B Syndrome, Acute Poly Neuronopathies).	3
26.3	Performance of the assessment and management of Vatavyadhi including Mastishkavarana shotha (Meningitis), Mastiskashotha (Encephalitis)	3
26.4	Performance of the assessment and management of Teevra Apasmara (Status Epilepticus)	3
26.5	Performance of the assessment and Ayurvedic management of Pain (Acute Neuronopathies, Acute musculoskeletal pain, visceral pain), Raktamokshana, Agnikarma, cupping	3
26.6	Performance of the assessment and atyayika chikitsa in Thyrotoxicosis, Adrenal crisis	3
26.7	Performance of the assessment and atyayika chikitsa in Mutraghata and Mootrakricchra including Acute Kidney Injury, Diabetic Ketoacidosis.	3
26.8	Performance of the assessment and atyayika chikitsa in Prameha atyayika Avastha like Diabetic complications like Hypoglycaemia, Hyperosmolar Hyperglycemia, Durmehaḥ (Diabetic Ketoacidosis)	3
26.9	Performance of the assessment and atyayika chikitsa in Teevra Chardi, Sarakta Chardi	2
26.10	Performance of the assessment and atyayika chikitsa in Teevra Atisara, Raktatisara, Grahani	2
26.11	Performance of the assessment and atyayika chikitsa in Kamala (Acute Liver Disease), Udara (Hepatic Encephalopathy, Cirrhosis)	2
26.12	Performance of the assessment and atyayika chikitsa in Raktamokshana and Nasya vyapad	2
26.13	Performance of the assessment and atyayika chikitsa in Basti vyapada like gudagata, urethral (uttarabasti), vaginal (uttarabasti). Bahi parimarjana chikitsa vyapada like sneha-swedana janya (upanaha, abhyanga etc)	2
26.14	Performance of the assessment and atyayika chikitsa in Drug overdoses (both accidental and non-accidental), acute drug reactions and anaphylaxis	2
26.15	Performance of the assessment and atyayika chikitsa in Poisonings	3

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Paper	Theory	Practical	Total
AYPG-KC	4	100 x 4 Papers = 400	400	800

6 B : Scheme of Assessment (Formative and Summative Assessment)

Credit frame work

AYPG-KC consists of 26 modules totaling 64 credits, which correspond to 1920 Notional Learning Hours. Each credit comprises 30 Hours of learner engagement, distributed across teaching, practical, and experiential learning in the ratio of 1:2:3. Accordingly, one credit includes 5 hours of teaching, 10 hours of practical training, 13 hours of experiential learning, and 2 hours allocated for modular assessment, which carries 25 marks.

Formative Assessment :Module wise Assessment:will be done at the end of each module. Evaluation includes learners active participation to get Credits and Marks. Each Module may contain one or more credits.

Summative Assessment:Summative Assessment (University examination) will be carried out at the end of Semester VI.

