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

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Task force Members

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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 K/S/A/C	K/KH /SH/P	Core	Suggested Teaching Learning Method	Suggested Assessment Method	Number for Certification	Vertical Integration	Horizontal Integration
Topic: Normal Growth and Development		**Number of competencies: (7)**			**Number of procedures that require certification: (02)**				
PE 1.1	**Define the terminologies Growth and Development and Discuss the factors affecting normal growth and development**	**K**	**KH**	**Y**	**Lecture/SGD**	**Written/viva voce**			
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			
PE 1.2	**Discuss and Describe the patterns of growth in infants, children and adolescents**	**K**	**KH**	**Y**	**Lecture/SGD**	**Written/viva voce**			**Psych**
1.2.1	Describe the patterns of growth in infants, children and adolescents	K	KH	Y	Lecture/SGD	Written/viva voce			
PE 1.3	**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**	**K**	**KH**	**Y**	**Lecture/SGD**	**Written/viva voce**			**Com Med**
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			
PE 1.4	**Perform Anthropometric measurements, document in growth charts and interpret**	**S**	**P**	**Y**	**SGD**	**Document in Logbook**	**3**		
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		

PE 1.5	**Define development and Discuss the normal developmental milestones with respect to motor, behavior, social, adaptive and language**	**K**	**KH**	**Y**	**Lecture/SGD**	**Written/viva voce**			**Psych**
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
PE 1.6	**Discuss the methods of assessment of development.**	**K**	**KH**	**Y**	**Lecture/SGD**	**Written/viva voce**			
1.6.1	Discuss the methods of assessment of development	K	KH	Y	Lecture/ SGD	Written/viva voce			
PE 1.7	**Perform Developmental assessment and interpret**	**S**	**P**	**N**	**Bedside/ skills lab**	**Document in Logbook**	**3**		
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		
Topic: Common problems related to Growth		**Number of competencies: (6)**				**Number of procedures that require certification: (NIL)**			
PE 2.1	**Discuss the etiopathogenesis, clinical features and management of a child who fails to thrive**	**K**	**KH**	**Y**	**Lecture/SGD**	**Written/viva voce**			
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			
PE 2.2	**Assessment of a child with failure to thrive including eliciting an appropriate history and examination**	**S**	**SH**	**Y**	**Bedside clinics**	**Skills station**			
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			
PE 2.3	**Counseling a parent with failing to thrive child**	**A/C**	**SH**	**Y**	**OSCE**	**Document in Logbook**		**AETCOM**	

2.3.1	Counsel a parent of a child with failure to thrive.	A/C	SH	Y	Skill lab/ role play	OSCE/ Document in Logbook			
PE 2.4	**Discuss the etiopathogenesis, clinical features and management of a child with short stature**	**K**	**KH**	**Y**	**Lecture/SGD**	**Written/viva voce**			
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			
PE2.5	**Assessment of a child with short stature: Elicit history; perform examination, document and present.**	**S**	**SH**	**Y**	**Bedside /skill lab**	**Skill assessment**			
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/ bedside case			
PE2.6	**Enumerate the referral criteria for growth related problems**	**K**	**K**	**Y**	**Lecture /SGD**	**Written/viva voce**			
2.6.1	Enumerate the referral criteria for growth related problems	K	K	Y	Lecture /SGD	Written/viva voce			
Topic: Common problems related to Development -1 (Developmental delay, Cerebral palsy)		**Number of competencies: (8)**				**Number of procedures that require certification: (NIL)**			
PE.3.1	**Define, Enumerate and Discuss the causes of developmental delay and disability including intellectual disability in children**	**K**	**K**	**Y**	**Lecture, SGD**	**Written/viva-voce**			
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			
PE3.2	**Discuss the approach to a child with developmental delay**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/viva-voce**			
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			
PE3.3	**Assessment of a child with developmental delay- elicit document and present history**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Skill assessment**			
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			
PE3.4	**Counsel a parent of a child with developmental delay**	**S**	**SH**	**Y**	**DOAP Session**	**Document in Logbook**			
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			
PE3.5	**Discuss the role of the child developmental unit in management of developmental delay**	**K**	**K**	**N**	**Lecture, SGD**	**Written/ Viva voce**		**Com Med**	
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	

