

## IAP Task Force on Implementation and Support of MCI Competency-based Curriculum for Pediatrics in undergraduate education

Workshop and Meeting of the Core Group

Delhi July 6, 2019 (1-6 PM)

Venue: Army R & R Hospital, 11, Dhaula Kuan, Delhi Cantt, Delhi - 110010, India

### Aim

To formulate uniform guidelines for implementation of the New Competency-based MCI curriculum in Pediatric Education

### Objectives

1. To convert competencies outlined for pediatrics in the new MCI competency-based curriculum for undergraduates, into learning objectives (*applicable on pan-India level; at present, every college has to do it on its own*)
2. To prepare guidelines on Teaching-learning activities and Assessment, based on the learning objectives (as prepared above)
3. To suggest modes/methodology of Integration of Pediatrics with basic sciences, Com Med and other disciplines; and outline the role of Pediatric faculty in the overall implementation of the competency-based curriculum
4. To evaluate and review the ongoing curriculum implementation at select Institutes

# Participants

## Central IAP

Digant Shastri, Santosh Soans, \*R Remesh, \*Bakul Parekh

**Conveners:** Tejinder Singh, Piyush Gupta

## Task force Members

P Ramachandran (Chennai), Rekha Harish (Delhi), G Sudhakar (Kurnool), Madhuri Kanitkar (Pune), Ashok Dutta (Kolkata)

## Contributing Experts

Sujata Kanhere (Professor and Head, Pediatrics, K J Somaiya Medical College, Mumbai), Preeti Malhotra (Associate Professor, Pediatrics, SGRD Amritsar), Jaya Shankar Kaushik (Associate Professor, Pediatrics, Rohtak), Shashi Kant Dhir (Associate Professor, Pediatrics, GGS Medical College, Faridkot), Roosy Aulakh (Associate Professor, Pediatrics, GMC, Chandigarh), Kuldeep Singh (Professor and Head Pediatrics, AIIMS, Jodhpur), Manab Baruah (Associate Professor, Pediatrics, Jorhat Medical College, Jorhat), Devendra Mishra (Professor, Pediatrics, MAMC, N Delhi), Roopa Bellad (Professor, Pediatrics, JNMC, Belgaum), Pankaj Buch (Professor, Pediatrics, MP Shah Medical College, Jamnagar), \*Anju Kapoor (Professor, Pediatrics, Peoples Medical College, Bhopal, MP), Sangita Yadav (Professor, Pediatrics, MAMC, Delhi), Monika Sharma (Professor, Pediatrics, CMC, Ludhiana)

## Nodal Person for Competency Development:

Jugesh Chhatwal, Ludhiana

**Disclaimer:** Competency statements (**in Bold**) are taken from the MCI document and not modifiable by us. Only the Learning objectives (in regular fonts) have been made by the task force within the MCI framework.

*\*Could not attend the Meeting*

| Number                                      | Competency & Learning Objective(s)                                                                                                                                                                                       | Domain<br>K/S/A/C                  | K/KH<br>/SH/P | Core     | Suggested Teaching<br>Learning Method                        | Suggested<br>Assessment<br>Method | Number<br>for<br>Certific<br>ation | Vertica<br>l<br>Integra<br>tion | Horizontal<br>Integratio<br>n |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------|----------|--------------------------------------------------------------|-----------------------------------|------------------------------------|---------------------------------|-------------------------------|
| <b>Topic: Normal Growth and Development</b> |                                                                                                                                                                                                                          | <b>Number of competencies: (7)</b> |               |          | <b>Number of procedures that require certification: (02)</b> |                                   |                                    |                                 |                               |
| <b>PE 1.1</b>                               | <b>Define the terminologies Growth and Development and Discuss the factors affecting normal growth and development</b>                                                                                                   | <b>K</b>                           | <b>KH</b>     | <b>Y</b> | <b>Lecture/SGD</b>                                           | <b>Written/viva voce</b>          |                                    |                                 |                               |
| 1.1.1                                       | Define Growth and Development                                                                                                                                                                                            | K                                  | KH            | Y        | Lecture/ SGD                                                 | Written/viva voce                 |                                    |                                 |                               |
| 1.1.2                                       | Enumerate the factors affecting normal growth and development                                                                                                                                                            | K                                  | KH            | Y        | Lecture/ SGD                                                 | Written/viva voce                 |                                    |                                 |                               |
| <b>PE 1.2</b>                               | <b>Discuss and Describe the patterns of growth in infants, children and adolescents</b>                                                                                                                                  | <b>K</b>                           | <b>KH</b>     | <b>Y</b> | <b>Lecture/SGD</b>                                           | <b>Written/viva voce</b>          |                                    |                                 | <b>Psych</b>                  |
| 1.2.1                                       | Describe the patterns of growth in infants, children and adolescents                                                                                                                                                     | K                                  | KH            | Y        | Lecture/SGD                                                  | Written/viva voce                 |                                    |                                 |                               |
| <b>PE 1.3</b>                               | <b>Discuss and Describe the methods of assessment of growth including use of WHO and Indian national standards. Enumerate the parameters used for assessment of physical growth in infants, children and adolescents</b> | <b>K</b>                           | <b>KH</b>     | <b>Y</b> | <b>Lecture/SGD</b>                                           | <b>Written/viva voce</b>          |                                    |                                 | <b>Com Med</b>                |
| 1.3.1                                       | Describe the methods of assessment of growth including use of WHO and Indian national standards.                                                                                                                         | K                                  | KH            | Y        | Lecture/ SGD                                                 | Written/viva voce                 |                                    |                                 |                               |
| 1.3.2                                       | Describe WHO and Indian national standards for growth of infants, children and adolescents.                                                                                                                              | K                                  | KH            | Y        | Lecture /SGD                                                 | Written/ viva voce                |                                    |                                 |                               |
| 1.3.3                                       | Enumerate the parameters used for assessment of physical growth in infants, children and adolescents.                                                                                                                    | K                                  | KH            | Y        | Lecture/ SGD                                                 | Written/viva voce                 |                                    |                                 |                               |
| <b>PE 1.4</b>                               | <b>Perform Anthropometric measurements, document in growth charts and interpret</b>                                                                                                                                      | <b>S</b>                           | <b>P</b>      | <b>Y</b> | <b>SGD</b>                                                   | <b>Document in Logbook</b>        | <b>3</b>                           |                                 |                               |
| 1.4.1                                       | Perform anthropometric measurements in children of different age groups.                                                                                                                                                 | S                                  | P             | Y        | Clinical teaching/ skill lab                                 | Document in Logbook               | 3                                  |                                 |                               |
| 1.4.2                                       | Document the measured parameters in growth charts and interpret the findings on growth charts.                                                                                                                           | S                                  | P             | Y        | Clinical teaching/ skill lab                                 | Document in Logbook               | 3                                  |                                 |                               |

|                                                                                                                                                                              |                                                                                                                                          |            |           |          |                            |                               |          |               |              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|----------|----------------------------|-------------------------------|----------|---------------|--------------|
| <b>PE 1.5</b>                                                                                                                                                                | <b>Define development and Discuss the normal developmental milestones with respect to motor, behavior, social, adaptive and language</b> | <b>K</b>   | <b>KH</b> | <b>Y</b> | <b>Lecture/SGD</b>         | <b>Written/viva voce</b>      |          |               | <b>Psych</b> |
| 1.5.1                                                                                                                                                                        | Define development.                                                                                                                      | K          | KH        | Y        | Lecture/ SGD               | Written/viva voce             |          |               |              |
| 1.5.2                                                                                                                                                                        | Describe the normal developmental milestones with respect to motor, behavior, social, adaptive and language domains.                     | K          | KH        | Y        | Lecture/ SGD               | Written/viva voce             |          |               | Psych        |
| <b>PE 1.6</b>                                                                                                                                                                | <b>Discuss the methods of assessment of development.</b>                                                                                 | <b>K</b>   | <b>KH</b> | <b>Y</b> | <b>Lecture/SGD</b>         | <b>Written/viva voce</b>      |          |               |              |
| 1.6.1                                                                                                                                                                        | Discuss the methods of assessment of development                                                                                         | K          | KH        | Y        | Lecture/ SGD               | Written/viva voce             |          |               |              |
| <b>PE 1.7</b>                                                                                                                                                                | <b>Perform Developmental assessment and interpret</b>                                                                                    | <b>S</b>   | <b>P</b>  | <b>N</b> | <b>Bedside/ skills lab</b> | <b>Document in Logbook</b>    | <b>3</b> |               |              |
| 1.7.1                                                                                                                                                                        | Perform Developmental assessment in infants and children and interpret the findings.                                                     | S          | P         | N        | Bedside/ skills lab        | Document in Logbook/skill lab | 3        |               |              |
| <b>Topic: Common problems related to Growth                      Number of competencies: (6)                      Number of procedures that require certification: (NIL)</b> |                                                                                                                                          |            |           |          |                            |                               |          |               |              |
| <b>PE 2.1</b>                                                                                                                                                                | <b>Discuss the etiopathogenesis, clinical features and management of a child who fails to thrive</b>                                     | <b>K</b>   | <b>KH</b> | <b>Y</b> | <b>Lecture/SGD</b>         | <b>Written/viva voce</b>      |          |               |              |
| 2.1.1                                                                                                                                                                        | Discuss the etiopathogenesis of a child who fails to thrive.                                                                             | K          | KH        | Y        | Lecture/ SGD               | Written/viva voce             |          |               |              |
| 2.1.2                                                                                                                                                                        | Describe the clinical features of a child who fails to thrive.                                                                           | K          | KH        | Y        | Lecture/ SGD               | Written/viva voce             |          |               |              |
| 2.1.3                                                                                                                                                                        | Discuss the management of a child who fails to thrive.                                                                                   | K          | KH        | Y        | Lecture/ SGD               | Written/viva voce             |          |               |              |
| <b>PE 2.2</b>                                                                                                                                                                | <b>Assessment of a child with failure to thrive including eliciting an appropriate history and examination</b>                           | <b>S</b>   | <b>SH</b> | <b>Y</b> | <b>Bedside clinics</b>     | <b>Skills station</b>         |          |               |              |
| 2.2.1                                                                                                                                                                        | Elicit an appropriate history in a child with failure to thrive.                                                                         | S          | SH        | Y        | Bedside clinics            | OSCE/ Clinical case           |          |               |              |
| 2.2.2                                                                                                                                                                        | Perform a complete physical examination in a child with failure to thrive.                                                               | S          | SH        | Y        | Bedside clinics            | OSCE/ Clinical case           |          |               |              |
| <b>PE 2.3</b>                                                                                                                                                                | <b>Counseling a parent with failing to thrive child</b>                                                                                  | <b>A/C</b> | <b>SH</b> | <b>Y</b> | <b>OSCE</b>                | <b>Document in Logbook</b>    |          | <b>AETCOM</b> |              |

|                                                                                                                                                                                                |                                                                                                                                     |          |           |          |                           |                                   |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------------|-----------------------------------|--|--|--|
| 2.3.1                                                                                                                                                                                          | Counsel a parent of a child with failure to thrive.                                                                                 | A/C      | SH        | Y        | Skill lab/ role play      | OSCE/<br>Document in<br>Logbook   |  |  |  |
| <b>PE 2.4</b>                                                                                                                                                                                  | <b>Discuss the etiopathogenesis, clinical features and management of a child with short stature</b>                                 | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/SGD</b>        | <b>Written/viva voce</b>          |  |  |  |
| 2.4.1                                                                                                                                                                                          | Enumerate causes of short stature in children.                                                                                      | K        | KH        | Y        | Lecture/ SGD              | Written/viva voce                 |  |  |  |
| 2.4.2                                                                                                                                                                                          | Describe the clinical features of a child with short stature.                                                                       | K        | KH        | Y        | Lecture/ SGD              | Written/viva voce                 |  |  |  |
| 2.4.3                                                                                                                                                                                          | Discuss the management of a child with short stature.                                                                               | K        | KH        | Y        | Lecture/ SGD              | Written/viva voce                 |  |  |  |
| <b>PE2.5</b>                                                                                                                                                                                   | <b>Assessment of a child with short stature: Elicit history; perform examination, document and present.</b>                         | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside /skill lab</b> | <b>Skill assessment</b>           |  |  |  |
| 2.5.1                                                                                                                                                                                          | Elicit history in a child with short stature.                                                                                       | S        | SH        | Y        | Bedside /skill lab        | Bedside/ OSCE                     |  |  |  |
| 2.5.2                                                                                                                                                                                          | Perform a complete physical examination in a child with short stature.                                                              | S        | SH        | Y        | Bedside /skill lab        | Bedside/ OSCE                     |  |  |  |
| 2.5.1                                                                                                                                                                                          | Document and present assessment of a child with short stature.                                                                      | S        | SH        | Y        | Bedside /skill lab        | Skill assessment/<br>bedside case |  |  |  |
| <b>PE2.6</b>                                                                                                                                                                                   | <b>Enumerate the referral criteria for growth related problems</b>                                                                  | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture /SGD</b>       | <b>Written/viva voce</b>          |  |  |  |
| 2.6.1                                                                                                                                                                                          | Enumerate the referral criteria for growth related problems                                                                         | K        | K         | Y        | Lecture /SGD              | Written/viva voce                 |  |  |  |
| <b>Topic: Common problems related to Development -1 (Developmental delay, Cerebral palsy)</b> <b>Number of competencies: (8)</b> <b>Number of procedures that require certification: (NIL)</b> |                                                                                                                                     |          |           |          |                           |                                   |  |  |  |
| <b>PE.3.1</b>                                                                                                                                                                                  | <b>Define, Enumerate and Discuss the causes of developmental delay and disability including intellectual disability in children</b> | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture, SGD</b>       | <b>Written/viva-voce</b>          |  |  |  |
| 3.1.1                                                                                                                                                                                          | Define developmental delay.                                                                                                         | K        | K         | Y        | Lecture /SGD              | Written/viva-voce                 |  |  |  |
| 3.1.2                                                                                                                                                                                          | Enumerate causes of developmental delay.                                                                                            | K        | K         | Y        | Lecture /SGD              | Written/viva-voce                 |  |  |  |

|              |                                                                                                  |          |           |          |                            |                            |  |                |  |
|--------------|--------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------|----------------------------|--|----------------|--|
| 3.1.3        | Define disability as per WHO.                                                                    | K        | K         | Y        | Lecture /SGD               | Written/viva-voce          |  |                |  |
| 3.1.4        | Define Intellectual disability in children.                                                      | K        | K         | Y        | Lecture /SGD               | Written/viva-voce          |  |                |  |
| 3.1.5        | Grade intellectual disability in terms of intelligence quotient (IQ).                            | K        | K         | Y        | Lecture /SGD               | Written/viva-voce          |  |                |  |
| <b>PE3.2</b> | <b>Discuss the approach to a child with developmental delay</b>                                  | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>        | <b>Written/viva-voce</b>   |  |                |  |
| 3.2.1        | Discuss clinical presentation of common causes of developmental delay.                           | K        | KH        | Y        | Lecture, SGD               | Written/ Viva voce         |  |                |  |
| 3.2.2        | Enumerate investigations for developmental delay.                                                | K        | KH        | Y        | Lecture, SGD               | Written/ Viva voce         |  |                |  |
| 3.2.3        | Based on clinical presentation, make an investigation plan for a child with developmental delay. | K        | KH        | Y        | Lecture, SGD               | Written/ Viva voce         |  |                |  |
| 3.2.4        | Discuss differential diagnosis of developmental delay.                                           | K        | KH        | Y        | Lecture, SGD               | Written/ Viva voce         |  |                |  |
| <b>PE3.3</b> | <b>Assessment of a child with developmental delay- elicit document and present history</b>       | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b> | <b>Skill assessment</b>    |  |                |  |
| 3.3.1        | Elicit developmental history from a parent/caretaker.                                            | S        | SH        | Y        | Bedside, Skills lab        | Case/ OSCE                 |  |                |  |
| 3.3.2        | Elicit the current developmental milestones of the child.                                        | S        | SH        | Y        | Bedside, Skills lab        | OSCE                       |  |                |  |
| 3.3.3        | Interpret developmental status of a child based on the history and examination.                  | S        | SH        | Y        | Bedside, Skills lab        | OSCE                       |  |                |  |
| 3.3.4        | Document and present the developmental assessment.                                               | S        | SH        | Y        | Bedside, Skills lab        | LOGBOOK                    |  |                |  |
| <b>PE3.4</b> | <b>Counsel a parent of a child with developmental delay</b>                                      | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>DOAP Session</b>        | <b>Document in Logbook</b> |  |                |  |
| 3.4.1        | Communicate the developmental status of the child to the parent.                                 | S        | SH        | Y        | DOAP Session               | Document in Logbook        |  |                |  |
| 3.4.2        | Counsel the parents of a child with developmental delay.                                         | S        | SH        | Y        | DOAP Session               | Document in Logbook        |  |                |  |
| <b>PE3.5</b> | <b>Discuss the role of the child developmental unit in management of developmental delay</b>     | <b>K</b> | <b>K</b>  | <b>N</b> | <b>Lecture, SGD</b>        | <b>Written/ Viva voce</b>  |  | <b>Com Med</b> |  |
| 3.5.1        | Enumerate the structure and composition of staff at a child development unit.                    | K        | K         | N        | Lecture /SGD               | Written/ Viva voce         |  | Com Med        |  |
| 3.5.2        | Describe roles of a child development unit.                                                      | K        | K         | N        | Lecture /SGD               | Written/ Viva voce         |  | Com Med        |  |

IAP Task Force on Competency-based Curriculum for Pediatrics in UG education: Competencies to Specific Learning Objectives  
Competency statements (**in Bold**) are taken from the MCI document and not modifiable

|                                                                                                                                 |                                                                                                                               |                                    |           |          |                                                               |                          |  |                |            |
|---------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-----------|----------|---------------------------------------------------------------|--------------------------|--|----------------|------------|
| <b>PE3.6</b>                                                                                                                    | <b>Discuss the referral criteria for children with developmental delay</b>                                                    | <b>K</b>                           | <b>K</b>  | <b>Y</b> | <b>Lecture, SGD</b>                                           | <b>Written/viva voce</b> |  |                |            |
| 3.6.1                                                                                                                           | Enumerate clinical criteria for referral of a child with developmental delay.                                                 | K                                  | K         | Y        | Lecture /SGD                                                  | Written/viva voce        |  |                |            |
| <b>PE3.7</b>                                                                                                                    | <b>Visit a Child Developmental Unit and Observe its functioning</b>                                                           | <b>S</b>                           | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                                           | <b>Logbook entry</b>     |  | <b>Com Med</b> |            |
| 3.7.1                                                                                                                           | Observe and list the activities in the child developmental unit.                                                              | S                                  | KH        | Y        | Lecture, SGD                                                  | Logbook entry            |  | Com Med        |            |
| <b>PE3.8</b>                                                                                                                    | <b>Discuss the etiopathogenesis, clinical presentation and multidisciplinary approach in the management of cerebral palsy</b> | <b>K</b>                           | <b>KH</b> | <b>Y</b> | <b>Lecture /SGD</b>                                           | <b>Written/viva voce</b> |  |                | <b>PMR</b> |
| 3.8.1                                                                                                                           | Define cerebral palsy.                                                                                                        | K                                  | KH        | Y        | Lecture /SGD                                                  | Written/viva voce        |  |                |            |
| 3.8.2                                                                                                                           | Enumerate common causes of cerebral palsy.                                                                                    | K                                  | KH        | Y        | Lecture /SGD                                                  | Written/viva voce        |  |                |            |
| 3.8.3                                                                                                                           | Describe the etiopathogenesis of cerebral palsy.                                                                              | K                                  | KH        | Y        | Lecture /SGD                                                  | Written/viva voce        |  |                |            |
| 3.8.4                                                                                                                           | Classify cerebral palsy with respect to function and topography.                                                              | K                                  | KH        | Y        | Lecture /SGD                                                  | Written/viva voce        |  |                |            |
| 3.8.5                                                                                                                           | Describe common clinical presentations of different types of cerebral palsy.                                                  | K                                  | KH        | Y        | Lecture /SGD                                                  | Written/viva voce        |  |                |            |
| 3.8.6                                                                                                                           | List some common co-morbidities in a child with cerebral palsy.                                                               | K                                  | KH        | Y        | Lecture /SGD                                                  | Written/viva voce        |  |                |            |
| 3.8.7                                                                                                                           | Describe common interventions for management of a child with cerebral palsy.                                                  | K                                  | KH        | Y        | Lecture /SGD                                                  | Written/viva voce        |  |                |            |
| <b>Topic: Common problems related to Development-2</b><br><b>(Scholastic backwardness, Learning Disabilities, Autism, ADHD)</b> |                                                                                                                               |                                    |           |          |                                                               |                          |  |                |            |
|                                                                                                                                 |                                                                                                                               | <b>Number of competencies: (6)</b> |           |          | <b>Number of procedures that require certification: (NIL)</b> |                          |  |                |            |
| <b>PE4.1</b>                                                                                                                    | <b>Discuss the causes and approach to a child with scholastic backwardness</b>                                                | <b>K</b>                           | <b>K</b>  | <b>N</b> | <b>Lecture, SGD</b>                                           | <b>Written/viva voce</b> |  |                |            |
| 4.1.1                                                                                                                           | Define scholastic backwardness.                                                                                               | K                                  | K         | N        | Lecture, SGD                                                  | Written/viva voce        |  |                |            |
| 4.1.2                                                                                                                           | List common causes of scholastic backwardness.                                                                                | K                                  | K         | N        | Lecture, SGD                                                  | Written/viva voce        |  |                |            |

|              |                                                                                                                                          |   |   |   |                     |                          |  |  |  |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---------------------|--------------------------|--|--|--|
| 4.1.3        | Discuss clinical assessment of a child with scholastic backwardness.                                                                     | K | K | N | Lecture, SGD        | Written/viva voce        |  |  |  |
| <b>PE4.2</b> | <b>Discuss the etiology, clinical features, diagnosis and management of a child with learning disabilities</b>                           | K | K | N | <b>Lecture, SGD</b> | <b>Written/viva voce</b> |  |  |  |
| 4.2.1        | Define learning disabilities.                                                                                                            | K | K | N | Lecture, SGD        | Written/viva voce        |  |  |  |
| 4.2.2        | Enumerate causes of learning disabilities.                                                                                               | K | K | N | Lecture, SGD        | Written/viva voce        |  |  |  |
| 4.2.3        | Describe clinical presentation of a child with learning disabilities.                                                                    | K | K | N | Lecture, SGD        | Written/viva voce        |  |  |  |
| 4.2.4        | Discuss assessment of a child with learning disabilities.                                                                                | K | K | N | Lecture, SGD        | Written/viva voce        |  |  |  |
| 4.2.5        | Discuss management options for a child with learning disabilities.                                                                       | K | K | N | Lecture, SGD        | Written/viva voce        |  |  |  |
| <b>PE4.3</b> | <b>Discuss the etiology, clinical features, diagnosis and management of a child with Attention Deficit Hyperactivity Disorder (ADHD)</b> | K | K | N | <b>Lecture, SGD</b> | <b>Written/viva voce</b> |  |  |  |
| 4.3.1        | Define ADHD.                                                                                                                             | K | K | N | Lecture, SGD        | Written/viva voce        |  |  |  |
| 4.3.2        | Describe clinical features of ADHD.                                                                                                      | K | K | N | Lecture, SGD        | Written/viva voce        |  |  |  |
| 4.3.3        | Discuss diagnostic assessment of a child with suspected ADHD.                                                                            | K | K | N | Lecture, SGD        | Written/viva voce        |  |  |  |
| 4.3.4        | Enumerate drugs for treatment of ADHD.                                                                                                   | K | K | N | Lecture, SGD        | Written/viva voce        |  |  |  |
| <b>PE4.4</b> | <b>Discuss etiology, clinical features, diagnosis and management of a child with autism</b>                                              | K | K | N | <b>Lecture, SGD</b> | <b>Written/viva voce</b> |  |  |  |
| 4.4.1        | Define Autism Spectrum Disorders (ASD).                                                                                                  | K | K | N | Lecture, SGD        | Written/viva voce        |  |  |  |
| 4.4.2        | Discuss causes of ASD.                                                                                                                   | K | K | N | Lecture, SGD        | Written/viva voce        |  |  |  |
| 4.4.3        | Describe clinical features of ASD.                                                                                                       | K | K | N | Lecture, SGD        | Written/viva voce        |  |  |  |
| 4.4.4        | Discuss clinical assessment of ASD.                                                                                                      | K | K | N | Lecture, SGD        | Written/viva voce        |  |  |  |

|                                                                                                                                                 |                                                                                          |          |           |          |                     |                            |  |              |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|----------------------------|--|--------------|--|
| 4.4.5                                                                                                                                           | Discuss management options for a child with ASD.                                         | K        | K         | N        | Lecture, SGD        | Written/viva voce          |  |              |  |
| <b>PE4.5</b>                                                                                                                                    | <b>Discuss the role of Child Guidance Clinic in children with Developmental problems</b> | <b>K</b> | <b>K</b>  | <b>N</b> | <b>Lecture, SGD</b> | <b>Written/Viva voce</b>   |  | <b>Psych</b> |  |
| 4.5.1                                                                                                                                           | Describe the structure of a Child Guidance Clinic with respect to staff and facilities.  | K        | K         | N        | Lecture, SGD        | Written/Viva voce          |  | Psych        |  |
| 4.5.2                                                                                                                                           | Enumerate the functions of a child guidance clinic.                                      | K        | K         | N        | Lecture, SGD        | Written/Viva voce          |  | Psych        |  |
| <b>PE4.6</b>                                                                                                                                    | <b>Visit to the Child Guidance Clinic</b>                                                | <b>S</b> | <b>KH</b> | <b>N</b> | <b>Lecture, SGD</b> | <b>Document in Logbook</b> |  | Psych        |  |
| 4.6.1                                                                                                                                           | Describe the functioning of child guidance clinic in their institutions.                 | S        | KH        | N        | Lecture, SGD        | Document in Logbook        |  | Psych        |  |
| <b>Topic: Common problems related to behaviour      Number of competencies: (3)      Number of procedures that require certification: (NIL)</b> |                                                                                          |          |           |          |                     |                            |  |              |  |
| <b>PE 5.1</b>                                                                                                                                   | <b>Describe the clinical features, diagnosis and management of thumb sucking</b>         | <b>K</b> | <b>K</b>  | <b>N</b> | <b>Lecture, SGD</b> | <b>Written</b>             |  |              |  |
| 5.1.1                                                                                                                                           | Describe clinical features of thumb sucking.                                             | K        | K         | N        | Lecture, SGD        | Written/viva voce          |  |              |  |
| 5.1.2                                                                                                                                           | Describe diagnosis of thumb sucking.                                                     | K        | K         | N        | Lecture, SGD        | Written/viva voce          |  |              |  |
| 5.1.3                                                                                                                                           | Discuss management strategies for a child with thumb sucking.                            | K        | K         | N        | Lecture, SGD        | Written/viva voce          |  |              |  |
| <b>PE 5.2</b>                                                                                                                                   | <b>Describe the clinical features, diagnosis and management of feeding problems</b>      | <b>K</b> | <b>K</b>  | <b>N</b> | <b>Lecture, SGD</b> | <b>Written/viva voce</b>   |  |              |  |
| 5.2.1                                                                                                                                           | Enumerate common feeding problems.                                                       | K        | K         | N        | Lecture, SGD        | Written/viva voce          |  |              |  |
| 5.2.2                                                                                                                                           | Discuss clinical presentations of feeding problems.                                      | K        | K         | N        | Lecture, SGD        | Written/viva voce          |  |              |  |
| 5.2.3                                                                                                                                           | Discuss management strategies for a child with feeding problems.                         | K        | K         | N        | Lecture, SGD        | Written/viva voce          |  |              |  |
| <b>PE 5.3</b>                                                                                                                                   | <b>Describe the clinical features, diagnosis and management of nail-biting</b>           | <b>K</b> | <b>K</b>  | <b>N</b> | <b>Lecture, SGD</b> | <b>Written/Viva Voce</b>   |  |              |  |
| 5.3.1                                                                                                                                           | Describe features of nail biting.                                                        | K        | K         | N        | Lecture, SGD        | Written/Viva Voce          |  |              |  |

|               |                                                                                           |          |          |          |                     |                          |  |  |       |
|---------------|-------------------------------------------------------------------------------------------|----------|----------|----------|---------------------|--------------------------|--|--|-------|
| 5.3.2         | Discuss management of nail biting.                                                        | K        | K        | N        | Lecture, SGD        | Written/Viva Voce        |  |  |       |
| <b>PE 5.4</b> | <b>Describe the clinical features, diagnosis and management of breath holding spells.</b> | <b>K</b> | <b>K</b> | <b>N</b> | <b>Lecture, SGD</b> | <b>Written/Viva Voce</b> |  |  |       |
| 5.4.1         | Describe a breath holding spell.                                                          | K        | K        | N        | Lecture, SGD        | Written/Viva Voce        |  |  |       |
| 5.4.2         | Describe the types of breath holding spells.                                              | K        | K        | N        | Lecture, SGD        | Written/Viva Voce        |  |  |       |
| 5.4.3         | Discuss causes of breath holding spells.                                                  | K        | K        | N        | Lecture, SGD        | Written/Viva Voce        |  |  |       |
| 5.4.4         | Discuss management of breath holding spells.                                              | K        | K        | N        | Lecture, SGD        | Written/Viva Voce        |  |  |       |
| <b>PE 5.5</b> | <b>Describe the clinical features, diagnosis and management of temper tantrums</b>        | <b>K</b> | <b>K</b> | <b>N</b> | <b>Lecture, SGD</b> | <b>Written/Viva Voce</b> |  |  | Psych |
| 5.5.1         | Describe presentation of a temper tantrum.                                                | K        | K        | N        | Lecture, SGD        | Written/Viva Voce        |  |  |       |
| 5.5.2         | Discuss causes of temper tantrum.                                                         | K        | K        | N        | Lecture, SGD        | Written/Viva Voce        |  |  |       |
| 5.5.3         | Discuss management of temper tantrums.                                                    | K        | K        | N        | Lecture, SGD        | Written/Viva Voce        |  |  |       |
| <b>PE 5.6</b> | <b>Describe the clinical features, diagnosis and management of pica</b>                   | <b>K</b> | <b>K</b> | <b>N</b> | <b>Lecture, SGD</b> | <b>Written/Viva Voce</b> |  |  |       |
| 5.6.1         | Define pica.                                                                              | K        | K        | N        | Lecture, SGD        | Written/Viva Voce        |  |  |       |
| 5.6.2         | Discuss causes of pica.                                                                   | K        | K        | N        | Lecture, SGD        | Written/Viva Voce        |  |  |       |
| 5.6.3         | Discuss treatment of pica.                                                                | K        | K        | N        | Lecture, SGD        | Written/Viva Voce        |  |  |       |
| <b>PE 5.7</b> | <b>Describe the clinical features, diagnosis and management of fussy infant</b>           | <b>K</b> | <b>K</b> | <b>N</b> | <b>Lecture, SGD</b> | <b>Written/Viva Voce</b> |  |  | Psych |
| 5.7.1         | Describe a fussy infant.                                                                  | K        | K        | N        | Lecture, SGD        | Written/Viva Voce        |  |  |       |
| 5.7.2         | Enumerate causes of fussiness in children.                                                | K        | K        | N        | Lecture, SGD        | Written/Viva Voce        |  |  |       |

|                                                                                                                                                                                      |                                                                                                                  |          |           |          |                     |                             |  |  |              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|-----------------------------|--|--|--------------|
| 5.7.3                                                                                                                                                                                | Discuss management of fussiness in a child.                                                                      | K        | K         | N        | Lecture, SGD        | Written/Viva Voce           |  |  |              |
| <b>PE 5.8</b>                                                                                                                                                                        | <b>Discuss the etiology, clinical features and management of enuresis.</b>                                       | <b>K</b> | <b>K</b>  | <b>N</b> | <b>Lecture, SGD</b> | <b>Written/Viva Voce</b>    |  |  |              |
| 5.8.1                                                                                                                                                                                | Define primary and secondary enuresis for boys and girls.                                                        | K        | K         | N        | Lecture, SGD        | Written/Viva Voce           |  |  |              |
| 5.8.2                                                                                                                                                                                | Discuss etiology of primary and secondary enuresis.                                                              | K        | K         | N        | Lecture, SGD        | Written/Viva Voce           |  |  |              |
| 5.8.3                                                                                                                                                                                | Discuss pharmacological and non-pharmacological management strategies for enuresis.                              | K        | K         | N        | Lecture, SGD        | Written/Viva Voce           |  |  |              |
| <b>PE 5.9</b>                                                                                                                                                                        | <b>Discuss the etiology, clinical features and management of Encopresis.</b>                                     | <b>K</b> | <b>K</b>  | <b>N</b> | <b>Lecture, SGD</b> | <b>Written/Viva Voce</b>    |  |  |              |
| 5.9.1                                                                                                                                                                                | Describe Encopresis.                                                                                             | K        | K         | N        | Lecture, SGD        | Written/Viva Voce           |  |  |              |
| 5.9.2                                                                                                                                                                                | Discuss causes of Encopresis.                                                                                    | K        | K         | N        | Lecture, SGD        | Written/Viva Voce           |  |  |              |
| 5.9.3                                                                                                                                                                                | Describe management of Encopresis.                                                                               | K        | K         | N        | Lecture, SGD        | Written/Viva Voce           |  |  |              |
| <b>PE 5.10</b>                                                                                                                                                                       | <b>Discuss the role of child guidance clinic in children with behavioural problems and the referral criteria</b> | <b>K</b> | <b>K</b>  | <b>N</b> | <b>Lecture, SGD</b> | <b>Written/Viva Voce</b>    |  |  | <b>Psych</b> |
| 5.10.1                                                                                                                                                                               | Describe the role of a child guidance clinic in children with behavioural problems.                              | K        | K         | N        | Lecture, SGD        | Written/Viva Voce           |  |  |              |
| 5.10.2                                                                                                                                                                               | Enumerate referral criteria for behavioural problems in children.                                                | K        | K         | N        | Lecture, SGD        | Written/Viva Voce           |  |  |              |
| <b>PE 5.11</b>                                                                                                                                                                       | <b>Visit to Child Guidance Clinic and observe functioning</b>                                                    | <b>K</b> | <b>KH</b> | <b>N</b> | <b>Lecture, SGD</b> | <b>Document in Logbooks</b> |  |  |              |
| 5.11.1                                                                                                                                                                               | Describe functioning of a Child Guidance Clinic.                                                                 | K        | KH        | N        | Lecture, SGD        | Document in Logbooks        |  |  |              |
| <b>Topic: Adolescent Health &amp; common problems related to Adolescent Health</b> <b>Number of competencies: (13)</b> <b>Number of procedures that require certification: (NIL)</b> |                                                                                                                  |          |           |          |                     |                             |  |  |              |
| <b>PE 6.1</b>                                                                                                                                                                        | <b>Define Adolescence and stages of adolescence</b>                                                              | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/viva voce</b>    |  |  |              |
| 6.1.1                                                                                                                                                                                | Define adolescence.                                                                                              | K        | K         | Y        | Lecture, SGD        | Written/viva voce           |  |  |              |

|                |                                                                                                    |          |           |          |                     |                          |  |  |              |
|----------------|----------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|--------------------------|--|--|--------------|
| 6.1.2          | Enumerate the stages of adolescence.                                                               | K        | KH        | Y        | Lecture, SGD        | Written/viva voce        |  |  |              |
| <b>PE 6.2.</b> | <b>Describe the physical, physiological and psychological changes during adolescence (Puberty)</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/viva voce</b> |  |  | <b>Psych</b> |
| 6.2.1          | Describe the physical changes during adolescence.                                                  | K        | KH        | Y        | Lecture, SGD        | Written/viva voce        |  |  | Psych        |
| 6.2.2          | Describe the physiological changes during adolescence.                                             | K        | KH        | Y        | Lecture, SGD        | Written/viva voce        |  |  | Psych        |
| 6.2.3          | Describe the psychological changes during adolescence.                                             | K        | KH        | Y        | Lecture, SGD        | Written/viva voce        |  |  | Psych        |
| <b>PE6.3</b>   | <b>Discuss the general health problems during adolescence</b>                                      | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/viva voce</b> |  |  |              |
| 6.3.1          | Enumerate the general health problems of adolescence                                               | K        | KH        | Y        | Lecture, SGD        | Written/viva voce        |  |  |              |
| 6.3.2          | Describe the general health problems of adolescence                                                | K        | KH        | Y        | Lecture, SGD        | Written/viva voce        |  |  |              |
| <b>PE6.4</b>   | <b>Describe adolescent sexuality and common problems related to it</b>                             | <b>K</b> | <b>KH</b> | <b>N</b> | <b>Lecture, SGD</b> | <b>Written/viva voce</b> |  |  | <b>Psych</b> |
| 6.4.1          | Describe adolescent sexuality.                                                                     | K        | KH        | N        | Lecture, SGD        | Written/viva voce        |  |  | Psych        |
| 6.4.2          | Enumerate common problems related to adolescent sexuality.                                         | K        | KH        | N        | Lecture, SGD        | Written/viva voce        |  |  | Psych        |
| <b>PE6.5</b>   | <b>Explain the Adolescent Nutrition and common nutritional problem</b>                             | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/viva voce</b> |  |  | <b>Psych</b> |
| 6.5.1          | Describe the nutritional requirements of adolescents.                                              | K        | KH        | Y        | Lecture, SGD        | Written/viva voce        |  |  |              |
| 6.5.2          | Discuss the nutritional problems in adolescents.                                                   | K        | KH        | Y        | Lecture, SGD        | Written/viva voce        |  |  | Psych        |
| <b>PE6.6</b>   | <b>Discuss the common Adolescent eating disorders (Anorexia nervosa, Bulimia)</b>                  | <b>K</b> | <b>KH</b> | <b>N</b> | <b>Lecture, SGD</b> | <b>Written/viva voce</b> |  |  | <b>Psych</b> |
| 6.6            | Describe the common adolescent eating problems like Anorexia nervosa and Bulimia nervosa.          | K        | KH        | N        | Lecture, SGD        | Written/viva voce        |  |  | Psych        |
| <b>PE6.7</b>   | <b>Describe the common mental health problems during adolescence</b>                               | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/viva voce</b> |  |  | <b>Psych</b> |

|               |                                                                                                                                                                                                                                                                    |          |           |          |                       |                            |  |  |        |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|-----------------------|----------------------------|--|--|--------|
| 6.7.1         | Describe the common mental health problems during adolescence.                                                                                                                                                                                                     | K        | KH        | Y        | Lecture, SGD          | Written/viva voce          |  |  | Psych  |
| <b>PE6.8</b>  | <b>Respecting patient privacy and maintaining confidentiality while dealing with adolescence</b>                                                                                                                                                                   | <b>A</b> | <b>SH</b> | <b>Y</b> | <b>Bedside</b>        | <b>Skill station</b>       |  |  |        |
| 6.8.1         | Interact with an adolescent in privacy and maintaining confidentiality.                                                                                                                                                                                            | A        | SH        | Y        | Bedside               | Skill station              |  |  | AETCOM |
| <b>PE6.9</b>  | <b>Perform routine Adolescent Health checkup including eliciting history, performing examination including SMR (Sexual Maturity Rating), growth assessments (using Growth charts) and systemic exam including thyroid and Breast exam and the HEADSS screening</b> | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside clinic</b> | <b>Skill station</b>       |  |  |        |
| 6.9.1         | Elicit the history from an adolescent.                                                                                                                                                                                                                             | S        | SH        | Y        | Bedside               | Skill station              |  |  |        |
| 6.9.2         | Assess sexual maturity rating (SMR) in an adolescent.                                                                                                                                                                                                              | S        | SH        | Y        | Bedside               | Skill station              |  |  |        |
| 6.9.3         | Evaluate the growth of an adolescent using growth charts.                                                                                                                                                                                                          | S        | SH        | Y        | Bedside               | Skill station              |  |  |        |
| 6.9.4         | Examine the thyroid gland of an adolescent.                                                                                                                                                                                                                        | S        | SH        | Y        | Bedside               | Skill station              |  |  |        |
| 6.9.5         | Perform a breast examination of an adolescent.                                                                                                                                                                                                                     | S        | SH        | Y        | Bedside               | Skill station              |  |  |        |
| 6.9.6         | Apply HEADSS screening in adolescent workup.                                                                                                                                                                                                                       | S        | SH        | Y        | Bedside               | Skill station              |  |  |        |
| <b>PE6.10</b> | <b>Discuss the objectives and functions of AFHS (Adolescent Friendly Health Services) and the referral criteria</b>                                                                                                                                                | <b>K</b> | <b>KH</b> | <b>N</b> | <b>Lecture, SGD</b>   | <b>Written/viva voce</b>   |  |  |        |
| 6.10.1        | Discuss the objectives of adolescent friendly health services (AFHS).                                                                                                                                                                                              | K        | KH        | N        | Lecture, SGD          | Written/viva voce          |  |  |        |
| 6.10.2        | Enumerate the functions of adolescent friendly health services (AFHS).                                                                                                                                                                                             | K        | KH        | N        | Lecture, SGD          | Written/viva voce          |  |  |        |
| <b>PE6.11</b> | <b>Visit to the Adolescent Clinic</b>                                                                                                                                                                                                                              | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>DOAP session</b>   | <b>Document in Logbook</b> |  |  |        |
| 6.11.1        | Visit an adolescent clinic at least once.                                                                                                                                                                                                                          | S        | KH        | Y        | DOAP session          | Document in Logbook        |  |  |        |
| <b>PE6.12</b> | <b>Enumerate the importance of obesity and other NCD in adolescents</b>                                                                                                                                                                                            | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>   | <b>Written/viva voce</b>   |  |  |        |
| 6.12.1        | Define obesity in adolescence and Enumerate the complications.                                                                                                                                                                                                     | K        | KH        | Y        | Lecture, SGD          | Written/viva voce          |  |  |        |
| 6.12.2        | Analyze the importance of non-communicable diseases in adolescence.                                                                                                                                                                                                | K        | KH        | Y        | Lecture, SGD          | Written/viva voce          |  |  |        |

|                                                                                                                                                                                                   |                                                                                                                        |          |           |          |                            |                          |          |               |            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------|--------------------------|----------|---------------|------------|
| <b>PE6.13</b>                                                                                                                                                                                     | <b>Enumerate the prevalence and the importance of recognition of sexual drug abuse in adolescents and children</b>     | <b>K</b> | <b>KH</b> | <b>N</b> | <b>Lecture, SGD</b>        | <b>Written/viva voce</b> |          |               |            |
| 6.13.1                                                                                                                                                                                            | State the prevalence of sexual and drug abuse among adolescents and children.                                          | K        | KH        | N        | Lecture, SGD               | Written/viva voce        |          |               |            |
| 6.13.2                                                                                                                                                                                            | Discuss the importance of recognition of sexual and drug abuse in adolescents and children.                            | K        | KH        | N        | Lecture, SGD               | Written/viva voce        |          |               | Psych      |
| <b>Topic: To promote and support optimal Breastfeeding for Infants</b> <span style="float: right;">Number of competencies: (11)      Number of procedures that require certification: (01)</span> |                                                                                                                        |          |           |          |                            |                          |          |               |            |
| <b>PE 7.1</b>                                                                                                                                                                                     | <b>Awareness on the cultural beliefs and practices of breastfeeding</b>                                                | <b>K</b> | <b>K</b>  | <b>N</b> | <b>Lecture, SGD</b>        | <b>Written/Viva</b>      |          |               | <b>OBG</b> |
| 7.1.1                                                                                                                                                                                             | Explain the harmless and harmful cultural beliefs and practices of breastfeeding.                                      | K        | K         | N        | Lecture, SGD               | Written/Viva             |          |               |            |
| <b>PE 7.2</b>                                                                                                                                                                                     | <b>Explain the Physiology of lactation</b>                                                                             | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>        | <b>Written/Viva</b>      |          | <b>Physio</b> |            |
| 7.2.1                                                                                                                                                                                             | Describe the Anatomy of breast.                                                                                        | K        | K         | Y        | Lecture, SGD               | Written/viva             |          |               |            |
| 7.2.2                                                                                                                                                                                             | Explain the Physiology of lactation.                                                                                   | K        | KH        | Y        | Lecture, SGD               | Written/viva             |          | Physio        |            |
| <b>PE 7.3</b>                                                                                                                                                                                     | <b>Describe the composition and types of breast milk and Discuss the differences between cow's milk and Human milk</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>        | <b>Written/viva voce</b> |          | <b>Physio</b> |            |
| 7.3.1                                                                                                                                                                                             | Describe the composition of breast milk.                                                                               | K        | K         | Y        | Lecture, SGD,              | Written/viva voce        |          |               |            |
| 7.3.2                                                                                                                                                                                             | Describe the composition of cow's milk.                                                                                | K        | K         | Y        | Lecture, SGD               | Written/viva voce        |          |               |            |
| 7.3.3                                                                                                                                                                                             | Enumerate the differences between breast milk and cow's milk.                                                          | K        | KH        | Y        | Lecture, SGD,              | Written/viva voce        |          |               |            |
| 7.3.4                                                                                                                                                                                             | Describe the various types of breast milk and their characteristic composition.                                        | K        | K         | Y        | Lecture, SGD,              | Written/viva voce        |          |               |            |
| <b>PE 7.4</b>                                                                                                                                                                                     | <b>Discuss the advantages of breast milk</b>                                                                           | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>        | <b>Written/viva voce</b> |          |               |            |
| 7.4.1                                                                                                                                                                                             | Enumerate the advantages of breast milk.                                                                               | K        | KH        | Y        | Lecture, SGD               | Written/viva voce        |          |               |            |
| <b>PE 7.5</b>                                                                                                                                                                                     | <b>Observe the correct technique of breastfeeding and distinguish right from wrong technique</b>                       | <b>S</b> | <b>P</b>  | <b>Y</b> | <b>Bedside, Skills lab</b> | <b>Skill assessment</b>  | <b>3</b> |               |            |

|                |                                                                                                                                                                |            |           |          |                                    |                                      |   |  |               |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|----------|------------------------------------|--------------------------------------|---|--|---------------|
| 7.5.1          | Observe correct technique of breastfeeding noting signs of good attachment and correct positioning of mother and baby.                                         | S          | P         | Y        | Bedside teaching/ video/ Skill lab | Logbook                              | 3 |  |               |
| 7.5.2          | Distinguish correct feeding technique from wrong one on the mother baby dyad.                                                                                  | S          | P         | Y        | Bedside, skills lab                | OSCE (video based)                   | 3 |  |               |
| <b>PE 7.6</b>  | <b>Enumerate the baby friendly hospital initiatives</b>                                                                                                        | <b>K</b>   | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                | <b>Written/viva voce</b>             |   |  |               |
| PE7.6.1        | Enumerate components of the baby friendly hospital initiative.                                                                                                 | K          | KH        | Y        | Lecture, SGD                       | Written short notes/viva voce        |   |  |               |
| <b>PE 7.7</b>  | <b>Perform breast examination and Identify common problems during lactation such as retracted nipples, cracked nipples, breast engorgement, breast abscess</b> | <b>S</b>   | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b>         | <b>skill assessment</b>              |   |  | <b>OBG</b>    |
| 7.7.1          | Enumerate common problems in the mother during lactation.                                                                                                      | K          | K         | Y        | Lecture, Bedside, skills lab       | Written/viva voce                    |   |  |               |
| 7.7.2          | Examine breast of a lactating mother in an appropriate manner.                                                                                                 | S          | SH        | Y        | Bedside, skills lab                | Skill assessment, OSCE (video based) |   |  |               |
| 7.7.3          | Identify the common problems after examining the breast in lactating mother viz retracted nipples, cracked nipples, breast engorgement, breast abscess.        | S          | SH        | Y        | Bedside, skills lab                | Skill assessment, OSCE (video based) |   |  |               |
| <b>PE 7.8</b>  | <b>Educate mothers on ante natal breast care and prepare mothers for lactation</b>                                                                             | <b>A/C</b> | <b>SH</b> | <b>Y</b> | <b>DOAP session</b>                | <b>Document in Logbook</b>           |   |  | <b>AETCOM</b> |
| 7.8.1          | Educate and counsel pregnant woman during antenatal period in preparation for breastfeeding.                                                                   | C          | SH        | Y        | DOAP session/Clinical session      | OSCE                                 |   |  |               |
| 7.8.2          | Educate the pregnant woman for antenatal breast care.                                                                                                          | C          | SH        | Y        | DOAP session/Clinical session      | OSCE                                 |   |  | <b>OBG</b>    |
| <b>PE7.9</b>   | <b>Educate and counsel mothers for best practices in Breastfeeding</b>                                                                                         | <b>A/C</b> | <b>SH</b> | <b>Y</b> | <b>DOAP session</b>                | <b>Logbook, OSCE</b>                 |   |  |               |
| 7.9.1          | Enumerate the best breastfeeding practices.                                                                                                                    | K          | K         | Y        | Lecture, SGD                       | Written/viva voce                    |   |  |               |
| 7.9.2          | Educate mothers for the best breastfeeding practices.                                                                                                          | A/C        | SH        | Y        | DOAP session                       | Logbook, OSCE with SP                |   |  |               |
| <b>PE 7.10</b> | <b>Respects patient privacy</b>                                                                                                                                | <b>A</b>   | <b>SH</b> | <b>Y</b> | <b>DOAP session</b>                | <b>Document in Logbook</b>           |   |  | <b>AETCOM</b> |