6 C : Calculation Method for Modular Grade Points (MGP)

Module Number & Name (a)	Credits (b)	Actual No. of Notional Learning Hours (c)	Attended Number of notional Learning hours (d)	Maximum Marks of assessment of modules (e)	Obtained Marks per module (f)	MGP $=d*f/c*e*100$
Semester No : 3						
Paper No : 1 (Prana Anna Udaka Mootra and Prishavaha srotodushti vikara chikitsa)						
M 1 Pranavaha Srotodushti Vikara evum Chikitsa-I (Respiratory disorders and its management)	2	60		50		
M 2 Pranavaha Srotodushti Vikara evum Chikitsa-II (Cardio-respiratory disorders and its management)	2	60		50		
Paper No : 2 (Rasa, Rakta, Mamsa, Medovaha srotodushti vikara chikitsa)						
M 8 Rasapradoshaja Vikara- Jvara evum Atisantapa (Hyperthermia)	2	60		50		
M 9 Rasapradoshaja vikara- Pandu	2	60		50		
Paper No : 3 (Asthi Majja Shukravaha srotodushti vikara & Manoroga, Vata Vyadhi chikitsa)						
M 15 Asthi-Majjhavahasrotas Vikara evam Chikitsa (Management of Bone and Joint Disorders/ Skeletal System Disorders)	3	90		75		
Paper No : 4 (Adhyatana Kayachikitsa (Updates in Kayachikitsa))						
M 21 Immunology, Organ transplantation, Gene therapy, radio isotopes	3	90		75		
M 22 National health programmes and emerging diseases	2	60		50		
	16	480		400		
Semester No : 4						
Paper No : 1 (Prana Anna Udaka Mootra and Prishavaha srotodushti vikara chikitsa)						
M 3 Annavaha Srotodushti Vikaras evum Chikitsa -I (Gastrointestinal disorders-I and its management)	2	60		50		
Paper No : 2 (Rasa, Rakta, Mamsa, Medovaha srotodushti vikara chikitsa)						
M 10 Raktapradoshaja Vikara – Raktapitta & Yakrit pleeha roga	2	60		50		
M 11 Raktapradoshaja vikara – Tvak roga	3	90		75		
Paper No : 3 (Asthi Majja Shukravaha srotodushti vikara & Manoroga, Vata Vyadhi chikitsa)						
M 16 Vatavyadhi -1	3	90		75		

M 17 Vatavyadhi – 2	3	90		75		
Paper No : 4 (Adhyatana Kayachikitsa (Updates in Kayachikitsa))						
M 23 Advances in kayachikitsa	3	90		75		
	16	480		400		
Semester No : 5						
Paper No : 1 (Prana Anna Udaka Mootra and Prishavaha srotodushti vikara chikitsa)						
M 4 Annavaha Srotodushti Vikara evum Chikitsa II (Gastrointestinal disorders and its management)	2	60		50		
M 5 Udakavaha Srotodushti Vikaras evum Cikitsa (Water and electrolyte imbalance and its management)	3	90		75		
Paper No : 2 (Rasa, Rakta, Mamsa, Medovaha srotodushti vikara chikitsa)						
M 12 Mamsa Pradoshaja vikara	3	90		75		
Paper No : 3 (Asthi Majja Shukravaha srotodushti vikara & Manoroga, Vata Vyadhi chikitsa)						
M 18 Vatavyadhi - 3 (Neurodegenerative and Musculoskeletal disorders)	3	90		75		
Paper No : 4 (Adhyatana Kayachikitsa (Updates in Kayachikitsa))						
M 24 Jaraja Vyadhi (Geriatric medicine)	2	60		50		
M 25 Atyayika Avastha and Chikitsa - Pranavaha Srotasa and Hridroga (Respiratory and Cardiovascular Emergencies), udaka vaha srotasa, Sanyasa ,Moorcha, Marmabhighata.	3	90		75		
	16	480		400		
Semester No : 6						
Paper No : 1 (Prana Anna Udaka Mootra and Prishavaha srotodushti vikara chikitsa)						
M 6 Mootravaha Srotodushti vikara evum Chikitsa (Genito-urinary and renal disorders and its management)	3	90		75		
M 7 Purishavaha Srotodushti vikaras evum Chikitsa (Intestinal and colorectal disorders with worm infestations and its management)	2	60		50		
Paper No : 2 (Rasa, Rakta, Mamsa, Medovaha srotodushti vikara chikitsa)						
M 13 Medo Doshaja Vikara	2	60		50		
M 14 Chaya – Apachaya Janya roga (Metabolic disorders) & Anthasravi Granthi Roga (Endocrine disorders)	2	60		50		
Paper No : 3 (Asthi Majja Shukravaha srotodushti vikara & Manoroga, Vata Vyadhi chikitsa)						
M 19 Manovaha Sroto Vikara	2	60		50		