PE3.6	**Discuss the referral criteria for children with developmental delay**	**K**	**K**	**Y**	**Lecture, SGD**	**Written/viva voce**			
3.6.1	Enumerate clinical criteria for referral of a child with developmental delay.	K	K	Y	Lecture /SGD	Written/viva voce			
PE3.7	**Visit a Child Developmental Unit and Observe its functioning**	**S**	**KH**	**Y**	**Lecture, SGD**	**Logbook entry**		**Com Med**	
3.7.1	Observe and list the activities in the child developmental unit.	S	KH	Y	Lecture, SGD	Logbook entry		Com Med	
PE3.8	**Discuss the etiopathogenesis, clinical presentation and multidisciplinary approach in the management of cerebral palsy**	**K**	**KH**	**Y**	Lecture /SGD	**Written/viva voce**			**PMR**
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			
Topic: Common problems related to Development-2 (Scholastic backwardness, Learning Disabilities, Autism, ADHD)		**Number of competencies: (6)**				**Number of procedures that require certification: (NIL)**			
PE4.1	**Discuss the causes and approach to a child with scholastic backwardness**	**K**	**K**	**N**	**Lecture, SGD**	**Written/viva voce**			
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			
PE4.2	**Discuss the etiology, clinical features, diagnosis and management of a child with learning disabilities**	K	K	N	**Lecture, SGD**	**Written/viva voce**			
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			
PE4.3	**Discuss the etiology, clinical features, diagnosis and management of a child with Attention Deficit Hyperactivity Disorder (ADHD)**	K	K	N	**Lecture, SGD**	**Written/viva voce**			
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			
PE4.4	**Discuss etiology, clinical features, diagnosis and management of a child with autism**	K	K	N	**Lecture, SGD**	**Written/viva voce**			
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			
PE4.5	**Discuss the role of Child Guidance Clinic in children with Developmental problems**	**K**	**K**	**N**	**Lecture, SGD**	**Written/Viva voce**		**Psych**	
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	
PE4.6	**Visit to the Child Guidance Clinic**	**S**	**KH**	**N**	**Lecture, SGD**	**Document in Logbook**		Psych	
4.6.1	Describe the functioning of child guidance clinic in their institutions.	S	KH	N	Lecture, SGD	Document in Logbook		Psych	
Topic: Common problems related to behaviour		**Number of competencies: (3)**				**Number of procedures that require certification: (NIL)**			
PE 5.1	**Describe the clinical features, diagnosis and management of thumb sucking**	**K**	**K**	**N**	**Lecture, SGD**	**Written**			
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			
PE 5.2	**Describe the clinical features, diagnosis and management of feeding problems**	**K**	**K**	**N**	**Lecture, SGD**	**Written/viva voce**			
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			
PE 5.3	**Describe the clinical features, diagnosis and management of nail-biting**	**K**	**K**	**N**	**Lecture, SGD**	**Written/Viva Voce**			
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			
PE 5.4	**Describe the clinical features, diagnosis and management of breath holding spells.**	**K**	**K**	**N**	**Lecture, SGD**	**Written/Viva Voce**			
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			
PE 5.5	**Describe the clinical features, diagnosis and management of temper tantrums**	**K**	**K**	**N**	**Lecture, SGD**	**Written/Viva Voce**			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			
PE 5.6	**Describe the clinical features, diagnosis and management of pica**	**K**	**K**	**N**	**Lecture, SGD**	**Written/Viva Voce**			
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			
PE 5.7	**Describe the clinical features, diagnosis and management of fussy infant**	**K**	**K**	**N**	**Lecture, SGD**	**Written/Viva Voce**			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			
PE 5.8	**Discuss the etiology, clinical features and management of enuresis.**	**K**	**K**	**N**	**Lecture, SGD**	**Written/Viva Voce**			
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			
PE 5.9	**Discuss the etiology, clinical features and management of Encopresis.**	**K**	**K**	**N**	**Lecture, SGD**	**Written/Viva Voce**			
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			
PE 5.10	**Discuss the role of child guidance clinic in children with behavioural problems and the referral criteria**	**K**	**K**	**N**	**Lecture, SGD**	**Written/Viva Voce**			**Psych**
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			
PE 5.11	**Visit to Child Guidance Clinic and observe functioning**	**K**	**KH**	**N**	**Lecture, SGD**	**Document in Logbooks**			
5.11.1	Describe functioning of a Child Guidance Clinic.	K	KH	N	Lecture, SGD	Document in Logbooks			
Topic: Adolescent Health & common problems related to Adolescent Health		**Number of competencies: (13)**				**Number of procedures that require certification: (NIL)**			
PE 6.1	**Define Adolescence and stages of adolescence**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/viva voce**			
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			
PE 6.2.	**Describe the physical, physiological and psychological changes during adolescence (Puberty)**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/viva voce**			**Psych**
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
PE6.3	**Discuss the general health problems during adolescence**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/viva voce**			
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			
PE6.4	**Describe adolescent sexuality and common problems related to it**	**K**	**KH**	**N**	**Lecture, SGD**	**Written/viva voce**			**Psych**
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
PE6.5	**Explain the Adolescent Nutrition and common nutritional problem**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/viva voce**			**Psych**
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
PE6.6	**Discuss the common Adolescent eating disorders (Anorexia nervosa, Bulimia)**	**K**	**KH**	**N**	**Lecture, SGD**	**Written/viva voce**			**Psych**
6.6	Describe the common adolescent eating problems like Anorexia nervosa and Bulimia nervosa.	K	KH	N	Lecture, SGD	Written/viva voce			Psych
PE6.7	**Describe the common mental health problems during adolescence**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/viva voce**			**Psych**

