

(Syllabus applicable from batch of students admitted in academic year 2010-2011 and onwards for B.A.M.S.Course)

3.6. KAUMARBHRITYA

Theory One Paper – 90 Marks

Theory Internal Assessment -10 Marks

Practical/Viva voce – 90 Marks

Practical Internal Assessment -10 Marks

Number of Lectures - 90

Hospital Training / Clinical Posting – 1 Month

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1. General introduction of Kaumarbhritya (Ayurvedic Pediatrics): Definition, importance, description and etymological interpretations of terminologies used in Kaumarbhritya.
 2. Vayobheda (Classification of age): Garbha, Bala, Kumara; Kshirada, Kshirannada & Annada etc.
 3. Importance of Kashyapa Samhita in Kaumarbhritya.
 4. Navajata Shishu Paricharya (Neonatal Care): Care of the Samaya-purvajata Shishu (Preterm), Purnakalika Shishu (Full term), and Samaya-Paschatajata Shishu (Post term neonate), Nabhinala Chhedana (Cutting of umbilical cord), Complications of improper cutting of umbilical cord and its treatment, Rakshoghna Karma (Protective measures).
 5. Prana Pratyagamanam (Neonatal Resuscitation): Methodology; complications and their management (Ayurvedic and modern view).
 6. Navajata Shishu Parikshana (Examination of new born): Ayu Parikshana (including Lakshanadhyaya)Modern approach of Neonatal Examination including gestational age assessment

7. Kumaragara (Nursery, NICU and Pediatric Ward).
8. Navajat Shishu Poshana (Nutritional aspects including neonatal feeding): Specific feeding schedule as per Ayurvedic texts and modern concept; Stana Sampat (Characteristics of normal breast), Stanya Sampat (Properties of normal breast milk) Stanyotpatti and Prasruti (Physiology of lactation), Stanya Sangathana (Composition of breast milk), Stanya Parikshana (Examination of breast milk), Stanya-Piyusha (Colostrum); Stanya-Pana-Vidhi (Method for breast feeding), Stanyakshaya-Stanyanasha (Inadequate production and absence of breast milk), Stanyabhava Pathya Vyavastha (Alternative feeding in the absence of breast milk), Various other feeding methods.
9. Stanyadosha (Vitiation of Breast milk), Stanya Shodhana (Purification of breast milk), Stanya Janana and Vardhanopakrama (Methods to enhance breast milk formation).
10. Dhatri (Wet nurse): Dhatri Guna and Dosha (Characteristics of wet nurse), Concept of human milk banking
11. Garbha Vridhi Vikasa Krama : Samanya Parichaya (General introduction to normal fetal growth from conception to full term maturity), Sharirika Vriddhi, Mansika evam Samajika Vikas (Physical, mental and social growth & development of child), Important mile stones during infancy and early childhood with special reference to gross & fine motor, language and personal – social development., Anthropometry-measurement and their interpretation.
12. Importance of Kreedabhumi (play ground) and Kreedanaka (toys), Kumaradhara (child care taker)
13. Poshana (Nutrition): Normal requirements of nutrients for newborn, infant and children, common food sources, Satmya and Asatmya Ahara (Compatible and incompatible diet)
14. Sanskaras: Jatakarma, Namakarana, Nishkramana, Upveshana, Annaprashana, Karnavedhana, Choodakarma, Upanayana and Vedarambha.
15. Dantotpatti evam Danta Raksha Vidhi (Dentition and dental care): Dantasampat (Characteristics of healthy teeth), Danta Nisheka evam Dantodbeda (Eruption of teeth), Dantodbhedjanya Vikara (Dentition disorders).