IAP Task Force on Competency-based Curriculum for Pediatrics in UG education: Competencies to Specific Learning Objectives  
Competency statements (**in Bold**) are taken from the MCI document and not modifiable

|                                                                                                                                      |                                                                                                                                             |            |           |          |                                        |                            |  |                |  |
|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|----------|----------------------------------------|----------------------------|--|----------------|--|
|                                                                                                                                      | Demonstrate respect for a mother's privacy.                                                                                                 | A          | SH        | Y        | DOAP session                           | OSCE                       |  |                |  |
| <b>PE 7.11</b>                                                                                                                       | <b>Participate in Breastfeeding Week Celebration</b>                                                                                        | <b>A</b>   | <b>SH</b> | <b>Y</b> | <b>DOAP session</b>                    | <b>Document in Logbook</b> |  |                |  |
| 7.11.1                                                                                                                               | Participate actively in breastfeeding week celebrations.                                                                                    | A          | SH        | Y        | Active Participation in the activities | Document in Logbook        |  |                |  |
| <b>Topic: Complementary Feeding</b> <b>Number of competencies: (5)</b> <b>Number of procedures that require certification: (NIL)</b> |                                                                                                                                             |            |           |          |                                        |                            |  |                |  |
| <b>PE 8.1</b>                                                                                                                        | <b>Define the term Complementary Feeding</b>                                                                                                | <b>K</b>   | <b>K</b>  | <b>Y</b> | <b>Lecture, SGD</b>                    | <b>Written/ Viva voce</b>  |  | <b>Com Med</b> |  |
| PE 8.1.1                                                                                                                             | Define complementary feeding.                                                                                                               | K          | K         | Y        | Lecture, SGD                           | Written/viva voce          |  |                |  |
| <b>PE 8.2</b>                                                                                                                        | <b>Discuss the principles, the initiation, attributes, frequency, technique and hygiene related to complementary feeding including IYCF</b> | <b>K</b>   | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                    | <b>Written/ Viva voce</b>  |  | <b>Com Med</b> |  |
| 8.2.1                                                                                                                                | Describe the principles of complementary feeding.                                                                                           | K          | K         | Y        | Lecture, SGD                           | Written/viva voce          |  |                |  |
| 8.2.2                                                                                                                                | Narrate the types and attributes of good complementary foods.                                                                               | K          | KH        | Y        | Lecture, SGD                           | Written/viva voce          |  |                |  |
| 8.2.3                                                                                                                                | Describe the initiation of complementary feeding in different situations.                                                                   | K          | K         | Y        | Lecture, SGD                           | Written/viva voce          |  |                |  |
| 8.2.4                                                                                                                                | Describe the frequency of complementary feeding in different situations.                                                                    | K          | KH        | Y        | Lecture, SGD                           | Written/viva voce          |  |                |  |
| 8.2.5                                                                                                                                | Describe the correct technique of complementary feeding.                                                                                    | K          | KH        | Y        | Lecture, SGD                           | Written/viva voce          |  |                |  |
| 8.2.6                                                                                                                                | Enumerate the hygienic practices to be followed during complementary feeding.                                                               | K          | KH        | Y        | Lecture, SGD                           | Written/viva voce          |  |                |  |
| <b>PE 8.3</b>                                                                                                                        | <b>Enumerate the common complimentary foods</b>                                                                                             | <b>K</b>   | <b>K</b>  | <b>Y</b> | <b>Lecture, SGD</b>                    | <b>Written/ Viva voce</b>  |  | <b>Com Med</b> |  |
| PE 8.3.1                                                                                                                             | Enumerate common locally available complementary foods.                                                                                     | K          | K         | Y        | Lecture, SGD                           | SAQ, viva voce             |  |                |  |
| <b>PE 8.4</b>                                                                                                                        | <b>Elicit history on the Complementary Feeding habits</b>                                                                                   | <b>S</b>   | <b>SH</b> | <b>Y</b> | <b>BEDSIDE, SKILL LAB</b>              | <b>skill assessment</b>    |  | <b>Com Med</b> |  |
| PE 8.4.1                                                                                                                             | Elicit a focused and detailed history for complementary feeding.                                                                            | S          | SH        | Y        | Bedside                                | OSCE                       |  |                |  |
| <b>PE 8.5</b>                                                                                                                        | <b>Counsel and educate mothers on the best practices in complementary feeding</b>                                                           | <b>A/C</b> | <b>SH</b> | <b>Y</b> | <b>DOAP session</b>                    | <b>DOCUMENT IN LOGBOOK</b> |  | <b>Com Med</b> |  |

|                                                           |                                                                                                                                    |                                    |           |          |                                                               |                           |  |                              |  |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-----------|----------|---------------------------------------------------------------|---------------------------|--|------------------------------|--|
| 8.5.1                                                     | Counsel the mother for the best practices in complementary feeding.                                                                | A/C                                | SH        | Y        | DOAP session                                                  | OSCE                      |  |                              |  |
| <b>Topic: Normal nutrition, assessment and monitoring</b> |                                                                                                                                    | <b>Number of competencies: (7)</b> |           |          | <b>Number of procedures that require certification: (NIL)</b> |                           |  |                              |  |
| <b>PE 9.1</b>                                             | <b>Describe the age-related nutritional needs of infants, children and adolescents including micronutrients and vitamins</b>       | <b>K</b>                           | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                                           | <b>Written/ Viva voce</b> |  | <b>Com Med, Biochemistry</b> |  |
| 9.1.1                                                     | List the macronutrients and micronutrients required for growth.                                                                    | K                                  | K         | Y        | Lecture, SGD                                                  | Written/ Viva voce        |  |                              |  |
| 9.1.2                                                     | Describe the nutritional needs (calorie, protein, micronutrients minerals and vitamins) of an infant.                              | K                                  | KH        | Y        | Lecture, SGD                                                  | Written/ Viva voce        |  |                              |  |
| 9.1.3                                                     | Describe the nutritional needs (calorie, protein, micronutrients minerals and vitamins) for children of different ages.            | K                                  | KH        | Y        | Lecture, SGD                                                  | Written/ Viva voce        |  |                              |  |
| 9.1.4                                                     | Describe the nutritional needs (calorie, protein, micronutrients minerals and vitamins) of adolescents of both genders.            | K                                  | KH        | Y        | Lecture, SGD                                                  | Written/ Viva voce        |  |                              |  |
| <b>P E 9.2</b>                                            | <b>Describe the tools and methods for assessment and classification of nutritional status of infants, children and adolescents</b> | <b>K</b>                           | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                                           | <b>Written/ Viva voce</b> |  | <b>Com Med</b>               |  |
| 9.2.1                                                     | List the tools required for anthropometric measurements viz. weight, length/height, head circumference, midarm circumference.      | K                                  | K         | Y        | Lecture, SGD                                                  | Written/ Viva voce        |  |                              |  |
| 9.2.2                                                     | Describe the method of assessment in detail for different anthropometric measurements for all age groups.                          | K                                  | KH        | Y        | Lecture, SGD                                                  | <b>Written/ Viva voce</b> |  |                              |  |
| 9.2.3                                                     | Classify the nutritional status as per WHO classification based on anthropometric measurement data for all age groups.             | K                                  | KH        | Y        | Lecture, SGD                                                  | <b>Written/ Viva voce</b> |  |                              |  |
| <b>P E 9.3</b>                                            | <b>Explains the calorific value of common Indian foods</b>                                                                         | <b>K</b>                           | <b>K</b>  | <b>Y</b> | <b>Lecture, SGD</b>                                           | <b>Written/ Viva voce</b> |  | <b>Biochemistry</b>          |  |
| 9.3.1                                                     | Explain the calorie and protein content of commonly used uncooked and cooked cereals.                                              | K                                  | K         | Y        | Lecture, SGD                                                  | <b>Written/ Viva voce</b> |  |                              |  |

|                |                                                                                                                                       |          |           |          |                            |                            |  |                |  |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------|----------------------------|--|----------------|--|
| 9.3.2          | Explain the calorie and protein content of common uncooked food items like dairy products, eggs, fruits, vegetables etc.              | K        | K         | Y        | Lecture, SGD               | Written/ Viva voce         |  |                |  |
| 9.3.3          | Explain the calorie and protein content of common Indian cooked food items e.g. dalia, roti, chapati, khichdi, dal, rice, idli.       | K        | K         | Y        | Lecture, SGD               | Written/ Viva voce         |  |                |  |
| <b>P E 9.4</b> | <b>Elicit, document and present an appropriate nutritional history and perform a dietary recall</b>                                   | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, skill lab</b>  | <b>Skill Assessment</b>    |  | <b>Com Med</b> |  |
| 9.4.1          | Take focussed dietary history based on recall method from the caregiver.                                                              | S        | SH        | Y        | Bedside, skill lab         | OSCE                       |  |                |  |
| 9.4.2          | Document the dietary history and calculate calorie and protein content.                                                               | S        | SH        | Y        | Bedside, skill lab         | OSCE, VIVA VOCE            |  |                |  |
| 9.4.3          | Present the dietary history.                                                                                                          | S        | P         | Y        | Bedside, skill lab         | LONG CASE, VIVA VOCE       |  |                |  |
| <b>P E 9.5</b> | <b>Calculate the age appropriate calorie requirement in health and disease and Identify gaps</b>                                      | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside clinic, SGD</b> | <b>OSCE, CLINICAL CASE</b> |  | <b>Com Med</b> |  |
| 9.5.1          | Calculate the recommended calorie and protein requirement for children of all age groups.                                             | S        | SH        | Y        | Bedside clinic, SGD        | LONG CASE, VIVA VOCE, OSCE |  |                |  |
| 9.5.2          | Calculate the calorie and protein content of 24 hour dietary intake by a child.                                                       | S        | SH        | Y        | Bedside clinic, SGD        | LONG CASE, VIVA VOCE       |  |                |  |
| 9.5.3          | Calculate the gap (deficit) between recommended intake of calorie and protein and actual intake.                                      | S        | SH        | Y        | Bedside clinic, SGD        | LONG CASE, VIVA VOCE       |  |                |  |
| <b>P E 9.6</b> | <b>Assess and classify the nutrition status of infants, children and adolescents and recognize deviations</b>                         | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside clinic, SGD</b> | <b>Skill Assessment</b>    |  | <b>Com Med</b> |  |
| 9.6.1          | Assess nutritional status from anthropometric parameters for children of all age groups.                                              | S        | P         | Y        | Bedside clinic, SGD        | OSCE, Bedside              |  |                |  |
| 9.6.2          | Interpret the anthropometric measurement data by plotting in appropriate WHO growth charts for children of all age groups and gender. | S        | P         | Y        | Bedside clinic, SGD        | OSCE                       |  |                |  |
| 9.6.3          | Classify the type and degree of undernutrition using the WHO charts.                                                                  | S        | SH        | Y        | Bedside clinic, SGD        | OSCE                       |  |                |  |
| 9.6.4          | Identify overnutrition (overweight and obesity) by using WHO charts.                                                                  | S        | SH        | Y        | Bedside clinic, SGD        | OSCE                       |  |                |  |

|                                                                                                                                                                                                       |                                                                                                                                                                                                                   |          |           |          |                            |                            |  |                               |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------|----------------------------|--|-------------------------------|--|
| <b>P E 9.7</b>                                                                                                                                                                                        | <b>Plan an appropriate diet in health and disease</b>                                                                                                                                                             | <b>S</b> | <b>SH</b> | <b>N</b> | <b>Bedside clinic, SGD</b> | <b>Document in Logbook</b> |  | <b>Com Med</b>                |  |
| 9.7.1                                                                                                                                                                                                 | Plan a diet for a healthy child of all age groups.                                                                                                                                                                | S        | SH        | N        | Bedside clinic, SGD        | Document in Logbook        |  |                               |  |
| 9.7.2                                                                                                                                                                                                 | Plan an age appropriate diet for child of different age groups with under nutrition/ over nutrition.                                                                                                              | S        | SH        | N        | Bedside clinic, SGD        | Document in Logbook        |  |                               |  |
| 9.7.3                                                                                                                                                                                                 | Plan an age appropriate diet for child of different age groups with few common diseases viz. Lactose intolerance, Celiac disease, Chronic Kidney disease                                                          | S        | SH        | N        | SGD                        | Document in Logbook        |  |                               |  |
| <b>Topic: Provide nutritional support, assessment and monitoring for common nutritional problems</b> <b>Number of competencies: (6)</b> <b>Number of procedures that require certification: (NIL)</b> |                                                                                                                                                                                                                   |          |           |          |                            |                            |  |                               |  |
| <b>P E 10.1</b>                                                                                                                                                                                       | <b>Define and Describe the etiopathogenesis, classify including WHO classification, clinical features, complication and management of severe acute malnourishment (SAM) and moderate acute Malnutrition (MAM)</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>        | <b>Written/ Viva voce</b>  |  | <b>Physio, Biochemis try,</b> |  |
| 10.1.1                                                                                                                                                                                                | Define malnutrition as per WHO.                                                                                                                                                                                   | K        | K         | Y        | Lecture, SGD               | Written/ Viva voce         |  |                               |  |
| 10.1.2                                                                                                                                                                                                | Describe the aetiology of malnutrition.                                                                                                                                                                           | K        | KH        | Y        | Lecture, SGD               | Written/ Viva voce         |  |                               |  |
| 10.1.3                                                                                                                                                                                                | Discuss the pathophysiology of malnutrition.                                                                                                                                                                      | K        | KH        | Y        | Lecture, SGD               | Written/ Viva voce         |  |                               |  |
| 10.1.4                                                                                                                                                                                                | Classify the malnutrition as per WHO.                                                                                                                                                                             | K        | KH        | Y        | Lecture, SGD               | Written/ Viva voce         |  |                               |  |
| 10.1.5                                                                                                                                                                                                | Describe the criteria for severe acute malnutrition (SAM) and moderate acute malnutrition (MAM) as per WHO.                                                                                                       | K        | KH        | Y        | Lecture, SGD               | Written/ Viva voce         |  |                               |  |
| 10.1.6                                                                                                                                                                                                | Describe the clinical features of MAM and SAM including marasmus and kwashiorkor.                                                                                                                                 | K        | KH        | Y        | Lecture, SGD               | Written/ Viva voce         |  |                               |  |
| 10.1.7                                                                                                                                                                                                | Describe the complications of SAM.                                                                                                                                                                                | K        | KH        | Y        | Lecture, SGD               | Written/ Viva voce         |  |                               |  |
| 10.1.8                                                                                                                                                                                                | Describe the steps of management of SAM involving stabilization and rehabilitation phase.                                                                                                                         | K        | KH        | Y        | Lecture, SGD               | Written/ Viva voce         |  |                               |  |

|                 |                                                                                                                                                                                       |          |           |          |                            |                            |  |                             |  |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------|----------------------------|--|-----------------------------|--|
| 10.1.9          | Describe the domiciliary management of moderate acute malnutrition (MAM).                                                                                                             | K        | KH        | Y        | Lecture, SGD               | Written/ Viva voce         |  |                             |  |
| <b>P E 10.2</b> | <b>Outline the clinical approach to a child with SAM and MAM</b>                                                                                                                      | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>        | <b>Written/ Viva voce</b>  |  | <b>Physio, Biochemistry</b> |  |
| 10.2.1          | Describe the clinical approach (algorithmic approach including clinical history, examination and investigations) to a child with SAM and MAM.                                         | K        | KH        | Y        | Lecture, SGD               | Written/ Viva voce         |  |                             |  |
| <b>P E 10.3</b> | <b>Assessment of a patient with SAM and MAM, diagnosis, classification and planning management including hospital and community-based intervention, rehabilitation and prevention</b> | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills Lab</b> | <b>Skill assessment</b>    |  | <b>Physio, Biochemistry</b> |  |
| 10.3.1          | Take clinical history including focussed dietary history from the caregiver.                                                                                                          | S        | SH        | Y        | Bedside                    | OSCE, Long case            |  |                             |  |
| 10.3.2          | Examine the child including anthropometry and signs of vitamin deficiency.                                                                                                            | S        | SH        | Y        | Bedside                    | OSCE, Long case            |  |                             |  |
| 10.3.3          | Diagnose and classify the patient as having SAM or MAM based on clinical history, examination and anthropometry.                                                                      | S        | SH        | Y        | Bedside                    | OSCE, Long case            |  |                             |  |
| 10.3.4          | Plan the individualised home-based management in a child with MAM or uncomplicated SAM.                                                                                               | S        | SH        | Y        | Bedside                    | OSCE, Long case            |  |                             |  |
| 10.3.5          | Plan the hospital-based management of complicated SAM in a child.                                                                                                                     | S        | SH        | Y        | Bedside                    | OSCE, Long case            |  |                             |  |
| 10.3.6          | Plan the hospital-based rehabilitation phase management of complicated SAM in a child.                                                                                                | S        | SH        | Y        | Bedside                    | OSCE, Long case            |  |                             |  |
| 10.3.7          | Plan prevention of malnutrition at all levels.                                                                                                                                        | S        | SH        | Y        | Bedside                    | OSCE, Long case            |  |                             |  |
| <b>P E 10.4</b> | <b>Identify children with under nutrition as per IMNCI criteria and plan referral</b>                                                                                                 | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>DOAP session</b>        | <b>Document in Logbook</b> |  | <b>Com Med</b>              |  |
| 10.4.1          | Identify undernutrition as per IMNCI criteria.                                                                                                                                        | S        | SH        | Y        | DOAP session               | Document in Logbook        |  |                             |  |
| 10.4.2          | Describe pre-referral treatment as per IMNCI.                                                                                                                                         | S        | SH        | Y        | DOAP session               | Document in Logbook        |  |                             |  |
| 10.4.3          | Plan referral for children with undernutrition as per IMNCI guidelines.                                                                                                               | S        | SH        | Y        | DOAP session               | Document in Logbook        |  |                             |  |

|                                                                                                                               |                                                                                                            |          |           |          |                                       |                            |            |                                   |  |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------------------------|----------------------------|------------|-----------------------------------|--|
| <b>P E 10.5</b>                                                                                                               | <b>Counsel parents of children with SAM and MAM</b>                                                        | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside clinic, Skills Station</b> | <b>Document in Logbook</b> |            | <b>AETCOM</b>                     |  |
| 10.5.1                                                                                                                        | Counsel the parents on rehabilitation of children with SAM and MAM.                                        | A,C      | SH        | Y        | Bedside clinic, skill station         | OSCE                       |            |                                   |  |
| 10.5.2                                                                                                                        | Address the queries raised by the parents.                                                                 | S        | SH        | Y        | Bedside clinic, skill station         | OSCE                       |            |                                   |  |
| <b>P E 10.6</b>                                                                                                               | <b>Enumerate the role of locally prepared therapeutic diets and ready to use therapeutic diets</b>         | <b>K</b> | <b>K</b>  | <b>N</b> | <b>Lecture, SGD</b>                   | <b>Written/ Viva voce</b>  |            |                                   |  |
| 10.6.1                                                                                                                        | Enumerate the composition of Ready to use therapeutic foods (RUTF).                                        | K        | K         | N        | Lecture, SGD                          | Written / viva voce        |            |                                   |  |
| 10.6.2                                                                                                                        | Enumerate the locally available home food prepared with cereals, pulses, sugar, oil, milk and/ or egg etc. | K        | K         | N        | Lecture, SGD                          | Written / viva voce        |            |                                   |  |
| 10.6.3                                                                                                                        | Discuss the role of RUTF/locally prepared food to achieve catch-up growth in malnourished child.           | K        | KH        | N        | Lecture, SGD                          | Written / viva voce        |            |                                   |  |
| <b>Topic: Obesity in children      Number of competencies: (6)      Number of procedures that require certification: (01)</b> |                                                                                                            |          |           |          |                                       |                            |            |                                   |  |
| <b>P E 11.1</b>                                                                                                               | <b>Describe the common etiology, clinical features and management of obesity in children</b>               | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/SGD</b>                    | <b>Written/Viva voce</b>   | <b>NIL</b> | <b>Physio/ Biochemistry/ Path</b> |  |
| 11.1.1                                                                                                                        | Define Obesity and overweight as per WHO guidelines.                                                       | K        | K         | Y        | Lecture, SGD                          | Written / viva voce        |            |                                   |  |
| 11.1.2                                                                                                                        | Enumerate common causes of Obesity among children.                                                         | K        | K         | Y        | Lecture, SGD                          | Written / viva voce        |            |                                   |  |
| 11.1.3                                                                                                                        | Describe clinical features of obesity including co-morbidities.                                            | K        | KH        | Y        | Lecture, SGD                          | Written / viva voce        |            |                                   |  |
| 11.1.3                                                                                                                        | Outline principles of management of Obesity in children.                                                   | K        | KH        | Y        | Lecture, SGD                          | Written / viva voce        |            |                                   |  |
| <b>P E 11.2</b>                                                                                                               | <b>Discuss the risk approach for obesity and Discuss the prevention strategies</b>                         | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                   | <b>Written/ Viva voce</b>  |            | <b>Physio, Path</b>               |  |
| 11.2.1                                                                                                                        | Enumerate risk factors for Obesity among children.                                                         | K        | KH        | Y        | Lecture, SGD                          | Written / viva voce        |            |                                   |  |
| 11.2.2                                                                                                                        | Describe strategies for prevention of Obesity.                                                             | K        | KH        | Y        | Lecture, SGD                          | Written / viva voce        |            |                                   |  |

|                                                                                                                                                                                         |                                                                                                                                                                |          |           |          |                                               |                            |          |                     |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|-----------------------------------------------|----------------------------|----------|---------------------|--|
| <b>P E 11.3</b>                                                                                                                                                                         | <b>Assessment of a child with obesity with regard to eliciting history including physical activity, charting and dietary recall</b>                            | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Standardized patients</b>         | <b>Document in Logbook</b> |          |                     |  |
| 11.3.1                                                                                                                                                                                  | Elicit a detailed history in a child with obesity including activity charting.                                                                                 | S        | SH        | Y        | Bedside skill lab                             | Logbook                    |          |                     |  |
| 11.3.2                                                                                                                                                                                  | Obtain detailed dietary history by recall method.                                                                                                              | S        | SH        | Y        | Bedside clinics, skill lab                    | Logbook                    |          |                     |  |
| <b>P E 11.4</b>                                                                                                                                                                         | <b>Examination including calculation of BMI, measurement of waist hip ratio, Identifying external markers like acanthosis, striae, pseudo-gynecomastia etc</b> | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Standardized patients, Videos</b> | <b>Skills Station</b>      |          |                     |  |
| 11.4.1                                                                                                                                                                                  | Perform anthropometry in an obese child including calculation of BMI and Waist Hip Ratio.                                                                      | S        | SH        | Y        | Bedside / Multimedia based tutorial           | OSCE                       |          |                     |  |
| 11.4.2                                                                                                                                                                                  | Identify physical markers of obesity like acanthosis, striae, pseudogynecomastia.                                                                              | S        | SH        | Y        | Videos/patients                               | OSCE                       |          |                     |  |
| <b>P E 11.5</b>                                                                                                                                                                         | <b>Calculate BMI, document in BMI chart and interpret</b>                                                                                                      | <b>S</b> | <b>P</b>  | <b>Y</b> | <b>Bedside, SGD</b>                           | <b>Document in Logbook</b> | <b>3</b> |                     |  |
| 11.5.1                                                                                                                                                                                  | Calculate and Chart BMI accurately.                                                                                                                            | S        | P         | Y        | Clinical postings                             | Record Logbook             | 3        |                     |  |
| 11.5.2                                                                                                                                                                                  | Interpret BMI for a given patient.                                                                                                                             | S        | P         | Y        | Bedside clinic                                | OSCE                       | 3        |                     |  |
| <b>P E 11.6</b>                                                                                                                                                                         | <b>Discuss criteria for referral</b>                                                                                                                           | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture, SGD</b>                           | <b>Written /Viva voce</b>  |          |                     |  |
| 11.6.2                                                                                                                                                                                  | Enumerate criteria for referral in an obese child.                                                                                                             | K        | KH        | Y        | Lecture/ SGD                                  | Written / viva voce        |          |                     |  |
| <b>Topic: Micronutrients in Health and disease-1 (Vitamins ADEK, B Complex and C)</b> <b>Number of competencies: (21)</b> <b>Number of procedures that require certification: (NIL)</b> |                                                                                                                                                                |          |           |          |                                               |                            |          |                     |  |
| <b>PE 12.1</b>                                                                                                                                                                          | <b>Discuss the RDA, dietary sources of Vitamin A and their role in health and disease</b>                                                                      | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture, SGD</b>                           | <b>Written/ Viva voce</b>  |          | <b>Biochemistry</b> |  |
| 12.1.1                                                                                                                                                                                  | Recall the RDA and dietary sources of vitamin A for children of different ages.                                                                                | K        | K         | Y        | Lecture, SGD                                  | Written / viva voce        |          |                     |  |
| 12.1.2                                                                                                                                                                                  | Describe the physiology and role of vitamin A in health and disease.                                                                                           | K        | KH        | Y        | Lecture, SGD                                  | Written / viva voce        |          |                     |  |

|                |                                                                                                             |          |           |          |                                           |                                    |  |                     |  |
|----------------|-------------------------------------------------------------------------------------------------------------|----------|-----------|----------|-------------------------------------------|------------------------------------|--|---------------------|--|
| <b>PE 12.2</b> | <b>Describe the causes, clinical features, diagnosis and management of Deficiency / excess of Vitamin A</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                       | <b>Written/ Viva voce</b>          |  | <b>Biochemistry</b> |  |
| 12.2.1         | Enumerate the causes of Vitamin A deficiency/excess in children.                                            | K        | K         | Y        | Lecture, SGD                              | Written / viva voce                |  |                     |  |
| 12.2.2         | Describe the clinical features of Vitamin A Deficiency/excess in children.                                  | K        | KH        | Y        | Lecture, SGD                              | Written / viva voce                |  |                     |  |
| 12.2.3         | Describe the diagnosis and management of Vitamin A Deficiency/excess in children.                           | K        | KH        | Y        | Lecture, SGD                              | Written / viva voce                |  |                     |  |
| <b>PE 12.3</b> | <b>Identify the clinical features of dietary deficiency /excess of Vitamin A</b>                            | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, SGD</b>                       | <b>Document in Logbook</b>         |  | <b>Biochemistry</b> |  |
| 12.3.1         | Identify the clinical features of Vitamin A Deficiency/excess in children.                                  | S        | SH        | Y        | SGD/clinical photographs/bedside teaching | OSCE/case presentation             |  | Ophthalmology       |  |
| <b>PE 12.4</b> | <b>Diagnose patients with Vitamin A deficiency (VAD), classify and plan management</b>                      | <b>S</b> | <b>SH</b> | <b>N</b> | <b>Bedside, Skill Station</b>             | <b>Document in Logbook</b>         |  | <b>Biochemistry</b> |  |
| 12.4.1         | Diagnose patients with VAD.                                                                                 | S        | SH        | N        | Bedside                                   | Document in Logbook                |  | Ophthalmology       |  |
| 12.4.2         | Classify the patient with VAD as per WHO.                                                                   | S        | SH        | N        | Skill Station, Bedside                    | Skill station, Document in Logbook |  | Ophthalmology       |  |
| 12.4.3         | Plan management of a child with VAD.                                                                        | K        | K         | N        | Skill Station, Bedside                    | Skill station, Document in Logbook |  |                     |  |
| <b>PE 12.5</b> | <b>Discuss the Vitamin A prophylaxis program and their Recommendations</b>                                  | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture, SGD</b>                       | <b>Written/ Viva voce</b>          |  | <b>Biochemistry</b> |  |
| 12.5.1         | Enumerate the components of the National vitamin A prophylaxis program.                                     | K        | K         | Y        | Lecture, SGD                              | Written / viva voce                |  | Com Med             |  |
| <b>PE 12.6</b> | <b>Discuss the RDA, dietary sources of Vitamin D and its role in health and disease</b>                     | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture, SGD</b>                       | <b>Written/ Viva voce</b>          |  | <b>Biochemistry</b> |  |
| 12.6.1         | Describe the RDA and dietary sources of vitamin D for the pediatric age groups.                             | K        | K         | Y        | Lecture, SGD                              | Written / viva voce                |  |                     |  |
| 12.6.2         | Describe the role of vitamin D in health and disease.                                                       | K        | KH        |          | Lecture, SGD                              | Written / viva voce                |  |                     |  |

|                           |                                                                                                                                                  |          |           |          |                                                |                                    |  |                                   |  |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|------------------------------------------------|------------------------------------|--|-----------------------------------|--|
| <b>PE 12.7</b><br>Rickets | <b>Describe the causes, clinical features, diagnosis and management of vitamin D deficiency (VDD)/ excess (Rickets &amp; Hypervitaminosis D)</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                            | <b>Written / viva voce</b>         |  | <b>Biochemistry, Physio, Path</b> |  |
| 12.7.1                    | List the causes of Rickets/ Hypervitaminosis D in children.                                                                                      | K        | K         | Y        | Lecture, SGD                                   | Written / viva voce                |  |                                   |  |
| 12.7.2                    | Describe the clinical features and Describe the underlying pathophysiology of Rickets / Hypervitaminosis D.                                      | K        | KH        | Y        | Lecture, SGD                                   | Written / viva voce                |  |                                   |  |
| 12.7.3                    | Describe the diagnosis and management of Rickets / Hypervitaminosis D.                                                                           | K        | KH        | Y        | Lecture, SGD                                   | Written / viva voce                |  |                                   |  |
| <b>PE 12.8</b>            | <b>Identify the clinical features of dietary deficiency of Vitamin D</b>                                                                         | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b>                     | <b>Document in Logbook</b>         |  | <b>Biochemistry, Physio, Path</b> |  |
| 12.8.1                    | Identify the clinical features of Rickets (VDD).                                                                                                 | S        | SH        | Y        | Clinical case or photographs/ bedside teaching | OSCE/ clinical case                |  |                                   |  |
| <b>PE 12.9</b>            | <b>Assess patients with Vitamin D deficiency, diagnose, classify and plan management</b>                                                         | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, skill lab</b>                      | <b>Document in Logbook</b>         |  | <b>Biochemistry, Radiology</b>    |  |
| 12.9.1                    | Diagnose patients with Rickets .                                                                                                                 | S        | SH        | Y        | Bedside                                        | Document in Logbook/OSCE           |  |                                   |  |
| 12.9.2                    | Classify the patient with Rickets.                                                                                                               | S        | SH        | Y        | Skill Station, Bedside                         | Skill station, Document in Logbook |  |                                   |  |
| 12.9.3                    | Plan management and follow-up of patient with Rickets.                                                                                           | S        | SH        | Y        | Skill station                                  | Logbook                            |  |                                   |  |
| 12.9.4                    | Identify non-response to VDD management and Identify need for referral.                                                                          | S        | SH        | Y        | Skill station                                  | Logbook                            |  |                                   |  |
| <b>PE 12.10</b>           | <b>Discuss the role of screening for Vitamin D deficiency</b>                                                                                    | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture, SGD</b>                            | <b>Written/viva voce</b>           |  |                                   |  |
| 12.10.1                   | List the sociodemographic factors associated with vitamin D deficiency.                                                                          | K        | K         | Y        | Lecture, SGD                                   | Written/viva voce                  |  |                                   |  |
| 12.10.2                   | Describe the prevalence and patterns of VDD in the region/country.                                                                               | K        | K         | Y        | Lecture, SGD                                   | Written/viva voce                  |  |                                   |  |

|                 |                                                                                                                 |          |           |          |                                        |                           |   |                                   |   |
|-----------------|-----------------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------------------|---------------------------|---|-----------------------------------|---|
| 12.10.3         | Discuss the role of screening for VDD in different groups (high-risk/population).                               | K        | K         | Y        | Lecture/SGD                            | Written/viva voce         |   |                                   |   |
| <b>PE 12.11</b> | <b>Discuss the RDA, dietary sources of Vitamin E and its role in health and disease</b>                         | <b>K</b> | <b>K</b>  | <b>N</b> | <b>Lecture, SGD</b>                    | <b>Written/ Viva voce</b> |   | <b>Biochemistry</b>               |   |
| 12.11.1         | Describe the RDA and dietary sources of vitamin E for the pediatric age.                                        | K        | K         | N        | Lecture, SGD                           | Written/viva voce         |   | Biochemistry                      | - |
| 12.11.2         | Describe the role of vitamin E in health and disease.                                                           | K        | KH        | N        | Lecture, SGD                           | Written/viva voce         |   | Biochemistry                      |   |
| <b>PE 12.12</b> | <b>Describe the causes, clinical features, diagnosis and management of deficiency of Vitamin E</b>              | <b>K</b> | <b>KH</b> | <b>N</b> | <b>Lecture, SGD</b>                    | <b>Written/ Viva voce</b> |   | <b>Biochemistry</b>               |   |
| 12.12.1         | List the causes of deficiency of Vitamin E in children.                                                         | K        | K         | N        | Lecture, SGD                           | Written/viva voce         |   | Biochemistry                      |   |
| 12.12.2         | Describe the clinical features of deficiency of Vitamin E .                                                     | K        | KH        | N        | Lecture, SGD                           | Written/viva voce         |   | Biochemistry                      |   |
| 12.12.3         | Describe the diagnosis and management of deficiency of Vitamin E.                                               | K        | KH        | N        | Lecture, SGD                           | Written/viva voce         |   | -                                 |   |
| <b>PE 12.13</b> | <b>Discuss the RDA, dietary sources of Vitamin K and their role in health and disease</b>                       | <b>K</b> | <b>K</b>  | <b>N</b> | <b>Lecture, SGD</b>                    | <b>Written/ Viva voce</b> |   | <b>Biochemistry, Physio, Path</b> |   |
| 12.13.1         | Describe the RDA and dietary sources of vitamin K for the pediatric age.                                        | K        | K         | N        | Lecture, SGD                           | Written/viva voce         |   | Biochemistry                      | - |
| 12.13.2         | Describe the role of vitamin K in health and disease.                                                           | K        | KH        | N        | Lecture, SGD                           | Written/viva voce         |   | Biochemistry                      |   |
| <b>PE 12.14</b> | <b>Describe the causes, clinical features, diagnosis management &amp; prevention of deficiency of Vitamin K</b> | <b>K</b> | <b>KH</b> | <b>N</b> | <b>Lecture group, Small Discussion</b> | <b>Written/ Viva voce</b> |   | <b>Biochemistry, Physio, Path</b> |   |
| 12.14.1         | List the causes of deficiency of Vitamin K in children of different ages.                                       | K        | K         | N        | Lecture/SGD                            | Written/viva voce         |   | Biochemistry                      |   |
| 12.14.2         | List the clinical features of deficiency of Vitamin K .                                                         | K        | KH        | N        | Lecture/SGD                            | Written/viva voce         |   | Biochemistry                      |   |
| 12.14.3         | Describe the diagnosis and management of deficiency of Vitamin K.                                               | K        | KH        | N        | Lecture/SGD                            | Written/viva voce         | - | -                                 |   |

|                 |                                                                                                             |          |           |          |                                             |                                    |   |                                                |   |
|-----------------|-------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------------------------------|------------------------------------|---|------------------------------------------------|---|
| <b>PE 12.15</b> | <b>Discuss the RDA, dietary sources of Vitamin B and its role in health and disease</b>                     |          |           |          | <b>Lecture, SGD</b>                         | <b>Written/ Viva voce</b>          | - | <b>Biochemistry</b>                            |   |
| 12.15.1         | Describe the RDA and dietary sources of various vitamins B for the pediatric age group.                     | K        | K         | Y        | Lecture/SGD                                 | Written/viva voce                  | - | Biochemistry                                   | - |
| 12.15.2         | Describe the role of vitamin B in health and disease.                                                       | K        | KH        | Y        | Lecture/SGD                                 | Written/viva voce                  | - | Biochemistry                                   |   |
| <b>PE 12.16</b> | <b>Describe the causes, clinical features, diagnosis and management of deficiency of B complex vitamins</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                         | <b>Viva/ SAQ/MCQ</b>               | - | <b>Biochemistry, Com Med, Derm, Hematology</b> |   |
| 12.16.1         | List the causes of deficiency of B complex vitamins in children                                             | K        | K         | Y        | Lecture/SGD                                 | Written/viva voce                  | - | Biochemistry, Com Med                          |   |
| 12.16.2         | Describe the clinical features of deficiency of B complex vitamins                                          | K        | KH        | Y        | Lecture/SGD                                 | Written/viva voce                  | - | Biochemistry, Derm, Hematology                 |   |
| 12.16.3         | Describe the diagnosis and management of deficiency of B complex vitamins                                   | K        | KH        | Y        | Lecture/SGD                                 | Written/viva voce                  | - | Hematology                                     |   |
| <b>PE 12.17</b> | <b>Identify the clinical features of Vitamin B complex deficiency</b>                                       | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b>                  | <b>Document in Logbook</b>         | - | <b>Derm, Hematology</b>                        |   |
| 12.17.1         | Identify the clinical features of deficiency of B complex vitamins                                          | S        | SH        | Y        | Clinical case /slides/bedside teaching      | OSCE                               | - | Derm, Hematology                               |   |
| <b>PE 12.18</b> | <b>Diagnose patients with vitamin B complex deficiency and plan management</b>                              | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b>                  | <b>Document in Logbook</b>         | - | <b>Derm Hematology</b>                         |   |
| 12.18.1         | Diagnose patients with vitamin B complex deficiency                                                         | S        | SH        | Y        | Bedside, Clinical photographs               | Document in Logbook                | - | Derm, Hematology                               |   |
| 12.18.2         | Plan management for a child with vitamin B complex deficiency                                               | S        | SH        | Y        | Skill Station, Bedside, Case-based learning | Skill station, Document in Logbook | - |                                                |   |
| <b>PE 12.19</b> | <b>Discuss the RDA, dietary sources of vitamin C and their role in health and disease</b>                   | <b>K</b> | <b>KH</b> | <b>N</b> | <b>Lecture, SGD</b>                         | <b>Written/ Viva voce</b>          |   | <b>Biochemistry</b>                            |   |
| 12.19.1         | List the RDA and dietary sources of vitamin C for the pediatric age                                         | K        | K         | N        | Lecture, SGD                                | Written/viva voce                  | - | Biochemistry                                   | - |