6.7.1	Describe the common mental health problems during adolescence.	K	KH	Y	Lecture, SGD	Written/viva voce			Psych
PE6.8	**Respecting patient privacy and maintaining confidentiality while dealing with adolescence**	**A**	**SH**	**Y**	**Bedside**	**Skill station**			
6.8.1	Interact with an adolescent in privacy and maintaining confidentiality.	A	SH	Y	Bedside	Skill station			AETCOM
PE6.9	**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**	**S**	**SH**	**Y**	**Bedside clinic**	**Skill station**			
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			
PE6.10	**Discuss the objectives and functions of AFHS (Adolescent Friendly Health Services) and the referral criteria**	**K**	**KH**	**N**	**Lecture, SGD**	**Written/viva voce**			
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			
PE6.11	**Visit to the Adolescent Clinic**	**K**	**KH**	**Y**	**DOAP session**	**Document in Logbook**			
6.11.1	Visit an adolescent clinic at least once.	S	KH	Y	DOAP session	Document in Logbook			
PE6.12	**Enumerate the importance of obesity and other NCD in adolescents**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/viva voce**			
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			

PE6.13	**Enumerate the prevalence and the importance of recognition of sexual drug abuse in adolescents and children**	**K**	**KH**	**N**	**Lecture, SGD**	**Written/viva voce**			
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
Topic: To promote and support optimal Breastfeeding for Infants		**Number of competencies: (11)**				**Number of procedures that require certification: (01)**			
PE 7.1	**Awareness on the cultural beliefs and practices of breastfeeding**	**K**	**K**	**N**	**Lecture, SGD**	**Written/Viva**			**OBG**
7.1.1	Explain the harmless and harmful cultural beliefs and practices of breastfeeding.	K	K	N	Lecture, SGD	Written/Viva			
PE 7.2	**Explain the Physiology of lactation**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/Viva**		**Physio**	
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	
PE 7.3	**Describe the composition and types of breast milk and Discuss the differences between cow's milk and Human milk**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/viva voce**		**Physio**	
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			
PE 7.4	**Discuss the advantages of breast milk**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/viva voce**			
7.4.1	Enumerate the advantages of breast milk.	K	KH	Y	Lecture, SGD	Written/viva voce			
PE 7.5	**Observe the correct technique of breastfeeding and distinguish right from wrong technique**	**S**	**P**	**Y**	**Bedside, Skills lab**	**Skill assessment**	**3**		

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		
PE 7.6	**Enumerate the baby friendly hospital initiatives**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/viva voce**			
PE7.6.1	Enumerate components of the baby friendly hospital initiative.	K	KH	Y	Lecture, SGD	Written short notes/viva voce			
PE 7.7	**Perform breast examination and Identify common problems during lactation such as retracted nipples, cracked nipples, breast engorgement, breast abscess**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**skill assessment**			**OBG**
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)			
PE 7.8	**Educate mothers on ante natal breast care and prepare mothers for lactation**	**A/C**	**SH**	**Y**	**DOAP session**	**Document in Logbook**			**AETCOM**
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			**OBG**
PE7.9	**Educate and counsel mothers for best practices in Breastfeeding**	**A/C**	**SH**	**Y**	**DOAP session**	**Logbook, OSCE**			
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			
PE 7.10	**Respects patient privacy**	**A**	**SH**	**Y**	**DOAP session**	**Document in Logbook**			**AETCOM**

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

8.5.1	Counsel the mother for the best practices in complementary feeding.	A/C	SH	Y	DOAP session	OSCE			
Topic: Normal nutrition, assessment and monitoring		**Number of competencies: (7)**				**Number of procedures that require certification: (NIL)**			
PE 9.1	**Describe the age-related nutritional needs of infants, children and adolescents including micronutrients and vitamins**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**Com Med, Biochemistry**	
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			
P E 9.2	**Describe the tools and methods for assessment and classification of nutritional status of infants, children and adolescents**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**Com Med**	
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	**Written/ Viva voce**			
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	**Written/ Viva voce**			
P E 9.3	**Explains the calorific value of common Indian foods**	**K**	**K**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**Biochemistry**	
9.3.1	Explain the calorie and protein content of commonly used uncooked and cooked cereals.	K	K	Y	Lecture, SGD	**Written/ Viva voce**			