M 20 Shukravaha Srotovikara (Reproductive medicine)	2	60		50		
Paper No : 4 (Adhyatana Kayachikitsa (Updates in Kayachikitsa))						
M 26 Vata Vyadhi (Neurological Emergency), Mootravaha sroto vyadhi, Annavaaha, purishavaha, (Gastroenterological Emergencies), Udakavaha (fluid and electrolyte imbalance), Toxicological Emergencies (Visha)	3	90		75		
	16	480		400		
MGP = ((Number of Notional learning hours attended in a module) X (Marks obtained in the modular assessment) / (Total number of Notional learning hours in the module) X (Maximum marks of the module)) X 100						

6 D : Semester Evaluation Methods for Semester Grade Point Average (SGPA)

SGPA will be calculated at the end of the semester as an average of all Module MGPs. Average of MGPs of the Semester For becoming eligible for Summative assessment of the semester, student should get minimum of 60% of SGPA SGPA = Average of MGP of all modules of all papers = add all MGPs in the semester/ no. of modules in the semester Evaluation Methods for Modular Assessment		
Semester No : 3		
Paper No : 1 Prana Anna Udaka Mootra and Prishavaha srotodushti vikara chikitsa		
A S.No	B Module number and Name	C MGP
1	M1.Pranavaha Srotodushti Vikara evum Chikitsa-I (Respiratory disorders and its management)	C 1
2	M2.Pranavaha Srotodushti Vikara evum Chikitsa-II (Cardio-respiratory disorders and its management)	C 2
Paper No : 2 Rasa, Rakta, Mamsa, Medovaha srotodushti vikara chikitsa		
A S.No	B Module number and Name	C MGP
3	M8.Rasapradoshaja Vikara- Jvara evum Atisantapa (Hyperthermia)	C 3
4	M9.Rasapradoshaja vikara- Pandu	C 4
Paper No : 3 Asthi Majja Shukravaha srotodushti vikara & Manoroga, Vata Vyadhi chikitsa		
A S.No	B Module number and Name	C MGP
5	M15.Asthi-Majjhavahasrotas Vikara evam Chikitsa (Management of Bone and Joint Disorders/ Skeletal System Disorders)	C 5
Paper No : 4 Adhyatana Kayachikitsa (Updates in Kayachikitsa)		
A S.No	B Module number and Name	C MGP
6	M21.Immunology, Organ transplantation, Gene therapy, radio isotopes	C 6
7	M22.National health programmes and emerging diseases	C 7
	Semester Grade point Average (SGPA)	$(C1+C2+C3+C4+C5+C6+C7) / \text{Number of modules}(7)$

Semester No : 4		
Paper No : 1 Prana Anna Udaka Mootra and Prishavaha srotodushti vikara chikitsa		
A S.No	B Module number and Name	C MGP
1	M3.Annavaha Srotodushti Vikaras evum Chikitsa -I (Gastrointestinal disorders–I and its management)	C 1
Paper No : 2 Rasa, Rakta, Mamsa, Medovaha srotodushti vikara chikitsa		
A S.No	B Module number and Name	C MGP
2	M10.Raktapradoshaja Vikara – Raktapitta & Yakrit pleeha roga	C 2
3	M11.Raktapradoshaja vikara – Tvak roga	C 3
Paper No : 3 Asthi Majja Shukravaha srotodushti vikara & Manoroga, Vata Vyadhi chikitsa		
A S.No	B Module number and Name	C MGP
4	M16.Vatavyadhi -1	C 4
5	M17.Vatavyadhi – 2	C 5
Paper No : 4 Adhyatana Kayachikitsa (Updates in Kayachikitsa)		
A S.No	B Module number and Name	C MGP
6	M23.Advances in kayachikitsa	C 6
	Semester Grade point Average (SGPA)	$(C1+C2+C3+C4+C5+C6) / \text{Number of modules}(6)$
Semester No : 5		
Paper No : 1 Prana Anna Udaka Mootra and Prishavaha srotodushti vikara chikitsa		
A S.No	B Module number and Name	C MGP
1	M4.Annavaha Srotodushti Vikara evum Chikitsa II (Gastrointestinal disorders and its management)	C 1
2	M5.Udakavaha Srotodushti Vikaras evum Cikitsa (Water and electrolyte imbalance and its management)	C 2
Paper No : 2 Rasa, Rakta, Mamsa, Medovaha srotodushti vikara chikitsa		
A S.No	B Module number and Name	C MGP