|                                                                                         |                                                                                                             |          |           |          |                                               |                                |                                                               |                            |  |
|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------|-----------|----------|-----------------------------------------------|--------------------------------|---------------------------------------------------------------|----------------------------|--|
| 12.19.2                                                                                 | Describe the role of vitamin C in health and disease                                                        | K        | KH        | N        | Lecture, SGD                                  | Written/viva voce              | -                                                             | Biochemistry               |  |
| <b>PE 12.20</b>                                                                         | <b>Describe the causes, clinical features, diagnosis and management of deficiency of vitamin C (scurvy)</b> | <b>K</b> | <b>KH</b> | <b>N</b> | <b>Lecture, SGD</b>                           | <b>Written/ Viva voce</b>      |                                                               | <b>Biochemistr y</b>       |  |
| 12.20.1                                                                                 | List the causes of deficiency of Vitamin C in children                                                      | K        | K         | N        | Lecture, SGD                                  | Written/viva voce              | -                                                             | Biochemistry               |  |
| 12.20.2                                                                                 | Describe the clinical features of deficiency of vitamin C                                                   | K        | KH        | N        | Lecture, SGD                                  | Written/viva voce              | -                                                             | Biochemistry               |  |
| 12.20.3                                                                                 | Describe the diagnosis and management of deficiency of vitamin C                                            | K        | KH        | N        | Lecture, SGD                                  | Written/viva voce              | -                                                             | -                          |  |
| <b>PE 12.21</b>                                                                         | <b>Identify the clinical features of vitamin C deficiency</b>                                               | <b>S</b> | <b>SH</b> | <b>N</b> | <b>Bedside, Skill lab</b>                     | <b>Document in Logbook</b>     |                                                               | -                          |  |
| 12.21.1                                                                                 | Identify the clinical features of deficiency of vitamin C.                                                  | S        | SH        | N        | Clinical case /slides/bedside teaching        | Document in Logbook OSCE       | -                                                             | -                          |  |
| 12.21.2                                                                                 | Differentiate the clinical features of deficiency of vitamin C (scurvy) from those due to VDD (rickets).    | S        | SH        | N        | Clinical case or photograph/ bedside teaching | Document in Logbook, OSCE/case | -                                                             | -                          |  |
| <b>Topic: Micronutrients in Health and disease -2: Iron, Iodine, Calcium, Magnesium</b> |                                                                                                             |          |           |          |                                               |                                |                                                               |                            |  |
|                                                                                         |                                                                                                             |          |           |          | <b>Number of competencies: (14)</b>           |                                | <b>Number of procedures that require certification: (NIL)</b> |                            |  |
| <b>PE 13.1</b>                                                                          | <b>Discuss the RDA, dietary sources of Iron and their role in health and disease</b>                        | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture, SGD</b>                           | <b>Written/ Viva voce</b>      |                                                               | <b>Path, Biochemistr y</b> |  |
| 13.1.1                                                                                  | Recall the RDA of Iron in children of all age groups.                                                       | K        | K         | Y        | Lecture, SGD                                  | Written/viva voce              |                                                               |                            |  |
| 13.1.2                                                                                  | Enumerate the dietary sources of Iron and Discuss their role in health and disease.                         | K        | K         | Y        | Lecture, SGD                                  | Written/viva voce              |                                                               |                            |  |
| <b>PE 13.2</b>                                                                          | <b>Describe the causes, diagnosis and management of Iron deficiency</b>                                     | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                           | <b>Written/viva voce</b>       |                                                               | <b>Path, Biochemistr y</b> |  |
| 13.2.1                                                                                  | Enumerate the causes of iron deficiency.                                                                    | K        | KH        | Y        | Lecture, SGD                                  | Written/viva voce              |                                                               |                            |  |

|                |                                                                                                    |          |           |          |                                               |                                          |  |                           |  |
|----------------|----------------------------------------------------------------------------------------------------|----------|-----------|----------|-----------------------------------------------|------------------------------------------|--|---------------------------|--|
| 13.2.2         | Describe the diagnosis of iron deficiency.                                                         | K        | KH        | Y        | Lecture, SGD                                  | Written/viva voce                        |  |                           |  |
| 13.2.3         | Describe management of iron deficiency.                                                            | K        | KH        | Y        | Lecture, SGD                                  | Written/viva voce                        |  |                           |  |
| <b>PE 13.3</b> | <b>Identify the clinical features of dietary deficiency of Iron and make a diagnosis</b>           | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside /skill lab</b>                     | <b>Document in Logbook</b>               |  | <b>Path, Biochemistry</b> |  |
| 13.3.1         | Identify the clinical features of dietary iron deficiency.                                         | S        | SH        | Y        | Bedside /skill lab                            | Document in Logbook/ OSCE/ Clinical case |  |                           |  |
| 13.3.2         | Make a clinical diagnosis of dietary deficiency of Iron after appropriate history and examination. | S        | SH        | Y        | Bedside /skill lab                            | Document in Logbook/ OSCE/ Clinical case |  |                           |  |
| <b>PE 13.4</b> | <b>Interpret hemogram and Iron Panel</b>                                                           | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside clinic/ Small group discussion</b> | <b>Skill Assessment</b>                  |  | <b>Path, Biochemistry</b> |  |
| 13.4.1         | Identify the features of iron deficiency anemia in a blood film.                                   | S        | SH        | Y        | Bedside clinic/ Small group discussion        | Skill Assessment/ OSCE                   |  |                           |  |
| 13.4.2         | Identify abnormal hematological indices on a hemogram.                                             | S        | SH        | Y        | Bedside clinic/ Small group discussion        | Skill Assessment/ OSCE                   |  |                           |  |
| 13.4.3         | Interpret hemogram.                                                                                | S        | SH        | Y        | Bedside clinic/ Small group discussion        | Skill Assessment/ OSCE                   |  |                           |  |
| 13.4.4         | Interpret abnormal values of the iron panel.                                                       | S        | SH        | Y        | Bedside clinic/ Small group discussion        | Skill Assessment/ OSCE                   |  |                           |  |
| <b>PE 13.5</b> | <b>Propose a management plan for IRON deficiency anemia</b>                                        | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside /skill lab</b>                     | <b>Skill assessment</b>                  |  | <b>Path, Pharm</b>        |  |
| 13.5.1         | Make a management plan for Iron deficiency anemia in children of different ages.                   | S        | SH        | Y        | Bedside /skill lab                            | Skill assessment/OSCE                    |  |                           |  |

|                 |                                                                                       |          |           |          |                                        |                            |  |                              |  |
|-----------------|---------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------------------|----------------------------|--|------------------------------|--|
| <b>PE 13.6</b>  | <b>Discuss the National anemia control program and its recommendations</b>            | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture, SGD</b>                    | <b>Written/viva voce</b>   |  | <b>Pharm, Com Med</b>        |  |
| 13.6.1          | Describe the components of National anemia control program and its recommendations.   | K        | K         | Y        | Lecture, SGD                           | Written/viva voce          |  |                              |  |
| <b>PE 13.7</b>  | <b>Discuss the RDA, dietary sources of Iodine and its role in Health and disease</b>  | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture, SGD</b>                    | <b>Written/viva voce</b>   |  | <b>Biochemistry</b>          |  |
| 13.7.1          | Recall the RDA of Iodine in children.                                                 | K        | K         | Y        | Lecture, SGD                           | Written/viva voce          |  |                              |  |
| 13.7.2          | Enumerate the dietary sources of Iodine and their role in Health and disease.         | K        | K         | Y        | Lecture, SGD                           | Written/viva voce          |  |                              |  |
| <b>PE 13.8</b>  | <b>Describe the causes, diagnosis and management of deficiency of Iodine</b>          | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                    | <b>Written/viva voce</b>   |  | <b>Biochemistry</b>          |  |
| 13.8.1          | Enumerate the causes of Iodine deficiency.                                            | K        | KH        | Y        | Lecture, SGD                           | Written/viva voce          |  |                              |  |
| 13.8.2          | Discuss the diagnosis of Iodine deficiency.                                           | K        | KH        | Y        | Lecture, SGD                           | Written/viva voce          |  |                              |  |
| 13.8.3          | Describe the management of Iodine deficiency.                                         | K        | KH        | Y        | Lecture, SGD                           | Written/viva voce          |  |                              |  |
| <b>PE 13.9</b>  | <b>Identify the clinical features of Iodine deficiency disorders</b>                  | <b>S</b> | <b>SH</b> | <b>N</b> | <b>Bedside clinic</b>                  | <b>Clinical assessment</b> |  | <b>Biochemistry</b>          |  |
| 13.9.1          | Identify the clinical features of Iodine deficiency disorders.                        | S        | SH        | N        | Bedside clinic                         | Clinical assessment        |  |                              |  |
| <b>PE 13.10</b> | <b>Discuss the National Goiter Control program and its recommendations</b>            | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture/ Small group discussion</b> | <b>Written/viva voce</b>   |  | <b>Biochemistry, Com Med</b> |  |
| 13.10.1         | Discuss the National Goiter Control program and the Recommendations.                  | K        | K         | Y        | Lecture/ Small group discussion        | Written/viva voce          |  |                              |  |
| <b>PE 13.11</b> | <b>Discuss the RDA, dietary sources of Calcium and its role in health and disease</b> | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture/ Small group discussion</b> | <b>Written/viva voce</b>   |  | <b>Biochemistry</b>          |  |
| 13.11.1         | Recall the RDA of Calcium in children.                                                | K        | K         | Y        | Lecture/ Small group discussion        | Written/viva voce          |  |                              |  |
| 13.11.2         | Enumerate the dietary sources of calcium.                                             | K        | K         | Y        | Lecture/ Small group discussion        | Written/viva voce          |  |                              |  |

|                                                                    |                                                                                                 |          |           |                                    |                                        |                                                               |  |                     |  |
|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----------|-----------|------------------------------------|----------------------------------------|---------------------------------------------------------------|--|---------------------|--|
| 13.11.3                                                            | Explain the role of calcium in health and disease.                                              | K        | K         | Y                                  | Lecture/ Small group discussion        | Written/viva voce                                             |  |                     |  |
| <b>PE 13.12</b>                                                    | <b>Describe the causes, clinical features, diagnosis and management of Calcium Deficiency</b>   | <b>K</b> | <b>KH</b> | <b>Y</b>                           | <b>Lecture/ Small group discussion</b> | <b>Written/viva voce</b>                                      |  | <b>Biochemistry</b> |  |
| 13.12.1                                                            | Enumerate the causes of Calcium Deficiency.                                                     | K        | KH        | Y                                  | Lecture/ Small group discussion        | Written/viva voce                                             |  |                     |  |
| 13.12.2                                                            | Describe the clinical features of Calcium Deficiency.                                           | K        | KH        | Y                                  | Lecture/ Small group discussion        | Written/viva voce                                             |  |                     |  |
| 13.12.3                                                            | Discuss the diagnosis of Calcium Deficiency.                                                    | K        | KH        | Y                                  | Lecture/ Small group discussion        | Written/viva voce                                             |  |                     |  |
| 13.12.4                                                            | Discuss the management of Calcium Deficiency.                                                   | K        | KH        | Y                                  | Lecture/ Small group discussion        | Written/viva voce                                             |  |                     |  |
| <b>PE 13.13</b>                                                    | <b>Discuss the RDA, dietary sources of Magnesium and their role in health and disease</b>       | <b>K</b> | <b>K</b>  | <b>N</b>                           | <b>Lecture/ Small group discussion</b> | <b>Written/viva voce</b>                                      |  | <b>Biochemistry</b> |  |
| 13.13.1                                                            | Recall the RDA of Magnesium in children.                                                        | K        | K         | N                                  | Lecture/ Small group discussion        | Written/viva voce                                             |  |                     |  |
| 13.13.2                                                            | List the dietary sources of Magnesium and their role in health and disease.                     | K        | K         | N                                  | Lecture/ Small group discussion        | Written/viva voce                                             |  |                     |  |
| <b>PE 13.14</b>                                                    | <b>Describe the causes, clinical features, diagnosis and management of Magnesium Deficiency</b> | <b>K</b> | <b>KH</b> | <b>N</b>                           | <b>Lecture/ Small group discussion</b> | <b>Written/viva voce</b>                                      |  | <b>Biochemistry</b> |  |
| 13.14.1                                                            | Enumerate the causes of Magnesium Deficiency.                                                   | K        | KH        | N                                  | Lecture/ Small group discussion        | Written/viva voce                                             |  |                     |  |
| 13.14.2                                                            | Describe the clinical features of Magnesium Deficiency.                                         | K        | KH        | N                                  | Lecture/ Small group discussion        | Written/viva voce                                             |  |                     |  |
| 13.14.3                                                            | Discuss the diagnosis of Magnesium Deficiency.                                                  | K        | KH        | N                                  | Lecture/ Small group discussion        | Written/viva voce                                             |  |                     |  |
| 13.14.4                                                            | Discuss the management of Magnesium Deficiency.                                                 | K        | KH        | N                                  | Lecture/ Small group discussion        | Written/viva voce                                             |  |                     |  |
| <b>Topic: Toxic elements and free radicals and oxygen toxicity</b> |                                                                                                 |          |           |                                    |                                        |                                                               |  |                     |  |
|                                                                    |                                                                                                 |          |           | <b>Number of competencies: (5)</b> |                                        | <b>Number of procedures that require certification: (NIL)</b> |  |                     |  |
| <b>PE 14.1</b>                                                     | <b>Discuss the risk factors, clinical features, diagnosis and management of Lead Poisoning</b>  |          |           |                                    | <b>Lecture/ Small group</b>            | <b>Written/viva voce</b>                                      |  | <b>Pharm</b>        |  |

|                |                                                                                                            |          |           |          |                                        |                          |  |              |  |
|----------------|------------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------------------|--------------------------|--|--------------|--|
|                |                                                                                                            |          |           |          | <b>discussion</b>                      |                          |  |              |  |
| 14.1.1         | Enumerate the risk factors for lead poisoning in children.                                                 | K        | K         | N        | Lecture/ Small group discussion        | Written/viva voce        |  |              |  |
| 14.1.2         | Describe the clinical features of lead poisoning.                                                          | K        | KH        | N        | Lecture/ Small group discussion        | Written/viva voce        |  |              |  |
| 14.1.3         | Discuss the diagnosis of lead poisoning.                                                                   | K        | KH        | N        | Lecture/ Small group discussion        | Written/viva voce        |  |              |  |
| 14.1.4         | Describe the management of a child with lead poisoning including prevention.                               | K        | KH        | N        | Lecture/ Small group discussion        | Written/viva voce        |  |              |  |
| <b>PE 14.2</b> | <b>Discuss the risk factors, clinical features, diagnosis and management of Kerosene aspiration</b>        | <b>K</b> | <b>KH</b> | <b>N</b> | Lecture/ Small group discussion        | Written/viva voce        |  | <b>ENT</b>   |  |
| 14.2.1         | Enumerate the risk factors for kerosene aspiration.                                                        | K        | K         | N        | Lecture/ Small group discussion        | Written/viva voce        |  |              |  |
| 14.2.2         | Describe the clinical features of kerosene aspiration.                                                     | K        | KH        | N        | Lecture/ Small group discussion        | Written/viva voce        |  |              |  |
| 14.2.3         | Discuss the diagnosis of kerosene aspiration.                                                              | K        | KH        | N        | Lecture/ Small group discussion        | Written/viva voce        |  |              |  |
| 14.2.4         | Describe the management of a child with kerosene aspiration.                                               | K        | KH        | N        | Lecture/ Small group discussion        | Written/viva voce        |  |              |  |
| <b>PE 14.3</b> | <b>Discuss the risk factors, clinical features, diagnosis and management of Organophosphorus poisoning</b> | <b>K</b> | <b>KH</b> | <b>N</b> | <b>Lecture/ Small group discussion</b> | <b>Written/viva voce</b> |  | <b>Pharm</b> |  |
| 14.3.1         | Enumerate the risk factors for organophosphorus poisoning.                                                 | K        | K         | N        | Lecture/ Small group discussion        | Written/viva voce        |  |              |  |
| 14.3.2         | Describe the clinical features of organophosphorus poisoning.                                              | K        | KH        | N        | Lecture/ Small group discussion        | Written/viva voce        |  |              |  |
| 14.3.4         | Discuss the diagnosis of organophosphorus poisoning.                                                       | K        | KH        | N        | Lecture/ Small group discussion        | Written/viva voce        |  |              |  |
| 14.3.5         | Describe the management of a child with organophosphorus poisoning.                                        | K        | KH        | N        | Lecture/ Small group discussion        | Written/viva voce        |  |              |  |
| <b>PE 14.4</b> | <b>Discuss the risk factors, clinical features, diagnosis and management of paracetamol poisoning</b>      | <b>K</b> | <b>KH</b> | <b>N</b> | <b>Lecture/ Small group discussion</b> | <b>Written/viva voce</b> |  | <b>Pharm</b> |  |
| 14.4.1         | Enumerate the risk factors for paracetamol poisoning.                                                      | K        | K         | N        | Lecture/ Small group discussion        | Written/viva voce        |  |              |  |

|                                                                                                                                          |                                                                                                                      |          |           |          |                                        |                          |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------------------|--------------------------|--|--|--|
| 14.4.2                                                                                                                                   | Describe the clinical features of paracetamol poisoning.                                                             | K        | KH        | N        | Lecture/ Small group discussion        | Written/viva voce        |  |  |  |
| 14.4.3                                                                                                                                   | Discuss the diagnosis of paracetamol poisoning.                                                                      | K        | KH        | N        | Lecture/ Small group discussion        | Written/viva voce        |  |  |  |
| 14.4.4                                                                                                                                   | Discuss the management of a child with paracetamol poisoning including prevention.                                   | K        | KH        | N        | Lecture/ Small group discussion        | Written/viva voce        |  |  |  |
| <b>PE 14.5</b>                                                                                                                           | <b>Discuss the risk factors, clinical features, diagnosis and management of Oxygen toxicity</b>                      | <b>K</b> | <b>KH</b> | <b>N</b> | <b>Lecture/ Small group discussion</b> | <b>Written/viva voce</b> |  |  |  |
| 14.5.1                                                                                                                                   | Enumerate the risk factors for oxygen toxicity.                                                                      | K        | K         | N        | Lecture/ Small group discussion        | Written/viva voce        |  |  |  |
| 14.5.2                                                                                                                                   | Describe the clinical features of oxygen toxicity.                                                                   | K        | KH        | N        | Lecture/ Small group discussion        | Written/viva voce        |  |  |  |
| 14.5.3                                                                                                                                   | Discuss the diagnosis of oxygen toxicity.                                                                            | K        | KH        | N        | Lecture/ Small group discussion        | Written/viva voce        |  |  |  |
| 14.5.4                                                                                                                                   | Discuss the management of a child with oxygen toxicity.                                                              | K        | KH        | N        | Lecture/ Small group discussion        | Written/viva voce        |  |  |  |
| <b>Topic: Fluid and electrolyte balance      Number of competencies: (7)      Number of procedures that require certification: (NIL)</b> |                                                                                                                      |          |           |          |                                        |                          |  |  |  |
| <b>PE 15.1</b>                                                                                                                           | <b>Discuss the fluid and electrolyte requirement in health and disease</b>                                           | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture/ Small group discussion</b> | <b>Written/viva voce</b> |  |  |  |
| 15.1.1                                                                                                                                   | State the fluid requirement of a healthy neonate.                                                                    | K        | K         | Y        | Lecture/ Small group discussion        | Written/viva voce        |  |  |  |
| 15.1.2                                                                                                                                   | Describe the fluid and electrolyte requirements of healthy children of different ages.                               | K        | K         | Y        | Lecture/ Small group discussion        | Written/viva voce        |  |  |  |
| 15.1.3                                                                                                                                   | Describe the fluid requirements in common diseases of children.                                                      | K        | K         | Y        | Lecture/ Small group discussion        |                          |  |  |  |
| <b>PE 15.2</b>                                                                                                                           | <b>Discuss the clinical features and complications of fluid and electrolyte imbalance and outline the management</b> |          |           |          | <b>Lecture/ Small group discussion</b> |                          |  |  |  |
| 15.2.1                                                                                                                                   | Define hyponatremia and hypernatremia.                                                                               | K        | K         | Y        | Lecture/ Small group discussion        | Written/viva voce        |  |  |  |
| 15.2.2                                                                                                                                   | Define hypokalemia and hyperkalemia.                                                                                 | K        | K         | Y        | Lecture/ Small group discussion        | Written/viva voce        |  |  |  |

|                |                                                                                  |          |           |          |                                 |                         |  |  |  |
|----------------|----------------------------------------------------------------------------------|----------|-----------|----------|---------------------------------|-------------------------|--|--|--|
| 15.2.3         | Describe the clinical features of a child who has dehydration or fluid overload. | K        | KH        | Y        | Lecture/ Small group discussion | Written/viva voce       |  |  |  |
| 15.2.4         | Outline the management of a child who has dehydration or fluid overload.         | K        | KH        | Y        | Lecture/ Small group discussion | Written/viva voce       |  |  |  |
| 15.2.5         | Enumerate the symptoms and signs of hyponatremia and Hypernatremia.              | K        | KH        | Y        | Lecture/ Small group discussion | Written/viva voce       |  |  |  |
| 15.2.6         | Enumerate the symptoms and signs of hypokalemia and hyperkalemia.                | K        | KH        | Y        | Lecture/ Small group discussion | Written/viva voce       |  |  |  |
| 15.2.7         | Outline the management of a child with hyponatremia / hypernatremia.             | K        | KH        | Y        | Lecture/ Small group discussion | Written/ viva voce      |  |  |  |
| 15.2.8         | Outline the management of a child with hypokalemia or Hyperkalemia.              | K        | SH        | Y        | Lecture/ Small group discussion | Written/viva voce       |  |  |  |
| <b>PE 15.3</b> | <b>Calculate the fluid and electrolyte requirement in health</b>                 | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, SGD</b>             | <b>Skill assessment</b> |  |  |  |
| <b>15.3.1</b>  | Calculate fluid requirement in healthy children of different ages.               | S        | SH        | Y        | Bedside, SGD                    | Skill assessment        |  |  |  |
| <b>15.3.2</b>  | Calculate electrolyte requirement in healthy children of different ages.         | S        | SH        | Y        | Bedside, SGD                    | Skill assessment        |  |  |  |
| <b>PE 15.4</b> | <b>Interpret electrolyte report</b>                                              | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside /SGD</b>             | <b>Skill assessment</b> |  |  |  |
| 15.4.1         | Interpret reports of dyselectrolytemia.                                          | S        | SH        | Y        | Bedside /SGD                    | Skill assessment        |  |  |  |
| <b>PE 15.5</b> | <b>Calculate fluid and electrolyte imbalance</b>                                 | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside /SGD</b>             | <b>Skill assessment</b> |  |  |  |
| 15.5.1         | Calculate fluid requirement of the child to correct fluid imbalance.             | S        | SH        | Y        | Bedside /SGD                    | Skill assessment        |  |  |  |
| 15.5.2         | Calculate electrolyte correction for a given scenario.                           | S        | SH        | Y        | Bedside /SGD                    | Skill assessment        |  |  |  |
| <b>PE 15.6</b> | <b>Demonstrate the steps of inserting an IV cannula in a model</b>               | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Skill lab</b>                | <b>Skill assessment</b> |  |  |  |
| 15.6.1         | Demonstrate inserting an intravenous cannula on a model in a skill laboratory.   | S        | SH        | Y        | Skill lab                       | Mannequin               |  |  |  |
| <b>PE 15.7</b> | <b>Demonstrate the steps of inserting an interosseous line in a mannequin</b>    | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Skill lab</b>                | <b>Skill assessment</b> |  |  |  |

|                                                                                                                                                                                            |                                                                                                                                                 |          |           |          |                             |                                      |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|-----------------------------|--------------------------------------|--|--|--|
| 15.7.1                                                                                                                                                                                     | Demonstrate inserting an intraosseous cannula in a mannequin.                                                                                   | S        | SH        | Y        | Skill lab                   | Mannequin                            |  |  |  |
| <b>Topic: Integrated Management of Neonatal and Childhood Illnesses (IMNCI) Guideline</b> <b>Number of competencies: (3)</b> <b>Number of procedures that require certification: (NIL)</b> |                                                                                                                                                 |          |           |          |                             |                                      |  |  |  |
| <b>PE 16.1</b>                                                                                                                                                                             | <b>Explain the components of Integrated Management of Neonatal and Childhood Illnesses (IMNCI) guidelines and method of Risk stratification</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>         | <b>Written/viva voce</b>             |  |  |  |
| 16.1.1                                                                                                                                                                                     | State the components of IMNCI approach.                                                                                                         | K        | KH        | Y        | Lecture/ SGD, IMNCI videos  | Written/viva voce                    |  |  |  |
| 16.1.2                                                                                                                                                                                     | Explain the risk stratification as per IMNCI.                                                                                                   | K        | KH        | Y        | Lecture/ SGD                | Written/viva voce                    |  |  |  |
| <b>PE 16.2</b>                                                                                                                                                                             | <b>Assess children &lt;2 months using IMNCI guidelines</b>                                                                                      | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>DOAP</b>                 | <b>Document in Logbook</b>           |  |  |  |
| 16.2.1                                                                                                                                                                                     | Demonstrate assessment of the young infant <2 months age as per IMNCI guidelines.                                                               | S        | SH        | Y        | DOAP, Video                 | Document in Logbook/ bedside session |  |  |  |
| 16.2.2                                                                                                                                                                                     | Classify the young infants <2 months age as per the IMNCI classification.                                                                       | S        | SH        | Y        | DOAP, Video                 | Document in Logbook/ bedside         |  |  |  |
| 16.2.3                                                                                                                                                                                     | Identify the treatment in young infants <2 months as per IMNCI.                                                                                 | S        | SH        | Y        | DOAP, SGD                   | Document in Logbook                  |  |  |  |
| 16.2.4                                                                                                                                                                                     | Counsel parents as per IMNCI guidelines.                                                                                                        | S        | SH        | Y        | DOAP, SGD, role play, Video | Document in Logbook/                 |  |  |  |
| <b>PE 16.3</b>                                                                                                                                                                             | <b>Assess children &gt;2 months to 5 years using IMNCI guidelines and stratify risk</b>                                                         | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>DOAP</b>                 | <b>Document in Logbook</b>           |  |  |  |
| 16.3.1                                                                                                                                                                                     | Demonstrate assessment of the child >2 months to 5 years as per IMNCI format.                                                                   | S        | SH        | Y        | DOAP, Video                 | Document in Logbook, OSCE            |  |  |  |
| 16.3.2                                                                                                                                                                                     | Classify the children >2 months to 5 years as per the IMNCI classification.                                                                     | S        | SH        | Y        | DOAP, Video                 | Document in Logbook, OSCE            |  |  |  |

|                                                                                                                                                   |                                                                                                                                                                                                                                       |          |           |          |                             |                           |  |                |            |
|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|-----------------------------|---------------------------|--|----------------|------------|
| 16.3.3                                                                                                                                            | Identify the treatment in children >2 months to 5 years as per IMNCI guidelines.                                                                                                                                                      | S        | SH        | Y        | DOAP, SGD                   | Document in Logbook       |  |                |            |
| 16.3.4                                                                                                                                            | Counsel parents as per IMNCI guidelines.                                                                                                                                                                                              | S        | SH        | Y        | DOAP, SGD, role play, Video | Document in Logbook, OSCE |  |                |            |
| <b>Topic: The National Health programs, NHM</b> <b>Number of competencies: (02)</b> <b>Number of procedures that require certification: (NIL)</b> |                                                                                                                                                                                                                                       |          |           |          |                             |                           |  |                |            |
| <b>PE 17.1</b>                                                                                                                                    | <b>State the vision and outline the goals, strategies and plan of action of NHM and other important national programs pertaining to maternal and child health including RMNCH A+, RBSK, RKSK, JSSK, mission Indradhanush and ICDS</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b>         | <b>Written/viva voce</b>  |  | <b>Com Med</b> |            |
| 17.1.1                                                                                                                                            | List the national health programs pertaining to maternal and child health.                                                                                                                                                            | K        | KH        | Y        | Lecture / SGD               | Written/viva voce         |  |                |            |
| 17.1.2                                                                                                                                            | Outline vision, goals, strategies and plan of action of NHM.                                                                                                                                                                          | K        | KH        | Y        | Lecture/ SGD                | Written/viva voce         |  |                |            |
| 17.1.3                                                                                                                                            | Outline the vision, goals, strategies and plan of action of other important national programs for maternal and child health –RMNCH A+, RBSK, RKSK, JSSK, mission Indradhanush and ICDS.                                               | K        | KH        | Y        | Lecture/ SGD                | Written/viva voce         |  |                |            |
| <b>PE17.2</b>                                                                                                                                     | <b>Analyze the outcomes and appraise the monitoring and evaluation of NHM</b>                                                                                                                                                         | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Debate</b>               | <b>Written/viva voce</b>  |  | <b>Com Med</b> |            |
| 17.2.1                                                                                                                                            | Critically analyze the impact of NHM and other national health programs on maternal and child health.                                                                                                                                 | K        | KH        | Y        | Debate, SGD                 | Written/viva voce         |  |                |            |
| 17.2.2                                                                                                                                            | Appraise the monitoring and evaluation of NHM and other health programs.                                                                                                                                                              | K        | KH        | Y        | Debate, SGD                 | Written/viva voce         |  |                |            |
| <b>Topic: The National Health Programs: RCH</b> <b>Number of competencies: (8)</b> <b>Number of procedures that require certification: (NIL)</b>  |                                                                                                                                                                                                                                       |          |           |          |                             |                           |  |                |            |
| <b>PE 18.1</b>                                                                                                                                    | <b>List and explain the components, plan, outcome of Reproductive Child Health (RCH) program and appraise its monitoring and evaluation</b>                                                                                           | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b>         | <b>Written/viva voce</b>  |  | <b>Com Med</b> | <b>OBG</b> |
| 18.1.1                                                                                                                                            | State the components, strategy and targeted outcome of RCH program.                                                                                                                                                                   | K        | KH        | Y        | Lecture/ SGD                | Written/viva voce         |  |                |            |
| 18.1.2                                                                                                                                            | List the prerequisites and role of accredited social health activist (ASHA).                                                                                                                                                          | K        | KH        | Y        | Lecture/ SGD                | Written/viva voce         |  |                |            |

|                |                                                                                                                            |          |           |          |                                 |                            |  |                |            |
|----------------|----------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------------------|----------------------------|--|----------------|------------|
| 18.1.3         | Analyze the monitoring and evaluation of RCH program.                                                                      | K        | KH        | Y        | Lecture/ SGD                    | Written/viva voce          |  |                |            |
| <b>PE 18.2</b> | <b>Explain preventive interventions for child survival and safe motherhood</b>                                             | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b>             | <b>Written/viva voce</b>   |  | <b>Com Med</b> | <b>OBG</b> |
| 18.2.1         | List the preventive interventions for child survival and safe motherhood.                                                  | K        | KH        | Y        | Lecture/ SGD                    | Written/viva voce          |  |                |            |
| 18.2.2         | Explain the preventive interventions for child survival and safe motherhood.                                               | K        | KH        | Y        | Lecture/ SGD                    | Written/viva voce          |  |                |            |
| <b>PE 18.3</b> | <b>Conduct antenatal examination of women independently and apply at-risk approach in antenatal care</b>                   | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside</b>                  | <b>Skill station</b>       |  | <b>Com Med</b> | <b>OBG</b> |
| 18.3.1         | Conduct antenatal examination of women independently.                                                                      | S        | SH        | Y        | Bedside, Video                  | Skill station              |  |                |            |
| 18.3.2         | Apply at-risk approach in antenatal care.                                                                                  | S        | SH        | Y        | Bedside, Video                  | Skill station              |  |                |            |
| <b>PE 18.4</b> | <b>Provide intra-natal care and conduct a normal delivery in a simulated environment</b>                                   | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>DOAP session, Skills lab</b> | <b>Document in Logbook</b> |  | <b>Com Med</b> | <b>OBG</b> |
| 18.4.1         | Demonstrate the steps of intra-natal monitoring in a simulated environment.                                                | S        | SH        | Y        | DOAP session, Skills Lab, Video | Document in Logbook        |  |                |            |
| 18.4.2         | Demonstrate the use of a portogram.                                                                                        | S        | SH        | Y        | DOAP session, Skills Lab, Video | Document in Logbook        |  |                |            |
| 18.4.3         | Conduct a normal delivery in a simulated environment.                                                                      | S        | SH        | Y        | DOAP session, Skills lab, Video | Document in Logbook        |  |                |            |
| <b>PE 18.5</b> | <b>Provide intra-natal care and observe the conduct of a normal delivery</b>                                               | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>DOAP session</b>             | <b>Document in Logbook</b> |  |                | <b>OBG</b> |
| 18.5.1         | Demonstrate the preparation of various components of intranatal care.                                                      | S        | SH        | Y        | DOAP session                    | Document in Logbook        |  |                |            |
| 18.5.2         | Observe and assist in conduct of a normal delivery.                                                                        | S        | SH        | Y        | DOAP session                    | Document in Logbook        |  |                |            |
| <b>PE 18.6</b> | <b>Perform Postnatal assessment of newborn and mother, provide advice on breastfeeding, weaning and on family planning</b> | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skill Lab</b>       | <b>Skill Assessment</b>    |  | <b>Com Med</b> | <b>OBG</b> |

|                                                                                                                                                                      |                                                                                                                                                             |            |           |          |                           |                               |  |                                     |            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|----------|---------------------------|-------------------------------|--|-------------------------------------|------------|
| 18.6.1                                                                                                                                                               | Perform postnatal assessment of newborn.                                                                                                                    | S          | SH        | Y        | Bedside, Skill Lab        | Skill Assessment              |  |                                     |            |
| 18.6.2                                                                                                                                                               | Perform postnatal assessment of mother.                                                                                                                     | S          | SH        | Y        | Bedside, Skill Lab        | Skill Assessment              |  |                                     |            |
| 18.6.3                                                                                                                                                               | Give advice to the mother on initiation and maintenance of exclusive breastfeeding, common problems seen during breastfeeding, weaning and family planning. | S          | SH        | Y        | Bedside, Skill Lab        | Skill Assessment              |  |                                     |            |
| <b>PE 18.7</b>                                                                                                                                                       | <b>Educate and counsel caregivers of children</b>                                                                                                           | <b>A/C</b> | <b>SH</b> | <b>Y</b> | <b>role play</b>          | <b>OSCE /Skill Assessment</b> |  | <b>AETCOM</b>                       |            |
| 18.7.1                                                                                                                                                               | Educate and counsel caregivers of children on newborn care including providing warmth, feeding, and prevention of infection, immunization and danger signs. | C          | SH        | Y        | Role play Video           | Skill Assessment OSCE         |  |                                     |            |
| <b>PE18.8</b>                                                                                                                                                        | <b>Observe the implementation of the program by visiting the Rural Health Center</b>                                                                        | <b>S</b>   | <b>SH</b> | <b>Y</b> | <b>Bedside, Skill Lab</b> | <b>Document in Logbook</b>    |  | <b>Com Med</b>                      | <b>OBG</b> |
| 18.8.1                                                                                                                                                               | Make observations on the implementation of the program by visiting the Rural Health Center.                                                                 | S          | SH        | Y        | Rural health center visit | Document in Logbook           |  |                                     |            |
| <b>Topic: National Programs, RCH-Universal Immunization program</b> <b>Number of competencies: (16)</b> <b>Number of procedures that require certification: (01)</b> |                                                                                                                                                             |            |           |          |                           |                               |  |                                     |            |
| <b>PE 19.1</b>                                                                                                                                                       | <b>Explain the components of the Universal Immunization Program (UIP) and the National Immunization Program (NIP)</b>                                       | <b>K</b>   | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b>       | <b>Written/viva voce</b>      |  | <b>Com Med, Micro, Biochemistry</b> |            |
| 19.1.1                                                                                                                                                               | Explain the components of UIP and NIP.                                                                                                                      | K          | KH        | Y        | Lecture/ SGD              | Written/viva voce             |  |                                     |            |
| 19.1.2                                                                                                                                                               | List the vaccines covered under UIP and NIP.                                                                                                                | K          | KH        | Y        | Lecture/ SGD              | Written/viva voce             |  |                                     |            |
| <b>PE 19.2</b>                                                                                                                                                       | <b>Explain the epidemiology of vaccine preventable diseases (VPDs)</b>                                                                                      | <b>K</b>   | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b>       | <b>Written/viva voce</b>      |  | <b>Com Med, Micro, Biochemistry</b> |            |
| 19.2.1                                                                                                                                                               | Describe the epidemiology of individual VPDs.                                                                                                               | K          | KH        | Y        | Lecture/ SGD              | Written/viva voce             |  |                                     |            |
| <b>PE 19.3</b>                                                                                                                                                       | <b>Vaccine description with regard to classification of vaccines, strain used, dose, route, schedule, risks,</b>                                            | <b>K</b>   | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b>       | <b>Written/viva voce</b>      |  | <b>Com Med, Micro,</b>              |            |

|                |                                                                                                                                                                                                                            |          |           |          |                     |                              |  |                                             |  |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|------------------------------|--|---------------------------------------------|--|
|                | <b>benefits and side effects, indications and contraindications</b>                                                                                                                                                        |          |           |          |                     |                              |  | <b>Biochemistry</b>                         |  |
| 19.3.1         | Classify vaccines according to type of vaccine.                                                                                                                                                                            | K        | KH        | Y        | Lecture/<br>SGD     | Written/viva<br>voce         |  |                                             |  |
| 19.3.2         | Describe the composition of the NIP vaccines including the strain used.                                                                                                                                                    | K        | KH        | Y        | Lecture/<br>SGD     | Written/viva<br>voce         |  |                                             |  |
| 19.3.3         | State the dose, route and schedule of all vaccines under NIP.                                                                                                                                                              | K        | KH        | Y        | Lecture/<br>SGD     | Written/viva<br>voce         |  |                                             |  |
| 19.3.4         | Recall the risks, benefits, side effects, indications and contraindications of vaccines under NIP.                                                                                                                         | K        | KH        | Y        | Lecture/<br>SGD     | Written/viva<br>voce         |  |                                             |  |
| <b>PE 19.4</b> | <b>Define cold chain and discuss the methods of safe storage and handling of vaccines</b>                                                                                                                                  | <b>K</b> | <b>KH</b> | <b>Y</b> | Lecture/<br>SGD     | <b>Written/viva<br/>voce</b> |  | <b>Com Med,<br/>Micro,<br/>Biochemistry</b> |  |
| 19.4.1         | Define cold chain and discuss its importance for vaccines.                                                                                                                                                                 | K        | KH        | Y        | Lecture/ SGD        | Written/viva<br>voce         |  |                                             |  |
| 19.4.2         | List the various cold chain equipment.                                                                                                                                                                                     | K        | KH        | Y        | Lecture/ SGD        | Written/viva<br>voce         |  |                                             |  |
| 19.4.3         | Describe the appropriate storage of vaccines in domestic refrigerator, ice lined refrigerator (ILR) and vaccine carriers.                                                                                                  | K        | KH        | Y        | Lecture/ SGD        | Written/viva<br>voce         |  |                                             |  |
| 19.4.4         | Enumerate the precautions for maintaining vaccines at appropriate temperature including the use of vaccine vial monitor (VVM).                                                                                             | K        | KH        | Y        | Lecture/ SGD        | Written/viva<br>voce         |  |                                             |  |
| 19.4.5         | Explain the method of cold chain maintenance during a vaccine session.                                                                                                                                                     | K        | KH        | Y        | Lecture/ SGD        | Written/viva<br>voce         |  |                                             |  |
| <b>PE 19.5</b> | <b>Discuss immunization in special situations – HIV positive children, immunodeficiency, pre-term, organ transplants, those who received blood and blood products, splenectomised children, adolescents, and travelers</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b> | <b>Written/viva<br/>voce</b> |  | <b>Com Med,<br/>Micro,<br/>Biochemistry</b> |  |
| 19.5.1         | Explain immunization in special situations – HIV positive children, immunodeficiency, pre-term, organ transplants, those who received blood and blood products, splenectomised children, adolescents, travelers.           | K        | KH        | Y        | Lecture / SGD       | Written/viva<br>voce         |  |                                             |  |

|                |                                                                                                                                                                                                        |            |           |          |                                                             |                            |          |                |  |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|----------|-------------------------------------------------------------|----------------------------|----------|----------------|--|
| <b>PE 19.6</b> | <b>Assess patient for fitness for immunization and prescribe an age appropriate immunization schedule</b>                                                                                              | <b>S</b>   | <b>P</b>  | <b>Y</b> | <b>Out Patient clinics, Skills lab</b>                      | <b>Skill Assessment</b>    | <b>5</b> |                |  |
| 19.6.1         | Assess patient fitness for immunization.                                                                                                                                                               | S          | P         | Y        | Out Patient clinics, Skills lab                             | Skill Assessment OSCE      | 5        |                |  |
| 19.6.2         | Make an age appropriate plan for immunization including catch up doses.                                                                                                                                | S          | P         | Y        | Out Patient clinics, Skills lab                             | Skill Assessment OSCE      | 5        |                |  |
| 19.6.3         | Prescribe the correct vaccine, dose, route of administration for the child.                                                                                                                            | S          | P         | Y        | Out Patient clinics, Skills lab                             | Skill Assessment           | 5        |                |  |
| <b>PE 19.7</b> | <b>Educate and counsel a patient for immunization</b>                                                                                                                                                  | <b>A/C</b> | <b>SH</b> | <b>Y</b> | <b>DOAP session</b>                                         | <b>Document in Logbook</b> |          |                |  |
| 19.7.1         | Educate the parents about the importance of vaccines.                                                                                                                                                  | A/C        | SH        | Y        | DOAP session, Role play                                     | Document in Logbook        |          |                |  |
| 19.7.2         | Counsel parents for age appropriate vaccines, the schedule and timing and the expected side effects.                                                                                                   | A/C        | SH        | Y        | DOAP session, Role play                                     | Document in Logbook, OSCE  |          |                |  |
| <b>PE 19.8</b> | <b>Demonstrate willingness to participate in the national and subnational immunization days</b>                                                                                                        | <b>A</b>   | <b>SH</b> | <b>Y</b> | <b>Lecture/ small group discussion</b>                      | <b>Document in Logbook</b> |          | <b>Com Med</b> |  |
| 19.8.1         | Participate in the national (NIDs) and subnational immunization days (SNIDs).                                                                                                                          | A          | SH        | Y        | Small group, NIDs and SNIDs                                 | Document in Logbook        |          |                |  |
| <b>PE 19.9</b> | <b>Describe the components of safe vaccine practice – Patient education/ counselling; adverse events following immunization, safe injection practices, documentation and medico-legal implications</b> | <b>K</b>   | <b>KH</b> | <b>Y</b> | <b>Lecture/ small group discussion/ Immunization clinic</b> | <b>Written/viva voce</b>   |          | <b>AETCOM</b>  |  |
| 19.9.1         | Describe the components of safe vaccine practices - patient education/counseling.                                                                                                                      | K          | KH        | Y        | Lecture/ SGD                                                | Written/ viva voce         |          | AETCOM         |  |
| 19.9.2         | Describe adverse events following immunization and standard precautions to prevent them.                                                                                                               | K          | KH        | Y        | Lecture/ SGD                                                | Written/viva voce          |          |                |  |
| 19.9.3         | List safe injection practices and documentation during immunization.                                                                                                                                   | K          | KH        | Y        | Lecture/ SGD                                                | Written/viva voce          |          |                |  |
| 19.9.4         | Demonstrate necessary documentation and medicolegal implications of immunization.                                                                                                                      | K          | KH        | Y        | Lecture/ SGD                                                | Written/viva voce          |          |                |  |