16. Vyadhikshamatva: General concepts of Bala (Immunity) and methods of Bala Vriddhi.
17. Lehana (Electuaries): Importance, uses and various types of Lehana.
18. Knowledge of National Programs related to Child Health Care: Reproductive and Child Health (RCH) Program, Community Child Health Programs, Nutritional Programs, National Immunization Program and other programs incorporated by Govt of India, time to time.
19. Balaroga Samanya Chikitsa Siddhanta (General principles of treatment in children), Balaroga Parikshavidhi- Shadvidha, Ashtavidha, Dashavidha Pariksha evam Shishu Vedana Parigyana (Examination of diseased child and Diagnostic methods-Ayurvedic and modern).
20. Aushadhi Matra Nirdharana- According to Vaya, Bhar evam Aushadhi Kalpana (drug doses according to age, weight and drug preparations)
21. Specific therapeutic procedures in children: Panchkarma procedures specific to pediatric age group.
22. Prasava Kaleena Abhigata (Birth injuries): Shwasavrodha (Asphyxia), Upasheershaka (Caput Succidaneum and Cephalohaematoma), Shastraghatajanya: Facial Paralysis, Erb's Paralysis, Bhagna (fractures).
23. Sahajavyadhi - (Congenital disorders) : Sahaja Hridaya Vikara (Congenital Cardiac Disorders) Jalashirshaka (Hydrocephalus), Khandaoushtha (cleft lip), Khanda-Talu (cleft palate), Sanniruddha Guda (Anal stricture / imperforated anus), Pada-Vikriti (Talipes equinovarus and valgus), Tracheoesophageal Fistula (TOF), Spina bifida, Meningocele, Meningomyelocele, Pyloric Stenosis.
24. Anuvanshika Vyadhi (Hereditary diseases): Down syndrome, Turner Syndrome, Myopathy, Thalassemia, Sahaja Prameha (Juvenile Diabetes).
25. Prasavottara Vyadhi (Neonatal disorders): Navajata Kamala (Neonatal Jaundice), Navajata Netrabhishyanda (Neonatal conjunctivitis), Nabhiroga (Umbilical disorders), Mastishkaghata (Cerebral Palsy), Rakta Vishamayata (Neonatal Septicaemia), Rakta Vaishamyata (Rh-Incompatibility), Raktasravi Vikara (Haemorrhagic Disorders), Ulvaka Roga.

26. Dushta Stanyapanajanya Vyadhi (Disorders due to Vitiated Milk): Cow's Milk Allergy, Charmadala (Infantile atopic dermatitis), Kshiralasaka, Kukunaka (Conjunctivitis), Ahiputana (Napkin Rashes)
27. Kuposhanajanya Vyadhi (Nutritional disorders): Karshya, Phakka, Balashosha and Parigarbhika (Protein Energy Malnutrition), Vitamin and micronutrient deficiency disorders, Hypervitaminosis.
28. Aupasargika Vyadhi (Infectious Diseases): Karnamula Shotha (Mumps), Romantika (Measles), Rubella, Masurika (Chicken Pox), Rohini (Diphtheria), Kukkura-kasa (Whooping Cough), Dhanurvata (Tetanus), Krimiroga (Worm Infestations), Antrika Jwara (Typhoid), Mastisakavarnashotha (Meningitis), AIDS, Dengue, Malaria, Poliomyelitis, Rajayakshma (Tuberculosis), Jivwanujanya Yakrit shotha (Hepatitis)
29. Srotas Vikara:
 - a. Pranavaha Srotas: Pratishyaya (common cold), Kasa (Cough), Shwasa (Respiratory distress syndrome), Tamaka Shwasa (Bronchial Asthma), Utp hullika, Swasanaka Jwara (Pneumonia/Pneumonitis, Bronchiolitis), Gala shotha (Pharyngitis, laryngitis), Talukantaka (Tonsillitis)
 - b. Annavaha Srotas: Ajirna (indigestion), Atisara (Diarrhoea) , Chhardi (Vomiting), Vibandha (Constipation), Mukhapaka (Stomatitis) , Gudapaka (Proctitis), Parikartika (Anal fissure) ,Udarshoola (Infantile colic), Pravahika (Dysentery) , Gudabhransa (Rectal Prolapse)
 - c. Rasavaha Srotasa: Jwara (Fever), Pandu (Anemia), Mridbhakshanajanya Pandu (Anemia associated with clay eating/ Pica).
 - d. Raktavaha Srotas: Kamala (Jaundice), Raktapitta (Haemorrhagic disorders), Krimija Hridroga (Infectious cardiac diseases including Rheumatic Heart Disease), Uchcha-Raktachapa (Hypertension), Yakridpleehodara (Hepatosplenomegaly).
 - e. e. Mamsa-Medovaha Srotas: Apachi (Lymphadenitis), Galaganda (Goitre), Gandamala (Cervical lymphadenopathy), Sthaulya (Obesity)
 - f. f. Mutravaha Srotasa: Mutraghata (Anuria), Mutrasanga (Retention of urine) Mutrakriccha (Dysurea), Vrikkashotha (Glomerulonephritis and Nephrotic syndrome)
30. Anya BalaVikara (Miscellaneous pediatric disorders)
 - Pangutwa (Locomotor disorders), Vamanatwa (Dwarfism), Jadatwa (Mental disorders), Apasmara (Epilepsy), Unamada, Akshepa (Convulsions),

Nirudhaprakasha (Phimosis), Kushtha (Skin disorders), Madhya Karna Shotha (Otitis media), Karnasrava (Otorrhoea)

31. Behavioral disorders of children, their management and counseling: Breath holding spell, Shayyamutra (Bed wetting), Autism, ADHD (Attention Deficit and Hyperactive Disorders)
32. Atyayika Balaroga Prabandhana (Pediatric Emergency Management): Shock and Anaphylaxis, Fluid and Electrolyte Management, Drowning, Poisoning, Foreign body aspiration, Status epilepticus, hemorrhage, Acute Renal Failure, Febrile Convulsion, Status Asthmaticus
33. Balagraha: General description, types, clinical features and management
34. Various Ayurvedic & modern procedures and investigations in pediatric practice