3	M12.Mamsa Pradoshaja vikara	C 3
Paper No : 3 Asthi Majja Shukravaha srotodushti vikara & Manoroga, Vata Vyadhi chikitsa		
A S.No	B Module number and Name	C MGP
4	M18.Vatavyadhi - 3 (Neurodegenerative and Musculoskeletal disorders)	C 4
Paper No : 4 Adhyatana Kayachikitsa (Updates in Kayachikitsa)		
A S.No	B Module number and Name	C MGP
5	M24.Jaraja Vyadhi (Geriatric medicine)	C 5
6	M25.Atyayika Avastha and Chikitsa -Pranavaha Srotasa and Hridroga (Respiratory and Cardiovascular Emergencies), udaka vaha srotasa, Sanyasa ,Moorcha, Marmabhighata.	C 6
	Semester Grade point Average (SGPA)	$(C1+C2+C3+C4+C5+C6) / \text{Number of modules}(6)$
Semester No : 6		
Paper No : 1 Prana Anna Udaka Mootra and Prishavaha srotodushti vikara chikitsa		
A S.No	B Module number and Name	C MGP
1	M6.Mootravaha Srotodushti vikara evum Chikitsa (Genito-urinary and renal disorders and its management)	C 1
2	M7.Purishavaha Srotodushti vikaras evum Chikitsa (Intestinal and colorectal disorders with worm infestations and its management)	C 2
Paper No : 2 Rasa, Rakta, Mamsa, Medovaha srotodushti vikara chikitsa		
A S.No	B Module number and Name	C MGP
3	M13.Medo Doshaja Vikara	C 3
4	M14.Chaya – Apachaya Janya roga (Metabolic disorders) & Anthasravi Granthi Roga (Endocrine disorders)	C 4
Paper No : 3 Asthi Majja Shukravaha srotodushti vikara & Manoroga, Vata Vyadhi chikitsa		
A S.No	B Module number and Name	C MGP
5	M19.Manovaha Sroto Vikara	C 5

6	M20.Shukravaha Srotovikara (Reproductive medicine)	C 6
Paper No : 4 Adhyatana Kayachikitsa (Updates in Kayachikitsa)		
A S.No	B Module number and Name	C MGP
7	M26.Vata Vyadhi (Neurological Emergency), Mootravaha sroto vyadhi, Annavaaha, purishavaha, (Gastroenterological Emergencies), Udakavaha (fluid and electrolyte imbalance), Toxicological Emergencies (Visha)	C 7
	Semester Grade point Average (SGPA)	(C1+C2+C3+C4+C5+C6+C7) / Number of modules(7)
S. No	Evaluation Methods	
1.	Method explained in the Assessment of the module or similar to the objectives of the module.	

6 E : Question Paper Pattern

MD/MS Ayurveda Examination AYPG-KC Sem VI

Time: 3 Hours ,**Maximum Marks:** 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	Marks per question	Total Marks
Q 1	Application-based Questions (ABQ)	1	20	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Analytical based structured Long answer question (LAQ)	4	10	40
				100