|                 |                                                                                                                                          |          |           |          |                                        |                            |  |                |  |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------------------|----------------------------|--|----------------|--|
| <b>PE 19.10</b> | <b>Observe the handling and storing of vaccines</b>                                                                                      | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>DOAP session</b>                    | <b>Written/viva voce</b>   |  |                |  |
| 19.10.1         | Observe and note the correct handling and storing of vaccines.                                                                           | S        | SH        | Y        | DOAP session, Videos                   | Viva voce/OSCE             |  |                |  |
| <b>PE 19.11</b> | <b>Document Immunization in an immunization record</b>                                                                                   | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Out Patient clinics, Skills lab</b> | <b>Skill assessment</b>    |  |                |  |
| 19.11.1         | Document Immunization in an immunization record.                                                                                         | S        | SH        | Y        | Out Patient clinics, Skills lab        | Skill assessment OSCE      |  |                |  |
| <b>PE 19.12</b> | <b>Observe the administration of UIP vaccines</b>                                                                                        | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>DOAP session</b>                    | <b>Document in Logbook</b> |  | <b>Com Med</b> |  |
| 19.12.1         | Observe and document the administration of vaccines.                                                                                     | S        | SH        | Y        | DOAP session                           | Document in Logbook        |  |                |  |
| <b>PE 19.13</b> | <b>Demonstrate the correct administration of different vaccines in a mannequin</b>                                                       | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>DOAP session</b>                    | <b>Document in Logbook</b> |  | <b>Com Med</b> |  |
| 19.13.1         | Prepare vaccines by maintaining hand hygiene and skin sterilization.                                                                     | S        | SH        | Y        | DOAP session, Skill station            | Document in Logbook, OSCE  |  |                |  |
| 19.13.2         | Administer a vaccine in the mannequin by correct route (IM, SC, ID) for the correct vaccine.                                             | S        | SH        | Y        | DOAP session, Skill station            | Document in Logbook, OSCE  |  |                |  |
| <b>PE 19.14</b> | <b>Practice Infection control measures and appropriate handling of the sharps</b>                                                        | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>DOAP session</b>                    | <b>Document in Logbook</b> |  | <b>Com Med</b> |  |
| 19.14.1         | Practice Infection control measures.                                                                                                     | S        | SH        | Y        | DOAP session                           | Document in Logbook        |  |                |  |
| 19.14.2         | Practice appropriate handling of the sharps.                                                                                             | S        | SH        | Y        | DOAP session                           | Document in Logbook        |  |                |  |
| <b>PE 19.15</b> | <b>Explain the term implied consent in Immunization services</b>                                                                         | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Small group discussion</b>          | <b>Written/viva voce</b>   |  |                |  |
| 19.15.1         | Explain the term implied consent in Immunization services.                                                                               | K        | K         | Y        | Small group discussion                 | Written/viva voce          |  |                |  |
| <b>PE 19.16</b> | <b>Enumerate available newer vaccines and their indications including pentavalent pneumococcal, rotavirus, JE, typhoid IPV &amp; HPV</b> | <b>K</b> | <b>K</b>  | <b>N</b> | <b>Lecture/ small group discussion</b> | <b>Written/viva voce</b>   |  |                |  |
| 19.16.1         | Enumerate newer vaccines (pneumococcal, rotavirus, JE typhoid, IPV, influenza& HPV vaccines).                                            | K        | K         | N        | Lecture/ SGD                           | Written/viva voce          |  |                |  |

|                                                                                                                                                              |                                                                                                                                                               |          |           |          |                       |                           |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|-----------------------|---------------------------|--|--|--|
| 19.16.2                                                                                                                                                      | List the indications for newer vaccines such as pneumococcal, JE, typhoid, influenza& HPV vaccines                                                            | K        | K         | N        | Lecture/ SGD          | Written/viva voce         |  |  |  |
| <b>Topic: Care of the Normal Newborn and High risk Newborn      Number of competencies: (20)      Number of procedures that require certification: (NIL)</b> |                                                                                                                                                               |          |           |          |                       |                           |  |  |  |
| <b>PE 20.1</b>                                                                                                                                               | <b>Define the common neonatal nomenclatures including the classification and describe the characteristics of a Normal Term Neonate and High Risk Neonates</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b>   | <b>Written/viva voce</b>  |  |  |  |
| 20.1.1                                                                                                                                                       | Define the Neonatal and Perinatal period.                                                                                                                     | K        | K         | Y        | Lecture/ SGD          | Written /Viva voce        |  |  |  |
| 20.1.2                                                                                                                                                       | Define live birth and still birth.                                                                                                                            | K        | K         | Y        | Lecture/ SGD          | Written /Viva voce        |  |  |  |
| 20.1.3                                                                                                                                                       | Classify the neonate according to birth weight into different categories.                                                                                     | K        | KH        | Y        | Lecture/ SGD          | Written /Viva voce        |  |  |  |
| 20.1.4                                                                                                                                                       | Classify the neonate according to period of gestation.                                                                                                        | K        | KH        | Y        | Lecture/ SGD          | Written /Viva voce        |  |  |  |
| 20.1.5                                                                                                                                                       | Classify the neonate as per intrauterine growth percentiles.                                                                                                  | K        | KH        | Y        | Lecture/ SGD          | Written /Viva voce        |  |  |  |
| 20.1.6                                                                                                                                                       | Define Neonatal Mortality Rate (NMR) and Perinatal Mortality Rate.                                                                                            | K        | K         | Y        | Lecture, SGD.         | Written /Viva voce        |  |  |  |
| 20.1.7                                                                                                                                                       | Describe the characteristics of a normal term neonate.                                                                                                        | K        | K         | Y        | Lecture, SGD.         | Written /Viva voce        |  |  |  |
| 20.1.8                                                                                                                                                       | Describe the characteristics of the high-risk neonate.                                                                                                        | K        | K         | Y        | Lecture, SGD.         | Written /Viva voce        |  |  |  |
| <b>PE 20.2</b>                                                                                                                                               | <b>Explain the care of a normal neonate</b>                                                                                                                   | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>   | <b>Written /Viva voce</b> |  |  |  |
| 20.2.1                                                                                                                                                       | Enumerate the components of Essential Newborn Care                                                                                                            | K        | K         | Y        | Lecture, SGD          | Written /Viva voce        |  |  |  |
| 20.2.2                                                                                                                                                       | Enumerate the steps of care of the normal neonate at birth.                                                                                                   | K        | K         | Y        | Lecture, SGD.         | Written /Viva voce        |  |  |  |
| 20.2.3                                                                                                                                                       | Explain the care of the normal neonate during the postnatal period.                                                                                           | K        | KH        | Y        | Lecture, SGD.         | Written /Viva voce        |  |  |  |
| 20.2.4                                                                                                                                                       | List the criteria for discharge of a normal neonate from the hospital                                                                                         | K        | KH        | Y        | Lecture, SGD.         | Written /Viva voce        |  |  |  |
| <b>PE 20.3</b>                                                                                                                                               | <b>Perform Neonatal resuscitation in a manikin</b>                                                                                                            | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>DOAP/SKILL LAB</b> | <b>Logbook</b>            |  |  |  |
| 20.3.1                                                                                                                                                       | Perform all the steps of routine care on a manikin.                                                                                                           | S        | SH        | Y        | DOAP/skill lab        | Logbook /OSCE             |  |  |  |

|                |                                                                                                                    |          |           |          |                           |                                  |  |  |  |
|----------------|--------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------------|----------------------------------|--|--|--|
| 20.3.2         | Demonstrate the initial steps of neonatal resuscitation in a manikin in the correct sequence.                      | S        | SH        | Y        | DOAP                      | Logbook entry/OSCE               |  |  |  |
| 20.3.3         | Demonstrate the method of counting the heart rate of the neonate during resuscitation.                             | S        | SH        | Y        | DOAP                      | Skill lab/OSCE                   |  |  |  |
| 20.3.4         | Demonstrate the method of administering free flow oxygen during resuscitation.                                     | S        | SH        | Y        | DOAP                      | Skill station/OSCE               |  |  |  |
| 20.3.5         | Check the functions of all parts of the self-inflating bag.                                                        | S        | SH        | Y        | DOAP                      | Logbook entry/OSCE               |  |  |  |
| 20.3.6         | Demonstrate the method of positive pressure ventilation (PPV) in a manikin using appropriate size of bag and mask. | S        | SH        | Y        | DOAP                      | Logbook entry/OSCE               |  |  |  |
| 20.3.7         | Checks the signs of effective positive pressure ventilation.                                                       | S        | SH        | Y        | DOAP                      | Logbook/OSCE                     |  |  |  |
| 20.3.8         | Initiate corrective steps in correct sequence for ineffective ventilation in simulated settings.                   | S        | SH        | Y        | DOAP                      | Logbook entry/OSCE               |  |  |  |
| 20.3.9         | Demonstrate the method of placement of orogastric tube during prolonged PPV in a manikin.                          | S        | SH        | Y        | DOAP                      | Logbook entry                    |  |  |  |
| 20.3.10        | Demonstrate the 'thumb technique' and 'two finger technique' of providing chest compression in a manikin.          | S        | SH        | Y        | DOAP                      | Logbook entry/skill station/OSCE |  |  |  |
| 20.3.11        | Prepare correct dilution of adrenaline injection.                                                                  | S        | SH        | Y        | DOAP                      | Logbook                          |  |  |  |
| 20.3.12        | Identify the correct size of Laryngoscope and endotracheal tube based on given birth weight/ gestation correctly.  | S        | SH        | Y        | DOAP                      | Logbook entry/OSCE               |  |  |  |
| 20.3.13        | Demonstrate the technique of endotracheal intubation in a manikin correctly.                                       | S        | SH        | Y        | DOAP                      | Logbook entry                    |  |  |  |
| <b>PE 20.4</b> | <b>Assessment of a normal neonate</b>                                                                              | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside /Skill lab</b> | <b>Skill assessment</b>          |  |  |  |
| 20.4.1         | Elicit the relevant general, antenatal, natal and postnatal history of the mother.                                 | S        | SH        | Y        | Bedside /Skill lab        | Skill assessment                 |  |  |  |
| 20.4.2         | Demonstrate the touch method of assessment of temperature in a newborn.                                            | S        | SH        | Y        | Bedside /Skill lab        | Skill assessment                 |  |  |  |
| 20.4.3         | Demonstrate the method of recording axillary and rectal temperature in a neonatal manikin.                         | S        | SH        | Y        | Bedside /Skill lab        | Skill assessment                 |  |  |  |
| 20.4.4         | Demonstrate the counting of respiratory rate in a neonate.                                                         | S        | SH        | Y        | Bedside /Skill lab        | Skill assessment                 |  |  |  |
| 20.4.5         | Demonstrate the eliciting of capillary refill time CRT in a newborn.                                               | S        | SH        | Y        | Bedside /Skill lab        | Skill assessment                 |  |  |  |

|                |                                                                                                                                                               |            |           |          |                    |                              |  |  |  |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|----------|--------------------|------------------------------|--|--|--|
| 20.4.6         | Demonstrate counting the heart rate in a neonate.                                                                                                             | S          | SH        | Y        | Bedside /Skill lab | Skill assessment             |  |  |  |
| 20.4.7         | Measure weight, length, head circumference and chest circumference in a neonate/manikin accurately.                                                           | S          | SH        | Y        | Bedside /Skill lab | Skill assessment             |  |  |  |
| 20.4.8         | Perform a gestational assessment by physical and neurological criteria in a neonate.                                                                          | S          | SH        | Y        | Bedside /Skill lab | Skill assessment             |  |  |  |
| 20.4.9         | Perform a head to toe examination of the neonate.                                                                                                             | S          | SH        | Y        | Bedside /Skill lab | Skill assessment             |  |  |  |
| 20.4.10        | Elicit common neonatal reflexes like rooting, sucking, grasp, and Moro's reflex correctly.                                                                    | S          | SH        | Y        | Bedside /Skill lab | Skill assessment             |  |  |  |
| 20.4.11        | Perform a relevant systemic examination of a neonate                                                                                                          | S          | SH        | Y        | Bedside /Skill lab | Skill assessment             |  |  |  |
| <b>PE 20.5</b> | <b>Counsel/educate mothers on the care of neonates</b>                                                                                                        | <b>A/C</b> | <b>SH</b> | <b>Y</b> | <b>DOAP</b>        | <b>Logbook entry</b>         |  |  |  |
| 20.5.1         | Counsel mothers using the GALPAC technique (Greet, Ask, Listen, Praise, Advise, Check for understanding) appropriately.                                       | A/C        | SH        | Y        | DOAP               | Logbook documentation/ OSCE  |  |  |  |
| 20.5.2         | Educate mothers regarding care of the eyes, skin and cord stump of the neonate.                                                                               | A/C        | SH        | Y        | DOAP               | Logbook documentation        |  |  |  |
| 20.5.3         | Educate the mother for prevention of infections.                                                                                                              | A/C        | SH        | Y        | DOAP               | Logbook documentation/ OSCE  |  |  |  |
| 20.5.4         | Educate mothers regarding bathing routine and cleanliness.                                                                                                    | A/C        | SH        | Y        | DOAP               | Logbook documentation/ OSCE  |  |  |  |
| 20.5.5         | Counsel the mother regarding her own nutrition and health.                                                                                                    | A/C        | SH        | Y        | DOAP               | Logbook documentation        |  |  |  |
| <b>PE 20.6</b> | <b>Explain the follow-up care for neonates including Breastfeeding, Temperature maintenance, immunization, importance of growth monitoring and red flags.</b> | <b>A/C</b> | <b>SH</b> | <b>Y</b> | <b>DOAP</b>        | <b>Logbook documentation</b> |  |  |  |
| 20.6.1         | Counsel the mothers about the importance of exclusive breastfeeding appropriately.                                                                            | A/C        | SH        | Y        | DOAP               | Logbook documentation        |  |  |  |
| 20.6.2         | Educate the mother regarding harmful effects of pre-lacteals and non-human milk.                                                                              | A/C        | SH        | Y        | DOAP               | Logbook documentation        |  |  |  |
| 20.6.3         | Explain to the mother the importance of frequent breastfeeding including night feeds.                                                                         | S          | SH        | Y        | DOAP               | Logbook documentation        |  |  |  |

|                |                                                                                                                                                                    |          |           |          |                     |                             |  |  |  |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|-----------------------------|--|--|--|
| 20.6.4         | Educate the mother regarding common lactation problems                                                                                                             | A/C      | SH        | Y        | DOAP                | Logbook documentation       |  |  |  |
| 20.6.5         | Explain to the mother the methods of keeping the baby warm at home.                                                                                                | S        | SH        | Y        | DOAP                | Logbook documentation/ OSCE |  |  |  |
| 20.6.6         | Demonstrate the technique of Kangaroo Mother Care in a manikin and simulated mother.                                                                               | S        | SH        | Y        | DOAP                | Logbook documentation/ OSCE |  |  |  |
| 20.6.7         | Explain the schedule of immunization as per the national immunization schedule correctly.                                                                          | S        | SH        | Y        | DOAP                | Logbook documentation/ OSCE |  |  |  |
| 20.6.8         | Counsel the parents on importance of regular visit to the well baby clinic for growth monitoring.                                                                  | A/C      | SH        | Y        | DOAP                | Logbook documentation/ OSCE |  |  |  |
| 20.6.9         | Explain to the parents the red flag signs for urgent visit to hospital.                                                                                            | S        | SH        | Y        | DOAP                | Logbook documentation/ OSCE |  |  |  |
| <b>PE 20.7</b> | <b>Discuss the etiology, clinical features and management of Birth asphyxia</b>                                                                                    | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b> | <b>Written /Viva voce</b>   |  |  |  |
| 20.7.1         | Define birth asphyxia as per NNF (National Neonatology Forum) and WHO, AAP guidelines.                                                                             | K        | K         | Y        | Lecture/ SGD        | Written /Viva voce          |  |  |  |
| 20.7.2         | Enumerate the etiology of birth asphyxia based on antenatal, natal and postnatal factors.                                                                          | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce          |  |  |  |
| 20.7.3         | Describe the clinical features of birth asphyxia.                                                                                                                  | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce          |  |  |  |
| 20.7.4         | List the complications of hypoxic ischemic encephalopathy.                                                                                                         | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce          |  |  |  |
| 20.7.5         | Describe the post resuscitation management of the asphyxiated neonate.                                                                                             | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce          |  |  |  |
| <b>PE 20.8</b> | <b>Discuss the etiology, clinical features and management of respiratory distress in Newborn including meconium aspiration and transient tachypnea of newborn.</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written /Viva voce</b>   |  |  |  |
| 20.8.1         | Define Respiratory Distress in a neonate (as per NNF guidelines).                                                                                                  | K        | K         | Y        | Lecture, SGD        | Written /Viva voce          |  |  |  |

|                 |                                                                                                                                                                                                                    |          |           |          |                     |                           |  |  |  |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|---------------------------|--|--|--|
| 20.8.2          | Enumerate the common etiologies of respiratory distress based on time of onset and gestation.                                                                                                                      | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.8.3          | Enumerate the parameters of the Downes score for assessment of severity of respiratory distress.                                                                                                                   | K        | K         | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.8.4          | Describe the clinical features and complications of Meconium Aspiration Syndrome (MAS).                                                                                                                            | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.8.5          | Discuss the management of MAS.                                                                                                                                                                                     | K        | K         | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.8.6          | Discuss the clinical features and management of Transient Tachypnea of Newborn.                                                                                                                                    | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.8.7          | Describe the etiology and clinical features of Hyaline Membrane Disease.                                                                                                                                           | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.8.8          | Discuss the management including prevention of HMD.                                                                                                                                                                | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| <b>PE 20.9</b>  | <b>Discuss the etiology, clinical features and management of birth injuries.</b>                                                                                                                                   | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written /Viva voce</b> |  |  |  |
| 20.9.1          | Define birth injury (as per National Vital Statistics Report).                                                                                                                                                     | K        | K         | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.9.2          | Enumerate the common birth injuries in neonates                                                                                                                                                                    | K        | K         | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.9.3          | Discuss the etiology and risk factors of birth injuries                                                                                                                                                            | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.9.4          | Discuss the clinical features of common birth injuries like, cephalhematoma, subgaleal hemorrhage, brachial plexus and facial nerve injury, bone and soft tissue injuries and intra-abdominal injuries, fractures. | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.9.5          | Discuss the management including prevention of common birth injuries                                                                                                                                               | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| <b>PE 20.10</b> | <b>Discuss the etiology, clinical features and management of hemorrhagic disease of newborn</b>                                                                                                                    | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written /Viva voce</b> |  |  |  |
| 20.10.1         | Enumerate the causes of hemorrhagic disease of newborn according to time of onset.                                                                                                                                 | K        | K         | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.10.2         | Discuss the role of vitamin K deficiency in hemorrhagic disease of newborn.                                                                                                                                        | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |

|                 |                                                                                                                                  |          |           |          |                     |                           |  |  |  |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|---------------------------|--|--|--|
| 20.10.3         | Describe the clinical features of early, classical and late onset hemorrhagic disease of newborn.                                | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.10.4         | Outline the steps of management and prevention of hemorrhagic disease of newborn.                                                | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| <b>PE 20.11</b> | <b>Discuss the clinical characteristics, complications and management of low birth weight (preterm and small for gestation).</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written /Viva voce</b> |  |  |  |
| 20.11.1         | Describe the clinical characteristics of preterm, small for gestation and low birth weight newborns.                             | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.11.2         | Enumerate the complications in the preterm, small for gestation and low birth weight newborns                                    | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.11.3         | Describe the management of the preterm, small for date and low birth weight newborns.                                            | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.11.4         | Enumerate the criteria for discharge of low birth weight babies from hospital-based care.                                        | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.11.5         | List the follow up advice for low birth weight newborns.                                                                         | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| <b>PE 20.12</b> | <b>Discuss the temperature regulation in neonates, clinical features and management of Neonatal Hypothermia.</b>                 | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written /Viva voce</b> |  |  |  |
| 20.12.1         | Enumerate the modes of heat loss in a newborn.                                                                                   | K        | K         | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.12.2         | Describe the mechanism of thermoregulation in the newborn.                                                                       | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.12.3         | Classify hypothermia in newborns as per NNF criteria.                                                                            | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.12.4         | Describe the clinical features of a newborn with cold stress, moderate hypothermia and severe hypothermia.                       | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.12.5         | Discuss the management of cold stress, moderate hypothermia and severe hypothermia.                                              | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.12.6         | Outline the prevention of hypothermia in newborn by 'ten steps of the warm chain'.                                               | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.12.7         | Explain the Kangaroo Mother Care for prevention of hypothermia in newborns.                                                      | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |

|                 |                                                                                           |          |           |          |                     |                           |  |  |  |
|-----------------|-------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|---------------------------|--|--|--|
| <b>PE 20.13</b> | <b>Discuss the etiology, clinical features and management of Neonatal hypoglycemia.</b>   | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | Written /Viva voce        |  |  |  |
| 20.13.1         | Define hypoglycemia in newborn.                                                           | K        | K         | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.13.2         | Enumerate the etiology of hypoglycemia in the newborn.                                    | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.13.3         | Enumerate the “at risk newborns” needing routine blood sugar monitoring for hypoglycemia. | K        | K         | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.13.4         | Describe the clinical features of hypoglycemia in the newborn.                            | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.13.5         | Discuss the management of a newborn with asymptomatic and symptomatic hypoglycemia.       | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.13.6         | Enumerate the measures for prevention of hypoglycemia in newborn.                         | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| <b>PE 20.14</b> | <b>Discuss the etiology, clinical features and management of Neonatal hypocalcemia.</b>   | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written /Viva voce</b> |  |  |  |
| 20.14.1         | Define neonatal hypocalcemia.                                                             | K        | K         | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.14.2         | Enumerate the risk factors for early and late onset hypocalcemia.                         | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.14.3         | Describe the clinical features of neonatal hypocalcemia.                                  | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.14.4         | Outline the management of neonatal hypocalcemia.                                          | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| <b>PE 20.15</b> | <b>Discuss the etiology, clinical features and management of neonatal seizures.</b>       | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written /Viva voce</b> |  |  |  |
| 20.15.1         | Enumerate the clinical types of seizures in the newborn.                                  | K        | K         | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.15.2         | Enumerate the key differentiating features between seizures and jitteriness.              | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.15.3         | Describe the common causes of neonatal seizures according to time of onset of seizure.    | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.15.4         | Discuss the clinical features of the common causes of neonatal seizures.                  | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |

|                 |                                                                                                                |          |           |          |                     |                           |  |  |  |
|-----------------|----------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|---------------------------|--|--|--|
| 20.15.5         | List the primary diagnostic tests indicated in neonatal seizures.                                              | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.15.6         | Elaborate the step wise algorithmic approach for the management of neonatal seizures.                          | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| <b>PE 20.16</b> | <b>Discuss the etiology, clinical features and management of neonatal sepsis.</b>                              | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written /Viva voce</b> |  |  |  |
| 20.16.1         | Define neonatal sepsis, probable sepsis, severe sepsis, septic shock                                           | K        | K         | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.16.2         | Classify Early and late neonatal sepsis.                                                                       | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.16.3         | Enumerate the organisms responsible for causing early and late onset sepsis.                                   | K        | KH        | Y        |                     |                           |  |  |  |
| 20.16.4         | Enumerate the risk factors of early and late onset neonatal sepsis correctly.                                  | K        | K         | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.16.5         | Describe the clinical features of early onset and late onset neonatal sepsis                                   | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.16.6         | Enumerate the commonly used laboratory tests for diagnosis of neonatal sepsis.                                 | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.16.7         | Recall the interpretation of a positive sepsis screen.                                                         | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |  |  |
| 20.16.8         | Describe the approach to a newborn with suspected early onset sepsis.                                          | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.16.9         | Describe the approach to a newborn with suspected late onset sepsis.                                           | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.16.8         | List the commonly used antibiotics (with dosage and duration of therapy) in the management of neonatal sepsis. | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| 20.16.9         | Describe the supportive and adjunctive therapy in management of neonatal sepsis.                               | K        | KH        | N        | Lecture/ SGD        | Written/viva voce         |  |  |  |
| 20.16.9         | Discuss the measures for prevention of early onset and late onset sepsis.                                      | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |
| <b>PE 20.17</b> | <b>Discuss the etiology, clinical features and management of Perinatal infections.</b>                         | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written /Viva voce</b> |  |  |  |
| 20.17.1         | Define Perinatal infection.                                                                                    | K        | K         | Y        | Lecture, SGD        | Written /Viva voce        |  |  |  |

|                 |                                                                                                                                                                                            |          |           |          |                     |                            |  |  |  |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|----------------------------|--|--|--|
| 20.17.2         | Discuss the etiology and risk factors for acquisition of common Perinatal infections like Herpes, Cytomegalovirus, Toxoplasmosis, Rubella, HIV, Varicella, Hepatitis B virus and syphilis. | K        | K         | Y        | Lecture, SGD        | Written /Viva voce         |  |  |  |
| 20.17.3         | Describe the clinical features of the common Perinatal infections.                                                                                                                         | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce         |  |  |  |
| 20.17.4         | Outline the management of the common Perinatal infections.                                                                                                                                 | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce         |  |  |  |
| 20.17.5         | Enumerate the measures for prevention of common Perinatal infections.                                                                                                                      | K        | KH        | Y        | Lecture, SGD        | Written /Viva voce         |  |  |  |
| <b>PE 20.18</b> | <b>Identify and stratify risk in a sick neonate using IMNCI guidelines</b>                                                                                                                 | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>DOAP</b>         | <b>Document in Logbook</b> |  |  |  |
| 20.18.1         | Identify possible serious bacterial infection/jaundice and stratify the sick neonate as per IMNCI.                                                                                         | S        | SH        | Y        | DOAP                | Document in Logbook        |  |  |  |
| 20.18.2         | Identify and stratify dehydration in a sick neonate with diarrhea as per IMNCI.                                                                                                            | S        | SH        | Y        | DOAP                | Document in Logbook        |  |  |  |
| 20.18.3         | Classify diarrhea into severe persistent diarrhea and severe dysentery as per IMNCI guidelines.                                                                                            | S        | SH        | Y        | DOAP                | Document in Logbook        |  |  |  |
| 20.18.4         | Check for feeding problem and malnutrition and stratify.                                                                                                                                   | S        | SH        | Y        | DOAP                | Document in Logbook        |  |  |  |
| 20.18.5         | Assess breastfeeding and check for signs of good attachment to the breast in a neonate.                                                                                                    | S        | SH        | Y        | DOAP                | Document in Logbook        |  |  |  |
| 20.18.6         | Interpret and classify the neonate on the basis of weight for age z scores weight categories accurately.                                                                                   | S        | SH        | Y        | DOAP                | Document in Logbook        |  |  |  |
| <b>PE 20.19</b> | <b>Discuss the etiology, clinical features and management of Neonatal hyperbilirubinemia.</b>                                                                                              | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture /SGD</b> | <b>Written /Viva voce</b>  |  |  |  |
| 20.19.1         | Describe the etiology of neonatal hyperbilirubinemia                                                                                                                                       | K        | KH        | Y        | Lecture /SGD        | Written /Viva voce         |  |  |  |
| 20.19.2         | Differentiate the causes of neonatal jaundice based on age of onset and duration of jaundice.                                                                                              | K        | KH        | Y        | Lecture SGD         | Written /Viva voce         |  |  |  |
| 20.19.3         | Enumerate the common causes of unconjugated and conjugated hyperbilirubinemia in the newborn.                                                                                              | K        | K         | Y        | Lecture /SGD        | Written /Viva voce         |  |  |  |
| 20.19.4         | Differentiate between physiological and pathological jaundice in the newborn.                                                                                                              | K        | KH        | Y        | Lecture /SGD        | Written /Viva voce         |  |  |  |

|                 |                                                                                                                                                                                                                           |          |           |          |                     |                           |  |  |  |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|---------------------------|--|--|--|
| 20.19.5         | Discuss the clinical features of common causes of neonatal jaundice                                                                                                                                                       | K        | KH        | Y        | Lecture /SGD        | Written /Viva voce        |  |  |  |
| 20.19.6         | Describe the important clinical features of acute bilirubin encephalopathy.                                                                                                                                               | K        | K         | Y        | Lecture SGD         | Written /Viva voce        |  |  |  |
| 20.19.7         | List the investigations to be performed in the evaluation of neonatal hyperbilirubinemia.                                                                                                                                 | K        | KH        | Y        | Lecture /SGD        | Written /Viva voce        |  |  |  |
| 20.19.8         | Categorize the risk in neonatal hyperbilirubinemia based on the American Academy of Pediatrics Bilirubin Nomogram.                                                                                                        | K        | KH        | Y        | Lecture /SGD        | Written /Viva voce        |  |  |  |
| 20.19.9         | Identify a neonate requiring phototherapy as per the American Academy of Pediatrics Bilirubin Nomogram.                                                                                                                   | K        | KH        | Y        | Lecture /SGD        | Written /Viva voce        |  |  |  |
| 20.19.10        | Identify a neonate requiring exchange transfusion as per the American Academy of Pediatrics Bilirubin Nomogram correctly.                                                                                                 | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |  |  |
| 20.19.11        | Describe the care of the baby receiving phototherapy.                                                                                                                                                                     | K        | K         | Y        | Lecture /SGD        | Written /Viva voce        |  |  |  |
| 20.19.12        | Explain the mechanism of phototherapy.                                                                                                                                                                                    | K        | K         | Y        | Lecture /SGD        | Written /Viva voce        |  |  |  |
| 20.19.13        | Detail the method of administering phototherapy.                                                                                                                                                                          | K        | K         | Y        | Lecture /SGD        | Written /Viva voce        |  |  |  |
| <b>PE 20.20</b> | <b>Identify clinical presentations of common surgical conditions in the newborn including TEF, esophageal atresia, anal atresia, cleft lip and palate, congenital diaphragmatic hernia and causes of acute abdomen.</b>   | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b> | <b>Written/ viva voce</b> |  |  |  |
| 20.20.1         | Describe clinical presentations of common surgical conditions in the newborn like Tracheo-esophageal fistula (TEF), esophageal atresia, anal atresia, cleft lip and palate and congenital diaphragmatic hernia correctly. | K        | K         | Y        | Lecture /SGD        | Written /Viva voce        |  |  |  |
| 20.20.2         | Enumerate the causes of acute abdomen in the newborn                                                                                                                                                                      | K        | K         | Y        | Lecture /SGD        | Written /Viva voce        |  |  |  |
| 20.20.3         | Recall the causes of acute abdomen in the newborn based on the presenting clinical features.                                                                                                                              | K        | KH        | Y        | Lecture /SGD        | Written /Viva voce        |  |  |  |
|                 |                                                                                                                                                                                                                           |          |           |          |                     |                           |  |  |  |

| Topic: Genito-Urinary system |                                                                                                                                                     | Number of competencies: (17) |           |          | Number of procedures that require certification: (NIL) |                           |  |              |  |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------|----------|--------------------------------------------------------|---------------------------|--|--------------|--|
| <b>PE 21.1</b>               | <b>Enumerate the etiopathogenesis, clinical features, complications and management of Urinary Tract infection (UTI) in children</b>                 | <b>K</b>                     | <b>KH</b> | <b>Y</b> | <b>Small group discussion</b>                          | <b>Written/ Viva voce</b> |  | <b>Micro</b> |  |
| 21.1.1                       | Define UTI as per standard criteria.                                                                                                                | K                            | KH        | Y        | Lecture/ SGD                                           | Written /Viva voce        |  |              |  |
| 21.1.2                       | Enumerate the organisms causing UTI in children of different ages.                                                                                  | K                            | KH        | Y        | Lecture/ SGD                                           | Written /Viva voce        |  |              |  |
| 21.1.3                       | Describe the clinical features of simple & complicated UTI.                                                                                         | K                            | KH        | Y        | Lecture/ SGD                                           | Written /Viva voce        |  |              |  |
| 21.1.4                       | Outline diagnostic workup for children with UTI at different ages.                                                                                  | K                            | KH        | Y        | Lecture/ SGD                                           | Written /Viva voce        |  |              |  |
| 21.1.5                       | Describe the treatment including the choice of antibiotics and duration of antibiotic therapy for treating simple & complicated UTI.                | K                            | KH        | Y        | Lecture/ SGD                                           | Written /Viva voce        |  |              |  |
| 21.1.6                       | Enumerate the complications of UTI children.                                                                                                        | K                            | KH        | Y        | Lecture/ SGD                                           | Written /Viva voce        |  |              |  |
| <b>PE 21.2</b>               | <b>Enumerate the etiopathogenesis, clinical features, complications and management of acute post-streptococcal Glomerular Nephritis in children</b> | <b>K</b>                     | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b>                                    | <b>Written /Viva voce</b> |  | <b>Path</b>  |  |
| 21.2.1                       | Define acute glomerulonephritis.                                                                                                                    | K                            | KH        | Y        | Lecture/ SGD                                           | Written /Viva voce        |  |              |  |
| 21.2.2                       | Elaborate pathogenesis of immune mediated nephritic syndrome                                                                                        | K                            | KH        | Y        | Lecture/ SGD                                           | Written /Viva voce        |  |              |  |
| 21.2.3                       | Describe the clinical features of Post-Streptococcal Glomerulonephritis (PSGN)                                                                      | K                            | KH        | Y        | Lecture/ SGD                                           | Written /Viva voce        |  |              |  |
| 21.2.4                       | Enumerate the complications of PSGN.                                                                                                                | K                            | K         | Y        | Lecture /SGD                                           | Written /Viva voce        |  |              |  |
| 21.2.5                       | Enumerate the investigations for PSGN.                                                                                                              | K                            | KH        | Y        | Lecture/ SGD                                           | Written /Viva voce        |  |              |  |
| 21.2.6                       | Enumerate indications of kidney biopsy in PSGN.                                                                                                     | K                            | KH        | Y        | Lecture/ SGD                                           | Written /Viva voce        |  |              |  |
| 21.2.7                       | Outline management of PSGN.                                                                                                                         | K                            | KH        | Y        | Lecture/ SGD                                           | Written /Viva voce        |  |              |  |

IAP Task Force on Competency-based Curriculum for Pediatrics in UG education: Competencies to Specific Learning Objectives  
Competency statements (**in Bold**) are taken from the MCI document and not modifiable

|                |                                                                                                                           |          |           |          |                     |                           |  |             |  |
|----------------|---------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|---------------------------|--|-------------|--|
| <b>PE 21.3</b> | <b>Discuss the approach and referral criteria to a child with Proteinuria</b>                                             | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b> | <b>Written /Viva voce</b> |  | <b>Path</b> |  |
| 21.3.1         | List causes of glomerular & non glomerular Proteinuria.                                                                   | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.3.2         | Define nephrotic syndrome.                                                                                                | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.3.3         | Enumerate causes of nephrotic syndrome.                                                                                   | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.3.4         | Outline the approach to a child with first episode of nephrotic syndrome.                                                 | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.3.5         | List the complications of nephrotic syndrome.                                                                             | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.3.6         | List indications of kidney biopsy in nephrotic syndrome.                                                                  | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.3.7         | Outline the management of initial episode nephrotic syndrome and subsequent relapse.                                      | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.3.8         | List the Criteria for referral of a child with proteinuria.                                                               | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| <b>PE 21.4</b> | <b>Discuss the approach and referral criteria to a child with hematuria</b>                                               | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b> | <b>Written /Viva voce</b> |  | <b>Anat</b> |  |
| 21.4.1         | Enumerate causes of hematuria in children of different ages                                                               | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.4.2         | Outline differences between glomerular & non glomerular hematuria                                                         | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.4.3         | List investigations for a child with hematuria                                                                            | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.4.4         | List indications of kidney biopsy in hematuria                                                                            | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.4.5         | List criteria for referral for a child with hematuria                                                                     | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| <b>PE 21.5</b> | <b>Enumerate the etiopathogenesis, clinical features, complications and management of Acute Renal Failure in children</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b> | <b>Written /Viva voce</b> |  | <b>Path</b> |  |
| 21.5.1         | Define acute kidney injury (AKI) as per KDIGO.                                                                            | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |

|                |                                                                                                                               |          |           |          |                     |                           |  |             |  |
|----------------|-------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|---------------------------|--|-------------|--|
| 21.5.2         | Outline classification of AKI.                                                                                                | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.5.3         | Enumerate causes of AKI.                                                                                                      | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.5.4         | List investigations for AKI in children.                                                                                      | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.5.5         | Describe the management of AKI.                                                                                               | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.5.6         | List indications of renal replacement therapy in AKI.                                                                         | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.5.7         | Enumerate complications of AKI.                                                                                               | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| <b>PE 21.6</b> | <b>Enumerate the etiopathogenesis, clinical features, complications and management of chronic kidney disease in children.</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b> | <b>Written /Viva voce</b> |  | <b>Path</b> |  |
| 21.6.1         | Define chronic kidney disease (CKD) & its staging in children.                                                                | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.6.2         | Outline the clinical features of CKD in children.                                                                             | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.6.3         | List causes of CKD in children.                                                                                               | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.6.4         | Enumerate complications of CKD in children.                                                                                   | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.6.5         | Outline management of CKD & its complications.                                                                                | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| <b>PE 21.7</b> | <b>Enumerate the etiopathogenesis, clinical features, complications and management of Wilms Tumor.</b>                        | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b> | <b>Written /Viva voce</b> |  | <b>Path</b> |  |
| 21.7.1         | Describe Etiopathogenesis of Wilms tumor.                                                                                     | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.7.2         | Describe clinical features of Wilms tumor.                                                                                    | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.7.3         | List investigations for a patient with Wilms tumor.                                                                           | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |
| 21.7.4         | Outline the management of Wilms tumor.                                                                                        | K        | KH        | Y        | Lecture/ SGD        | Written /Viva voce        |  |             |  |

|                 |                                                                                                                            |          |           |          |                            |                            |  |                          |                |
|-----------------|----------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------|----------------------------|--|--------------------------|----------------|
| <b>PE 21.8</b>  | <b>Elicit, document and present a history pertaining to diseases of the Genitourinary tract</b>                            | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b> | <b>Skill Assessment</b>    |  |                          |                |
| 21.8.1          | Elicit clinical history pertaining to genitourinary diseases in children.                                                  | S        | SH        | Y        | Bedside, Skills lab        | Skill Assessment           |  |                          |                |
| 21.8.2          | Perform a complete physical examination for a child with genitourinary diseases.                                           | S        | SH        | Y        | Bedside, Skills lab        | Skill Assessment           |  |                          |                |
| 21.8.4          | Document the complete history in the Logbook.                                                                              | S        | SH        | Y        | Bedside, Skills lab        | Skill Assessment           |  |                          |                |
| <b>PE 21.9</b>  | <b>Identify external markers for Kidney disease, like Failing to thrive, hypertension, pallor, Ichthyosis, anasarca</b>    | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b> | <b>Document in Logbook</b> |  |                          |                |
| 21.9.1          | Identify external markers for Kidney disease, like Failing to thrive, hypertension, pallor, Ichthyosis, anasarca.          | S        | SH        | Y        | Bedside, Skills lab        | Document in Logbook        |  |                          |                |
| <b>PE21.10</b>  | <b>Analyze symptom and interpret the physical findings and arrive at an appropriate provisional differential diagnosis</b> | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b> | <b>Logbook</b>             |  |                          |                |
| 21.10.1         | Analyze symptoms and interpret the physical findings and arrive at an appropriate provisional differential diagnosis.      | S        | SH        | Y        | Bedside, Skills lab        | Logbook                    |  |                          |                |
| <b>PE 21.11</b> | <b>Perform and interpret the common analytes in a Urine examination</b>                                                    | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b> | <b>Skill assessment</b>    |  | <b>Biochemistr, Path</b> |                |
| 21.11.1         | Perform at least one test to elicit Proteinuria.                                                                           | S        | SH        | Y        | Bedside, Skills lab        | Skill assessment           |  |                          |                |
| 21.11.2         | Interpret the tests for proteinuria and their significance.                                                                | S        | SH        | Y        | Bedside, Skills lab        | Skill assessment           |  |                          |                |
| 21.11.3         | Perform test for evaluating Urine PH.                                                                                      | S        | SH        | Y        | Bedside, Skills lab        | Skill assessment           |  |                          |                |
| 21.11.4         | Perform urine microscopy.                                                                                                  | S        | SH        | Y        | Bedside, Skills lab        | Skill assessment           |  |                          |                |
| 21.11.5         | Identify the abnormal deposits and Interpret the urine microscopy findings.                                                | S        | SH        | Y        | Bedside, Skills lab        | Skill assessment           |  |                          |                |
| 21.11.6         | Test the urine for glucosuria.                                                                                             | S        | SH        | Y        | Bedside, Skills lab        | Skill assessment           |  |                          |                |
| 21.11.7         | Interpret the urine sugar results.                                                                                         | S        | SH        | Y        | Bedside, Skills lab        | Skill assessment           |  |                          |                |
| <b>PE 21.12</b> | <b>Interpret report of Plain X Ray of KUB</b>                                                                              | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b> | <b>Logbook</b>             |  |                          | <b>Radio D</b> |
| 21.12.1         | Identify any abnormalities on X-Ray KUB.                                                                                   | S        | SH        | Y        | Bedside, Skills lab        | Logbook                    |  |                          |                |
| <b>PE 21.13</b> | <b>Enumerate the indications for and Interpret the written report of Ultra sonogram of KUB</b>                             | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b> | <b>Logbook</b>             |  |                          | <b>Radio D</b> |

|                 |                                                                                                                                                                                                                                                                                                                                                     |            |           |          |                            |                            |  |        |             |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|----------|----------------------------|----------------------------|--|--------|-------------|
| 21.13.1         | Enumerate indications for Ultrasound KUB.                                                                                                                                                                                                                                                                                                           | K          | KH        | Y        | Bedside, Skills lab        | Logbook                    |  |        |             |
| 21.13.2         | Interpret the written report of ultrasonogram of KUB.                                                                                                                                                                                                                                                                                               | S          | SH        | Y        | Bedside, Skills lab        | Logbook                    |  |        |             |
| <b>PE 21.14</b> | <b>Recognize common surgical conditions of the abdomen and genitourinary system and enumerate the indications for referral including acute and subacute intestinal obstruction, appendicitis, pancreatitis, perforation intussusception, Phimosis, undescended testis, Chordee, hypospadias, Torsion testis, hernia Hydrocele, Vulval Synechiae</b> | <b>S</b>   | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b> | <b>Bedside, Skills lab</b> |  |        | <b>Surg</b> |
| 21.14.1         | Recognize common surgical conditions of the abdomen and genitourinary system and enumerate the indications for referral including acute and subacute intestinal obstruction, appendicitis, pancreatitis, perforation intussusception, Phimosis, undescended testis, Chordee, hypospadias, Torsion testis, hernia Hydrocele, Vulval Synechiae.       | S          | SH        | Y        | Bedside, Skills lab        | Bedside, Skills lab        |  |        |             |
| <b>PE 21.15</b> | <b>Discuss and enumerate the referral criteria for children with genitourinary disorder</b>                                                                                                                                                                                                                                                         | <b>K</b>   | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b>        | <b>Written / viva voce</b> |  |        |             |
| 21.15.1         | Enumerate referral criteria in a child with Genitourinary disorder.                                                                                                                                                                                                                                                                                 | K          | KH        | Y        | Lecture/ SGD               | Written / viva voce        |  |        |             |
| <b>PE 21.16</b> | <b>Counsel / educate a patient for referral appropriately</b>                                                                                                                                                                                                                                                                                       | <b>A/C</b> | <b>SH</b> | <b>Y</b> | <b>DOAP</b>                | <b>Logbook</b>             |  | AETCOM |             |
| 21.16.1         | Counsel / educate a patient for referral appropriately.                                                                                                                                                                                                                                                                                             | A/C        | SH        | Y        | DOAP                       | Logbook                    |  |        |             |
| <b>PE 21.17</b> | <b>Describe the etiopathogenesis, grading, clinical features and management of hypertension in children</b>                                                                                                                                                                                                                                         | <b>K</b>   | <b>KH</b> | <b>Y</b> | <b>Lecture / SGD</b>       | <b>Written/ viva voce</b>  |  |        |             |
| 21.17.1         | Define Hypertension (HTN) & its staging as per AAP 2017 guidelines.                                                                                                                                                                                                                                                                                 | K          | KH        | Y        | Lecture /SGD               | Written/ viva voce         |  |        |             |
| 21.17.2         | Enumerate causes of hypertension in children.                                                                                                                                                                                                                                                                                                       | K          | KH        | Y        | Lecture /SGD               | Written/ viva voce         |  |        |             |
| 21.17.3         | Describe the clinical presentation of a child with HT.                                                                                                                                                                                                                                                                                              | K          | KH        | Y        | Lecture /SGD               | Written/ viva voce         |  |        |             |
| 21.17.4         | List complications of HT in children.                                                                                                                                                                                                                                                                                                               | K          | KH        | Y        | Lecture /SGD               | Written/ viva voce         |  |        |             |
| 21.17.5         | Enumerate investigations for hypertension in children.                                                                                                                                                                                                                                                                                              | K          | KH        | Y        | Lecture /SGD               | Written/ viva voce         |  |        |             |