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• **TERM WISE DISTRIBUTION OF THEORY SYLLABUS**

<u>SR.NO</u>	<u>TERM</u>	<u>POINTS</u>
1	FIRST	1 TO 10
2	SECOND	11 TO 28
3	THIRD	29 TO 34

• **SCHEME OF PRACTICALS / CLINICAL TRAINING** –
Total Duration 1 Month

- OPD - 10 days.
- IPD - 15 days
- Vaccination, Drugs & Instruments ,
Procedures / Panchkarma – 5 days

Under clinical posting each student has to study 10 long Cases and 05 short cases and prepare record of it as prescribed as **Annexure – A & B**

Out of these 10 long cases following division should be strictly followed (Neonatal cases 3 & Paediatric cases 7)

• **GUIDLINES OF KAUMARBHRITYA PRACTICALS / CLINICS**

Under clinical posting following activities /skills /Practical work should be done by each student.

1. Training in case taking clinical examination and case presentation
2. Clinical training of above mentioned disorders of children.
3. Navajata Shishu Paricharya (Care of the newborn)
4. Pranapratyagamana Vidhi (Resuscitation procedure of new born)
5. Vaccination
6. Panchakarma Vidhi (Panchakarma procedures)
7. Knowledge of various equipments such as phototherapy unit, overhead radiant warmer, special resuscitation equipments, Panchakarma and their application
8. Knowledge of IV fluids administration, blood sampling and common procedures
9. Breast feeding technique

• **PRACTICAL EXAMINATION : (To be conducted by University)**

- | | |
|-------------------------------------|-------------|
| 1. Long Case taking and case viva | - 30 Marks |
| 2. Short Case taking and case viva | - 20 Marks |
| 3. Specific viva Drug & Instruments | - 15 Marks |
| 4. General viva | - 15 Marks |
| 5. Long & Short cases Record | -10 Marks . |

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Total = 90 Marks

- **THEORY EXAMINATION (To be conducted by University)**

There will be One Papers of 90 Marks The examiners are directed to set a question paper in such a way that it shall covers all points of syllabus. On any syllabus group maximum 5 SAQ and maximum 10 MCQ can be included in the question paper by Paper setter.

- a. **SECTION-A. (M.C.Q.)** - 15 MARKS

- IT CONTAINS **30 M.C.Q.s** – CARRYING ½ (half), MARK EACH.

- b. **SECTION-B. (S.A.Q.)** - 30 MARKS

- IT CONTAINS **12 S.A.Q.s** – EACH CARRYING 3 MARKS AND ANY 10 SAQs SHOULD BE SOLVED BY STUDENT.

- c. **SECTION-C. (L.A.Q.)** - 45 MARKS

- IT CONTAINS **4 L.A.Q.s** –EACH CARRYING 15 MARKS AND ANY 3 LAQs SHOULD BE SOLVED BY STUDENT.

- **DIVISION OF SYLLABUS POINTS AND GROUP WISE WEIGHTAGES OF MARKS IN UNIVERSITY QUESTION PAPER.**

<u>GROUPS</u>	<u>SYLLABUS POINTS</u>	<u>ALLOTTED MAXIMUM MARKS</u>	<u>QUESTION PATTERN</u>
A	01 to 07	30	1LAQ + 4SAQ + 6MCQ
B	08 to 18	26	1LAQ + 2SAQ+ 10 MCQ
C	19 to 28	30	1LAQ + 4SAQ + 6MCQ
D	29 to 34	25	1LAQ +2SAQ + 08 MCQ
		111 Marks	-

• **Reference Books**

1. Kashyapa samhita - Complete Hindi translation by Satyapal Vidhyalankara
- English translation by Prof. Premvati Tiwari
2. Essential Paediatrics - O.P. Ghai
3. Text Book of Paediatrics - Nelson
4. Care of New Born - Meharban Singh
5. Clinical Methods in Paediatrics - Meharban Singh
6. Paediatric Emergencies - Meharban Singh
7. Diseases of New Born - Scheffers
8. IAP Text book of Paediatrics
9. Kaumarbhritya related references from Charaka samhita, Sushruta samhita Vagbhatta etc. -
10. Kaumarbhritya -Vd. Devendra Nath Mishr
11. Kaumarbhritya – - Vd. Ashok G. More
12. Child care in Ayurveda - Dr. Abhimanyu Kumar
- 13.

DEPT.OF KAUMARBHRITYA (BALROGA) Long Case Sheet

Name of patient :-----

Age sex caste/religion

Bed No. OPD No. IPD No.