6 F : Distribution for summative assessment (University examination)

S.No	List of Module/Unit	ABQ	SAQ	LAQ
Paper No : 1 (Prana Anna Udaka Mootra and Prishavaha srotodushti vikara chikitsa)				
(M-1) Pranavaha Srotodushti Vikara evum Chikitsa-I (Respiratory disorders and its management) (Marks: Range 5-20)				
1	(U-1) Dexterity on Kasa, Parshwashoola and their conventional correlation	Yes	Yes	Yes
2	(U-2) Dexterity on Shwasa, Hikka and Swarabheda with conventional correlation	Yes	Yes	Yes
(M-2) Pranavaha Srotodushti Vikara evum Chikitsa-II (Cardio-respiratory disorders and its management) (Marks: Range 5-20)				
1	(U-1) Dexterity on Rajayakshma and Urahkshata with conventional correlation	Yes	Yes	Yes
2	(U-2) Dexterity on Hridroga with comparative studies on heart diseases	Yes	Yes	Yes
3	(U-3) Dexterity on diagnostic approaches of cardio-respiratory diseases	Yes	Yes	Yes
(M-3) Annavaaha Srotodushti Vikaras evum Chikitsa -I (Gastrointestinal disorders–I and its management) (Marks: Range 5-20)				
1	(U-1) Dexterity on Ama dosha vikar and it's management	No	Yes	Yes
2	(U-2) Dexterity on disorders of Agni. it's management and conventional correlation	Yes	Yes	Yes
(M-4) Annavaaha Srotodushti Vikara evum Chikitsa II (Gastrointestinal disorders and its management) (Marks: Range 5-20)				
1	(U-1) Dexterity on Shoola in comparison with PUD and related disorders	Yes	Yes	Yes
2	(U-2) Dexterity on Grahani in comparison with IBS	Yes	Yes	Yes
3	(U-3) Dexterity on diagnostic approach of GI disorders	No	Yes	Yes
(M-5) Udakavaha Srotodushti Vikaras evum Cikitsa (Water and electrolyte imbalance and its management) (Marks: Range 5-20)				
1	(U-1) Trishna and conventional correlation	No	Yes	Yes
2	(U-2) Shotha and conventional correlation	No	Yes	Yes
3	(U-3) Water and electrolyte imbalance	Yes	Yes	Yes
4	(U-4) Udararoga and conventional correlation	Yes	Yes	Yes

(M-6) Mootravaha Srotodushti vikara evum Chikitsa (Genito-urinary and renal disorders and its management) (Marks: Range 5-20)				
1	(U-1) Mootrakrichra, Mootraghata and Conventional correlation	Yes	Yes	Yes
2	(U-2) Mootrashmari and conventional correlation	No	Yes	Yes
3	(U-3) Vrikka rogas and conventional correlation	Yes	Yes	Yes
4	(U-4) Renal disorders and its manifestation	No	Yes	Yes
(M-7) Purishavaha Srotodushti vikaras evum Chikitsa (Intestinal and colorectal disorders with worm infestations and its management) (Marks: Range 5-20)				
1	(U-1) Purishavaha srotodushti vikara	Yes	Yes	Yes
2	(U-2) Purishaja Krimi Vikara evum chikitsa	No	Yes	No
3	(U-3) Diagnostic techniques of Purishavaha Srotodushti Vikara (Intestinal and colorectal disorders)	No	Yes	No
4	(U-4) Viruddha and Asatmya Ahara Janya Vikara (food poisoning)	No	Yes	No
S.No	List of Module/Unit	ABQ	SAQ	LAQ
Paper No : 2 (Rasa, Rakta, Mamsa, Medovaha srotodushti vikara chikitsa)				
(M-8) Rasapradoshaja Vikara- Jvara evum Atisantapa (Hyperthermia) (Marks: Range 5-20)				
1	(U-1) Jvara	Yes	Yes	Yes
2	(U-2) Sankramaka Roga – Infectious fevers	No	Yes	Yes
3	(U-3) Sankramaka Roga - Pidakajanya Jvara (Infectious fever with rash) This unit provide comprehensive knowledge about Pidakajanya Jwara and management	No	Yes	Yes
4	(U-4) Sankramaka jvara - Fevers of Parasitic origin	No	Yes	Yes
5	(U-5) Atisantapa (hyperthermia)	No	Yes	No
(M-9) Rasapradoshaja vikara- Pandu (Marks: Range 5-20)				
1	(U-1) Pandu	Yes	Yes	Yes
2	(U-2) Pandu Vikara - Hypoproliferative anemia (Anemia of Central Origin)	Yes	Yes	Yes
3	(U-3) Pandu Vikara - Anemia due to Maturation defect/disorder	No	Yes	Yes
4	(U-4) Pandu Vikara - Anemia due to Hemolysis/Hemorrhage	No	Yes	Yes
(M-10) Raktapradoshaja Vikara – Raktapitta & Yakrit pleeha roga (Marks: Range 5-20)				
1	(U-1) Raktapitta	Yes	Yes	Yes