IAP Task Force on Competency-based Curriculum for Pediatrics in UG education: Competencies to Specific Learning Objectives  
Competency statements (**in Bold**) are taken from the MCI document and not modifiable

|                                                                                                                                                                                           |                                                                                                                                                                     |          |           |          |                                 |                            |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------------------|----------------------------|--|--|--|
| 21.17.6                                                                                                                                                                                   | Outline treatment of hypertension (as per guidelines) in children.                                                                                                  | K        | KH        | Y        | Lecture /SGD                    | Written/ viva voce         |  |  |  |
| <b>Topic: Approach to and recognition of a child with possible Rheumatologic problem</b> <b>Number of competencies: (3)</b> <b>Number of procedures that require certification: (NIL)</b> |                                                                                                                                                                     |          |           |          |                                 |                            |  |  |  |
| <b>PE 22.1</b>                                                                                                                                                                            | <b>Enumerate the common Rheumatological problems in children. Discuss the clinical approach to recognition and referral of a child with Rheumatological problem</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture /SGD</b>             | <b>Written / viva voce</b> |  |  |  |
| 22.1.1                                                                                                                                                                                    | Enumerate the common Rheumatological problems in children.                                                                                                          | K        | KH        | Y        | Lecture /SGD                    | Written / viva voce        |  |  |  |
| 22.1.2                                                                                                                                                                                    | Describe the clinical approach to a child with Rheumatological problem.                                                                                             | K        | KH        | Y        | Lecture /SGD                    | Written / viva voce        |  |  |  |
| 22.1.3                                                                                                                                                                                    | Enumerate the indications for referral of a child with Rheumatological problem.                                                                                     | K        | KH        | Y        | Lecture /SGD                    | Written / viva voce        |  |  |  |
| <b>PE 22.2</b>                                                                                                                                                                            | <b>Counsel a patient with Chronic illness</b>                                                                                                                       | <b>S</b> | <b>SH</b> | <b>N</b> | <b>Bedside clinic/skill lab</b> | <b>Logbook</b>             |  |  |  |
| 22.2.1                                                                                                                                                                                    | Counsel a child / parents of a child with a chronic illness.                                                                                                        | S        | SH        | N        | Bedside clinic/skill lab        | Logbook                    |  |  |  |
| <b>PE 22.3</b>                                                                                                                                                                            | <b>Describe the diagnosis and management of common vasculitic disorders including Henoch Schonlein Purpura, Kawasaki Disease, SLE, JIA</b>                          | <b>K</b> | <b>KH</b> | <b>N</b> | <b>Lecture /SGD</b>             | <b>Written / viva voce</b> |  |  |  |
| 22.3.1                                                                                                                                                                                    | List the common causes of vasculitis in children.                                                                                                                   | K        | KH        | Y        | Lecture/ SGD                    | Written /Viva voce         |  |  |  |
| 22.3.2                                                                                                                                                                                    | Enumerate Clinical features suggestive of vasculitis in a child                                                                                                     | K        | KH        | N        | Lecture /SGD                    | Written / viva voce        |  |  |  |
| 22.3.3.                                                                                                                                                                                   | List the clinical features of Henoch Schonlein Purpura (HSP).                                                                                                       | K        | KH        | N        | Lecture /SGD                    | Written / viva voce        |  |  |  |
| 22.3.4                                                                                                                                                                                    | List the diagnostic criteria of HSP.                                                                                                                                | K        | KH        | N        | Lecture /SGD                    | Written / viva voce        |  |  |  |
| 22.3.5                                                                                                                                                                                    | Outline the management of a child with HSP.                                                                                                                         | K        | KH        | N        | Lecture /SGD                    | Written / viva voce        |  |  |  |
| 22.3.6                                                                                                                                                                                    | Enumerate the clinical features of Kawasaki disease (KD).                                                                                                           | K        | KH        | N        | Lecture /SGD                    | Written / viva voce        |  |  |  |

|                                                                                                                                                       |                                                                                                                                            |          |           |          |                     |                           |  |                     |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|---------------------------|--|---------------------|--|
| 22.3.7                                                                                                                                                | Define diagnostic criteria of Kawasaki disease.                                                                                            | K        | KH        | N        | Lecture /SGD        | Written / viva voce       |  |                     |  |
| 22.3.8                                                                                                                                                | Outline the management of a child with Kawasaki Disease.                                                                                   | K        | KH        | N        | Lecture /SGD        | Written / viva voce       |  |                     |  |
| 22.3.9                                                                                                                                                | Define diagnostic criteria of SLE.                                                                                                         | K        | KH        | N        | Lecture /SGD        | Written / viva voce       |  |                     |  |
| 22.3.10                                                                                                                                               | Outline the management of a child with SLE.                                                                                                | K        | KH        | N        | Lecture /SGD        | Written / viva voce       |  |                     |  |
| 22.3.11                                                                                                                                               | Define diagnostic criteria of JIA.                                                                                                         | K        | KH        | N        | Lecture /SGD        | Written / viva voce       |  |                     |  |
| 22.3.12                                                                                                                                               | Outline the management of a child with JIA.                                                                                                | K        | KH        | N        | Lecture /SGD        | Written / viva voce       |  |                     |  |
| <b>Topic: Cardiovascular system- Heart Diseases</b> <b>Number of competencies: (18)</b> <b>Number of procedures that require certification: (NIL)</b> |                                                                                                                                            |          |           |          |                     |                           |  |                     |  |
| <b>PE 23.1</b>                                                                                                                                        | <b>Discuss the Hemodynamic changes, clinical presentation, complications and management of acyanotic Heart Diseases -VSD, ASD and PDA</b>  | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture /SGD</b> | <b>Written/ Viva voce</b> |  | <b>Physio, Path</b> |  |
| 23.1.1                                                                                                                                                | Explain and illustrate diagrammatically the hemodynamic changes seen in acyanotic congenital heart diseases viz VSD, ASD, PDA.             | K        | KH        | Y        | Lecture /SGD        | Written/Viva Voce         |  | Physio, Path        |  |
| 23.1.2                                                                                                                                                | Describe the signs and symptoms, timing of presentation of above acyanotic congenital heart diseases.                                      | K        | KH        | Y        | Lecture /SGD        | Written/Viva Voce         |  |                     |  |
| 23.1.3                                                                                                                                                | Enumerate the complications of acyanotic congenital heart diseases.                                                                        | K        | K         | Y        | Lecture /SGD        | Written/Viva Voce         |  |                     |  |
| 23.1.4                                                                                                                                                | Outline the medical management of congenital acyanotic heart disease as above.                                                             | K        | K         | Y        | Lecture /SGD        | Written/Viva Voce         |  |                     |  |
| 23.1.5                                                                                                                                                | Enumerate the surgical treatments for VSA, ASD, PDA.                                                                                       | K        | KH        | Y        | Lecture /SGD        | Written/Viva Voce         |  |                     |  |
| <b>PE 23.2</b>                                                                                                                                        | <b>Discuss the Hemodynamic changes, clinical presentation, complications and management of Cyanotic Heart Diseases – Fallot Physiology</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture /SGD</b> | <b>Written/Viva Voce</b>  |  | <b>Physio, Path</b> |  |
| 23.2.1                                                                                                                                                | Enumerate the essential components of Fallot Physiology and List the cardiac conditions with the Fallot Physiology.                        | K        | K         | Y        | Lecture /SGD        | Written/Viva Voce         |  |                     |  |
| 23.2.2                                                                                                                                                | Describe and illustrate diagrammatically the hemodynamic changes seen in Fallot Physiology cyanotic congenital heart diseases.             | K        | KH        | Y        | Lecture /SGD        | Written/Viva Voce         |  |                     |  |

|                |                                                                                                                     |          |           |          |                     |                          |  |                     |  |
|----------------|---------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|--------------------------|--|---------------------|--|
| 23.2.3         | Explain the clinical presentation and complications of Fallot Physiology cyanotic congenital heart diseases.        | K        | KH        | Y        | Lecture /SGD        | Written/Viva Voce        |  |                     |  |
| 23.2.5         | Describe a cyanotic spell and the pharmacological and non-pharmacological management of cyanotic spells.            | K        | KH        | Y        | Lecture /SGD        | Written/Viva Voce        |  |                     |  |
| 23.2.6         | Describe the treatment options for lesions with Fallot Physiology.                                                  | K        | KH        | Y        | Lecture /SGD        | Written/Viva Voce        |  |                     |  |
| <b>PE 23.3</b> | <b>Discuss the etiopathogenesis, clinical presentation and management of cardiac failure in infant and children</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture /SGD</b> | <b>Written/Viva Voce</b> |  | <b>Physio, Path</b> |  |
| 23.3.1         | Enumerate causes of congestive heart failure in children as per the age of presentation.                            | K        | K         | Y        | Lecture /SGD        | Written/Viva Voce        |  |                     |  |
| 23.3.2         | Describe the hemodynamic changes in congestive heart failure.                                                       | K        | KH        | Y        | Lecture /SGD        | Written/Viva Voce        |  |                     |  |
| 23.3.3         | Describe the signs and symptoms of left side, right side and combined congestive heart failure.                     | K        | K         | Y        | Lecture /SGD        | Written/Viva Voce        |  |                     |  |
| 23.3.4         | Enumerate the various management options available for congestive heart failure.                                    | K        | KH        | Y        | Lecture /SGD        | Written/Viva Voce        |  |                     |  |
| 23.3.5         | Explain the role of diuretics, inotropes, inodilators, and afterload reducing agents in treatment of CCF.           | K        | K         | Y        | Lecture /SGD        | Written/Viva Voce        |  |                     |  |
| <b>PE 23.4</b> | <b>Discuss the etiopathogenesis, clinical presentation and management of Acute Rheumatic Fever in children</b>      | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture /SGD</b> | <b>Written/Viva Voce</b> |  | <b>Physio, Path</b> |  |
| 23.4.1         | Explain the etiopathogenesis of Acute rheumatic fever.                                                              | K        | K         | Y        | Lecture /SGD        | Written/Viva Voce        |  |                     |  |
| 23.4.2         | Describe the modified Jones criteria to diagnose the Acute rheumatic fever.                                         | K        | K         | Y        | Lecture /SGD        | Written/Viva Voce        |  |                     |  |
| 23.4.3         | Describe laboratory changes in Acute rheumatic fever.                                                               | K        | K         | Y        | Lecture /SGD        | Written/Viva Voce        |  |                     |  |
| <b>PE 23.5</b> | <b>Discuss the clinical features, complications, diagnosis, management and prevention of Acute Rheumatic Fever</b>  | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture /SGD</b> | <b>Written/Viva Voce</b> |  | <b>Physio, Path</b> |  |
| 23.5.1         | Describe the clinical features of acute rheumatic fever.                                                            | K        | K         | Y        | Lecture /SGD        | Written/Viva Voce        |  |                     |  |
| 23.5.2         | List the long-term complications of Acute Rheumatic fever.                                                          | K        | K         | Y        | Lecture /SGD        | Written/Viva Voce        |  |                     |  |

|                |                                                                                                                                                                                                                                                                                                  |          |           |          |                            |                                  |  |                            |  |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------|----------------------------------|--|----------------------------|--|
| 23.5.3         | Outline the medical management of acute rheumatic fever.                                                                                                                                                                                                                                         | K        | K         | Y        | Lecture /SGD               | Written/Viva Voce                |  |                            |  |
| 23.5.4         | Discuss strategies for the primary and secondary prevention of the acute rheumatic fever.                                                                                                                                                                                                        | K        | K         | Y        | Lecture /SGD               | Written/Viva Voce                |  |                            |  |
| <b>PE 23.6</b> | <b>Discuss the etiopathogenesis, clinical features and management of Infective endocarditis in children</b>                                                                                                                                                                                      | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture /SGD</b>        | <b>Written/Viva Voce</b>         |  | <b>Physio, Path, Micro</b> |  |
| 23.6.1         | Enumerate the common predisposing conditions and etiopathogenesis of Infective endocarditis in children.                                                                                                                                                                                         | K        | KH        | Y        | Lecture /SGD               | Written/Viva Voce                |  |                            |  |
| 23.6.2         | List criteria used to diagnose Infective endocarditis.                                                                                                                                                                                                                                           | K        | KH        | Y        | Lecture /SGD               | Written/Viva Voce                |  |                            |  |
| 23.6.3         | Describe the clinical features of infective endocarditis in children.                                                                                                                                                                                                                            | K        | KH        | Y        | Lecture /SGD               | Written/Viva Voce                |  |                            |  |
| 23.6.4         | Outline the management of infective endocarditis in children.                                                                                                                                                                                                                                    | K        | KH        | Y        | Lecture/ SGD               | Written /Viva voce               |  |                            |  |
| 23.6.5         | State the long-term complications of Infective endocarditis.                                                                                                                                                                                                                                     | K        | KH        | Y        | Lecture /SGD               | Written/Viva Voce                |  |                            |  |
| 23.6.6         | Enumerate the conditions requiring prophylaxis for infective endocarditis.                                                                                                                                                                                                                       | K        | K         | Y        | Lecture /SGD               | Written/Viva Voce                |  |                            |  |
| <b>PE 23.7</b> | <b>Elicit appropriate history for a cardiac disease, analyze the symptoms e.g. breathlessness, chest pain, tachycardia, feeding difficulty, failing to thrive, reduced urinary output, swelling, syncope, cyanotic spells, Suck rest cycle, frontal swelling in infants.</b>                     | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b> | <b>Bed side/skill assessment</b> |  |                            |  |
| 23.7.1         | Elicit appropriate history relevant to the cardiac disease and analyze the importance of symptoms e.g. breathlessness, chest pain, tachycardia, feeding difficulty, failing to thrive, reduced urinary output, swelling, syncope, cyanotic spells, Suck rest cycle, frontal swelling in infants. | S        | SH        | Y        | Bedside, skills lab        | Bed side/skill assessment        |  |                            |  |
| 23.7.2         | Document and present the history taken in appropriate manner.                                                                                                                                                                                                                                    | S        | SH        | Y        | Bedside, skills lab        | Bed side/skill assessment        |  |                            |  |
| <b>PE 23.8</b> | <b>Identify external markers of a cardiac disease e.g. Cyanosis, Clubbing, dependent edema, dental caries, arthritis, erythema rash, chorea, subcutaneous nodules, Osler node, Janeway lesions and document</b>                                                                                  | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills Lab</b> | <b>Bed side/skill assessment</b> |  |                            |  |

|                 |                                                                                                                                                                                                                                                                                             |          |           |          |                            |                                  |  |  |  |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------|----------------------------------|--|--|--|
| 23.8.1          | Identify and document the external markers of heart disease in general physical examination e.g. Cyanosis, Clubbing, dependent edema, dental caries, arthritis, erythema rash, chorea, subcutaneous nodules, Osler node, Janeway lesions.                                                   | S        | SH        | Y        | Bedside, skills lab        | Bed side/skill assessment        |  |  |  |
| <b>PE 23.9</b>  | <b>Record pulse, blood pressure, temperature and respiratory rate and interpret as per the age</b>                                                                                                                                                                                          | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b> | <b>Bed side/skill assessment</b> |  |  |  |
| 23.9.1          | Record and demonstrate various parameters of the pulse.                                                                                                                                                                                                                                     | S        | SH        | Y        | Bedside, Skills lab        | OSCE /bedside assessment         |  |  |  |
| 23.9.2          | Record correctly the systolic and diastolic blood pressure using appropriate equipment.                                                                                                                                                                                                     | S        | SH        | Y        | Bedside/ skill lab         | OSCE /bedside assessment         |  |  |  |
| 23.9.3          | Use the age specific nomograms to interpret the BP readings.                                                                                                                                                                                                                                | S        | SH        | Y        | Bedside, Skills lab        | OSCE /bedside assessment         |  |  |  |
| 23.9.4          | Measure body temperature using a thermometer.                                                                                                                                                                                                                                               | S        | SH        | Y        | Bedside, Skills lab        | OSCE /bedside assessment         |  |  |  |
| 23.9.5          | Count the respiratory rate and interpret as per the age.                                                                                                                                                                                                                                    | S        | SH        | Y        | Bedside, Skills lab        | OSCE /bedside assessment         |  |  |  |
| <b>PE 23.10</b> | <b>Perform independently examination of the cardiovascular system – look for precordial bulge, pulsations in the precordium, JVP and its significance in children and infants, relevance of percussion in Pediatric examination, Auscultation and other system examination and document</b> | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b> | <b>Bed side/skill assessment</b> |  |  |  |
| 23.10.1         | Perform independent CVS examination looking for precordial bulge and pulsations, auscultation of areas of precordium.                                                                                                                                                                       | S        | SH        | Y        | Bedside, Skills lab        | Bedside, OSCE                    |  |  |  |
| 23.10.2         | Look for and measure JVP.                                                                                                                                                                                                                                                                   | S        | SH        | Y        | Bedside, Skills lab        | bedside assessment               |  |  |  |
| 23.10.3         | Describe relevance of percussion in the cardiovascular examination.                                                                                                                                                                                                                         | K        | K         | Y        | SGD                        | Viva                             |  |  |  |
| 23.10.4         | Document the findings of the cardiovascular and other system exam.                                                                                                                                                                                                                          | S        | SH        | Y        | Bedside, Skills lab        | Logbook                          |  |  |  |
| <b>PE 23.11</b> | <b>Develop a treatment plan and prescribe appropriate drugs including fluids in cardiac diseases, anti -failure drugs, and inotropic agents</b>                                                                                                                                             | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b> | <b>written/Viva voce</b>         |  |  |  |

|                 |                                                                                                                         |          |           |          |                                 |                                                      |  |               |  |
|-----------------|-------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------------------|------------------------------------------------------|--|---------------|--|
| 23.11.1         | Make an appropriate treatment plan for a child with cardiac disease including anti failure drugs, inotropes and fluids. | S        | SH        | Y        | Bedside class/paper cases       | OSCE/ Logbook                                        |  |               |  |
| <b>PE 23.12</b> | <b>Interpret a chest X ray and recognize Cardiomegaly</b>                                                               | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b>      | <b>Logbook entry</b>                                 |  | <b>RadioD</b> |  |
| 23.12.1         | Calculate cardio thoracic ratio and interpret according to age.                                                         | S        | SH        | Y        | Bedside, Skills lab             | viva voce, OSCE                                      |  | <b>RadioD</b> |  |
| 23.12.2         | State features of cardiomegaly on the chest X-ray.                                                                      | S        | SH        | Y        | Bedside, Skills lab             | OSCE, viva voce                                      |  | <b>RadioD</b> |  |
| 23.12.3         | Identify the pathognomonic radiological features of various congenital heart diseases on chest x ray.                   | S        | SH        | Y        | Bedside, Skills lab             | OSCE, viva voce                                      |  |               |  |
| 23.12.4         | Identify pleural effusion and the pulmonary edema on a chest X-ray.                                                     | S        | SH        | Y        | Bedside, Skills lab             | OSCE, viva voce                                      |  |               |  |
| <b>PE 23.13</b> | <b>Choose and Interpret blood reports in Cardiac illness</b>                                                            | <b>S</b> | <b>P</b>  | <b>Y</b> | <b>Bedside, SGD</b>             | <b>Logbook entry</b>                                 |  |               |  |
| 23.13.1         | List blood tests relevant for the cardiac diseases.                                                                     | K        | KH        | Y        | Bedside, Skills lab             | viva voce                                            |  |               |  |
| 23.13.2         | Interpret the blood tests reports for the cardiac disease.                                                              | S        | SH        | Y        | Bedside, Skills lab             | viva voce, OSCE                                      |  |               |  |
| <b>PE 23.14</b> | <b>Interpret Pediatric ECG</b>                                                                                          | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b>      | <b>Logbook entry</b>                                 |  |               |  |
| 23.14.2         | Interpret few common ECG abnormalities in children.                                                                     | S        | SH        | Y        | SGD, skill lab                  | OSCE, viva voce                                      |  |               |  |
| <b>PE 23.15</b> | <b>Use the ECHO reports in management of cases</b>                                                                      | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside</b>                  | <b>Logbook entry</b>                                 |  | <b>Cardio</b> |  |
| 23.15.1         | Use the ECHO reports in management of cases.                                                                            | S        | SH        | Y        | Bedside, Skills lab             | Logbook entry                                        |  |               |  |
| <b>PE 23.16</b> | <b>Discuss the indications and limitations of Cardiac catheterization</b>                                               | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture/ SGD</b>             | <b>Written/ Viva Voce</b>                            |  |               |  |
| <b>23.16.1</b>  | Enumerate the indications of Cardiac catheterization.                                                                   | <b>K</b> | <b>K</b>  | <b>Y</b> | Lecture/ SGD                    | Written/ Viva Voce                                   |  |               |  |
| <b>23.16.2</b>  | List the limitations of Cardiac catheterization.                                                                        | <b>K</b> | <b>K</b>  | <b>Y</b> | Lecture/ SGD                    | Written/ Viva Voce                                   |  |               |  |
| <b>PE 23.17</b> | <b>Enumerate some common cardiac surgeries like BT shunt, Potts and Waterston's and corrective surgeries</b>            | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture/ SGD</b>             | <b>Written/ Viva Voce</b>                            |  |               |  |
| 23.17.1         | Enumerate common cardiac surgeries and their indications in children.                                                   | K        | K         | Y        | Lecture/ SGD                    | Written/ Viva Voce                                   |  |               |  |
| <b>PE 23.18</b> | <b>Demonstrate empathy while dealing with children with cardiac diseases in every patient encounter</b>                 | <b>A</b> | <b>SH</b> | <b>Y</b> | <b>SGD, Bedside, Skills lab</b> | <b>Document in Logbook, Direct observation, OSCE</b> |  | <b>AETCOM</b> |  |

|                                                                                                                                                    |                                                                                                                              |          |           |          |                               |                            |  |                    |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|-------------------------------|----------------------------|--|--------------------|--|
| 23.18.1                                                                                                                                            | Demonstrate empathy while dealing with children with cardiac diseases in every patient encounter.                            | A        | SH        | Y        | Bedside, Skills lab           | Direct observation, OSCE   |  | AETCOM             |  |
| 23.18.2                                                                                                                                            | Demonstrate empathy while dealing with parents of children with cardiac diseases in every contact.                           | A        | SH        | Y        | Bedside, Skills lab           | Direct observation, OSCE   |  | AETCOM             |  |
| <b>Topic: Diarrhoeal diseases and Dehydration</b> <b>Number of competencies: (17)</b> <b>Number of procedures that require certification: (03)</b> |                                                                                                                              |          |           |          |                               |                            |  |                    |  |
| <b>PE 24.1</b>                                                                                                                                     | <b>Discuss the etiopathogenesis, classification, clinical presentation and management of diarrheal diseases in children.</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b>           | <b>Written / viva voce</b> |  | <b>Path Micro</b>  |  |
| 24.1.1                                                                                                                                             | Explain etiopathogenesis of Diarrheal diseases in children.                                                                  | K        | K         | Y        | Lecture/ SGD                  | Written/ Viva Voce         |  | Path Micro         |  |
| 24.1.2                                                                                                                                             | Classify Diarrheal disease based on duration and etiology.                                                                   | K        | KH        | Y        | Lecture/ SGD                  | Written/ Viva Voce         |  | Path Micro         |  |
| 24.1.3                                                                                                                                             | Describe symptoms and signs of Diarrheal disease in children.                                                                | K        | KH        | Y        | Lecture/ SGD                  | Written/ Viva Voce         |  |                    |  |
| 24.1.4                                                                                                                                             | Enumerate investigations required for Diarrheal disease in children.                                                         | K        | K         | Y        | Lecture/ SGD                  | Written/ Viva Voce         |  | Path Micro         |  |
| 24.1.5                                                                                                                                             | Outline the treatment plan of Diarrheal disease in children.                                                                 | K        | KH        | Y        | Lecture/ SGD                  | Written/ Viva Voce         |  |                    |  |
| <b>PE 24.2</b>                                                                                                                                     | <b>Discuss the classification and clinical presentation of various types of diarrheal dehydration</b>                        | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture / SGD</b>          | <b>Written / viva voce</b> |  | <b>Path, Micro</b> |  |
| 24.2.1                                                                                                                                             | Enumerate all the signs and symptoms of dehydration in children.                                                             | K        | K         | Y        | Lecture/ Small group activity | Written/ Viva Voce         |  |                    |  |
| 24.2.2                                                                                                                                             | Classify dehydration as per WHO guidelines.                                                                                  | K        | KH        | Y        | Lecture/ SGD                  | Written/Viva Voce          |  |                    |  |
| 24.2.3                                                                                                                                             | Enumerate the clinical features of dehydration of different severity.                                                        | K        | KH        | Y        | Lecture/ SGD                  | Written/Viva Voce          |  |                    |  |
| <b>PE 24.3</b>                                                                                                                                     | <b>Discuss the physiological basis of ORT, types of ORS and the composition of various types of ORS in children</b>          | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b>           | <b>Written/ viva voce</b>  |  |                    |  |

|                |                                                                                                                                    |          |           |          |                      |                            |            |                     |  |
|----------------|------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------|----------------------------|------------|---------------------|--|
| 24.3.1         | Explain pathophysiology of fluid and electrolyte loss in Diarrheal diseases.                                                       | K        | KH        | Y        | Lecture/ SGD         | Written/Viva voce          |            |                     |  |
| 24.3.2         | State the basis of fluid and electrolyte replacement in Diarrheal diseases.                                                        | K        | KH        | Y        | Lecture/ SGD         | Written/Viva voce          |            |                     |  |
| 24.3.3         | Recall composition of WHO standard ORS.                                                                                            | K        | KH        | Y        | Lecture/ SGD         | Written/Viva voce          |            |                     |  |
| 24.3.4         | Recall composition of other type of ORS viz ResoMal, Low osmolarity ORS.                                                           | K        | KH        | Y        | Lecture/ SGD         | Written/Viva voce          |            |                     |  |
| <b>PE 24.4</b> | <b>Discuss the types of fluid used in Pediatric diarrheal diseases and their composition</b>                                       | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture / SGD</b> | <b>Written/ viva voce</b>  |            |                     |  |
| 24.4.1         | Enumerate the types of fluids used in management of dehydration in children.                                                       | K        | K         | Y        | Lecture SGD          | Written / Viva voce        |            |                     |  |
| 24.4.2         | Describe the composition of Ringer lactate and Normal saline and rationale of their use in correction of dehydration.              | K        | K         | Y        | Lecture SGD          | Written / Viva voce        |            |                     |  |
| <b>PE 24.5</b> | <b>Discuss the role of antibiotics, antispasmodics, anti-secretory drugs, probiotics, anti-emetics in acute diarrheal diseases</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture / SGD</b> | <b>Written / viva voce</b> |            | <b>Pharm, Micro</b> |  |
| 24.5.1         | Describe harmful practices in treatment of diarrheal diseases in children                                                          | K        | KH        | Y        | Lecture SGD          | Written / Viva voce        |            |                     |  |
| 24.5.2         | Enumerate the indications of antibiotic therapy in diarrheal diseases in children                                                  | K        | K         | Y        | Lecture SGD          | Written / Viva voce        |            |                     |  |
| 24.5.3         | Describe role, dosage and duration of Zinc therapy in Diarrheal diseases in children                                               | K        | KH        | Y        | Lecture SGD          | Written / Viva voce        |            |                     |  |
| 24.5.4         | Interpret selective role of probiotics, anti-secretory drugs, antispasmodics and antiemetics in acute diarrheal diseases.          | K        | KH        | Y        | Lecture SGD          | Written / Viva voce        |            |                     |  |
| <b>PE 24.6</b> | <b>Discuss the causes, clinical presentation and management of persistent diarrhea in children</b>                                 | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture / SGD</b> | <b>Written/ viva voce</b>  | <b>Nil</b> | <b>Micro</b>        |  |
| 24.6.1         | Define Persistent diarrhea in children.                                                                                            | K        | KH        | Y        | Lecture SGD          | Written and viva voce      |            |                     |  |
| 24.6.2         | Enumerate causes of persistent diarrhea in children.                                                                               | K        | KH        | Y        | SGD                  | Written and viva voce      |            |                     |  |
| 24.6.3         | Describe clinical presentation in child with persistent diarrhea.                                                                  | K        | KH        | Y        | Lecture SGD          | Written and viva voce      |            |                     |  |

|                |                                                                                                  |          |           |          |                           |                                             |            |                     |  |
|----------------|--------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------------|---------------------------------------------|------------|---------------------|--|
| 24.6.4         | List investigations in persistent diarrhea.                                                      | K        | KH        | Y        | Lecture SGD               | Written and viva voce                       |            |                     |  |
| 24.6.5         | Outline the treatment plan in persistent diarrhea.                                               | K        | KH        | Y        | Lecture SGD               | Written and viva voce                       |            |                     |  |
| <b>PE 24.7</b> | <b>Discuss the causes, clinical presentation and management of chronic diarrhea in children.</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture / SGD</b>      | <b>Written / via voce</b>                   |            |                     |  |
| 24.7.1.        | Define chronic diarrhea in children.                                                             | K        | KH        | Y        | Lecture /SGD              | Written/ viva                               |            |                     |  |
| 24.7.2         | Enumerate the common causes of chronic diarrhea in children.                                     | K        | K         | Y        | Lecture /SGD              | Written and viva voce                       |            |                     |  |
| 24.7.3         | Describe symptoms and signs of chronic diarrhea.                                                 | K        | KH        | Y        | Lecture /SGD              | Written and viva voce                       |            |                     |  |
| 24.7.4         | Enumerate investigations for chronic diarrhea.                                                   | K        | K         | Y        | Lecture /SGD              | Written and viva voce                       |            |                     |  |
| 24.7.5         | Outline treatment of chronic diarrhea.                                                           | K        | K         | Y        | Lecture /SGD              | Written and viva voce                       |            |                     |  |
| 24.7.6         | Identify need of referral in a case of chronic diarrhea.                                         | K        | KH        | Y        | Lecture /SGD              | Written and viva voce                       |            |                     |  |
| <b>PE 24.8</b> | <b>Discuss the causes, clinical presentation and management of dysentery in children</b>         | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture /SGD</b>       | <b>Written / viva voce</b>                  | <b>Nil</b> | <b>Pharm, Micro</b> |  |
| 24.8.1         | Define dysentery in children.                                                                    | K        | KH        | Y        | Lecture /SGD              | Written, Viva voce                          |            |                     |  |
| 24.8.2         | Enumerate the etiological agents causing dysentery in children.                                  | K        | KH        | Y        | Lecture /SGD              | Written / viva                              |            | Micro               |  |
| 24.8.3         | Describe symptoms and signs of dysentery in children.                                            | K        | KH        | Y        | Lecture /SGD              | Written, Viva voce                          |            |                     |  |
| 24.8.4         | Outline the antibiotic therapy in children with dysentery.                                       | K        | KH        | Y        | Lecture/ SGD              | Written/viva                                |            | Pharm               |  |
| <b>PE 24.9</b> | <b>Elicit, document and present history pertaining to diarrheal diseases</b>                     | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skill lab</b> | <b>Clinical case/ OSCE/skill assessment</b> |            |                     |  |
| 24.9.1         | Elicit history for diarrheal diseases in children.                                               | S        | SH        | Y        | Bedside, Skill lab        | Clinical case/ OSCE/skill assessment        |            |                     |  |

|                   |                                                                                                           |          |           |          |                                          |                                        |  |              |  |
|-------------------|-----------------------------------------------------------------------------------------------------------|----------|-----------|----------|------------------------------------------|----------------------------------------|--|--------------|--|
| 24.9.2            | Document gathered information in history sheet.                                                           | S        | SH        | Y        | Bedside, Skill lab                       | clinical case/<br>skill<br>assessment  |  |              |  |
| 24.9.3            | Present the history pertaining to diarrheal diseases.                                                     | S        | SH        | Y        | Bedside, Skill lab                       | Clinical case,<br>skill<br>assessment, |  |              |  |
| <b>PE 24.10</b>   | <b>Assess for signs of dehydration, document and present</b>                                              | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, skill lab</b>                | <b>Skill<br/>Assessment</b>            |  |              |  |
| 24.10.1           | Assess clinical signs of dehydration.                                                                     | S        | SH        | Y        | Bedside, skill lab                       | Skill Assessment                       |  |              |  |
| 24.10.2           | Correlate clinical signs to severity of dehydration.                                                      | S        | SH        | Y        | Bedside, skill lab                       | Skill Assessment                       |  |              |  |
| 24.10.3           | Document and present the signs of dehydration pertaining to diarrheal diseases.                           | S        | SH        | Y        | Bedside, skill lab                       | Skill Assessment                       |  |              |  |
| <b>PE 24.11</b>   | <b>Apply the IMNCI guidelines in risk stratification of children with diarrheal dehydration and refer</b> | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside / skill lab</b>               | <b>Document in<br/>Logbook</b>         |  |              |  |
| 24.11.1           | Apply risk stratification of children with diarrheal dehydration as per IMNCI guidelines.                 | S        | SH        | Y        | Bedside / skill lab                      | Document in<br>Logbook                 |  |              |  |
| 24.11.2           | Identify need for referral in a case of diarrheal dehydration based on risk stratification as per IMNCI.  | S        | SH        | Y        | Bedside, Skill lab                       | Document in<br>Logbook                 |  |              |  |
| <b>PE 24.12.1</b> | <b>Perform and interpret stool examination including Hanging Drop</b>                                     | <b>S</b> | <b>SH</b> | <b>N</b> | <b>Bedside, Skill lab</b>                | <b>Document in<br/>Logbook</b>         |  | <b>Micro</b> |  |
| 24.12.1           | Prepare slide for stool examination under microscope.                                                     | S        | SH        | N        | Bedside, Skill lab                       | Document in<br>Logbook                 |  |              |  |
| 24.12.2           | Correctly identify pathogen after microscopic examination of stool.                                       | S        | SH        | N        | Bedside, Skill lab                       | Document in<br>Logbook                 |  |              |  |
| 24.12.3           | Correctly perform hanging drop preparation from stool sample given.                                       | S        | SH        | N        | Bedside, Skill lab                       | Document in<br>Logbook                 |  |              |  |
| <b>PE 24.13</b>   | <b>Interpret RFT and electrolyte report</b>                                                               | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside/ skill lab/<br/>SGD</b>       | <b>Document in<br/>Logbook</b>         |  |              |  |
| 24.13.1           | Interpret the given reports for values of urea, creatinine, sodium and potassium.                         | S        | SH        | Y        | Bedside/ skill lab/<br>SGD               | Document in<br>Logbook                 |  |              |  |
| <b>PE 24.14</b>   | <b>Plan fluid management as per the WHO criteria</b>                                                      | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Small<br/>group activity</b> | <b>Skill lab</b>                       |  |              |  |

|                 |                                                                                                                                                                 |          |          |          |                               |                            |          |  |  |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------|-------------------------------|----------------------------|----------|--|--|
| 24.14.1         | Select appropriate type of fluid and Calculate amount, route and duration of therapy of fluid to be given as per Plan A, for a given age and weight of a child. | S        | SH       | Y        | Bedside, Small group activity | Skill lab                  |          |  |  |
| 24.14.2         | Select appropriate type of fluid and Calculate amount, route and duration of therapy of fluid to be given as per Plan B, for a given age and weight of a child. | S        | SH       | Y        | Bedside, Small group activity | Skill lab                  |          |  |  |
| 24.14.3         | Select appropriate type of fluid and Calculate amount, route and duration of therapy of fluid to be given as per Plan C for age and weight of a child.          | S        | SH       | Y        | Bedside, Small group activity | Skill lab                  |          |  |  |
| <b>PE 24.15</b> | <b>Perform NG tube insertion in a manikin</b>                                                                                                                   | <b>S</b> | <b>P</b> | <b>Y</b> | <b>DOAP session</b>           | <b>Document in Logbook</b> | <b>2</b> |  |  |
| 24.15.1         | Identify size of nasogastric tube as per age of child.                                                                                                          | S        | P        | Y        | DOAP session                  | Document in Logbook        | 2        |  |  |
| 24.15.2         | Demonstrate landmarks for measurement of length of NG tube to be inserted on a manikin.                                                                         | S        | P        | Y        | DOAP session                  | Document in Logbook        | 2        |  |  |
| 24.15.3         | Correctly measure the length of NG tube to be inserted.                                                                                                         | S        | P        | Y        | DOAP session                  | Document in Logbook        | 2        |  |  |
| 24.15.4         | Insert the tube and check its position.                                                                                                                         | S        | P        | Y        | DOAP session                  | Document in Logbook        | 2        |  |  |
| 24.15.5         | Demonstrates all the steps to check correct position of NG tube and fix NG tube.                                                                                | S        | P        | Y        | DOAP session                  | Document in Logbook        | 2        |  |  |
| <b>PE 24.16</b> | <b>Perform IV cannulation in a model</b>                                                                                                                        | <b>S</b> | <b>P</b> | <b>Y</b> | <b>DOAP session</b>           | <b>Document in Logbook</b> | <b>2</b> |  |  |
| 24.16.1         | Identify size of IV cannula as per age of child.                                                                                                                | S        | P        | Y        | DOAP session                  | Document in Logbook        | 2        |  |  |
| 24.16.2         | Demonstrate all steps of infection control policy like handwashing, wearing gloves, proper filling of fluid in syringe.                                         | S        | P        | Y        | DOAP session                  | Document in Logbook        | 2        |  |  |
| 24.16.3         | Demonstrate common sites for IV cannulation in children and preparation of site.                                                                                | S        | P        | Y        | DOAP session                  | Document in Logbook        | 2        |  |  |
| 24.16.4         | Correctly insert IV cannula in a model and look for free flow of blood.                                                                                         | S        | P        | Y        | DOAP session                  | Document in Logbook        | 2        |  |  |
| 24.16.5         | Properly fix IV cannula and correctly demonstrate disposal of biomedical waste.                                                                                 | S        | P        | Y        | DOAP session                  | Document in Logbook        | 2        |  |  |

|                                                                                                                                                   |                                                                                                                                                 |          |           |          |                     |                            |          |                   |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|----------------------------|----------|-------------------|--|
| <b>PE 24.17</b>                                                                                                                                   | <b>Perform Interosseous insertion model</b>                                                                                                     | <b>S</b> | <b>P</b>  | <b>Y</b> | <b>DOAP session</b> | <b>Document in Logbook</b> | <b>2</b> |                   |  |
| 24.17.1                                                                                                                                           | Identify site for intraosseous insertion in children based on landmarks.                                                                        | S        | P         | Y        | DOAP session        | Document in Logbook        | 2        |                   |  |
| 24.17.2                                                                                                                                           | Demonstrate all steps of infection control.                                                                                                     | S        | P         | Y        | DOAP session        | Document in Logbook        | 2        |                   |  |
| 24.17.3                                                                                                                                           | Insert the Intraosseous cannula and demonstrate how to check its proper insertion in model.                                                     | S        | P         | Y        | DOAP session        | Document in Logbook        | 2        |                   |  |
| 24.17.4                                                                                                                                           | Fix Intraosseous cannula and correctly demonstrate disposal of biomedical waste.                                                                | S        | P         | Y        | DOAP session        | Document in Logbook        | 2        |                   |  |
| <b>Topic: Malabsorption</b> <b>Number of competencies: (1)</b> <b>Number of procedures that require certification: (NIL)</b>                      |                                                                                                                                                 |          |           |          |                     |                            |          |                   |  |
| <b>PE 25.1</b>                                                                                                                                    | <b>Discuss the etiopathogenesis, clinical presentation and management of Malabsorption in Children and its causes including celiac disease.</b> | <b>K</b> | <b>KH</b> | <b>N</b> | <b>Lecture /SGD</b> | <b>Written/ viva voce</b>  |          | <b>Path</b>       |  |
| 25.1.1                                                                                                                                            | Define malabsorption in children.                                                                                                               | K        | K         | N        | Lecture /SGD        | Written/ Viva Voce         |          |                   |  |
| 25.1.2                                                                                                                                            | Enumerate causes of malabsorption in children.                                                                                                  | K        | KH        | N        | Lecture /SGD        | Written/ Viva Voce         |          |                   |  |
| 25.1. 3                                                                                                                                           | Describe etiopathogenesis of malabsorption in children.                                                                                         | K        | K         | N        | Lecture /SGD        | Written/ Viva Voce         |          |                   |  |
| 25.1.4                                                                                                                                            | Describe common symptoms and signs of malabsorption in children.                                                                                | K        | K         | N        | Lecture /SGD        | Written/ Viva Voce         |          |                   |  |
| 25.1.5                                                                                                                                            | Describe presentations of celiac disease in children.                                                                                           | K        | KH        | N        | Lecture /SGD        | Written/ Viva Voce         |          |                   |  |
| 25.1.6                                                                                                                                            | Enumerate investigations in case of celiac disease.                                                                                             | K        | K         | N        | Lecture /SGD        | Written/ Viva Voce         |          |                   |  |
| 25.1.7                                                                                                                                            | Enumerate steps of treatment plan in case of celiac disease.                                                                                    | K        | K         | N        | Lecture /SGD        | Written/ Viva Voce         |          |                   |  |
| <b>Topic: Acute and chronic liver disorders</b> <b>Number of competencies: (13)</b> <b>Number of procedures that require certification: (NIL)</b> |                                                                                                                                                 |          |           |          |                     |                            |          |                   |  |
| <b>PE 26.1</b>                                                                                                                                    | <b>Discuss the etiopathogenesis, clinical features and management of acute hepatitis in children</b>                                            | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture/ SGD</b> | <b>Written/ Viva Voce</b>  |          | <b>Path Micro</b> |  |
| 26.1.1                                                                                                                                            | Define Acute Hepatitis in children.                                                                                                             | K        | K         | Y        | Lecture/ SGD        | Written/ Viva Voce         |          |                   |  |

|                |                                                                                                                |          |          |          |                               |                          |  |                   |  |
|----------------|----------------------------------------------------------------------------------------------------------------|----------|----------|----------|-------------------------------|--------------------------|--|-------------------|--|
| 26.1.2         | Enumerate common causes of Acute Hepatitis in children.                                                        | K        | K        | Y        | Lecture/ SGD                  | Written/ Viva Voce       |  |                   |  |
| 26.1.3         | Describe pathogenesis of Acute Hepatitis in children.                                                          | K        | KH       | Y        | Lecture/ SGD                  | Written/ Viva Voce       |  |                   |  |
| 26.1.4         | Describe the clinical features and complications of Acute Hepatitis.                                           | K        | KH       | Y        | Lecture/ SGD                  | Written/ Viva Voce       |  |                   |  |
| 26.1.5         | List the investigations required for diagnosis of Acute Hepatitis.                                             | K        | KH       | Y        | Lecture/ SGD                  | Written/ Viva Voce       |  |                   |  |
| 26.1.6         | Describe the management and prevention of Acute Hepatitis.                                                     | K        | KH       | Y        | Lecture/ SGD                  | Written/ Viva Voce       |  |                   |  |
| <b>PE 26.2</b> | <b>Discuss the etiopathogenesis, clinical features and management of Fulminant Hepatic Failure in children</b> | <b>K</b> | <b>K</b> | <b>Y</b> | <b>Lecture/ SGD</b>           | <b>Written/Viva Voce</b> |  | <b>Path Micro</b> |  |
| 26.2.1         | Define Fulminant Hepatic Failure in Children.                                                                  | K        | K        | Y        | Lecture/ SGD                  | Written/Viva Voce        |  |                   |  |
| 26.2.2         | Enumerate the factors which precipitate Fulminant Hepatic Failure.                                             | K        | K        | Y        | Lecture/ SGD                  | Written/Viva Voce        |  |                   |  |
| 26.2.3         | Describe the pathogenesis of Fulminant Hepatic Failure.                                                        | K        | KH       | Y        | Lecture/ SGD                  | Written/Viva Voce        |  |                   |  |
| 26.2.4         | Describe the clinical features of Fulminant Hepatic Failure.                                                   | K        | KH       | Y        | Lecture/ SGD                  | Written/Viva Voce        |  |                   |  |
| 26.2.5         | Enumerate the investigations for a child with Fulminant Hepatic Failure.                                       | K        | KH       | Y        | Lecture/ Small group activity | Written/Viva Voce        |  |                   |  |
| 26.2.6         | Describe the management of Fulminant Hepatic Failure.                                                          | K        | KH       | Y        | Lecture/ Small group activity | Written/Viva Voce        |  |                   |  |
| <b>PE 26.3</b> | <b>Discuss the etiopathogenesis, clinical features and management of chronic liver diseases in children.</b>   | <b>K</b> | <b>K</b> | <b>Y</b> | <b>Lecture/ SGD</b>           | <b>Written/Viva voce</b> |  | <b>Path Micro</b> |  |
| 26.3.1         | Define Chronic Liver Disease in children.                                                                      | K        | K        | Y        | Lecture/ SGD                  | Written/Viva voce        |  |                   |  |
| 26.3.2         | Enumerate the causes of chronic liver diseases in children.                                                    | K        | K        | Y        | Lecture/ SGD                  | Written/Viva voce        |  |                   |  |
| 26.3.3         | Discuss the pathogenesis of common chronic Liver Diseases.                                                     | K        | KH       | Y        | Lecture/ SGD                  | Written/Viva voce        |  |                   |  |
| 26.3.4         | Describe the clinical features of chronic liver disease.                                                       | K        | KH       | Y        | Lecture/ SGD                  | Written/Viva voce        |  |                   |  |