Date of admission: Date of discharge:

Vedana vishesh (Chief complaints with duration):

Vartaman Vyadhi Vrutta:

Purvotpanna Vyadhi Vrutta / Chikitsa Vrutta:

Kulavrutta:

Balak Avastha & Ahara:

Janma Itivrutta (Birth History):

a) Garbhakalin:

b) Prasavakalin:

c) Jatmatra:

Lasikaran (Immunization status):

BCG

HBV

OPV

OTHER

DPT

MEASLES

Navjat Balak Pariksha:

Akal Prasut/Kal Prasut /Kalatit Prasut (Gestational age in weeks)

Navajat Balak Pratikshipta Kriya (Neonatal Reflexes):

Rooting	sucking
Swallowing	Moro's
Tonic neck reflex	Stepping
Automatic walking	Extensor planter reflex

Sharirik Pariman (Anthropometry):

Weight: kg	Length/Height: cm
Head circumference: cm	chest circumference: cm
Mid Arm circumference: cm	

Shirorandhra (Fontanel):

Developmental milestones:

Motor:

Social:

Adaptive:

Speech:

Samanya Parikshan (General Examination)

Nakha	Netra	Tvak
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Jivha

Danta

Kesha

Agni

Mala

Mutra

Nadi

Dehoshma

Raktadab

Prakruti

Samhanan

Satmyasatmya

Rodan

Achushan

Nabhi

Indriya Parikshan:

Dnyanedriya:

Karmendriya:

Srotas Parikshan:

1. Pranavah Srotas:

2. Annavah Srotas:

3. Udakavah Srotas:

4. Rasavah Srotas:

5. Raktavah Srotas:

6. Mamsavah Srotas:

7. Medovah Srotas:

8. Asthivah Srotas:

9. Majjavah Srotas:

10. Shukravah Srotas:

11. Artavavah Srotas:

12. Mutravah Srotas:

13. Purishavah Srotas:

14. Swedovah Srotas:

15. Manovah Srotas:

Prayogshalin & Anyaparikshan (Investigation)

Nidan Panchak:

Hetu:

Purvarup:

Rupa:

Upashayanupashay:

Samprapti:

Vyadhi Vyavacched Nidan:

Vyadhi Vinishchaya:

Dosha -

Dushya –

Srotas –

Adhistan –

Avastha –

Sadhyasadhyavatha –

Chikitsa:

Siddhant:

Abhyantar:

Bahya:

Pathyapathya:

Dainadina Vruttam

Date

Lakshan

Chikitsa

Nirgamankalin Upadesh:

Student's Signature

Teacher's Signature

(Annexure 'B')

KAUMARBHRITYA (BALROGA)- (Short Case Sheet)

Name of patient:

Age sex caste/religion

Bed No. OPD No. IPD No.

Date of admission: Date of discharge:

Vedana vishesh (Chief complaints with duration):

Vartaman Vyadhi Vrutta:

Purvotpanna Vyadhi Vrutta / Chikitsa Vrutta:

Kulavrutta:

Balak Avastha & Ahara:

Janma Itivrutta (Birth History):

a) Garbhakalin:

b) Prasavakalin:

c) Jatmatra:

Lasikaran (Immunization status):

BCG	HBV
OPV	OTHER
DPT	
MEASLES	

Navjat Balak Pariksha:

Akal Prasut/Kal Prasut /Kalatit Prasut (Gestational age in weeks)

Navajat Balak Pratikshipta Kriya (Neonatal Reflexes):

Rooting	sucking
Swallowing	Moro's
Tonic neck reflex	Stepping
Automatic walking	Extensor planter reflex

Sharirik Pariman (Anthropometry):

Weight: kg	Length/Height: cm
Head circumference: cm	chest circumference: cm
Mid Arm circumference: cm	

Shirorandhra (Fontanel):

Developmental milestones:

Motor:

Social:

Adaptive:

Speech:

Samanya Parikshan (General Examination)

Nakha	Netra	Tvak
Jivha	Danta	Kesha
Agni	Mala	Mutra
Nadi	Dehoshma	Raktadab
Prakruti	Samhanan	Satmyasatmya
Rodan	Achushan	Nabhi

Indriya Parikshan:

Dnyanedriya:

Karmendriya:

Srotas Parikshan:

Prayogshalin & Anyaparikshan (Investigation):

Nidan Panchak:

Hetu:

Purvarup:

Rupa:

Upashayanupashay:

Samprapti:

Vyadhi Vyavacched Nidan:

Vyadhi Vinishchaya:

Dosha -

Dushya –

Srotas –

Adhistan –

Avastha –

Sadhyasadhyavatha –

Chikitsa:

Siddhant:

Abhyantar:

Bahya:

Pathyapathya:

Dainadina Vruttam

Date

Lakshan

Chikitsa

Nirgamankalin Upadesh:

Student's Signature

Teacher's Signature

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