2	(U-2) Yakrit Roga	Yes	Yes	Yes
3	(U-3) Pleeha Roga	No	Yes	Yes
(M-11)Raktapradoshaja vikara – Tvak roga (Marks: Range 5-20)				
1	(U-1) Twak Vikara (SN 40 -SN9Z, SN 60- SN 6Z)	Yes	Yes	Yes
2	(U-2) Twak roga - Infections and Infestations	No	Yes	Yes
3	(U-3) Twak Roga due to inflammation	No	Yes	Yes
4	(U-4) Twak roga - Pigmentation disorders and Keratinization disorders	No	Yes	Yes
5	(U-5) Hair and Cosmetic issues	No	Yes	No
6	(U-6) Autoimmune disorders w.s.r to Raktavahasrotas	No	Yes	No
(M-12)Mamsa Pradoshaja vikara (Marks: Range 5-20)				
1	(U-1) Galaganda, Gandamala and Apachi	No	Yes	Yes
2	(U-2) Granthi, Arbuda and Neoplasm	Yes	Yes	Yes
3	(U-3) Arbuda – Carcinoma	No	Yes	No
4	(U-4) Arbuda – Sarcoma	No	Yes	No
5	(U-5) Arbuda – Rakta Arbuda (Blood Cancer)	No	Yes	Yes
6	(U-6) Brain and Spinal cord Cancers	No	Yes	Yes
(M-13)Medo Doshaja Vikara (Marks: Range 5-20)				
1	(U-1) Medo roga	No	Yes	Yes
2	(U-2) Sthoulya	No	Yes	Yes
3	(U-3) Prameha	Yes	Yes	Yes
4	(U-4) Prameha Upadrava	No	Yes	Yes
(M-14)Chaya – Apachaya Janya roga (Metabolic disorders) & Anthasravi Granthi Roga (Endocrine disorders) (Marks: Range 5-20)				
1	(U-1) Metabolic disorders	Yes	Yes	Yes
2	(U-2) Endocrine disorders	No	No	Yes
3	(U-3) Endocrine disorders of Pituitary Gland	No	Yes	No
4	(U-4) Thyroid and Parathyroid gland disorders	No	Yes	Yes
5	(U-5) Adrenal gland disorders	No	Yes	Yes
6	(U-6) Disorders of reproductive glands – Testes and Ovary	No	Yes	Yes
S.No	List of Module/Unit	ABQ	SAQ	LAQ
Paper No : 3 (Asthi Majja Shukravaha srotodushti vikara & Manoroga, Vata Vyadhi chikitsa)				