|                |                                                                                                                                                                                                                     |          |           |          |                            |                                    |  |             |  |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------|------------------------------------|--|-------------|--|
| 26.3.5         | Enumerate the investigations for diagnosis of Chronic Liver Disease.                                                                                                                                                | K        | KH        | Y        | Lecture/ SGD               | Written/Viva voce                  |  |             |  |
| 26.3.6         | Describe the management of Chronic liver disease.                                                                                                                                                                   | K        | KH        | Y        | Lecture/ SGD               | Written/Viva voce                  |  |             |  |
| <b>PE 26.4</b> | <b>Discuss the etiopathogenesis, clinical features and management of Portal Hypertension in children</b>                                                                                                            | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture /SGD</b>        | <b>Written / Viva voce</b>         |  | <b>Path</b> |  |
| 26.4.1         | Define Portal Hypertension in children.                                                                                                                                                                             | K        | K         | Y        | Lecture /SGD               | Written / Viva voce                |  |             |  |
| 26.4.2         | Classify different types of portal hypertension.                                                                                                                                                                    | K        | K         | Y        | Lecture /SGD               | Written / Viva voce                |  |             |  |
| 26.4.3         | Enumerate the causes of portal hypertension.                                                                                                                                                                        | K        | K         | Y        | Lecture /SGD               | Written / Viva voce                |  |             |  |
| 26.4.4         | Explain the pathogenesis of portal hypertension.                                                                                                                                                                    | K        | KH        | Y        | Lecture /SGD               | Written / Viva voce                |  |             |  |
| 26.4.5         | Describe the clinical features of portal hypertension.                                                                                                                                                              | K        | KH        | Y        | Lecture /SGD               | Written / Viva voce                |  |             |  |
| 26.4.6         | Outline the management of portal hypertension.                                                                                                                                                                      | K        | KH        | Y        | Lecture /SGD               | Written / Viva voce                |  |             |  |
| <b>PE 26.5</b> | <b>Elicit document and present the history related to diseases of Gastrointestinal system</b>                                                                                                                       | <b>S</b> | <b>S</b>  | <b>Y</b> | <b>Bedside, Skills Lab</b> | <b>Skills station/bedside/OSCE</b> |  |             |  |
| 26.5.1         | Elicit the history for diseases of Gastrointestinal system.                                                                                                                                                         | S        | S         | Y        | Bedside, Skills Lab        | Skills station/bedside/OSCE        |  |             |  |
| 26.5.2         | Document the history.                                                                                                                                                                                               | S        | SH        | Y        | Bedside, Skills Lab        | Skills station                     |  |             |  |
| 26.5.3         | Present the history related to Gastrointestinal system.                                                                                                                                                             | S        | SH        | Y        | Bedside, Skills Lab        | Skills station/bedside             |  |             |  |
| <b>PE 26.6</b> | <b>Identify external markers for GI and Liver disorders e.g. Jaundice, Pallor, Gynecomastia, Spider angioma, Palmar erythema, Ichthyosis, Caput medusa, Clubbing, Failing to thrive, Vitamin A and D deficiency</b> | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills Lab</b> | <b>Skill Assessment/OSCE</b>       |  |             |  |
| 26.6.1         | Detect Jaundice, pallor, Gynecomastia, Spider angioma, clubbing, Caput medusa, Ichthyosis and failure to thrive, signs of vitamin deficiency.                                                                       | S        | SH        | Y        | Bedside, Skills Lab        | Skill Assessment/OSCE              |  |             |  |

|                 |                                                                                                       |          |           |          |                                   |                            |  |                          |  |
|-----------------|-------------------------------------------------------------------------------------------------------|----------|-----------|----------|-----------------------------------|----------------------------|--|--------------------------|--|
| PE 26.7         | <b>Perform examination of the abdomen, demonstrate organomegaly, ascites etc.</b>                     | S        | SH        | Y        | Bedside clinic, Skills Lab        | Skill Assessment           |  |                          |  |
| 26.7.1          | Perform an examination of the abdomen in children of different ages.                                  | S        | SH        | Y        | Bedside clinic, Skills Lab        | Skill Assessment           |  |                          |  |
| 26.7.2          | Detect organomegaly on abdominal examination giving details of the affected organ/s.                  | S        | SH        | Y        | Bedside clinic, Skills Lab        | Bedside/ skill lab/OSCE    |  |                          |  |
| 26.7.3          | Examine for ascites in children.                                                                      | S        | SH        | Y        | Bedside clinic, Skills Lab        | Skill Assessment           |  |                          |  |
| 26.7.4          | Examine for other palpable masses in abdomen.                                                         | S        | SH        | Y        | Bedside clinic, Skills Lab        | Skill Assessment           |  |                          |  |
| <b>PE 26.8</b>  | <b>Analyze symptoms and interpret physical signs to make a provisional/ differential diagnosis</b>    | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside clinic, Skills Lab</b> | <b>Skill Assessment</b>    |  |                          |  |
| 26.8.1          | Analyze the symptoms in a child with gastrointestinal disorder.                                       | S        | SH        | Y        | Bedside clinic, Skills Lab        | Skill Assessment           |  |                          |  |
| 26.8.2          | Interpret the physical signs in a child with gastrointestinal disorder.                               | S        | SH        | Y        | Bedside clinic, Skills Lab        | Skill Assessment           |  |                          |  |
| 26.8.3          | Formulate a provisional and differential diagnosis related to clinical presentation.                  | S        | SH        | Y        | Bedside clinic, Skills Lab        | Skill Assessment           |  |                          |  |
| <b>PE 26.9</b>  | <b>Interpret Liver Function Tests, viral markers, Ultra sonogram report</b>                           | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside / skill lab</b>        | <b>Bedside/ OSCE</b>       |  | <b>Path Biochemistry</b> |  |
| 26.9.1          | Interpret the given reports of liver function tests.                                                  | S        | SH        | Y        | Bedside / skill lab               | Bedside/ OSCE              |  |                          |  |
| 26.9.2          | Interpret the viral markers related to viral hepatitis.                                               | S        | SH        | Y        | Bedside / skill lab               | Bedside/ OSCE              |  |                          |  |
| 26.9.3          | Interpret the given report of abdominal/ liver Ultrasonography.                                       | S        | SH        | Y        | Bedside clinic, Skills Lab        | Skill Assessment           |  |                          |  |
| <b>PE 26.10</b> | <b>Demonstrate the technique of liver biopsy in a Perform Liver Biopsy in a simulated environment</b> | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>DOAP</b>                       | <b>Document in Logbook</b> |  |                          |  |
| 26.10.1         | Demonstrate the technique of liver biopsy in a simulated environment.                                 | S        | SH        | Y        | DOAP                              | Document in Logbook        |  |                          |  |
| <b>PE 26.11</b> | <b>Enumerate the indications for Upper GI endoscopy</b>                                               | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture /SGD</b>               | <b>Written, Viva voce</b>  |  |                          |  |
| 26.11.1         | Enumerate the indications of upper GI endoscopy in children.                                          | K        | KH        | Y        | Lecture /SGD                      | Written, Viva voce         |  |                          |  |

|                                                                                                                                                                     |                                                                                                                |            |           |          |                                   |                            |  |              |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------|-----------|----------|-----------------------------------|----------------------------|--|--------------|--|
| <b>PE 26.12</b>                                                                                                                                                     | <b>Discuss the prevention of Hep B infection – Universal precautions and Immunization</b>                      | <b>K</b>   | <b>K</b>  | <b>Y</b> | <b>Lecture /SGD</b>               | <b>Written, Viva voce</b>  |  | <b>Micro</b> |  |
| 26.12.1                                                                                                                                                             | Enumerate different preventive measures against hepatitis B virus infection.                                   | K          | K         | Y        | Lecture /SGD                      | Written, Viva voce         |  |              |  |
| 26.12.2                                                                                                                                                             | List universal precautions.                                                                                    | K          | KH        | Y        | Lecture /SGD                      | Written, Viva voce         |  |              |  |
| 26.12.3                                                                                                                                                             | Describe the immunization schedule of Hepatitis B.                                                             | K          | KH        | Y        | Lecture /SGD                      | Written/Viva voce          |  |              |  |
| <b>PE 26.13</b>                                                                                                                                                     | <b>Counsel and educate patients and their family appropriately on liver diseases</b>                           | <b>A/C</b> | <b>P</b>  | <b>Y</b> | <b>Bedside clinic, Skills Lab</b> | <b>Document in Logbook</b> |  |              |  |
| 26.13.1                                                                                                                                                             | Counsel the family on liver disease in the child.                                                              | A/C        | SH        | Y        | Bedside clinic Skills Lab         | Document in Logbook        |  |              |  |
| 26.13.2                                                                                                                                                             | Educate the family about prevention of liver disease.                                                          | A/C        | P         | Y        | Bedside clinic, Skills Lab        | Document in Logbook        |  |              |  |
| <b>Topic: Pediatric Emergencies – Common Pediatric Emergencies</b> <b>Number of competencies: (35)</b> <b>Number of procedures that require certification: (10)</b> |                                                                                                                |            |           |          |                                   |                            |  |              |  |
| <b>PE 27.1</b>                                                                                                                                                      | <b>List the common causes of morbidity and mortality in the under five children</b>                            | <b>K</b>   | <b>K</b>  | <b>Y</b> | <b>Lecture /SGD</b>               | <b>Written/viva-voce</b>   |  |              |  |
| 27.1.1                                                                                                                                                              | Enumerate the common causes of morbidity and mortality in under five children.                                 | K          | K         | Y        | Lecture /SGD                      | Written /viva              |  |              |  |
| <b>PE 27.2</b>                                                                                                                                                      | <b>Describe the etiopathogenesis, clinical approach and management of cardiorespiratory arrest in children</b> | <b>K</b>   | <b>KH</b> | <b>Y</b> | <b>Lecture /SGD</b>               | <b>Written/ Viva voce</b>  |  |              |  |
| 27.2.1                                                                                                                                                              | Enumerate the causes of cardiorespiratory arrest in children.                                                  | K          | K         | Y        | Lecture /SGD                      | Written/ Viva voce         |  |              |  |
| 27.2.2                                                                                                                                                              | Discuss the pathogenesis of respiratory and cardiac failure leading to cardiorespiratory arrest.               | K          | KH        | Y        | Lecture /SGD                      | Written/ Viva voce         |  |              |  |
| 27.2.3                                                                                                                                                              | Describe the clinical approach to a child in cardiorespiratory arrest.                                         | K          | KH        | Y        | Lecture /SGD                      | Written/ Viva voce         |  |              |  |
| 27.2.4                                                                                                                                                              | Describe the management of a child in cardiorespiratory arrest.                                                | K          | KH        | Y        | Lecture /SGD                      | Written/ Viva voce         |  |              |  |
| <b>PE 27.3</b>                                                                                                                                                      | <b>Describe the etiopathogenesis of respiratory distress in children</b>                                       | <b>K</b>   | <b>KH</b> | <b>Y</b> | <b>Lecture /SGD</b>               | <b>Written/ Viva voce</b>  |  |              |  |
| 27.3.1                                                                                                                                                              | Enumerate the causes of respiratory distress in children of different age groups.                              | K          | K         | Y        | Lecture /SGD                      | Written/ Viva voce         |  |              |  |

|                |                                                                                                                                                             |          |           |          |                     |                           |  |  |  |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|---------------------------|--|--|--|
| 27.3.2         | Explain the pathogenesis of respiratory distress in children.                                                                                               | K        | KH        | Y        | Lecture /SGD        | Written/ Viva voce        |  |  |  |
| <b>PE 27.4</b> | <b>Describe the clinical approach and management of respiratory distress in children</b>                                                                    | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture /SGD</b> | <b>Written/ Viva voce</b> |  |  |  |
| 27.4.1         | Discuss the clinical approach based on history, examination and investigation algorithm of children of different ages presenting with respiratory distress. | K        | KH        | Y        | Lecture /SGD        | Written/ Viva voce        |  |  |  |
| 27.4.2         | Outline the treatment in children with respiratory distress.                                                                                                | K        | KH        | Y        | Lecture /SGD        | Written/ Viva voce        |  |  |  |
| <b>PE 27.5</b> | <b>Describe the etiopathogenesis, clinical approach and management of Shock in children</b>                                                                 | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture /SGD</b> | <b>Written/ Viva voce</b> |  |  |  |
| 27.5.1         | Define shock including different types of shock.                                                                                                            | K        | KH        | Y        | Lecture /SGD        | Written/ Viva voce        |  |  |  |
| 27.5.2         | Enumerate the causes leading to different types of shock viz hypovolemic, septic and cardiogenic shock.                                                     | K        | K         | Y        | Lecture /SGD        | Written/ Viva voce        |  |  |  |
| 27.5.3         | Explain pathogenesis of different types of shock in children.                                                                                               | K        | KH        | Y        | Lecture /SGD        | Written/ Viva voce        |  |  |  |
| 27.5.4         | Describe clinical approach to identify different types of shock.                                                                                            | K        | KH        | Y        | Lecture /SGD        | Written/ Viva voce        |  |  |  |
| 27.5.4         | Outline an algorithm approach to the management of different types of shock in children.                                                                    | K        | KH        | Y        | Lecture /SGD        | Written/ Viva voce        |  |  |  |
| <b>PE 27.6</b> | <b>Describe the etiopathogenesis, clinical approach and management of Status epilepticus</b>                                                                | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture /SGD</b> | <b>Written/ Viva voce</b> |  |  |  |
| 27.6.1         | Define Status epilepticus.                                                                                                                                  | K        | K         | Y        | Lecture /SGD        | Written/ Viva voce        |  |  |  |
| 27.6.2         | Discuss the pathogenesis of status epilepticus in children.                                                                                                 | K        | KH        | Y        | Lecture /SGD        | Written/ Viva voce        |  |  |  |
| 27.6.3         | Discuss the underlying diagnosis based on clinical history, examination and investigation algorithm in a child with status epilepticus.                     | K        | KH        | Y        | Lecture /SGD        | Written/ Viva voce        |  |  |  |
| 27.6.4         | Outline the treatment algorithm as per recent guidelines in a child with status epilepticus.                                                                | K        | KH        | Y        | Lecture /SGD        | Written/ Viva voce        |  |  |  |
| <b>PE 27.7</b> | <b>Describe the etiopathogenesis, clinical approach and management of an unconscious child</b>                                                              | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  |  |  |

|                 |                                                                                                                                      |          |           |          |                                        |                            |  |  |  |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------------------|----------------------------|--|--|--|
| PE 27.7.1       | Define different levels of consciousness in children.                                                                                | K        | KH        | Y        | Lecture /SGD                           | Written/ Viva voce         |  |  |  |
| 27.7.2          | Enumerate the causes of altered sensorium/coma in children.                                                                          | K        | K         | Y        | Lecture /SGD                           | Written/ Viva voce         |  |  |  |
| 27.7.3          | Explain pathogenesis of altered sensorium/coma.                                                                                      | K        | KH        | Y        | Lecture /SGD                           | Written/ Viva voce         |  |  |  |
| 27.7.4          | Describe the clinical approach based on clinical history, examination in a child with altered sensorium/coma.                        | K        | KH        | Y        | Lecture /SGD                           | Written/ Viva voce         |  |  |  |
| 27.7.5          | List the investigations as guided by the clinical assessment of the patient.                                                         | K        | KH        | Y        | Lecture /SGD                           | Written/ Viva voce         |  |  |  |
| 27.7.4          | Outline the treatment plan for a comatose child.                                                                                     | K        | KH        | Y        | Lecture /SGD                           | Written/ Viva voce         |  |  |  |
| <b>PE 27.8</b>  | <b>Discuss the common types, clinical presentations and management of poisoning in children</b>                                      | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, Small group discussion</b> | <b>Written/ Viva voce</b>  |  |  |  |
| 27.8.1          | Enumerate the common poisoning in children.                                                                                          | K        | K         | Y        | Lecture /SGD                           | Written/ Viva voce         |  |  |  |
| 27.8.1          | Elaborate on the clinical sign and symptoms of common poisoning in children (kerosene, organophosphorus, paracetamol and corrosive). | K        | K         | Y        | Lecture /SGD                           | Written/ Viva voce         |  |  |  |
| 27.8.1          | Discuss the management of common poisoning in children (kerosene, organophosphorus, paracetamol and corrosive).                      | K        | KH        | Y        | Lecture /SGD                           | Written/ Viva voce         |  |  |  |
| <b>PE 27.9</b>  | <b>Discuss oxygen therapy, in Pediatric emergencies and modes of administration</b>                                                  | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture /SGD</b>                    | <b>Written/ Viva voce</b>  |  |  |  |
| 27.9.1          | Enumerate the indications of oxygen therapy in pediatric emergencies.                                                                | K        | K         | Y        | Lecture /SGD                           | Written/ Viva voce         |  |  |  |
| 27.9.2          | Describe different modalities for oxygen delivery.                                                                                   | K        | KH        | Y        | Lecture /SGD                           | Written/ Viva voce         |  |  |  |
| <b>PE 27.10</b> | <b>Observe the various methods of administering Oxygen</b>                                                                           | <b>S</b> | <b>KH</b> | <b>Y</b> | <b>Demonstration</b>                   | <b>Document in Logbook</b> |  |  |  |
| 27.10.1         | Observed and noted various methods of oxygen delivery.                                                                               | S        | KH        | Y        | Demonstration Bed side                 | Document in Logbook        |  |  |  |
| 27.10.2         | Monitor oxygen delivery in a patient.                                                                                                | S        | KH        | Y        | Demonstration Bed side                 | Document in Logbook        |  |  |  |

|                 |                                                                                                                                              |          |           |          |                                      |                                   |          |  |  |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|--------------------------------------|-----------------------------------|----------|--|--|
| <b>PE 27.11</b> | <b>Explain the need and process of triage of sick children brought to health facility</b>                                                    | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                  | <b>Written/ Viva voce</b>         |          |  |  |
| 27.11.1         | Discuss the need of triage of sick child especially in resource limited setting.                                                             | K        | KH        | Y        | Lecture, SGD                         | Written/ Viva voce                |          |  |  |
| 27.11.2         | Explain the process of triage of sick children.                                                                                              | K        | KH        | Y        | Lecture, SGD                         | Written/ Viva voce                |          |  |  |
| <b>PE 27.12</b> | <b>Enumerate emergency signs and priority signs</b>                                                                                          | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                  | <b>Written/ Viva voce</b>         |          |  |  |
| 27.12.1         | Enumerate various emergency and priority signs in a sick child.                                                                              | K        | K         | Y        | Lecture, SGD,                        | Written/ Viva voce                |          |  |  |
| <b>PE 27.13</b> | <b>List the sequential approach of assessment of emergency and priority signs</b>                                                            | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                  | <b>Written/ Viva voce</b>         |          |  |  |
| 27.13.1         | Discuss the systematic approach for assessing a sick child based on emergency and priority signs as per WHO – ETAT guidelines.               | K        | KH        | Y        | Lecture, SGD                         | Written/ Viva voce                |          |  |  |
| <b>PE 27.14</b> | <b>Assess emergency signs and prioritize</b>                                                                                                 | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>DOAP session, Skills lab</b>      | <b>Skills Assessment</b>          |          |  |  |
| 27.14.1         | Assess and recognize emergency signs in a sick child and prioritize treatment.                                                               | S        | SH        | Y        | Bedside, skill lab                   | Skill assessment                  |          |  |  |
| <b>PE 27.15</b> | <b>Assess airway and breathing: recognize signs of severe respiratory distress. Check for cyanosis, severe chest indrawing, grunting</b>     | <b>S</b> | <b>P</b>  | <b>Y</b> | <b>DOAP session, Skills lab</b>      | <b>Skills Assessment</b>          |          |  |  |
| 27.15.1         | Recognize signs of severe respiratory distress by assessing cyanosis, severe chest indrawing and grunting.                                   | S        | P         | Y        | Bed side, DOAP session               | skill assessment, OSCE with video | 3        |  |  |
| <b>PE 27.16</b> | <b>Assess airway and breathing. Demonstrate the method of positioning of an infant &amp; child to open airway in a simulated environment</b> | <b>S</b> | <b>P</b>  | <b>Y</b> | <b>DOAP session, Skills Lab</b>      | <b>Skills Assessment</b>          | <b>3</b> |  |  |
| 27.16.1         | Demonstrate the methods of opening the airway in infants and children by head tilt – chin lift and jaw thrust methods on mannequin.          | S        | P         | Y        | BLS training session using mannequin | OSCE using mannequin              | 3        |  |  |
| <b>PE 27.17</b> | <b>Assess airway and breathing: administer oxygen using correct technique and appropriate flow rate</b>                                      | <b>S</b> | <b>P</b>  | <b>Y</b> | <b>DOAP session, Skills Lab</b>      | <b>Skills Assessment</b>          | <b>3</b> |  |  |

|                 |                                                                                                                                               |          |          |          |                                 |                                               |          |  |  |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------|---------------------------------|-----------------------------------------------|----------|--|--|
| 27.17.1         | Demonstrate the appropriate use of various oxygen delivery systems in different clinical scenarios along with recommended flow rate of oxygen | S        | P        | Y        | DOAP session, Skills Lab        | Skill assessment, OSCE using mannequin        | 3        |  |  |
| <b>PE 27.18</b> | <b>Assess airway and breathing: perform assisted ventilation by Bag and mask in a simulated environment</b>                                   | <b>S</b> | <b>p</b> | <b>y</b> | <b>DOAP session, Skills Lab</b> | <b>Skill assessment, OSCE using mannequin</b> | <b>3</b> |  |  |
| 27.18.1         | Demonstrate assisted ventilation using bag and mask in a simulated environment                                                                | S        | P        | y        | DOAP session, Skills Lab        | Skill assessment, OSCE using mannequin        | 3        |  |  |
| <b>PE 27.19</b> | <b>Check for signs of shock i.e. pulse, Blood pressure, CRT</b>                                                                               | <b>S</b> | <b>p</b> | <b>y</b> | <b>DOAP session, Skills Lab</b> | <b>Skill assessment,</b>                      | <b>3</b> |  |  |
| 27.19.1         | Check pulse as a sign of shock.                                                                                                               | S        | P        | Y        | DOAP session, Skills Lab        | Skill assessment,                             | 3        |  |  |
| 27.19.2         | Measure blood pressure to check for shock.                                                                                                    | S        | P        | Y        | DOAP session, Skills Lab        | Skill assessment,                             | 3        |  |  |
| 27.19.3         | Assess CRT for checking for shock.                                                                                                            | S        | P        | Y        | DOAP session, Skills Lab        | Skill assessment                              | 3        |  |  |
| <b>PE 27.20</b> | <b>Secure an IV access in a simulated environment</b>                                                                                         | <b>S</b> | <b>P</b> | <b>Y</b> | <b>DOAP session, Skills Lab</b> | <b>Skill assessment,</b>                      | <b>3</b> |  |  |
| 27.20.1         | Collect all the necessary items for IV access.                                                                                                | S        | P        | Y        | DOAP session, Skills Lab        | Skill assessment                              | 3        |  |  |
| 27.20.2         | Identify an appropriate site and vein.                                                                                                        | S        | P        | Y        | DOAP session, Skills Lab        | Skill assessment                              | 3        |  |  |
| 27.20.3         | Obtain IV access in the manikin.                                                                                                              | S        | P        | Y        | DOAP session, Skills Lab        | Skill assessment                              | 3        |  |  |
| 27.20.4         | Secure the IV line appropriately.                                                                                                             | S        | P        | Y        | DOAP session, Skills Lab        | Skill assessment                              | 3        |  |  |
| 27.20.5         | Maintain asepsis throughout the procedure.                                                                                                    | S        | P        | Y        | DOAP session, Skills Lab        | Skill assessment                              | 3        |  |  |

IAP Task Force on Competency-based Curriculum for Pediatrics in UG education: Competencies to Specific Learning Objectives  
Competency statements (**in Bold**) are taken from the MCI document and not modifiable

|                 |                                                                                                                                                                                                                                                                                 |          |          |          |                                 |                           |          |  |  |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------|---------------------------------|---------------------------|----------|--|--|
| <b>PE 27.21</b> | <b>Choose the type of fluid and calculate the fluid requirement in shock</b>                                                                                                                                                                                                    | <b>S</b> | <b>P</b> | <b>Y</b> | <b>DOAP session, Skills Lab</b> | <b>Skill assessment</b>   | <b>3</b> |  |  |
| 27.21.1         | Choose appropriate fluid according to different types of shock.                                                                                                                                                                                                                 | S        | P        | Y        | DOAP session, Skills Lab        | Skill assessment          | 3        |  |  |
| 27.21.2         | Calculate the fluid for managing different types of shock at different age/size of the child.                                                                                                                                                                                   | S        | P        | Y        | DOAP session, Skills Lab        | Skill assessment          | 3        |  |  |
| <b>PE 27.22</b> | <b>Assess level of consciousness &amp; provide emergency treatment to a child with convulsions/ coma - Position an unconscious child<br/>- Position a child with suspected trauma<br/>- Administer IV/per rectal Diazepam for a convulsing child in a simulated environment</b> | <b>S</b> | <b>P</b> | <b>Y</b> | <b>DOAP session, Skills Lab</b> | <b>Skill assessment</b>   | <b>3</b> |  |  |
| 27.22.1         | Assess level of consciousness                                                                                                                                                                                                                                                   | S        | P        | Y        | DOAP session, Skills Lab        | Skill assessment          | 3        |  |  |
| 27.22.2         | Provide emergency treatment to a child with convulsions/ coma including ABCDE                                                                                                                                                                                                   | S        | P        | Y        | DOAP session, Skills Lab        | Skill assessment          | 3        |  |  |
| 27.22.3         | Administer IV/per rectal Diazepam for a convulsing child in a simulated environment                                                                                                                                                                                             | S        | P        | Y        | DOAP session, Skills Lab        | Skill assessment          | 3        |  |  |
| 27.22.4         | Position an unconscious child appropriately.                                                                                                                                                                                                                                    | S        | P        | Y        | DOAP session, Skills Lab        | Skill assessment          | 3        |  |  |
| 27.22.5         | Position a child with suspected trauma keeping the necessary precautions.                                                                                                                                                                                                       | S        | P        | Y        | DOAP session, Skills Lab        | Skill assessment          | 3        |  |  |
| <b>PE 27.23</b> | <b>Assess signs of severe dehydration</b>                                                                                                                                                                                                                                       | <b>S</b> | <b>P</b> | <b>Y</b> | <b>DOAP session, Skills Lab</b> | <b>Skill assessment</b>   | <b>3</b> |  |  |
| 27.23.1         | Identify signs of severe dehydration                                                                                                                                                                                                                                            | S        | P        | Y        | DOAP session, Skills Lab        | Skill assessment          | 3        |  |  |
| <b>PE 27.24</b> | <b>Monitoring and maintaining temperature: define hypothermia. Describe the clinical features, complications and management of Hypothermia</b>                                                                                                                                  | <b>K</b> | <b>K</b> | <b>Y</b> | <b>Lecture / SGD</b>            | <b>Written/ Viva voce</b> |          |  |  |
| 27.24.1         | Define Hypothermia.                                                                                                                                                                                                                                                             | K        | K        | Y        | Lecture / SGD                   | Written / Viva voce       |          |  |  |
| 27.24.2         | Describe clinical features of Hypothermia.                                                                                                                                                                                                                                      | K        | K        | Y        | Lecture / SGD                   | Written/ Viva voce        |          |  |  |

|                 |                                                                                                     |          |           |          |                                      |                           |          |  |  |
|-----------------|-----------------------------------------------------------------------------------------------------|----------|-----------|----------|--------------------------------------|---------------------------|----------|--|--|
| 27.24.3         | Enumerate complications of hypothermia.                                                             | K        | K         | Y        | Lecture / SGD                        | Written/ Viva voce        |          |  |  |
| 27.24.4         | Describe management of Hypothermia.                                                                 | K        | K         | Y        | Lecture / SGD                        | Written/ Viva voce        |          |  |  |
| <b>PE 27.25</b> | <b>Describe the advantages and correct method of keeping an infant warm by skin to skin contact</b> | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture / SGD</b>                 | <b>Written/ Viva voce</b> |          |  |  |
| 27.25.1         | Describe the correct method of keeping infant warm by skin to skin contact                          | K        | K         | Y        | Lecture / SGD                        | Written/ Viva voce        |          |  |  |
| 27.25.2         | Enumerate the advantages of providing warmth by skin to skin contact                                | K        | K         | Y        | Lecture / SGD                        | Written/ Viva voce        |          |  |  |
| <b>PE 27.26</b> | <b>Describe the environmental measures to maintain temperature</b>                                  | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture / SGD</b>                 | <b>Written/ Viva voce</b> |          |  |  |
| 27.26.1         | Describe the environmental measures to maintain temperature in sick children.                       | K        | K         | Y        | Lecture / SGD                        | Written/ Viva voce        |          |  |  |
| <b>PE 27.27</b> | <b>Assess for hypothermia and maintain temperature</b>                                              | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Skills Lab</b>                    | <b>Skill assessment</b>   |          |  |  |
| 27.27.1         | Assess a sick child for hypothermia.                                                                | S        | SH        | Y        | Skills Lab                           | Skill assessment          |          |  |  |
| 27.27.2         | Apply measures to maintain temperature in sick children.                                            | S        | SH        | Y        | Skills Lab                           | Skill assessment          |          |  |  |
| <b>PE 27.28</b> | <b>Provide BLS for children in manikin</b>                                                          | <b>S</b> | <b>P</b>  | <b>Y</b> | <b>Skills Lab</b>                    | <b>Skill assessment</b>   | <b>3</b> |  |  |
| 27.28.1         | Perform all the steps of BLS in children.                                                           | S        | P         | Y        | Skills Lab                           | Skill assessment          | 3        |  |  |
| <b>PE 27.29</b> | <b>Discuss the common causes, clinical presentation, medico-legal implications of abuse</b>         | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture / SGD</b>                 | <b>Written/ Viva voce</b> |          |  |  |
| 27.29.1         | Enumerate common causes of child abuse.                                                             | K        | K         | Y        | Lecture / SGD                        | Written/ Viva voce        |          |  |  |
| 27.29.2         | Describe clinical presentations of child abuse.                                                     | K        | K         | Y        | Lecture / SGD                        | Written/ Viva voce        |          |  |  |
| 27.29.3         | Discuss medicolegal implications of child abuse.                                                    | K        | K         | Y        | Lecture / SGD                        | Written/ Viva voce        |          |  |  |
| <b>PE 27.30</b> | <b>Demonstrate confidentiality with regard to abuse</b>                                             | <b>A</b> | <b>SH</b> | <b>Y</b> | <b>Skill lab, simulated patients</b> | <b>Skill assessment</b>   |          |  |  |
| 27.30.1         | Maintains confidentiality with regard to child abuse in a simulated setting                         | A        | SH        | Y        | Skill lab, simulated patients        | Skill assessment          |          |  |  |



|                |                                                                                                   |          |           |          |                     |                           |  |            |  |
|----------------|---------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|---------------------------|--|------------|--|
| 28.1.1         | Enumerate the etiological factors for Naso pharyngitis.                                           | K        | KH        | Y        | lecture, SGD        | Written/ Viva voce        |  |            |  |
| 28.1.2         | Describe the clinical features of Nasopharyngitis                                                 | K        | KH        | Y        | lecture, SGD        | Written/ Viva voce        |  |            |  |
| 28.1.3         | Outline the management of Nasopharyngitis                                                         | K        | KH        | Y        | lecture, SGD        | Written/ Viva voce        |  |            |  |
| <b>PE 28.2</b> | <b>Discuss the etiopathogenesis of Pharyngotonsillitis</b>                                        | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  | <b>ENT</b> |  |
| 28.2.1         | Enumerate the etiological factors causing Pharyngo-tonsillitis.                                   | K        | KH        | Y        | lecture, SGD        | Written/ Viva voce        |  |            |  |
| <b>PE 28.3</b> | <b>Discuss the clinical features and management of Pharyngotonsillitis</b>                        | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  | <b>ENT</b> |  |
| 28.3.1         | Describe the clinical features of Pharyngotonsillitis.                                            | K        | KH        | Y        | lecture, SGD        | Written/Viva voce         |  |            |  |
| 28.3.2         | Outline the management of acute Pharyngo-tonsillitis.                                             | K        | KH        | Y        | lecture, SGD        | Written/ Viva voce        |  |            |  |
| <b>PE28.4</b>  | <b>Discuss the etiopathogenesis, clinical features and management of Acute Otitis Media (AOM)</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  | <b>ENT</b> |  |
| 28.4.1         | List the common etiological agent causing Acute Otitis Media (AOM)                                | K        | K         | Y        | lecture, SGD        | Written/ Viva voce        |  |            |  |
| 28.4.2         | Discuss the pathogenesis of Acute Otitis Media (AOM),                                             | K        | KH        | Y        | lecture, SGD        | Written/ Viva voce        |  |            |  |
| 28.4.3         | Enumerate the clinical features of Acute Otitis Media (AOM), recurrent AOM and OM with effusion   | K        | KH        | Y        | lecture, SGD        | Written/ Viva voce        |  |            |  |
| 28.4.4         | Outline the management of Acute Otitis Media (AOM), recurrent AOM and OM with effusion            | K        | KH        | Y        | lecture, SGD        | Written/ Viva voce        |  |            |  |
| <b>PE28.5</b>  | <b>Discuss the etiopathogenesis, clinical features and management of Epiglottitis</b>             | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  | <b>ENT</b> |  |
| 28.5.1         | Describe the etiopathogenesis of Epiglottitis                                                     | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |            |  |
| 28.5.2         | Enumerate the clinical features of Epiglottitis                                                   | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |            |  |

|                |                                                                                                                    |          |           |          |                                        |                           |  |            |  |
|----------------|--------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------------------|---------------------------|--|------------|--|
| 28.5.3         | Outline the management of Epiglottitis including acute care                                                        | K        | KH        | Y        | Lecture, SGD                           | Written/ Viva voce        |  |            |  |
| <b>PE28.6</b>  | <b>Discuss the etiopathogenesis, clinical features and management of Acute laryngotracheobronchitis</b>            | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, Small group Discussion</b> | <b>Written/ Viva voce</b> |  | <b>ENT</b> |  |
| 28.6.1         | Describe the etiopathogenesis of Acute laryngo-tracheo-bronchitis (croup)                                          | K        | KH        | Y        | Lecture, SGD                           | Written/ Viva voce        |  |            |  |
| 28.6.2         | Describe the clinical features of Acute laryngo-tracheo-bronchitis                                                 | K        | KH        | Y        | Lecture, SGD                           | Written/ Viva voce        |  |            |  |
| 28.6.3         | Outline the management of Acute laryngo-tracheo-bronchitis.                                                        | K        | KH        | Y        | Lecture, SGD                           | Written/ Viva voce        |  |            |  |
| <b>PE 28.7</b> | <b>Discuss the etiology, clinical features and management of Stridor in children</b>                               | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                    | <b>Written/ Viva voce</b> |  | <b>ENT</b> |  |
| 28.7.1         | Enumerate the etiology of stridor in children                                                                      | K        | KH        | Y        | lecture, SGD                           | Written/ Viva voce        |  |            |  |
| 28.7.2         | Describe the clinical features of stridor in children                                                              | K        | KH        | Y        | Lecture, SGD                           | Written/ Viva voce        |  |            |  |
| 28.7.3         | Discuss the differential diagnosis of stridor                                                                      | S        | SH        | Y        | Lecture, SGD                           | Written/ Viva voce        |  |            |  |
| 28.7.4         | Outline the management of stridor.                                                                                 | K        | KH        | Y        | Lecture, SGD                           | Written/ Viva voce        |  |            |  |
| <b>PE 28.8</b> | <b>Discuss the types, clinical presentation, and management of foreign body aspiration in infants and children</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                    | <b>Written/ Viva voce</b> |  | <b>ENT</b> |  |
| 28.8.1         | List the objects commonly aspirated by children                                                                    | K        | KH        | Y        | Lecture, SGD                           | Written/ Viva voce        |  |            |  |
| 28.8.2         | Enumerate the clinical features of FB aspiration                                                                   | K        | KH        | Y        | Lecture, SGD                           | Written/ Viva voce        |  |            |  |
| 28.8.3         | Describe 'Heimlich maneuver' for a child and '5 back slaps and 5 chest thrust' for an infant                       | K        | KH        | Y        | Lecture, SGD                           | Written/ Viva voce        |  |            |  |
| 28.8.5         | Outline the management of FB aspiration                                                                            | K        | KH        | Y        | Lecture, SGD                           | Written/ Viva voce        |  |            |  |

|                 |                                                                                                                                                   |          |           |          |                           |                                       |  |            |  |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------------|---------------------------------------|--|------------|--|
| <b>PE 28.9</b>  | <b>Elicit, document and present age appropriate history of a child with upper respiratory problem including Stridor</b>                           | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, skill lab</b> | <b>Skill Assessment</b>               |  | <b>ENT</b> |  |
| 28.9.1          | Elicit detailed history of a child with upper respiratory problem including stridor                                                               | A, C     | SH        | Y        | Bedside, skill lab        | OSCE / Skills Assessment              |  |            |  |
| 28.9.2          | Document the history of a child with upper respiratory problem including stridor                                                                  | S        | SH        | Y        | Bedside, skill lab        | Logbook                               |  |            |  |
| 28.9.3          | Present the history of a child with upper respiratory problem including stridor                                                                   | C        | SH        | Y        | Bedside, skill lab        | Logbook                               |  |            |  |
| <b>PE 28.10</b> | <b>Perform otoscopic examination of the ear</b>                                                                                                   | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>DOAP session</b>       | <b>Skills Assessment</b>              |  | <b>ENT</b> |  |
| 28.10.1         | Counsel the parent and child to prepare for otoscopic examination                                                                                 | C        | SH        | Y        | Bedside, skill lab        | OSCE/ Skills Assessment               |  |            |  |
| 28.10.2         | Position the child and perform otoscopic examination                                                                                              | S        | SH        | Y        | Bedside, skill lab        | OSCE/ Skills Assessment               |  |            |  |
| <b>PE 28.11</b> | <b>Perform throat examination using tongue depressor</b>                                                                                          | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>DOAP session</b>       | <b>Skills Assessment</b>              |  | <b>ENT</b> |  |
| 28.11.1         | Counsel the parent and child to prepare for throat examination                                                                                    | C        | SH        | Y        | Bedside, skill lab        | OSCE/ Skills Assessment               |  |            |  |
| 28.11.2         | Position the child and perform throat examination using a tongue depressor                                                                        | S        | SH        | Y        | Bedside, skill lab        | OSCE / Skills Assessment              |  |            |  |
| <b>PE 28.12</b> | <b>Perform examination of the nose</b>                                                                                                            | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>DOAP session</b>       | <b>Skills Assessment</b>              |  | <b>ENT</b> |  |
| 28.12.1         | Position the child and perform nose examination                                                                                                   | S        | SH        | Y        | Bedside, skill lab        | OSCE / Skills Assessment              |  |            |  |
| <b>PE 28.13</b> | <b>Analyze the clinical symptoms and interpret physical findings and make a provisional / differential diagnosis in a child with ENT symptoms</b> | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside</b>            | <b>Skills Assessment</b>              |  |            |  |
| 28.13.1         | Discuss the provisional/ differential diagnosis in a child with ENT symptoms after analysis of history and physical examination.                  | S        | SH        | Y        | Bedside                   | Skills Assessment/OSCE /Clinical Case |  |            |  |
| <b>PE 28.14</b> | <b>Develop a treatment plan and document appropriately in a child with upper respiratory symptoms</b>                                             | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside</b>            | <b>Skills Assessment</b>              |  |            |  |

|                 |                                                                                                                                                                                                                                                                        |          |           |          |                     |                                      |  |                    |  |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|--------------------------------------|--|--------------------|--|
| 28.14.1         | Plan treatment in a child with upper respiratory symptoms                                                                                                                                                                                                              | S        | SH        | Y        | Bedside             | OSCE/Skills Assessment               |  |                    |  |
| 28.14.2         | Prescribe supportive and symptomatic treatment for upper respiratory symptoms                                                                                                                                                                                          | S        | SH        | Y        | Bedside             | OSCE/ Skills Assessment              |  |                    |  |
| <b>PE 28.15</b> | <b>Stratify risk in children with stridor using IMNCI guidelines</b>                                                                                                                                                                                                   | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside</b>      | <b>Logbook documentation</b>         |  |                    |  |
| 28.15.1         | Classify the child with stridor as per IMNCI guidelines                                                                                                                                                                                                                | S        | SH        | Y        | Bedside             | Logbook documentation/ clinical case |  |                    |  |
| <b>PE 28.16</b> | <b>Interpret blood tests relevant to upper respiratory problems</b>                                                                                                                                                                                                    | <b>S</b> | <b>SH</b> | <b>N</b> | <b>Bedside, SGD</b> | <b>Logbook</b>                       |  |                    |  |
| 28.16.1         | Plan and interpret the relevant blood test in a patient with upper respiratory problems                                                                                                                                                                                | S        | SH        | N        | Bedside, SGD        | Logbook                              |  |                    |  |
| <b>PE 28.17</b> | <b>Interpret X-ray of the paranasal sinuses and mastoid; and /or use, written report in case of management. Interpret CXR in foreign body aspiration and lower respiratory tract infection, understand the significance of thymic shadow in pediatric chest X-rays</b> | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, SGD</b> | <b>Skills Assessment</b>             |  | <b>ENT, RadioD</b> |  |
| 28.17.1         | Interpret the X-ray of paranasal sinuses and mastoid for various common diseases                                                                                                                                                                                       | S        | SH        | Y        | Bedside, SGD        | OSCE/ Skills Assessment              |  |                    |  |
| 28.17.2         | Interpret the chest X-ray for identifying suspected FB aspiration and lower respiratory tract infection                                                                                                                                                                | S        | SH        | Y        | Bedside, SGD        | Skills Assessment/OSCE               |  |                    |  |
| 28.17.3         | Identify thymic shadow in chest X-ray.                                                                                                                                                                                                                                 | S        | SH        | Y        | Bedside, SGD        | Skills Assessment/OSCE               |  |                    |  |
| 28.17.4         | Plan the treatment after interpreting X-ray and/or its written report.                                                                                                                                                                                                 | S        | SH        | Y        | Bedside, SGD        | Skills Assessment/ OSCE              |  |                    |  |
| <b>PE 28.18</b> | <b>Describe the etiopathogenesis, diagnosis, clinical features, management and prevention of lower</b>                                                                                                                                                                 | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>SGD, Lecture</b> | <b>Written, Viva voce</b>            |  |                    |  |