(M-15)Asthi-Majjhavahasrotas Vikara evam Chikitsa (Management of Bone and Joint Disorders/ Skeletal System Disorders) (Marks: Range 5-20)				
1	(U-1) Asthikshaya and Sandhigatavata	No	Yes	Yes
2	(U-2) Asthi-Majjavidradhi	No	Yes	Yes
3	(U-3) Metabolic and autoimmune joint Disorders	Yes	Yes	Yes
4	(U-4) Urustambha and prayoga shalina pariksha in Joint Disorders	No	Yes	Yes
(M-16)Vatavyadhi -1 (Marks: Range 5-20)				
1	(U-1) Vatavyadhi Parichaya	No	Yes	Yes
2	(U-2) Spinal cord disorders	Yes	Yes	Yes
3	(U-3) Snayu & Sandhi Vikara	No	Yes	No
4	(U-4) VegakaalanaVatavyadhi	No	Yes	Yes
(M-17)Vatavyadhi – 2 (Marks: Range 5-20)				
1	(U-1) Arditavata, Gatavata	Yes	Yes	Yes
2	(U-2) Madhya Shareeragata vata and Tuni	No	Yes	No
3	(U-3) Kampavata/Parkinson's Disease and Bahu tantrika Shotha (Polyneuropathy)	No	Yes	Yes
4	(U-4) Pakshaghata	Yes	Yes	Yes
(M-18)Vatavyadhi - 3 (Neurodegenerative and Musculoskeletal disorders) (Marks: Range 5-20)				
1	(U-1) Neurodegenerative disorders and Smriti Nasha	No	Yes	Yes
2	(U-2) ALS AND Multiple Sclerosis	No	Yes	Yes
3	(U-3) Musculoskeletal disorders	No	Yes	Yes
4	(U-4) Myelopathy	No	Yes	No
(M-19)Manovaha Sroto Vikara (Marks: Range 5-20)				
1	(U-1) Unmada	No	Yes	Yes
2	(U-2) Apasmara and Atatvabhinivesha	Yes	Yes	Yes
3	(U-3) Mada, Moorcha, Sanyasa	No	Yes	No
4	(U-4) Madatyaya	No	Yes	Yes
5	(U-5) Organic and non-organic Mental(brain) disorders	No	Yes	No
(M-20)Shukravaha Srotovikara (Reproductive medicine) (Marks: Range 5-20)				
1	(U-1) Klaibya	Yes	Yes	Yes
2	(U-2) Male Reproductive Disorders	No	Yes	Yes

3	(U-3) Vandyatva and Vajeeekarana	Yes	Yes	Yes
S.No	List of Module/Unit	ABQ	SAQ	LAQ
Paper No : 4 (Adhyatana Kayachikitsa (Updates in Kayachikitsa))				
(M-21) Immunology, Organ transplantation, Gene therapy, radio isotopes (Marks: Range 5-15)				
1	(U-1) Immunology	No	Yes	Yes
2	(U-2) Organ transplantation	No	Yes	Yes
3	(U-3) Gene therapy	No	Yes	Yes
4	(U-4) Radio isotopes	No	Yes	No
(M-22) National health programmes and emerging diseases (Marks: Range 5-15)				
1	(U-1) National health Programmes	No	Yes	Yes
2	(U-2) Emerging Health Challenges	No	Yes	Yes
(M-23) Advances in kayachikitsa (Marks: Range 5-20)				
1	(U-1) Advances in Kayachikitsa	No	Yes	Yes
2	(U-2) Integrative Medicine	No	Yes	No
3	(U-3) Advances in Rasayana, Vajikarana, Manasaroga	Yes	Yes	Yes
4	(U-4) Advances in Panchakarma	No	Yes	No
(M-24) Jaraja Vyadhi (Geriatric medicine) (Marks: Range 5-20)				
1	(U-1) Jaraja Vyadhi	Yes	No	Yes
(M-25) Atyayika Avastha and Chikitsa -Pranavaha Srotasa and Hridroga (Respiratory and Cardiovascular Emergencies), udaka vaha srotasa, Sanyasa ,Moorcha, Marmabhighata. (Marks: Range 5-20)				
1	(U-1) Basics of Emergency medicine and Atyayika chikitsa	No	Yes	Yes
2	(U-2) ICU care devices, instruments and procedures	No	Yes	No
3	(U-3) Teevra Shwasa and Hikka Vegavastha	Yes	No	Yes
4	(U-4) Svatantra and Paratantra Hridroga	Yes	No	No
5	(U-5) Teevra Jwara	No	Yes	No
6	(U-6) Marmabhighata Chikitsa	No	Yes	Yes
(M-26) Vata Vyadhi (Neurological Emergency), Mootravaha sroto vyadhi, Annavaha, purishavaha, (Gastroenterological Emergencies), Udakavaha (fluid and electrolyte imbalance), Toxicological Emergencies (Visha) (Marks: Range 5-20)				
1	(U-1) Vegavastha of Pakshaghata, Ardita, Ekanga-Sarvanga Roga	Yes	No	Yes
2	(U-2) Atyayika chikitsa in Mootrakricchra and Mutraghata	No	Yes	Yes