|                 |                                                                                                                                             |          |           |          |                     |                           |  |                 |  |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|---------------------------|--|-----------------|--|
|                 | <b>respiratory infections including bronchiolitis, wheeze associated LRTI Pneumonia and empyema</b>                                         |          |           |          |                     |                           |  |                 |  |
| 28.18.1         | Enumerate the common organisms causing LRTI                                                                                                 | K        | KH        | Y        | Lecture, SGD,       | Written /Viva voce        |  |                 |  |
| 28.18.2         | Discuss the pathogenesis of LRTI including bronchiolitis, WALRI, pneumonia and empyema.                                                     | K        | KH        | Y        | Lecture, SGD,       | Written/Viva voce         |  |                 |  |
| 28.18.3         | Describe the clinical features of LRTI including bronchiolitis, WALRI, pneumonia and empyema                                                | K        | KH        | Y        | Lecture, SGD,       | Written/Viva voce         |  |                 |  |
| 28.18.4         | Discuss the diagnosis of LRTI including bronchiolitis, WALRI, pneumonia and empyema after taking relevant clinical history and examination. | K        | KH        | Y        | Lecture, SGD,       | Written/Viva voce         |  |                 |  |
| 28.18.5         | Describe relevant investigations in a child with LRI                                                                                        | K        | KH        | Y        | Lecture, SGD,       | Written , Viva voce       |  |                 |  |
| 28.18.6         | Discuss the treatment of LRTI including bronchiolitis, WALRI, pneumonia and empyema                                                         | K        | KH        | Y        | Lecture, SGD,       | Written , Viva voce       |  |                 |  |
| 28.18.7         | Discuss the preventive strategies for LRTI                                                                                                  | K        | KH        | Y        | Lecture, SGD,       | Viva voce, SAQ/MCQ        |  |                 |  |
| <b>PE 28.19</b> | <b>Describe the etiopathogenesis, diagnosis, clinical features, management and prevention of asthma in children</b>                         | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  | <b>Resp Med</b> |  |
| 28.19.1         | Define Asthma in children as per ATM guidelines.                                                                                            | K        | KH        | Y        | Lecture, SGD,       | Written, Viva voce        |  |                 |  |
| 28.19.2         | Discuss the pathophysiology of asthma in children.                                                                                          | K        | KH        | Y        | Lecture, SGD,       | Written test, Viva voce   |  |                 |  |
| 28.19.3         | Describe the clinical features of asthma                                                                                                    | K        | KH        | Y        | Lecture, SGD,       | Written test, Viva voce   |  |                 |  |
| 28.19.4         | Discuss the diagnosis of asthma based on relevant clinical history, family history and physical examination.                                | K        | KH        | Y        | Lecture, SGD,       | Viva voce                 |  |                 |  |
| 28.19.5         | Enumerate the investigations in a child with Asthma                                                                                         | K        | KH        | Y        | Lecture, SGD,       | Viva voce                 |  |                 |  |
| 28.19.6         | List the drugs used for treating asthma in children                                                                                         | K        | KH        | Y        | Lecture, SGD,       | Written test, Viva voce   |  |                 |  |
| 28.19.7         | Describe the treatment of acute attack of asthma                                                                                            | K        | KH        | Y        | Lecture, SGD,       | Written test, Viva voce   |  |                 |  |
| 28.19.8         | Describe the step wise approach of preventer therapy for asthma as per ATM/GINA guidelines                                                  | K        | KH        | Y        | Lecture, SGD,       | Written test, Viva voce   |  |                 |  |

|                                                                                                                                                                         |                                                                                                                 |          |           |          |                              |                                                |  |                     |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|----------|-----------|----------|------------------------------|------------------------------------------------|--|---------------------|--|
| 28.19.9                                                                                                                                                                 | Describe various drug delivery devices for asthma                                                               | K        | KH        | Y        | Lecture, SGD                 | Written, Viva voce                             |  |                     |  |
| 28.19.10                                                                                                                                                                | Enumerate asthma triggers                                                                                       | K        | KH        | Y        | Lecture, SGD,                | Written, Viva voce                             |  |                     |  |
| <b>PE 28.20</b>                                                                                                                                                         | <b>Counsel the child with asthma on the correct use of inhalers in a simulated environment</b>                  | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, SGD, Lecture</b> | <b>Skills Assessment<br/>Written Viva voce</b> |  | <b>Resp Med</b>     |  |
| 28.20.1                                                                                                                                                                 | Counsel the child and the caretaker for correct use of MDI and spacer at initiation of therapy and on follow up | C        | SH        | Y        | Skill lab, clinics, lecture  | OSCE                                           |  |                     |  |
| <b>Topic: Anemia and other Hemato-oncologic disorders in children</b> <b>Number of competencies: (20)</b> <b>Number of procedures that require certification: (NIL)</b> |                                                                                                                 |          |           |          |                              |                                                |  |                     |  |
| <b>PE 29.1</b>                                                                                                                                                          | <b>Discuss the etiopathogenesis, clinical features, classification and approach to a child with anemia</b>      | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>          | <b>Written, viva-voce</b>                      |  | <b>Path, Physio</b> |  |
| 29.1.1                                                                                                                                                                  | Define anemia as per WHO GUIDELINES                                                                             | K        | KH        | Y        | Lecture, SGD                 | Written, viva-voce                             |  |                     |  |
| 29.1.2                                                                                                                                                                  | Enumerate the causes of anemia.                                                                                 | K        | KH        | Y        | Lecture, SGD                 | Written, viva-voce                             |  |                     |  |
| 29.1.3                                                                                                                                                                  | Describe the pathogenesis of anemia.                                                                            | K        | KH        | Y        | Lecture, SGD                 | Written, viva-voce                             |  |                     |  |
| 29.1.4                                                                                                                                                                  | Enumerate clinical features of anemia                                                                           | K        | KH        | Y        | Lecture, SGD                 | Written, viva-voce                             |  |                     |  |
| 29.1.5                                                                                                                                                                  | Classify Anemia according to red cell morphology                                                                | K        | KH        | Y        | Lecture, SGD                 | Written, viva-voce                             |  |                     |  |
| 29.1.6                                                                                                                                                                  | Describe the approach to a child with Anemia.                                                                   | K        | KH        | Y        | Lecture, SGD                 | Written, viva-voce                             |  |                     |  |
| 29.1.7                                                                                                                                                                  | List the investigations in child with anemia.                                                                   | K        | KH        | Y        | Lecture, SGD                 | Written, viva-voce                             |  |                     |  |
| <b>PE 29.2</b>                                                                                                                                                          | <b>Discuss the etiopathogenesis, clinical features and management of iron deficiency anemia.</b>                | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>          | <b>Written/Viva-voce</b>                       |  | <b>Path, Physio</b> |  |
| 29.2.1                                                                                                                                                                  | Enumerate the causes of iron deficiency anemia in children                                                      | K        | KH        | Y        | Lecture, SGD                 | Written, viva-voce                             |  |                     |  |
| 29.2.2                                                                                                                                                                  | Describe the pathogenesis of iron deficiency anemia.                                                            | K        | KH        | Y        | Lecture, SGD                 | Written, viva-voce                             |  |                     |  |

|                |                                                                                                                                                                                                                         |          |           |          |                     |                           |  |                     |  |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|---------------------------|--|---------------------|--|
| 29.2.3         | Describe clinical features of iron deficiency anemia in children.                                                                                                                                                       | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce        |  |                     |  |
| 29.2.4         | List the investigations in a child with iron deficiency.                                                                                                                                                                | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce        |  |                     |  |
| 29.2.5         | Describe the treatment of iron deficiency anemia in children.                                                                                                                                                           | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce        |  |                     |  |
| <b>PE 29.3</b> | <b>Discuss the etiopathogenesis, clinical features and management of Vitamin B-12, Folate deficiency anemia.</b>                                                                                                        | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/Viva-voce</b>  |  | <b>Path, Physio</b> |  |
| 29.3.1         | Enumerate the causes of vitamin B-12 and folic acid deficiency.                                                                                                                                                         | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce        |  |                     |  |
| 29.3.2         | Describe the pathogenesis of Vitamin B-12 deficiency.                                                                                                                                                                   | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce        |  |                     |  |
| 29.3.3         | Describe the pathogenesis of folate deficiency.                                                                                                                                                                         | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce        |  |                     |  |
| 29.3.4         | Describe the clinical features of vitamin B-12 and Folate deficiency.                                                                                                                                                   | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce        |  |                     |  |
| 29.3.5         | Enumerate the investigations for a child of Vitamin B-12 and Folate deficiency.                                                                                                                                         | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce        |  |                     |  |
| 29.3.6         | Describe the treatment for a child suffering from Vitamin B-12 and Folic acid deficiency.                                                                                                                               | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce        |  |                     |  |
| <b>PE 29.4</b> | <b>Discuss the etiopathogenesis, clinical features and management of Hemolytic anemia, Thalassemia Major, Sickle cell anemia, Hereditary spherocytosis, Auto-immune hemolytic anemia and hemolytic uremic syndrome.</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written, viva-voce</b> |  | <b>Path, Physio</b> |  |
| 29.4.1         | Define Hemolytic Anemia.                                                                                                                                                                                                | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce        |  |                     |  |
| 29.4.2         | Enumerate the causes of hemolytic anemia in children.                                                                                                                                                                   | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce        |  |                     |  |
| 29.4.3         | Describe the pathogenesis of different types of hemolytic anemia.                                                                                                                                                       | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce        |  |                     |  |
| 29.4.4         | Describe the clinical features of hemolytic anemia, Thalassemia Major, Sickle cell anemia, Hereditary                                                                                                                   | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce        |  |                     |  |

|                |                                                                                                                                                                     |          |           |          |                     |                    |  |                |  |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|--------------------|--|----------------|--|
|                | spherocytosis, Auto-immune hemolytic anemia and hemolytic uremic syndrome                                                                                           |          |           |          |                     |                    |  |                |  |
| 29.4.5         | List the investigations for diagnosis of hemolytic anemia.                                                                                                          | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce |  |                |  |
| 29.4.6         | Differentiate various types of hemolytic anemia based on clinical features and investigations.                                                                      | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce |  |                |  |
| 29.4.7         | Describe treatment of hemolytic anemia Thalassemia Major, Sickle cell anemia, Hereditary spherocytosis, Auto-immune hemolytic anemia and hemolytic uremic syndrome. | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce |  |                |  |
| 29.4.8         | Describe the role of chelation therapy and recall the drugs, dosages and side-effects of the drugs.                                                                 | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce |  |                |  |
| <b>PE 29.5</b> | <b>Discuss the National Anemia Control Program.</b>                                                                                                                 | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | Written, viva-voce |  | <b>Com Med</b> |  |
| 29.5.1         | Describe National Anemia Control Program.                                                                                                                           | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce |  |                |  |
| <b>PE 29.6</b> | <b>Discuss the cause of thrombocytopenia in children: describe the clinical features and management of idiopathic Thrombocytopenic Purpura.</b>                     | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | Written, viva-voce |  | <b>Path</b>    |  |
| 29.6.1         | Define thrombocytopenia                                                                                                                                             | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce |  |                |  |
| 29.6.2         | Enumerate the causes of thrombocytopenia in children.                                                                                                               | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce |  |                |  |
| 29.6.3         | Describe the pathogenesis of ITP.                                                                                                                                   | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce |  |                |  |
| 29.6.4         | Describe the clinical features of ITP.                                                                                                                              | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce |  |                |  |
| 29.6.5         | Outline the investigations of ITP                                                                                                                                   | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce |  |                |  |
| 29.6.6         | Outline the management of ITP.                                                                                                                                      | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce |  |                |  |
| <b>PE 29.7</b> | <b>Discuss the etiology, classification, pathogenesis and clinical features of Hemophilia in children.</b>                                                          | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | Written, viva-voce |  | <b>Path</b>    |  |
| 29.7.1         | Describe the etiology of hemophilia.                                                                                                                                | K        | KH        | Y        | Lecture, SGD        | Written, viva-voce |  |                |  |

|                 |                                                                                                                |          |           |          |                            |                           |  |             |  |
|-----------------|----------------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------|---------------------------|--|-------------|--|
| 29.7.2          | Classify hemophilia.                                                                                           | K        | KH        | Y        | Lecture, SGD               | Written, viva-voce        |  |             |  |
| 29.7.3          | Describe the pathogenesis of hemophilia.                                                                       | K        | KH        | Y        | Lecture, SGD               | Written, viva-voce        |  |             |  |
| 29.7.4          | Enumerate the clinical features of hemophilia.                                                                 | K        | KH        | Y        | Lecture, SGD               | Written, viva-voce        |  |             |  |
| <b>PE 29.8</b>  | <b>Discuss the etiology, clinical presentation and management of Acute Lymphoblastic Leukemia in Children.</b> | <b>K</b> | <b>KH</b> | <b>N</b> | <b>Lecture, SGD</b>        | <b>Written, Viva-voce</b> |  | <b>Path</b> |  |
| 29.8.1          | State the etiologies of Acute Lymphoblastic Leukemia (ALL).                                                    | K        | KH        | N        | Lecture, SGD               | Written, viva-voce        |  |             |  |
| 29.8.2          | Enumerate risk factors for childhood leukemia.                                                                 | K        | KH        | N        | Lecture, SGD               | Written, viva-voce        |  |             |  |
| 29.8.3          | Describe the clinical presentation of ALL.                                                                     | K        | KH        | N        | Lecture, SGD               | Written, viva-voce        |  |             |  |
| 29.8.4          | Outline the investigations for diagnosis of ALL.                                                               | K        | KH        | N        | Lecture, SGD               | Written, viva-voce        |  |             |  |
| 29.8.5          | Outline the treatment for ALL.                                                                                 | K        | KH        | N        | Lecture, SGD               | Written, viva-voce        |  |             |  |
| <b>PE 29.9</b>  | <b>Discuss the etiology, clinical presentation and management of Lymphoma in children.</b>                     | <b>K</b> | <b>KH</b> | <b>N</b> | <b>Lecture, SGD</b>        | <b>Written, Viva-Voce</b> |  | <b>Path</b> |  |
| 29.9.1          | Define lymphoma.                                                                                               | K        | KH        | N        | Lecture, SGD               | Written, viva-voce        |  |             |  |
| 29.9.2          | State the etiology of Lymphoma and its types.                                                                  | K        | KH        | N        | Lecture, SGD               | Written, viva-voce        |  |             |  |
| 29.9.3          | Describe the pathology of lymphomas.                                                                           | K        | KH        | N        | Lecture, SGD               | Written, viva-voce        |  |             |  |
| 29.9.4          | Recall the clinical features of Lymphomas.                                                                     | K        | KH        | N        | Lecture, SGD               | Written, viva-voce        |  |             |  |
| 29.9.5          | Outline the investigations (diagnostic work up) for Lymphomas.                                                 | K        | KH        | N        | Lecture, SGD               | Written, viva-voce        |  |             |  |
| 29.9.6          | Enumerate the treatment modalities for Lymphomas.                                                              | K        | KH        | N        | Lecture, SGD               | Written, viva-voce        |  |             |  |
| <b>PE 29.10</b> | <b>Elicit, document and present the history related to Hematology.</b>                                         | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b> | <b>Skill Station</b>      |  |             |  |

|                 |                                                                                                                                                                                                      |          |           |          |                             |                            |  |  |  |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|-----------------------------|----------------------------|--|--|--|
| 29.10.1         | Elicit the history related to a hematological disorder.                                                                                                                                              | S        | SH        | Y        | Bedside, Skills lab         | Skill Station              |  |  |  |
| 29.10.2         | Document the history.                                                                                                                                                                                | S        | SH        | Y        | Bedside, Skills lab         | Skill Station              |  |  |  |
| 29.10.3         | Present the history                                                                                                                                                                                  | S        | SH        | Y        | Bedside, Skills lab         | Skill Station              |  |  |  |
| <b>PE 29.11</b> | <b>Identify external markers for hematological disorders e.g. Jaundice, Pallor, Petechiae, Purpura, Ecchymosis, Lymphadenopathy, bone tenderness, loss of weight, Mucosal and large joint bleed.</b> | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills Lab</b>  | <b>Skill assessment</b>    |  |  |  |
| 29.11.1         | Identify jaundice, pallor, petechial spots, purpura, ecchymosis, lymphadenopathy, bone tenderness, Mucosal and large joint bleed in a patient of hematological disorder.                             | S        | SH        | Y        | Bedside, Skills Lab         | Skill assessment           |  |  |  |
| <b>PE 29.12</b> | <b>Perform examination of the abdomen, demonstrate Organomegaly.</b>                                                                                                                                 | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills Lab.</b> | <b>Skill assessment</b>    |  |  |  |
| 29.12.1         | Perform per abdomen examination.                                                                                                                                                                     | S        | SH        | Y        | Bedside, Skills Lab         | Skill assessment           |  |  |  |
| 29.12.2         | Demonstrate organomegaly in a child after abdominal examination.                                                                                                                                     | S        | SH        | Y        | Bedside, Skills Lab         | Skill assessment           |  |  |  |
| <b>PE 29.13</b> | <b>Analyze symptoms and interpret physical signs to make a provisional /differential diagnosis.</b>                                                                                                  | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills Lab</b>  | <b>Skill assessment</b>    |  |  |  |
| 29.13.1         | Analyze symptoms related to hemato-oncological conditions.                                                                                                                                           | S        | SH        | Y        | Bedside, Skills Lab         | Skill assessment           |  |  |  |
| 29.13.2         | interpret physical signs to make a provisional diagnosis                                                                                                                                             | S        | SH        | Y        | Bedside, Skills Lab         | Skill assessment           |  |  |  |
| 29.13.3         | Produce differential diagnosis keeping in mind the symptoms and signs related to haemato-oncological conditions.                                                                                     | S        | SH        | Y        | Bedside, Skills Lab         | Skill assessment           |  |  |  |
| <b>PE 29.14</b> | <b>Interpret CBC, LFT</b>                                                                                                                                                                            | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills Lab</b>  | <b>Skill assessment</b>    |  |  |  |
| 29.14.1         | interpret Complete Blood Count Report                                                                                                                                                                | S        | SH        | Y        | Bedside, Skills Lab         | Skill assessment           |  |  |  |
| 29.14.2         | Interpret Liver Function Tests Report.                                                                                                                                                               | S        | SH        | Y        | Bedside, Skills Lab         | Skill assessment           |  |  |  |
| <b>PE 29.15</b> | <b>Perform and Interpret peripheral smear.</b>                                                                                                                                                       | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>DOAP session</b>         | <b>Document in Logbook</b> |  |  |  |
| 29.15.1         | Prepare a peripheral blood film.                                                                                                                                                                     | S        | SH        | Y        | DOAP session                | Document in Logbook        |  |  |  |
| 29.15.2         | Interpret the peripheral blood film.                                                                                                                                                                 | S        | SH        | Y        | DOAP session                | Document in Logbook        |  |  |  |
| 29.15.3         | Make diagnosis of peripheral blood film.                                                                                                                                                             | S        | SH        | Y        | DOAP session                | Document in Logbook        |  |  |  |

|                                                                                                                                                        |                                                                                                                            |            |           |          |                                      |                            |  |                     |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|------------|-----------|----------|--------------------------------------|----------------------------|--|---------------------|--|
| <b>PE 29.16</b>                                                                                                                                        | <b>Discuss the indications for Hemoglobin electrophoresis and interpret the report.</b>                                    | <b>K</b>   | <b>K</b>  | <b>N</b> | <b>Lecture, SGD</b>                  | <b>Written /Viva-voce</b>  |  | <b>Biochemistry</b> |  |
| 29.16.1                                                                                                                                                | Enumerate the indications for Hemoglobin electrophoresis                                                                   | K          | K         | N        | Lecture, SGD                         | Written/Viva-voce          |  |                     |  |
| 29.16.2                                                                                                                                                | interpret the report of Hemoglobin electrophoresis                                                                         | K          | K         | N        | Lecture, SGD                         | Written/Viva-voce          |  |                     |  |
| <b>PE 29.17</b>                                                                                                                                        | <b>Demonstrate performance of bone marrow aspiration in mannequin.</b>                                                     | <b>S</b>   | <b>SH</b> | <b>Y</b> | <b>Skills lab</b>                    | <b>Document in Logbook</b> |  |                     |  |
| 29.17.1                                                                                                                                                | identify the sites of bone marrow aspiration                                                                               | S          | SH        | Y        | Skills Lab                           | Document in Logbook        |  |                     |  |
| 29.17.2                                                                                                                                                | Demonstrate the correct steps of bone marrow aspiration under aseptic conditions on a mannequin.                           | S          | SH        | Y        | Skills Lab                           | Document in Logbook        |  |                     |  |
| <b>PE 29.18</b>                                                                                                                                        | <b>Enumerate the referral criteria for Hematological conditions.</b>                                                       | <b>S</b>   | <b>SH</b> | <b>Y</b> | <b>Bedside, Small group activity</b> | <b>Written /Viva-voce</b>  |  |                     |  |
| 29.18.1                                                                                                                                                | Enumerate the criteria for referring a patient with Hematological conditions                                               | S          | SH        | Y        | Small group activity                 | Written/ Viva-voce         |  |                     |  |
| <b>PE 29.19</b>                                                                                                                                        | <b>Counsel and educate patients about prevention and treatment of anemia.</b>                                              | <b>A/C</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills Lab</b>           | <b>Document in Logbook</b> |  |                     |  |
| 29.19.1                                                                                                                                                | Counsel the parents empathetically about the diet and preventive measures for anemia.                                      | A/C        | SH        | Y        | Bedside, Skills Lab                  | Document in Logbook        |  |                     |  |
| 29.19.2                                                                                                                                                | Educate the patients/parents about the correct usage of drugs.                                                             | A/C        | SH        | Y        | Bedside, Skills Lab                  | Document in Logbook        |  |                     |  |
| <b>PE 29.20</b>                                                                                                                                        | <b>Enumerate the indications for splenectomy and precautions</b>                                                           | <b>K</b>   | <b>K</b>  | <b>N</b> | <b>Small group activity</b>          | <b>Written/ Viva-voce</b>  |  |                     |  |
| 29.20.1                                                                                                                                                | Enumerate the indications for splenectomy                                                                                  | K          | KH        | N        | Small group activity                 | Written/ Viva-voce         |  |                     |  |
| 29.20.2                                                                                                                                                | Explain about the immunization and antibiotic prophylaxis                                                                  | K          | KH        | N        | Small group activity                 | Written/ Viva-voce         |  |                     |  |
| <b>Topic: Systemic Pediatrics-Central Nervous system      Number of competencies: (23)      Number of procedures that require certification: (NIL)</b> |                                                                                                                            |            |           |          |                                      |                            |  |                     |  |
| <b>PE 30.1</b>                                                                                                                                         | <b>Discuss the etiopathogenesis, clinical features, complications, management and prevention of meningitis in children</b> | <b>K</b>   | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                  | <b>Written/ Viva voce</b>  |  | <b>Micro</b>        |  |
| 30.1.1                                                                                                                                                 | Enumerate all common causes of meningitis in children.                                                                     | K          | K         | Y        | Lecture, SGD                         | Written/ Viva              |  |                     |  |

|                |                                                                                                                                  |          |           |          |                     |                           |  |              |  |
|----------------|----------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|---------------------------|--|--------------|--|
|                |                                                                                                                                  |          |           |          |                     | voce                      |  |              |  |
| 30.1.2         | Describe pathogenesis of meningitis in children.                                                                                 | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.1.3         | Describe all the clinical features of meningitis in children.                                                                    | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.1.4         | Enumerate all the complications of meningitis in children.                                                                       | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.1.6         | Enumerate all the investigations to diagnose meningitis in children.                                                             | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.1.7         | Describe the CSF picture diagnostic of pyogenic meningitis.                                                                      | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.1.8         | Describe the standard treatment of meningitis based on age of patient and organism if identified.                                | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.1.9         | Enumerate various preventive measures for meningitis.                                                                            | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| <b>PE 30.2</b> | <b>Distinguish bacterial, viral and tuberculous meningitis</b>                                                                   | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  | <b>Micro</b> |  |
| 30.2.1         | Differentiate the clinical features of bacterial, viral and tubercular meningitis in a child                                     | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.2.2         | Differentiate the cerebrospinal fluid (CSF) picture of bacterial, viral and tubercular meningitis in a child                     | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| <b>PE 30.3</b> | <b>Discuss the etiopathogenesis, classification, clinical features, complication and management of Hydrocephalus in children</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  |              |  |
| 30.3.1         | Define hydrocephalus.                                                                                                            | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.3.2         | Enumerate all causes of hydrocephalus.                                                                                           | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.3.3         | Describe normal CSF circulation and pathogenesis of hydrocephalus                                                                | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.3.4         | Classify types of hydrocephalus                                                                                                  | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.3.5         | Describe all the clinical features of hydrocephalus.                                                                             | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |

IAP Task Force on Competency-based Curriculum for Pediatrics in UG education: Competencies to Specific Learning Objectives  
Competency statements (**in Bold**) are taken from the MCI document and not modifiable

|                |                                                                                                                              |          |           |          |                     |                           |  |  |  |
|----------------|------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|---------------------------|--|--|--|
| 30.3.6         | Enumerate all the complications of hydrocephalus.                                                                            | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.3.7         | Describe the radiological picture (USG, CT scan or MRI) diagnostic of hydrocephalus                                          | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.3.8         | Enumerate the investigations required to make an etiological diagnosis of hydrocephalus                                      | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.3.9         | Describe the standard treatment for hydrocephalus including medical and surgical modalities.                                 | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| <b>PE 30.4</b> | <b>Discuss the etiopathogenesis, classification, clinical features, and management of Microcephaly in children</b>           | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  |  |  |
| 30.4.1         | Define microcephaly.                                                                                                         | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.4.2         | Enumerate all causes of microcephaly in children                                                                             | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.4.3         | Describe pathogenesis of microcephaly in children                                                                            | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.4.4         | Classify types of microcephaly in children                                                                                   | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.4.5         | Describe all the clinical features of microcephaly                                                                           | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.4.6         | Describe treatment for microcephaly.                                                                                         | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| <b>PE 30.5</b> | <b>Enumerate the Neural tube defects. Discuss the causes, clinical features, types, and management of Neural Tube defect</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  |  |  |
| 30.5.1         | Define Neural tube defects.                                                                                                  | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.5.2         | Enumerate all causes of Neural tube defects.                                                                                 | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.5.3         | Describe pathogenesis of Neural tube defects.                                                                                | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.5.4         | Classify types of Neural tube defects.                                                                                       | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.5.5         | Describe all the clinical features of the common types of Neural tube defects                                                | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |

|                |                                                                                                                                                                    |          |           |          |                     |                           |  |  |  |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|---------------------------|--|--|--|
| 30.5.6         | Describe radiological investigations (USG local and USG Head, CT scan and MRI) and the relevant findings to diagnose Neural tube defects and associated conditions | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.5.7         | Outline medical and surgical management including immediate treatment of neural tube defects.                                                                      | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.5.8         | Enumerate indications and contraindications of conservative and surgical modalities to treat neural tube defects.                                                  | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.5.9         | Enumerate steps for prevention of neural tube defects.                                                                                                             | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| <b>PE 30.6</b> | <b>Discuss the etiopathogenesis, clinical features, and management of Infantile hemiplegia</b>                                                                     | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  |  |  |
| 30.6.1         | Define infantile hemiplegia.                                                                                                                                       | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.6.2         | Enumerate all causes of infantile hemiplegia.                                                                                                                      | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.6.3         | Describe pathogenesis of infantile hemiplegia.                                                                                                                     | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.6.4         | Describe all the clinical features of infantile hemiplegia.                                                                                                        | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.6.5         | Enumerate investigations to diagnose infantile hemiplegia.                                                                                                         | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.6.6         | Describe all the treatment modalities for infantile hemiplegia including medical management, occupational therapy and physiotherapy.                               | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| <b>PE 30.7</b> | <b>Discuss the etiopathogenesis, clinical features, complications and management of Febrile seizures in children</b>                                               | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  |  |  |
| 30.7.1         | Define Febrile seizures.                                                                                                                                           | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.7.2         | Enumerate causes of Febrile seizures.                                                                                                                              | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.7.3         | Describe the pathogenesis of Febrile seizures.                                                                                                                     | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.7.4         | Classify types of Febrile seizures.                                                                                                                                | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |

IAP Task Force on Competency-based Curriculum for Pediatrics in UG education: Competencies to Specific Learning Objectives  
Competency statements (**in Bold**) are taken from the MCI document and not modifiable

|                |                                                                                                                                      |          |           |          |                     |                           |  |  |  |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|---------------------------|--|--|--|
|                |                                                                                                                                      |          |           |          |                     | voce                      |  |  |  |
| 30.7.5         | Describe the clinical features of different types of Febrile seizures.                                                               | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.7.6         | Enumerate complications of Febrile seizures.                                                                                         | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.7.7         | Enumerate the investigations for diagnosis of Febrile seizures and the cause of the underlying fever.                                | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.7.8         | Describe the standard treatment for Febrile seizures in children including intermittent prophylaxis and treatment of cause of fever. | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| <b>PE 30.8</b> | <b>Define epilepsy. Discuss the pathogenesis, clinical types, presentation and management of Epilepsy in children</b>                | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  |  |  |
| 30.8.1         | Define Epilepsy.                                                                                                                     | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.8.2         | Describe the pathogenesis of Epilepsy.                                                                                               | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.8.3         | Classify clinical types of Epilepsy.                                                                                                 | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.8.4         | Describe the various presentations of Epilepsy.                                                                                      | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.8.5         | Enumerate and Describe the investigations required to diagnose Epilepsy.                                                             | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.8.6         | Outline the medical and surgical management of Epilepsy                                                                              | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.8.7         | Enumerate common Antiepileptic drugs and the types of Epilepsy in which they are indicated.                                          | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.8.8         | Enumerate the side effects of commonly used Antiepileptic drugs.                                                                     | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| <b>PE 30.9</b> | <b>Define Status Epilepticus. Discuss the clinical presentation and management</b>                                                   | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  |  |  |
| 30.9.1         | Define Status epilepticus.                                                                                                           | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.9.2         | Describe the clinical presentation of status epilepticus                                                                             | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.9.4         | Enumerate investigations required for diagnosis of status                                                                            | K        | KH        | Y        | Lecture, SGD        | Written/ Viva             |  |  |  |

IAP Task Force on Competency-based Curriculum for Pediatrics in UG education: Competencies to Specific Learning Objectives  
Competency statements (**in Bold**) are taken from the MCI document and not modifiable

|                 |                                                                                                                                                 |          |           |          |                     |                           |  |  |  |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|---------------------------|--|--|--|
|                 | epilepticus                                                                                                                                     |          |           |          |                     | voce                      |  |  |  |
| 30.9.5          | Describe management of status epilepticus in a step wise manner based on the standard algorithm of management of status epilepticus of the PICU | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| <b>PE 30.10</b> | <b>Discuss the etiopathogenesis, clinical features and management of Mental retardation in children</b>                                         | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  |  |  |
| 30.10.1         | Define Mental Retardation (Intellectual disability)                                                                                             | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.10.2         | Enumerate the causes of Mental Retardation (Intellectual disability)                                                                            | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.10.3         | Describe the pathogenesis of Mental Retardation (Intellectual disability)                                                                       | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.10.4         | Classify Mental Retardation (Intellectual disability).                                                                                          | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.10.5         | Enumerate and Describe clinical features of Mental Retardation (Intellectual disability) including dysmorphic features.                         | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.10.6         | Describe the investigations for diagnosis of Mental Retardation (Intellectual disability).                                                      | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.10.7         | Describe the investigations (including genetic tests) required for identifying the etiology of Mental Retardation (Intellectual disability).    | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.10.8         | Describe the multidisciplinary approach to management of Mental Retardation (Intellectual disability).                                          | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.10.9         | Describe the treatment of preventable and treatable causes of Mental Retardation (Intellectual disability).                                     | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| <b>PE 30.11</b> | <b>Discuss the etiopathogenesis, clinical features and management of children with cerebral palsy</b>                                           | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  |  |  |
| 30.11.1         | Define Cerebral Palsy                                                                                                                           | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.11.2         | Enumerate the causes of Cerebral Palsy                                                                                                          | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.11.3         | Describe the pathogenesis of Cerebral Palsy                                                                                                     | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.11.4         | Classify Cerebral Palsy.                                                                                                                        | K        | KH        | Y        | Lecture, SGD        | Written/ Viva             |  |  |  |

IAP Task Force on Competency-based Curriculum for Pediatrics in UG education: Competencies to Specific Learning Objectives  
Competency statements (**in Bold**) are taken from the MCI document and not modifiable

|                 |                                                                                                                                 |          |           |          |                     |                           |  |              |  |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|---------------------------|--|--------------|--|
|                 |                                                                                                                                 |          |           |          |                     | voce                      |  |              |  |
| 30.11.5         | Enumerate and Describe clinical features of different types of Cerebral Palsy                                                   | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.11.6         | Describe the investigations required for identifying the etiology of Cerebral Palsy.                                            | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.11.7         | Describe the multidisciplinary approach to management of Cerebral Palsy.                                                        | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.11.8         | Describe the treatment of preventable and treatable causes of Cerebral Palsy.                                                   | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| <b>PE 30.12</b> | <b>Enumerate the causes of floppiness in an infant and discuss the clinical features, differential diagnosis and management</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  |              |  |
| 30.12.1         | Define floppiness in an infant.                                                                                                 | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.12.2         | Enumerate the causes of floppiness in an infant.                                                                                | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.12.3         | Describe the pathogenesis of floppiness in an infant                                                                            | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.12.4         | Describe the clinical features of floppiness in an infant                                                                       | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.12.5         | Describe the differential diagnosis of floppiness in an infant                                                                  | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.12.6         | Enumerate the investigations for floppiness in an infant                                                                        | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.12.7         | Describe treatment approach to a floppy infant, including occupational therapy and physiotherapy.                               | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| <b>PE 30.13</b> | <b>Discuss the etiopathogenesis, clinical features, management and prevention of Poliomyelitis in children</b>                  | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  | <b>Micro</b> |  |
| 30.13.1         | Define acute flaccid paralysis (AFP).                                                                                           | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.13.2         | List causes of Acute Flaccid Paralysis.                                                                                         | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |              |  |
| 30.13.3         | Enumerate the viruses causing Poliomyelitis.                                                                                    | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  | <b>Micro</b> |  |
| 30.13.4         | Describe the pathogenesis of Poliomyelitis                                                                                      | K        | KH        | Y        | Lecture, SGD        | Written/ Viva             |  |              |  |

|                 |                                                                                                                                     |          |           |          |                     |                           |  |  |  |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|---------------------------|--|--|--|
|                 |                                                                                                                                     |          |           |          |                     | voce                      |  |  |  |
| 30.13.5         | Describe all the clinical features of Poliomyelitis.                                                                                | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.13.6         | Discuss the differential diagnosis of AFP.                                                                                          | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.13.7         | Describe all the treatment modalities for Poliomyelitis / AFP including medical management, occupational therapy and physiotherapy. | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.13.8         | Describe the various available Polio vaccines and their role in prevention of poliomyelitis.                                        | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| <b>PE 30.14</b> | <b>Discuss the etiopathogenesis, clinical features and management of Duchene muscular dystrophy</b>                                 | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  |  |  |
| 30.14.1         | Define Duchene muscular dystrophy.                                                                                                  | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.14.2         | Describe the etiopathogenesis of Duchene muscular dystrophy                                                                         | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.14.3         | Describe the clinical features of Duchene muscular dystrophy.                                                                       | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.14.4         | Enumerate investigations required including genetic testing to diagnose Duchene muscular dystrophy.                                 | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.14.5         | Describe the treatment modalities for Duchene muscular dystrophy including occupational therapy and physiotherapy.                  | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| <b>PE 30.15</b> | <b>Discuss the etiopathogenesis, clinical features and management of Ataxia in children</b>                                         | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b> | <b>Written/ Viva voce</b> |  |  |  |
| 30.15.1         | Define Ataxia in children.                                                                                                          | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.15.2         | Enumerate all causes of Ataxia in children.                                                                                         | K        | K         | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.15.3         | Describe the pathogenesis of Ataxia in children.                                                                                    | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.15.4         | Describe all the clinical features of Ataxia in children.                                                                           | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.15.5         | Enumerate the investigations in evaluation of Ataxia in children.                                                                   | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |
| 30.15.7         | Describe the treatment available for the various causes of                                                                          | K        | KH        | Y        | Lecture, SGD        | Written/ Viva voce        |  |  |  |

|                 |                                                                                                                                                             |          |           |          |                                    |                           |  |  |  |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|------------------------------------|---------------------------|--|--|--|
|                 | Ataxia in children.                                                                                                                                         |          |           |          |                                    |                           |  |  |  |
| <b>PE 30.16</b> | <b>Discuss the approach to and management of a child with headache</b>                                                                                      | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                | <b>Written/ Viva voce</b> |  |  |  |
| 30.16.1         | Enumerate causes of headache in children                                                                                                                    | K        | K         | Y        | Lecture, SGD                       | Written/ Viva voce        |  |  |  |
| 30.16.2         | Enumerate the types of headache                                                                                                                             | K        | K         | Y        | Lecture, SGD                       | Written/ Viva voce        |  |  |  |
| 30.16.3         | Describe the clinical features of various types of headaches in children                                                                                    | K        | KH        | Y        | Lecture, SGD                       | Written/ Viva voce        |  |  |  |
| 30.16.4         | Enumerate all investigations to diagnose cause and type of headache.                                                                                        | K        | KH        | Y        | Lecture, SGD                       | Written/ Viva voce        |  |  |  |
| 30.16.5         | Analyse the history and interpret the examination findings and investigations using an algorithm to come to a differential diagnosis/ diagnosis of headache | K        | KH        | Y        | Lecture, SGD                       | Written/ Viva voce        |  |  |  |
| 30.16.6         | Discuss approach to management of headache based on history, examination and investigations                                                                 | K        | KH        | Y        | Lecture, SGD                       | Written/ Viva voce        |  |  |  |
| 30.16.7         | Describe treatment of a child with headache.                                                                                                                | K        | KH        | Y        | Lecture, SGD                       | Written/ Viva voce        |  |  |  |
| <b>PE 30.17</b> | <b>Elicit, document and present an age appropriate history pertaining to the CNS</b>                                                                        | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b>         | <b>Skill Assessment</b>   |  |  |  |
| 30.17.1         | Elicit age appropriate detailed history pertaining to CNS                                                                                                   | S        | SH        | Y        | Bedside, Skills lab                | Clinical case/ OSCE       |  |  |  |
| 30.17.2         | Write down age appropriate history including history pertaining to CNS under appropriate headings                                                           | S        | SH        | Y        | Bedside, Skills lab                | Logbook                   |  |  |  |
| 30.17.3         | Present the documented age appropriate history pertaining to CNS                                                                                            | S        | SH        | Y        | Bedside, Skills lab                | Logbook                   |  |  |  |
| <b>PE 30.18</b> | <b>Demonstrate the correct method for physical examination of CNS including identification of external markers. Document and present clinical findings</b>  | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b>         | <b>Skill Assessment</b>   |  |  |  |
| 30.18.1         | Measure head circumference accurately.                                                                                                                      | S        | SH        | Y        | Bedside, Skills lab                | OSCE                      |  |  |  |
| 30.18.2         | Recognize neurocutaneous markers.                                                                                                                           | S        | SH        |          | Bedside/skill lab/ pictures/ video | OSCE                      |  |  |  |
| 30.18.3         | Do a complete CNS examination in children of different                                                                                                      | S        | SH        |          | Bedside/ skill lab                 | Skill lab                 |  |  |  |

|                 |                                                                                                                        |          |           |          |                                       |                         |  |               |  |
|-----------------|------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------------------------|-------------------------|--|---------------|--|
|                 | ages.                                                                                                                  |          |           |          |                                       |                         |  |               |  |
| 30.18.4         | Recognize involuntary movements.                                                                                       | S        | SH        |          | Bedside/skill lab/<br>pictures/ video | OSCE                    |  |               |  |
| 30.18.5         | Examine for signs of meningeal irritation.                                                                             | S        | SH        |          | Bedside/ skill lab                    | Skill lab               |  |               |  |
| 30.18.6         | Document and present clinical findings.                                                                                | S        | SH        |          | Bedside/ skill lab                    | Clinical case           |  |               |  |
| <b>PE 30.19</b> | <b>Analyse symptoms and interpret physical findings and propose a provisional / differential diagnosis</b>             | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b>            | <b>Skill Assessment</b> |  |               |  |
| 30.19.1         | Analyse symptoms and propose a provisional / differential diagnosis                                                    | S        | SH        | Y        | Bedside/ skill lab                    | Clinical case           |  |               |  |
| 30.19.2         | Interpret physical findings and propose a provisional / differential diagnosis                                         | S        | SH        | Y        | Bedside/ skill lab                    | Clinical case           |  |               |  |
| 30.19.3         | Combine analysis of symptoms and interpretation of physical findings to propose a provisional / differential diagnosis | S        | SH        | Y        | Bedside/ skill lab                    | Clinical case           |  |               |  |
| <b>PE 30.20</b> | <b>Interpret and explain the findings in a CSF analysis</b>                                                            | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>SGD</b>                            | <b>Logbook</b>          |  | <b>Micro</b>  |  |
| 30.20.1         | Interpret the findings (cells, proteins and sugar levels) in a CSF analysis. .                                         | S        | SH        | Y        | Skill lab                             | OSCE                    |  |               |  |
| 30.20.2         | Explain the significance of findings (cells, proteins and sugar levels) in a CSF analysis                              | K        | KH        | Y        | SGD                                   | SAQ/viva                |  |               |  |
| <b>PE 30.21</b> | <b>Enumerate the indication and discuss the limitations of EEG, CT, MRI</b>                                            | <b>K</b> | <b>K</b>  | <b>N</b> | <b>Bedside</b>                        | <b>Logbook</b>          |  |               |  |
| 30.21.1         | Enumerate the indications of EEG.                                                                                      | K        | K         | N        | Bedside                               | Logbook                 |  |               |  |
| 30.21.2         | Discuss the limitations of EEG.                                                                                        | K        | K         | N        | Bedside                               | Logbook                 |  |               |  |
| 30.21.3         | Enumerate the indications of CT scan                                                                                   | K        | K         | N        | Bedside                               | Logbook                 |  |               |  |
| 30.21.4         | Discuss the limitations of CT scan.                                                                                    | K        | K         | N        | Bedside                               | Logbook                 |  |               |  |
| 30.21.5         | Enumerate the indications of MRI.                                                                                      | K        | K         | N        | Bedside                               | Logbook                 |  |               |  |
| 30.21.6         | Discuss the limitations of MRI.                                                                                        | K        | K         | N        | Bedside                               | Logbook                 |  |               |  |
| <b>PE 30.22</b> | <b>Interpret the reports of EEG, CT, MRI</b>                                                                           | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b>            | <b>Logbook</b>          |  | <b>RadioD</b> |  |
| 30.22.1         | Interpret EEG reports                                                                                                  | S        | SH        | Y        | Bedside, Skills lab                   | Logbook                 |  |               |  |
| 30.22.2         | Interpret CT scan (Brain and Spine) reports                                                                            | S        | SH        | Y        | Bedside, Skills lab                   | Logbook                 |  | <b>RadioD</b> |  |
| 30.22.3         | Interpret MRI (Brain & Spine) reports                                                                                  | S        | SH        | Y        | Bedside, Skills lab                   | Logbook                 |  | <b>RadioD</b> |  |