3	(U-3) Atyayika chikitsa in Annavaha, purishvaha and Udakavaha srotas.	Yes	No	Yes
4	(U-4) Panchakarma Vyapad	No	Yes	No
5	(U-5) Drug overdoses and poisoning	No	Yes	No

6 G : Instruction for the paper setting & Blue Print for Summative assessment (University Examination)

Instructions for the paper setting.

1. University examination shall have 4 papers of 100 marks.

Each 100 marks question paper shall contain:-

- Application Based Question: 1 No (carries 20 marks)
- Short Answer Questions: 8 Nos (each question carries 05 marks)
- Long Answer Questions: 4 Nos (each question carries 10 marks)

2. Questions should be drawn based on the table 6F.

3. Marks assigned for the module in 6F should be considered as the maximum marks. No question shall be asked beyond the maximum marks.

4. Refer table 6F before setting the questions. Questions should not be framed on the particular unit if indicated "NO".

5. There will be a single application-based question (ABQ) worth 20 marks. No other questions should be asked from the same module where the ABQ is framed.

6. Except the module on which ABQ is framed, at least one Short Answer Question should be framed from each module.

7. Long Answer Question should be analytical based structured questions assessing the higher cognitive ability.

8. Create Blueprint based on instructions 1 to 7.

6 H : Distribution of Practical Exam (University Examination)

S.No	Heads	Marks
1	Long case or procedure/Major practical as applicable	100
2	Short case or procedure/Minor practical *as applicable	50
3	Spotters	50
4	Assessing teaching ability	20
5	Assessing presentation skills	20
6	Viva (4 examiners: 20 marks/each examiner)	80
7	Dissertation Viva	40
8	Logbook (Activity record)	20
9	Practical/Clinical Record (atleast one from each module)	20
Total Marks		400

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Abbreviations

Domain		T L Method		Level	
CK	Cognitive/Knowledge	L	Lecture	K	Know
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does
CS	Cognitive/Synthesis	REC	Recitation		
CE	Cognitive/Evaluation	SY	Symposium		
PSY-SET	Psychomotor/Set	TUT	Tutorial		
PSY-GUD	Psychomotor/Guided response	DIS	Discussions		
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming		
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning		
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning		
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning		
AFT-RES	Affective/Responding	PrBL	Project-Based Learning		
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning		
AFT-SET	Affective/Organization	TPW	Team Project Work		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom		
		BL	Blended Learning		
		EDU	Edutainment		
		ML	Mobile Learning		
		ECE	Early Clinical Exposure		
		SIM	Simulation		
		RP	Role Plays		
		SDL	Self-directed learning		

		PSM	Problem-Solving Method		
		KL	Kinaesthetic Learning		
		W	Workshops		
		GBL	Game-Based Learning		
		LS	Library Session		
		PL	Peer Learning		
		RLE	Real-Life Experience		
		PER	Presentations		
		D-M	Demonstration on Model		
		PT	Practical		
		X-Ray	X-ray Identification		
		CD	Case Diagnosis		
		LRI	Lab Report Interpretation		
		DA	Drug Analysis		
		D	Demonstration		
		D-BED	Demonstration Bedside		
		DL	Demonstration Lab		
		DG	Demonstration Garden		
		FV	Field Visit		
		JC	Journal Club		
		Mnt	Mentoring		
		PAL	Peer Assisted Learning		
		C_L	Co Learning		
		DSN	Dissection		
		PSN	Prosection		

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