|                                                                                                                                                                                              |                                                                                                           |          |           |          |                            |                           |  |             |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------|---------------------------|--|-------------|--|
| <b>PE 30.23</b>                                                                                                                                                                              | <b>Perform in a mannequin lumbar puncture. Discuss the indications, contraindication of the procedure</b> | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b> | <b>Skill Assessment</b>   |  |             |  |
| 30.23.1                                                                                                                                                                                      | Perform lumbar puncture on a mannequin.                                                                   | S        | SH        | Y        | Skill lab                  | SKILL assessment          |  |             |  |
| 30.23.2                                                                                                                                                                                      | Enumerate all indications of lumbar puncture.                                                             | K        | K         | Y        | SGD                        | OSCE/ VIVA                |  |             |  |
| 30.23.3                                                                                                                                                                                      | Enumerate contraindications of lumbar puncture                                                            | K        | K         | Y        | SGD                        | OSCE/VIVA                 |  |             |  |
| <b>Topic: Allergic Rhinitis, Atopic Dermatitis, Bronchial Asthma, Urticaria Angioedema</b> <b>Number of competencies: (12)</b> <b>Number of procedures that require certification: (NIL)</b> |                                                                                                           |          |           |          |                            |                           |  |             |  |
| <b>PE 31.1</b>                                                                                                                                                                               | <b>Describe the etiopathogenesis, management and prevention of Allergic Rhinitis in Children</b>          | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>        | <b>Written/ Viva voce</b> |  | <b>ENT</b>  |  |
| 31.1.1                                                                                                                                                                                       | Define allergic rhinitis in children                                                                      | K        | K         | Y        | Lecture, SGD               | Written/ Viva voce        |  | ENT         |  |
| 31.1.2                                                                                                                                                                                       | Enumerate risk factors and describe pathogenesis for allergic rhinitis in children                        | K        | KH        | Y        | Lecture, SGD               | Written and viva voce     |  | ENT         |  |
| 31.1.3                                                                                                                                                                                       | Describe treatment and prevention for allergic rhinitis in children                                       | K        | K         | Y        | Lecture, SGD               | Written and viva voce     |  | ENT         |  |
| <b>PE 31.2</b>                                                                                                                                                                               | <b>Recognize the clinical signs of Allergic Rhinitis</b>                                                  | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skill Lab</b>  | <b>Skill assessment</b>   |  | <b>ENT</b>  |  |
| 31.2.1                                                                                                                                                                                       | identify clinical sign of allergic rhinitis in children                                                   | S        | SH        | Y        | Bedside, Skill Lab         | Skill assessment          |  | ENT         |  |
| <b>PE 31.3</b>                                                                                                                                                                               | <b>Describe the etiopathogenesis, clinical features and management of Atopic dermatitis in Children</b>   | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>        | <b>Written/ Viva voce</b> |  | <b>Derm</b> |  |
| 31.3.1                                                                                                                                                                                       | Describe etiopathogenesis of atopic dermatitis in children.                                               | K        | KH        | Y        | Lecture, SGD               | Written/ Viva voce        |  | Derm        |  |
| 31.3.2                                                                                                                                                                                       | Describe clinical features of atopic dermatitis in children.                                              | K        | KH        | Y        | Lecture, SGD               | Written and viva voce     |  |             |  |
| 31.3.3                                                                                                                                                                                       | Describe treatment for prevention and control of atopic dermatitis in children                            | K        | KH        | Y        | Lecture, SGD               | Written and viva voce     |  |             |  |
| <b>PE 31.4</b>                                                                                                                                                                               | <b>Identify clinical features of atopic dermatitis and manage</b>                                         | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, skill lab</b>  | <b>Skill assessment</b>   |  | <b>Derm</b> |  |
| 31.4.1                                                                                                                                                                                       | Identify clinical features of atopic dermatitis                                                           | S        | SH        | Y        | Bedside, skill lab         | Skill assessment          |  | Derm        |  |

|                |                                                                                                                   |          |           |          |                           |                            |  |  |  |
|----------------|-------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------------|----------------------------|--|--|--|
| 31.4.2         | Make a plan for local and supportive therapy for children with atopic dermatitis                                  | S        | SH        | Y        | Bedside, skill lab        | Skill assessment           |  |  |  |
| 31.4.3         | Plan appropriate systemic therapy for children with atopic dermatitis                                             | S        | SH        | Y        | Bedside, skill lab        | Skill assessment           |  |  |  |
| <b>PE 31.5</b> | <b>Discuss the etiopathogenesis, clinical types, presentations, management and prevention of childhood Asthma</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture / SGD</b>      | <b>Written / viva voce</b> |  |  |  |
| 31.5.1         | Describe etiopathogenesis of childhood asthma                                                                     | K        | KH        | Y        | Lecture / SGD             | Written/ Viva voce         |  |  |  |
| 31.5.2         | Describe types/ patterns of childhood asthma as per ATM module.                                                   | K        | KH        | Y        | Lecture / SGD             | Written and viva voce      |  |  |  |
| 31.5.3         | Enumerate common triggers in childhood asthma                                                                     | K        | KH        | Y        | Lecture / SGD             | Written and viva voce      |  |  |  |
| 31.5.4         | Describe clinical presentations of childhood asthma                                                               | K        | K         | Y        | Lecture / SGD             | Written and viva voce      |  |  |  |
| 31.5.5         | Enumerate investigations in childhood asthma                                                                      | K        | KH        | Y        | Lecture / SGD             | Written and viva voce      |  |  |  |
| 31.5.6         | Discuss treatment options for childhood asthma.                                                                   | K        | K         | Y        | Lecture / SGD             | Written and viva voce      |  |  |  |
| 31.5.7         | Discuss prevention for childhood asthma.                                                                          | K        | K         | Y        | Lecture / SGD             | Written and viva voce      |  |  |  |
| <b>PE 31.6</b> | <b>Recognize symptoms and signs of asthma in a child</b>                                                          | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, skill lab</b> | <b>Skill assessment</b>    |  |  |  |
| 31.6.1         | Recognize symptoms and signs of asthma in a child                                                                 | S        | SH        | Y        | Bedside, skill lab        | Skill assessment           |  |  |  |
| <b>PE 31.7</b> | <b>Develop a treatment plan for a child with appropriate to the severity and clinical presentation</b>            | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, skill lab</b> | <b>Skill assessment</b>    |  |  |  |
| 31.7.1         | Develop a treatment plan appropriate for the severity and clinical presentation of a child with asthma            | S        | SH        | Y        | Bedside, skill lab        | Skill assessment           |  |  |  |
| 31.7.2         | Make a treatment plan for a child with acute severe asthma (status asthmaticus)                                   | S        | SH        | Y        | Bedside, skill lab        | Skill assessment           |  |  |  |
| 31.7.3         | Observe and document steps of use of metered dose inhaler with spacer in a child with asthma.                     | S        | SH        | Y        | Bedside, skill lab        | Skill assessment           |  |  |  |

|                 |                                                                                                               |          |           |          |                            |                               |  |                           |  |
|-----------------|---------------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------|-------------------------------|--|---------------------------|--|
| <b>PE 31.8</b>  | <b>Enumerate the criteria for referral in a child with asthma</b>                                             | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture, SGD</b>        | <b>Written/ Viva voce</b>     |  |                           |  |
| 31.8.1          | Enumerate the criteria for referral in a child with Asthma.                                                   | K        | K         | Y        | Lecture, SGD               | Written/ Viva voce            |  |                           |  |
| <b>PE 31.9</b>  | <b>Interpret CBC and CX Ray in Asthma</b>                                                                     | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside clinic, SGD</b> | <b>Skill assessment/ OSCE</b> |  |                           |  |
| 31.9.1          | Interpret CBC findings in relation to asthma from given case report.                                          | S        | SH        | Y        | Bedside clinic, SGD        | Skill assessment/ OSCE        |  |                           |  |
| 31.9.2          | Interpret findings on a given X-Ray of a child with asthma                                                    | S        | SH        | Y        | Bedside clinic,            | Skill assessment              |  |                           |  |
| <b>PE 31.10</b> | <b>Enumerate the indications for PFT.</b>                                                                     | <b>K</b> | <b>K</b>  | <b>N</b> | <b>Lecture, SGD</b>        | <b>Written/ Viva voce</b>     |  | <b>Pulmonary medicine</b> |  |
| 31.10.1         | Enumerate the indications of pulmonary function Test (PFT) in childhood asthma                                | K        | K         | N        | Lecture, SGD               | Written/ Viva voce            |  | Pulmonary medicine        |  |
| <b>PE 31.11</b> | <b>Observe administration of Nebulization</b>                                                                 | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>DOAP</b>                | <b>Document in Logbook</b>    |  |                           |  |
| 31.11.1         | Observe and document steps of administration of Nebulization to a child with asthma                           | S        | SH        | Y        | DOAP                       | Document in Logbook           |  |                           |  |
| <b>PE 31.12</b> | <b>Discuss the etiopathogenesis, clinical features, complications and management of Urticaria Angioedema.</b> | <b>K</b> | <b>K</b>  | <b>Y</b> | <b>Lecture, SGD</b>        | <b>Written/ Viva voce</b>     |  |                           |  |
| 31.12.1         | Describe etiopathogenesis of urticaria/ angioedema in children                                                | K        | K         | Y        | Lecture / SGD              | Written/ Viva voce            |  |                           |  |
| 31.12.2         | Describe clinical features of urticaria/ angioedema                                                           | K        | KH        | Y        | Lecture / SGD              | Written and viva voce         |  |                           |  |
| 31.12.3         | Enumerate common complications of urticaria/ angioedema in children                                           | K        | KH        | Y        | Lecture / SGD              | Written and viva voce         |  |                           |  |
| 31.12.4         | Enumerate investigations in case of urticaria/ angioedema in children                                         | K        | K         | Y        | Lecture / SGD              | Written and viva voce         |  |                           |  |
| 31.12.5         | Describe treatment plan of urticaria/ angioedema in children                                                  | K        | KH        | Y        | Lecture / SGD              | Written and viva voce         |  |                           |  |
|                 |                                                                                                               |          |           |          |                            |                               |  |                           |  |

| Topic: Chromosomal Abnormalities |                                                                                                                                        | Number of competencies: (13) |           |          | Number of procedures that require certification: (NIL) |                           |  |                    |            |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------|----------|--------------------------------------------------------|---------------------------|--|--------------------|------------|
| <b>PE 32.1</b>                   | <b>Discuss the genetic basis, risk factors, complications, prenatal diagnosis, management and genetic counselling in Down Syndrome</b> | <b>K</b>                     | <b>KH</b> | <b>Y</b> | <b>Lecture, Small group discussion</b>                 | <b>Written</b>            |  | <b>Human Anat</b>  |            |
| 32.1.1                           | Describe the genetic basis of Down syndrome                                                                                            | K                            | KH        | Y        | Lecture/ SGD                                           | MCQ/SAQ, / Viva voce      |  | Anat, Biochemistry | OBG        |
| 32.1.2                           | Enumerate the risk factors for Down syndrome                                                                                           | K                            | KH        | Y        | Lecture/ SGD                                           | MCQ/SAQ, / Viva voce      |  |                    |            |
| 32.1.3                           | Enumerate the complications of Down syndrome                                                                                           | K                            | KH        | Y        | Lecture/ SGD                                           | MCQ/SAQ, / Viva voce      |  |                    |            |
| 32.1.4                           | Describe the prenatal diagnosis of Down syndrome                                                                                       | K                            | KH        | Y        | Lecture/ SGD                                           | MCQ/SAQ, / Viva voce      |  |                    |            |
| 32.1.5                           | Describe the management of Down syndrome                                                                                               | K                            | KH        | Y        | Lecture/ SGD                                           | MCQ/SAQ, / Viva voce      |  |                    |            |
| 32.1.6                           | Describe the genetic counseling for Down syndrome                                                                                      | K                            | KH        | Y        | Lecture/ SGD                                           | MCQ/SAQ, / Viva voce      |  |                    |            |
| <b>PE 32.2</b>                   | <b>Identify the clinical features of Down Syndrome</b>                                                                                 | <b>S</b>                     | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b>                             | <b>Logbook</b>            |  | <b>Med</b>         |            |
| 32.2.1                           | Identify common clinical features in a child with Down syndrome                                                                        | S                            | SH        | Y        | Bedside clinic                                         | Bedside /OSCE             |  |                    |            |
| <b>PE 32.3</b>                   | <b>Interpret normal Karyotype and recognize Trisomy 21</b>                                                                             | <b>S</b>                     | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b>                             | <b>Logbook</b>            |  |                    | <b>Med</b> |
| 32.3.1                           | Read a normal Karyotype and recognize true Trisomy 21                                                                                  | S                            | KH        | Y        | Skill lab                                              | OSCE/ Logbook             |  |                    |            |
| 32.3.2                           | Recognize different types of Karyotype abnormalities in Down Syndrome                                                                  | S                            | SH        | N        | Skill lab                                              | OSCE                      |  | Anat/Path          | <b>Med</b> |
| <b>PE 32.4</b>                   | <b>Discuss the referral criteria and Multidisciplinary approach to management</b>                                                      | <b>K</b>                     | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                                    | <b>Written/ Viva voce</b> |  |                    |            |
| 32.4.1                           | Enumerate the referral criteria for Down syndrome.                                                                                     | K                            | KH        | Y        | SGD                                                    | SAQ/ Viva                 |  | Anat Biochemistry  | Med        |
| 32.4.2                           | Describe a multidisciplinary approach to management of a child with Down syndrome                                                      | K                            | KH        | Y        | Lecture/ SGD                                           | MCQ/SAQ                   |  |                    |            |
| <b>PE 32.5</b>                   | <b>Counsel parents regarding 1. Present child 2. Risk in the next pregnancy</b>                                                        | <b>A/C</b>                   | <b>SH</b> | <b>N</b> | <b>Bedside, Skills lab</b>                             | <b>Logbook</b>            |  |                    |            |
| 32.5.1                           | Counsel the parents of a child with Down syndrome in a comprehensive manner including care, possible complications, future outcomes    | A/C                          | SH        | Y        | DOAP/ bedside / skill lab/ role play                   | Logbook/role play         |  |                    |            |
| 32.5.2                           | Counsel parents for risk in future pregnancies                                                                                         | C/A                          | SH        | Y        | Simulation, Role play                                  | OSCE/ Logbook             |  |                    |            |

IAP Task Force on Competency-based Curriculum for Pediatrics in UG education: Competencies to Specific Learning Objectives  
Competency statements (**in Bold**) are taken from the MCI document and not modifiable

|                 |                                                                                                                                                            |            |           |          |                                     |                           |  |                    |                |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|----------|-------------------------------------|---------------------------|--|--------------------|----------------|
| <b>PE 32.6</b>  | <b>Discuss the genetic basis, risk factors, clinical features, complications, prenatal diagnosis, management and genetic counseling in Turner Syndrome</b> | <b>K</b>   | <b>KH</b> | <b>N</b> | <b>Lecture, SGD</b>                 | <b>Written/ Viva voce</b> |  | <b>Med, OBG</b>    |                |
| 32.6.1          | Describe the genetic basis of Turner syndrome                                                                                                              | K          | KH        | N        | Lecture/ SGD                        | MCQ/SAQ, / Viva voce      |  | Anat, Biochemistry | OBG            |
| 32.6.2          | Enumerate the risk factors for Turner syndrome                                                                                                             | K          | KH        | N        | Lecture/ SGD                        | MCQ/SAQ, / Viva voce      |  |                    |                |
| 32.6.3          | Describe the clinical features of Turner syndrome                                                                                                          | K          | KH        | N        | Lecture/ SGD                        | MCQ/SAQ, / Viva voce      |  |                    |                |
| 32.6.4          | Enumerate the complications of Turner syndrome                                                                                                             | K          | KH        | N        | Lecture/ SGD                        | MCQ/SAQ, / Viva voce      |  |                    |                |
| 32.6.5          | Describe the prenatal diagnosis of Turner syndrome                                                                                                         | K          | KH        | N        | Lecture/ SGD                        | MCQ/SAQ, / Viva voce      |  |                    |                |
| 32.6.6          | Describe the management of Turner syndrome                                                                                                                 | K          | KH        | N        | Lecture/ SGD                        | MCQ/SAQ, / Viva voce      |  |                    |                |
| 32.6.7          | Describe the genetic counseling for Turner syndrome                                                                                                        | K          | KH        | N        | Lecture/ SGD                        | MCQ/SAQ, / Viva voce      |  |                    |                |
| <b>PE 32.7</b>  | <b>Identify the clinical features of Turner Syndrome</b>                                                                                                   | <b>S</b>   | <b>SH</b> | <b>N</b> | <b>Bedside, Skills lab</b>          | <b>Logbook</b>            |  | <b>Med</b>         |                |
| 32.7.1          | Identify clinical features of Turner syndrome                                                                                                              | S          | SH        | N        | Bedside, Photo                      | Bedside /Logbook          |  |                    |                |
| <b>PE 32.8</b>  | <b>Interpret normal Karyotype and recognize Turner Karyotype</b>                                                                                           | <b>S</b>   | <b>SH</b> | <b>N</b> | <b>Bedside, Skills lab</b>          | <b>Logbook</b>            |  |                    | <b>Med</b>     |
| 32.8.1          | Read a normal Karyotype and recognize Turner karyotype                                                                                                     | S          | KH        | N        | Skill lab                           | Logbook                   |  |                    |                |
| <b>PE 32.9</b>  | <b>Discuss the referral criteria and Multidisciplinary approach to management</b>                                                                          | <b>K</b>   | <b>KH</b> | <b>N</b> | <b>Lecture, SGD</b>                 | <b>Written/ Viva voce</b> |  |                    |                |
| 32.9.1          | Enumerate the referral criteria for Turner syndrome.                                                                                                       | K          | KH        | N        | SGD                                 | SAQ/ Viva                 |  | Anat Biochemistry  | <b>Med</b>     |
| 32.9.2          | Describe a multidisciplinary approach to management of a child with Turner syndrome                                                                        | K          | KH        | N        | Lecture/ SGD                        | MCQ/SAQ                   |  |                    |                |
| <b>PE 32.10</b> | <b>Counsel parents regarding 1. Present child<br/>2. Risk in the next pregnancy</b>                                                                        | <b>A/C</b> | <b>SH</b> | <b>N</b> | <b>Bedside, Skills lab</b>          | <b>Logbook</b>            |  |                    | Med, Obs Gynae |
| 32.10.1         | Counsel the parents of a child with Turner syndrome in a comprehensive manner including care, possible complications, future outcomes                      | A/C        | SH        | N        | DOAP/ bedside/ skill lab/ role play | Logbook/role play         |  |                    |                |

|                                                                                                                              |                                                                                                                                               |          |           |          |                           |                          |  |  |     |
|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------------|--------------------------|--|--|-----|
| 32.10.2                                                                                                                      | Counsel parents for risk in future pregnancies                                                                                                | C/A      | SH        | N        | Simulation, Role play     | Logbook                  |  |  |     |
| <b>PE 32.11</b>                                                                                                              | <b>Discuss the genetic basis, risk factors, complications, prenatal diagnosis, management and genetic counselling in Klinefelter Syndrome</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b>       | <b>Written/ viva</b>     |  |  | Med |
| 32.1.1                                                                                                                       | Discuss the genetic basis, risk factors, complications, prenatal diagnosis, management and genetic counselling in Klinefelter Syndrome        | K        | KH        | Y        | Lecture/ SGD              | Written/ viva            |  |  |     |
| <b>PE 32.12</b>                                                                                                              | <b>Identify the clinical features of Klinefelter Syndrome</b>                                                                                 | <b>S</b> | <b>SH</b> | <b>N</b> | <b>Bedside/ photo</b>     | <b>LOGBOOK</b>           |  |  | Med |
|                                                                                                                              | Identify the clinical features of Klinefelter Syndrome                                                                                        | S        | SH        | N        | Bedside/ photo/           | LOGBOOK                  |  |  |     |
| <b>PE 32.13</b>                                                                                                              | <b>Interpret normal Karyotype and recognize the Klinefelter Karyotype</b>                                                                     | <b>S</b> | <b>SH</b> | <b>N</b> | <b>Bedside/ photo</b>     | <b>LOGBOOK</b>           |  |  | Med |
| <b>Topic: Endocrinology</b> <b>Number of competencies: (11)</b> <b>Number of procedures that require certification: (02)</b> |                                                                                                                                               |          |           |          |                           |                          |  |  |     |
| <b>PE 33.1</b>                                                                                                               | <b>Describe the etiopathogenesis clinical features, management of Hypothyroidism in children</b>                                              | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>       | <b>written/viva voce</b> |  |  |     |
| 33.1.1                                                                                                                       | Describe the pathogenesis of hypothyroidism in children                                                                                       | K        | KH        | Y        | <b>Lecture / SGD</b>      | Written/ viva            |  |  |     |
| 33.1.2                                                                                                                       | Enumerate the causes of congenital and acquired hypothyroidism in children.                                                                   | K        | K         | Y        | Lecture, SGD              | Written/ viva            |  |  |     |
| 33.1.4                                                                                                                       | Describe the clinical features of congenital and acquired hypothyroidism                                                                      | K        | KH        | Y        | Lecture, SGD              | Written/ viva            |  |  |     |
| 33.1.5                                                                                                                       | Discuss the approach to a case of congenital / acquired hypothyroidism in children                                                            | K        | KH        | Y        | Lecture, SGD              | Written/ viva            |  |  |     |
| 33.1.6                                                                                                                       | Outline the treatment of hypothyroidism in children.                                                                                          | K        | KH        | Y        | Lecture, SGD              | Written/ viva            |  |  |     |
| <b>PE 33.2</b>                                                                                                               | <b>Recognize the clinical signs of Hypothyroidism and refer</b>                                                                               | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skill Lab</b> | <b>Skill Assessment</b>  |  |  |     |
| 33.2.1                                                                                                                       | Recognize hypothyroidism by taking appropriate history and focused physical examination                                                       | S        | SH        | Y        | Bedside                   | Skill assessment         |  |  |     |
| 33.2.2                                                                                                                       | Identify the need to refer the child to higher center                                                                                         | S/C      | SH        | Y        | Bedside, skill lab        | OSCE with SP             |  |  |     |
| <b>PE 33.3</b>                                                                                                               | <b>Interpret and explain neonatal thyroid screening report</b>                                                                                | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, SGD</b>       | <b>Skill Assessment</b>  |  |  |     |
| 33.3.1                                                                                                                       | Interpret the given neonatal thyroid screening report                                                                                         | S        | SH        | Y        | SGD, Bedside              | OSCE/viva voce           |  |  |     |
| 33.3.2                                                                                                                       | Explain the given thyroid screening report                                                                                                    | K/S      | SH        | Y        | Bedside, SGD              | OSCE                     |  |  |     |

|                 |                                                                                                                                  |          |           |          |                                             |                           |          |                      |  |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------------------------------|---------------------------|----------|----------------------|--|
| <b>PE 33.4</b>  | <b>Discuss the etiopathogenesis, clinical types, presentations, complication and management of Diabetes mellitus in children</b> | K        | KH        | Y        | <b>Lecture, SGD</b>                         | <b>Written/ Viva voce</b> |          |                      |  |
| 33.4.1          | Explain the etiopathogenesis of Diabetes mellitus in children.                                                                   | K        | KH        | Y        | Lecture / SGD                               | Written/ viva             |          | Biochemistry, Physio |  |
| 33.4.2          | Discuss clinical types of DM in children.                                                                                        | K        | KH        | Y        | Lecture / SGD                               | Written/ viva             |          |                      |  |
| 33.4.4          | Describe the clinical features of DM in children.                                                                                | K        | KH        | Y        | Lecture / SGD                               | Written/ viva             |          |                      |  |
| 33.4.5          | Enumerate the complications of DM.                                                                                               | K        | KH        | Y        | Lecture / SGD                               | Written/ viva             |          |                      |  |
| 33.4.6          | Describe the comprehensive management for children with DM.                                                                      | K/S      | KH        | Y        | Lecture / SGD                               | Written/ viva             |          |                      |  |
| <b>PE 33.5</b>  | <b>Interpret Blood sugar reports and explain the diagnostic criteria for Type 1 Diabetes</b>                                     | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside clinic, small group activity</b> | <b>Skill Assessment</b>   |          |                      |  |
| 33.5.1          | Identify Type 1 Diabetes from a given blood report as per latest diagnostic criteria of DM (American Diabetes Association, 2016) | K/S      | SH        | Y        | Bedside, SGD                                | OSCE                      |          |                      |  |
| <b>PE 33.6</b>  | <b>Perform and interpret Urine Dip Stick for Sugar</b>                                                                           | <b>S</b> | <b>P</b>  | <b>Y</b> | <b>DOAP session</b>                         | <b>Skill Assessment</b>   | <b>3</b> | <b>Biochemistry</b>  |  |
| 33.6.1          | Perform urine dipstick test for sugar and interpret it correctly                                                                 | S        | P         | Y        | DOAP session                                | OSPE                      |          |                      |  |
| <b>PE 33.7</b>  | <b>Perform genital examination and recognize Ambiguous Genitalia and refer appropriately</b>                                     | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, skill lab</b>                   | <b>Skill Assessment</b>   |          |                      |  |
| 33.7.1          | Identify the deviation from normal while performing genital examination maintaining full dignity of the patient                  | S        | SH        | Y        | Bedside, skill lab                          | OSCE                      |          |                      |  |
| 33.7.2          | Counsel the parents for referral to specialist after recognizing ambiguous genitalia                                             | A/C      | SH        | Y        | Bedside, skill lab                          | OSCE station with SP      |          |                      |  |
| <b>PE 33.8</b>  | <b>Define precocious and delayed Puberty</b>                                                                                     | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture, SGD</b>                         | <b>Written/ Viva voce</b> |          |                      |  |
| 33.8.1          | Discuss normal Physiology of puberty and define precocious and delayed puberty                                                   | K        | KH        | Y        | Lecture, SGD                                | Written/ viva             |          |                      |  |
| <b>PE 33.9</b>  | <b>Perform Sexual Maturity Rating (SMR) and interpret</b>                                                                        | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, skill lab</b>                   | <b>Skill Assessment</b>   |          |                      |  |
| 33.9.1          | Perform SMR staging maintaining full dignity of the adolescent patient and interpret it correctly                                | K/S      | SH        | Y        | Bedside, skill lab                          | OSCE                      |          |                      |  |
| <b>PE 33.10</b> | <b>Recognize precocious and delayed Puberty and refer</b>                                                                        | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, skill lab</b>                   | <b>Logbook</b>            |          |                      |  |

|                                                                                                                                                          |                                                                                                                               |          |           |          |                           |                          |   |                              |                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------------|--------------------------|---|------------------------------|-----------------|
| 33.10.1                                                                                                                                                  | Recognize features of precocious and delayed puberty in a child                                                               | S        | SH        | Y        | Bedside/skill lab         | Logbook                  |   |                              |                 |
| 33.10.2                                                                                                                                                  | Counsel the parents for need to refer the child to higher center after diagnosing precocious or delayed Puberty               | S/C      | SH        | Y        | Bedside, skill lab        | OSCE with SP             |   |                              |                 |
| <b>PE 33.11</b>                                                                                                                                          | <b>Identify deviations in growth and plan appropriate referral</b>                                                            | <b>S</b> | <b>P</b>  | <b>Y</b> | <b>Bedside, skill lab</b> | <b>Logbook</b>           | 2 |                              |                 |
| 33.11.1                                                                                                                                                  | Identify the abnormal growth pattern in a child                                                                               | S        | SH        | Y        | Bedside, skill lab        | OSCE                     | 2 |                              |                 |
| 33.11.2                                                                                                                                                  | Plan the referral of a child with abnormal growth to a specialist and counsel the parents accordingly                         | S/C      | P         | Y        | Bedside, skill lab        | OSCE with SP             | 2 |                              |                 |
| <b>Topic: Vaccine preventable Diseases-Tuberculosis</b> <b>Number of competencies: (20)</b> <b>Number of procedures that require certification: (03)</b> |                                                                                                                               |          |           |          |                           |                          |   |                              |                 |
| <b>PE 34.1</b>                                                                                                                                           | <b>Discuss the epidemiology, clinical features, clinical types, complications of Tuberculosis in Children and Adolescents</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/SGD</b>        | <b>Written/viva voce</b> |   | <b>Micro</b>                 | <b>Resp Med</b> |
| 34.1.1                                                                                                                                                   | discuss the epidemiology of Tuberculosis in Children and Adolescents                                                          | K        | KH        | Y        | Lecture/SGD               | Written/viva voce        |   |                              |                 |
| 34.1.2                                                                                                                                                   | Describe the clinical features of Tuberculosis in Children and Adolescents                                                    | K        | KH        | Y        | Lecture/SGD               | Written/viva voce        |   |                              |                 |
| 34.1.3                                                                                                                                                   | Enumerate the clinical types of Tuberculosis in Children and Adolescents                                                      | K        | KH        | Y        | Lecture/SGD               | Written/viva voce        |   |                              |                 |
| 34.1.4                                                                                                                                                   | List the complications of Tuberculosis in Children and Adolescents                                                            | K        | KH        | Y        | Lecture/SGD               | Written/viva voce        |   |                              |                 |
| <b>PE 34.2</b>                                                                                                                                           | <b>Discuss the various diagnostic tools for childhood tuberculosis</b>                                                        | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/SGD</b>        | <b>Written/viva voce</b> |   | <b>Micro</b>                 | <b>Resp Med</b> |
| 34.2.1                                                                                                                                                   | Describe the various diagnostic tools for childhood tuberculosis                                                              | K        | KH        | Y        | Lecture/SGD               | Written/viva voce        |   |                              |                 |
| <b>PE 34.3</b>                                                                                                                                           | <b>Discuss the various regimens for management of Tuberculosis as per National Guidelines</b>                                 | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/SGD</b>        | <b>Written/viva voce</b> |   | <b>Micro, Com Med, Pharm</b> | <b>Resp Med</b> |
| 34.3.1                                                                                                                                                   | Describe the various regimens for management of Tuberculosis as per National Guidelines                                       | K        | KH        | Y        | Lecture/SGD               | Written/viva voce        |   |                              |                 |
| <b>PE 34.4</b>                                                                                                                                           | <b>Discuss the preventive strategies adopted and the objectives and outcome of the National Tuberculosis Program</b>          | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/SGD</b>        | <b>Written/viva voce</b> |   | <b>Micro, Com Med, Pharm</b> | <b>Resp Med</b> |

|                 |                                                                                                             |          |           |          |                            |                          |          |               |                 |
|-----------------|-------------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------------------------|--------------------------|----------|---------------|-----------------|
| 34.4.1          | Describe the preventive strategies adopted under the National Tuberculosis Program                          | K        | KH        | Y        | Lecture/ SGD               | Written/viva voce        |          |               |                 |
| 34.4.2          | List the objectives of the National Tuberculosis Program                                                    | K        | KH        | Y        | Lecture/ SGD               | Written/viva voce        |          |               |                 |
| 34.4.3          | Discuss the outcome of the National Tuberculosis Program                                                    | K        | KH        | Y        | Lecture/ SGD               | Written/viva voce        |          |               |                 |
| <b>PE 34.5</b>  | <b>Able to elicit, document and present history of contact with tuberculosis in every patient encounter</b> | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside, Skills lab</b> | <b>Skill Assessment</b>  |          |               | <b>Resp Med</b> |
| 34.5.1          | Elicit history of contact with tuberculosis in every patient encounter                                      | S        | SH        | Y        | Bedside, Skills lab        | Skill Assessment         |          |               |                 |
| 34.5.2          | Document history of contact with tuberculosis in every patient encounter                                    | S        | SH        | Y        | Bedside, Skills lab        | Skill Assessment         |          |               |                 |
| 34.5.3          | Present history of contact with tuberculosis in every patient encounter                                     | S        | SH        | Y        | Bedside, Skills lab        | Skill Assessment         |          |               |                 |
| <b>PE 34.6</b>  | <b>Identify a BCG scar</b>                                                                                  | <b>S</b> | <b>P</b>  | <b>Y</b> | <b>Bedside, Skills lab</b> | <b>Skill Assessment</b>  | <b>3</b> | <b>Micro</b>  | <b>Resp Med</b> |
| 34.6.1          | Identify a BCG scar in a child                                                                              | S        | P         | Y        | Bedside, Skills lab        | Skill Assessment         | 3        |               |                 |
| <b>PE 34.7</b>  | <b>Interpret a Mantoux Test</b>                                                                             | <b>S</b> | <b>P</b>  | <b>Y</b> | <b>Bedside</b>             | <b>Skill Assessment</b>  | <b>3</b> | <b>Micro</b>  | <b>Resp Med</b> |
| 34.7.1          | Read a Mantoux Test                                                                                         | S        | P         | Y        | Bedside                    | Skill Assessment         | 3        |               |                 |
| 34.7.2          | Interpret a Mantoux Test                                                                                    | S        | P         | Y        | Bedside                    | Skill Assessment         | 3        |               |                 |
| <b>PE 34.8</b>  | <b>Interpret a chest radiograph</b>                                                                         | <b>S</b> | <b>SH</b> | <b>Y</b> | <b>Bedside</b>             | <b>Skill Assessment</b>  |          | <b>Radiod</b> | <b>Resp Med</b> |
| 34.8.1          | Identify abnormalities caused by tuberculosis in a chest radiograph                                         | S        | SH        | Y        | Bedside                    | Skill Assessment         |          |               |                 |
| <b>PE 34.9</b>  | <b>Interpret blood tests in the context of laboratory evidence for tuberculosis</b>                         | <b>S</b> | <b>SH</b> | <b>N</b> | <b>Bedside, SGD</b>        | <b>Logbook</b>           |          | <b>Micro</b>  | <b>Resp Med</b> |
| 34.9.1          | interpret blood tests in the context of laboratory evidence for tuberculosis                                | S        | SH        | N        | Bedside, SGD               | Logbook                  |          |               |                 |
| <b>PE 34.10</b> | <b>Discuss the various samples for demonstrating the organism e.g. Gastric Aspirate, Sputum, CSF, FNAC</b>  | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Bedside, SGD</b>        | <b>Written/viva voce</b> |          | <b>Micro</b>  | <b>Resp Med</b> |
| 34.10.1         | Describe the various samples for demonstrating the mycobacteria e.g. Gastric Aspirate, Sputum, CSF, FNAC    | K        | KH        | Y        | Bedside, SGD               | Written/viva voce        |          |               |                 |

|                 |                                                                                                                                                                                                                  |          |           |          |                     |                          |          |              |                 |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|--------------------------|----------|--------------|-----------------|
| <b>PE 34.11</b> | <b>Perform AFB staining</b>                                                                                                                                                                                      | <b>S</b> | <b>P</b>  | <b>Y</b> | <b>DOAP session</b> | <b>Logbook/Journal</b>   | <b>3</b> | <b>Micro</b> | <b>Resp Med</b> |
| 34.11.1         | Perform AFB staining                                                                                                                                                                                             | S        | P         | Y        | DOAP session        | Logbook/Journal          | 3        |              |                 |
| <b>PE 34.12</b> | <b>Enumerate the indications and discuss the limitations of methods of culturing M. Tuberculosis</b>                                                                                                             | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>SGD</b>          | <b>Written/viva voce</b> |          | <b>Micro</b> | <b>Resp Med</b> |
| 34.12.1         | Enumerate the indications of culturing M. tuberculosis                                                                                                                                                           | K        | KH        | Y        | SGD                 | Written/viva voce        |          |              |                 |
| 34.12.2         | Enumerate the methods of culturing M. tuberculosis                                                                                                                                                               | K        | KH        | Y        | SGD                 | Written/ viva            |          |              |                 |
| 34.12.3         | Describe the limitations of different methods of culturing M. tuberculosis                                                                                                                                       | K        | KH        | Y        | SGD                 | Written/viva voce        |          |              |                 |
| <b>PE 34.13</b> | <b>Enumerate the newer diagnostic tools for Tuberculosis including BACTEC CBNAAT and their indications</b>                                                                                                       | <b>K</b> | <b>K</b>  | <b>N</b> | <b>Lecture/ SGD</b> | <b>Written/viva voce</b> |          |              |                 |
| 34.13.1         | Enumerate the newer diagnostic tools for Tuberculosis including BACTEC and CBNAAT                                                                                                                                | K        | K         | N        | Lecture/ SGD        | Written/viva voce        |          |              |                 |
| 34.13.2         | recall the indications for using the newer diagnostic tools for Tuberculosis including BACTEC and CBNAAT                                                                                                         | K        | K         | N        | Lecture/ SGD        | Written/viva voce        |          |              |                 |
| <b>PE 34.14</b> | <b>Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of fever in children</b>                                                               | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b> | <b>Written/viva voce</b> |          | <b>Micro</b> |                 |
| 34.14.1         | Enumerate the common causes of fever in children.                                                                                                                                                                | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |          |              |                 |
| 34.14.2         | Describe the pathophysiology of fever in children.                                                                                                                                                               | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |          |              |                 |
| 34.14.3         | List the clinical features associated with fever in children which aid in diagnosis.                                                                                                                             | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |          |              |                 |
| 34.14.4         | Recall the complications of fever in children.                                                                                                                                                                   | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |          |              |                 |
| 34.14.5         | Elaborate the management of fever in children.                                                                                                                                                                   | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |          |              |                 |
| <b>PE 34.15</b> | <b>Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with exanthematous illness like Measles, Mumps, Rubella &amp; Chicken pox</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b> | <b>Written/viva voce</b> |          | <b>Micro</b> |                 |

|                 |                                                                                                                                                                            |          |           |          |                     |                          |  |              |          |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|--------------------------|--|--------------|----------|
| 34.15.1         | Enumerate the common causes of exanthematous illness (fever with rash) in children                                                                                         | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| 34.15.2         | discuss the pathogenesis of Measles, Mumps, Rubella & Chicken pox                                                                                                          | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| 34.15.3         | Describe the clinical features of Measles, Mumps, Rubella & Chicken pox in children and adolescents                                                                        | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| 34.15.4         | Enumerate the complications of Measles, Mumps, Rubella & Chicken pox in children and adolescents                                                                           | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| 34.15.5         | outline the management of Measles, Mumps, Rubella & Chicken pox in children and adolescents                                                                                | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| <b>PE 34.16</b> | <b>Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Diphtheria, Pertussis, Tetanus</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b> | <b>Written/viva voce</b> |  | <b>Micro</b> |          |
| 34.16.1         | discuss the pathogenesis of Diphtheria, Pertussis and Tetanus                                                                                                              | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| 34.16.2         | Describe the clinical features of Diphtheria, Pertussis and Tetanus in children and adolescents.                                                                           | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| 34.16.3         | Enumerate the complications of Diphtheria, Pertussis and Tetanus in children and adolescents                                                                               | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| 34.16.4         | outline the management of Diphtheria, Pertussis and Tetanus in children and adolescents                                                                                    | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| <b>PE 34.17</b> | <b>Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Typhoid</b>                        | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b> | <b>Written/viva voce</b> |  | <b>Micro</b> | <b>-</b> |
| 34.17.1         | discuss the pathophysiology of Typhoid fever                                                                                                                               | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| 34.17.2         | Describe the clinical features of Typhoid fever in children                                                                                                                | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| 34.17.3         | Enumerate the complications of Typhoid fever in children                                                                                                                   | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| 34.17.4         | outline the management of Typhoid fever in children                                                                                                                        | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
|                 |                                                                                                                                                                            |          |           |          |                     |                          |  |              |          |

|                 |                                                                                                                                                                                                                                                                |          |           |          |                     |                          |  |              |          |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|---------------------|--------------------------|--|--------------|----------|
| <b>PE 34.18</b> | <b>Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Dengue, Chikungunya and other vector borne diseases</b>                                                                | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b> | <b>Written/viva voce</b> |  | <b>Micro</b> | <b>-</b> |
| 34.18.1         | Enumerate common causes of fever resulting from vector borne diseases in children (Eg Dengue, Chikungunya and others)                                                                                                                                          | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| 34.18.2         | discuss the pathophysiology of vector borne diseases in children (Eg Dengue, Chikungunya, and others)                                                                                                                                                          | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| 34.18.3         | list the clinical features of vector borne diseases in children (Eg Dengue, Chikungunya, and others)                                                                                                                                                           | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| 34.18.4         | recall the complications of vector borne diseases in children (Eg Dengue, Chikungunya, and others)                                                                                                                                                             | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| 34.18.5         | elaborate the management of vector borne diseases in children (Eg Dengue, Chikungunya, and others)                                                                                                                                                             | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| <b>PE 34.19</b> | <b>Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of children with Common Parasitic Infections, malaria, leishmaniasis, filariasis, helminthic infestations, amebiasis, giardiasis</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/ SGD</b> | <b>Written/viva voce</b> |  | <b>Micro</b> | <b>-</b> |
| 34.19.1         | Enumerate the common causes of fever resulting from parasitic infections like malaria, leishmaniasis, filariasis, helminthic infestations, amebiasis and giardiasis                                                                                            | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| 34.19.2         | Discuss the pathophysiology of Common Parasitic Infections like malaria, leishmaniasis, filariasis, helminthic infestations, amebiasis and giardiasis                                                                                                          | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| 34.19.3         | List the clinical features of Common Parasitic Infections like malaria, leishmaniasis, filariasis, helminthic infestations, amebiasis and giardiasis                                                                                                           | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| 34.19.4         | Recall the complications of Common Parasitic Infections like malaria, leishmaniasis, filariasis, helminthic infestations, amebiasis and giardiasis                                                                                                             | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |
| 34.19.5         | Elaborate the management of Common Parasitic Infections like malaria, leishmaniasis, filariasis, helminthic infestations, amebiasis and giardiasis                                                                                                             | K        | KH        | Y        | Lecture/ SGD        | Written/viva voce        |  |              |          |

|                                                                                                                                                       |                                                                                                                                                                                         |          |           |          |                                      |                                         |   |              |          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|--------------------------------------|-----------------------------------------|---|--------------|----------|
| <b>PE 34.20</b>                                                                                                                                       | <b>Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Rickettsial diseases</b>                        | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Lecture/SGD</b>                   | <b>Written/viva voce</b>                |   | <b>Micro</b> | <b>-</b> |
| 34.20.1                                                                                                                                               | Enumerate the common causes of fever resulting from Rickettsial diseases                                                                                                                | K        | KH        | Y        | Lecture/SGD                          | Written/viva voce                       |   |              |          |
| 34.20.2                                                                                                                                               | Discuss the pathophysiology of Rickettsial diseases                                                                                                                                     | K        | KH        | Y        | Lecture/SGD                          | Written/viva voce                       |   |              |          |
| 34.20.3                                                                                                                                               | List the clinical features of Rickettsial diseases in children                                                                                                                          | K        | KH        | Y        | Lecture/SGD                          | Written/viva voce                       |   |              |          |
| 34.20.4                                                                                                                                               | Recall the complications of Rickettsial diseases in children                                                                                                                            | K        | KH        | Y        | Lecture/SGD                          | Written/viva voce                       |   |              |          |
| 34.20.5                                                                                                                                               | Elaborate the management of Rickettsial diseases in children                                                                                                                            | K        | KH        | Y        | Lecture/SGD                          | Written/viva voce                       |   |              |          |
| <b>Topic: The role of the physician in the community      Number of competencies: (1)      Number of procedures that require certification: (NIL)</b> |                                                                                                                                                                                         |          |           |          |                                      |                                         |   |              |          |
| <b>PE 35.1</b>                                                                                                                                        | <b>Identify, discuss and defend medicolegal, socio-cultural and ethical issues as they pertain to health care in children (including parental rights and right to refuse treatment)</b> | <b>K</b> | <b>KH</b> | <b>Y</b> | <b>Small group discussion</b>        | <b>Written/Viva voce</b>                |   |              |          |
| 35.1.1                                                                                                                                                | List common medicolegal issues related to healthcare in children                                                                                                                        | K        | KH        | Y        | Interactive lecture                  | Written/ viva                           | - | Forensic     |          |
| 35.1.2                                                                                                                                                | List common socio-cultural issues related to healthcare in children                                                                                                                     | K        | KH        | Y        | Interactive lecture/ community visit | Written/ viva                           | - | Com Med      |          |
| 35.1.3                                                                                                                                                | Identify the important socio-cultural and ethical issues related to healthcare in children in a clinical case during bedside teaching                                                   | K        | KH/S<br>H | Y        | Bedside teaching                     | Long case<br>OSCE<br>Reflective writing |   |              |          |
| 35.1.4                                                                                                                                                | Discuss the common medico-legal, socio-cultural and ethical issues related to healthcare in children                                                                                    | K        | KH/S<br>H | Y        | Case-based learning/ SGD             | OSCE<br>Reflective writing              |   |              |          |

### LIST OF ABBREVIATIONS

|          |                                            |
|----------|--------------------------------------------|
| A        | Attitude                                   |
| AETCOM   | Attitude Ethics and Communication          |
| Anat     | Anatomy                                    |
| Biochem  | Biochemistry                               |
| Cardio   | Cardiology                                 |
| Com Med  | Community Medicine                         |
| Derm     | Dermatology                                |
| DOAP     | Demonstrate Observe Assist Perform         |
| ENT      | ENT                                        |
| Forensic | Forensic Medicine                          |
| Gastro   | Gastroenterology                           |
| K        | Knows                                      |
| KH       | Know How                                   |
| S        | Shows                                      |
| C        | Communication                              |
| Med      | Gen Medicine                               |
| Micro    | Microbiology                               |
| N        | No                                         |
| OBG      | Obstetrics & Gynecology                    |
| Ophthal  | Ophthalmology                              |
| OSCE     | Objective Structured Clinical Examination  |
| OSPE     | Objective Structured Practical Examination |
| Psych    | Psychiatry                                 |
| PMR      | Physical Medicine Rehabilitation           |
| Path     | Pathology                                  |
| Physio   | Physiology                                 |
| Pharm    | Pharmacology                               |
| SAQ      | Short Answer Question                      |
| SGD      | Small Group Discussion                     |
| Surg     | Gen Surgery                                |
| RadioD   | Radio diagnosis                            |
| Resp Med | Respiratory Medicine                       |
| Y        | Yes                                        |