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**			
P E 9.4	**Elicit, document and present an appropriate nutritional history and perform a dietary recall**	**S**	**SH**	**Y**	**Bedside, skill lab**	**Skill Assessment**		**Com Med**	
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			
P E 9.5	**Calculate the age appropriate calorie requirement in health and disease and Identify gaps**	**S**	**SH**	**Y**	**Bedside clinic, SGD**	**OSCE, CLINICAL CASE**		**Com Med**	
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			
P E 9.6	**Assess and classify the nutrition status of infants, children and adolescents and recognize deviations**	**S**	**SH**	**Y**	**Bedside clinic, SGD**	**Skill Assessment**		**Com Med**	
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			

P E 9.7	**Plan an appropriate diet in health and disease**	**S**	**SH**	**N**	**Bedside clinic, SGD**	**Document in Logbook**		**Com Med**	
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			
Topic: Provide nutritional support, assessment and monitoring for common nutritional problems		**Number of competencies: (6)**				**Number of procedures that require certification: (NIL)**			
P E 10.1	**Define and Describe the etiopathogenesis, classify including WHO classification, clinical features, complication and management of severe acute malnourishment (SAM) and moderate acute Malnutrition (MAM)**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**Physio, Biochemistry,**	
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			
P E 10.2	**Outline the clinical approach to a child with SAM and MAM**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**Physio, Biochemistry**	
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			
P E 10.3	**Assessment of a patient with SAM and MAM, diagnosis, classification and planning management including hospital and community-based intervention, rehabilitation and prevention**	**S**	**SH**	**Y**	**Bedside, Skills Lab**	**Skill assessment**		**Physio, Biochemistry**	
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			
P E 10.4	**Identify children with under nutrition as per IMNCI criteria and plan referral**	**S**	**SH**	**Y**	**DOAP session**	**Document in Logbook**		**Com Med**	
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			

P E 10.5	**Counsel parents of children with SAM and MAM**	**S**	**SH**	**Y**	**Bedside clinic, Skills Station**	**Document in Logbook**		**AETCOM**	
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			
P E 10.6	**Enumerate the role of locally prepared therapeutic diets and ready to use therapeutic diets**	**K**	**K**	**N**	**Lecture, SGD**	**Written/ Viva voce**			
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			
Topic: Obesity in children		**Number of competencies: (6)**				**Number of procedures that require certification: (01)**			
P E 11.1	**Describe the common etiology, clinical features and management of obesity in children**	**K**	**KH**	**Y**	**Lecture/SGD**	**Written/Viva voce**	**NIL**	**Physio/ Biochemistry/ Path**	
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			
P E 11.2	**Discuss the risk approach for obesity and Discuss the prevention strategies**	**K**	**KH**	**Y**	Lecture, SGD	**Written/ Viva voce**		**Physio, Path**	
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			

P E 11.3	**Assessment of a child with obesity with regard to eliciting history including physical activity, charting and dietary recall**	**S**	**SH**	**Y**	**Bedside, Standardized patients**	**Document in Logbook**			
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			
P E 11.4	**Examination including calculation of BMI, measurement of waist hip ratio, Identifying external markers like acanthosis, striae, pseudo-gynecomastia etc**	**S**	**SH**	**Y**	**Bedside, Standardized patients, Videos**	**Skills Station**			
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			
P E 11.5	**Calculate BMI, document in BMI chart and interpret**	**S**	**P**	**Y**	**Bedside, SGD**	**Document in Logbook**	**3**		
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		
P E 11.6	**Discuss criteria for referral**	**K**	**K**	**Y**	**Lecture, SGD**	**Written /Viva voce**			
11.6.2	Enumerate criteria for referral in an obese child.	K	KH	Y	Lecture/ SGD	Written / viva voce			
Topic: Micronutrients in Health and disease-1 (Vitamins ADEK, B Complex and C)		**Number of competencies: (21)**			**Number of procedures that require certification: (NIL)**				
PE 12.1	**Discuss the RDA, dietary sources of Vitamin A and their role in health and disease**	**K**	**K**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**Biochemistry**	
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			

PE 12.2	**Describe the causes, clinical features, diagnosis and management of Deficiency / excess of Vitamin A**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**Biochemistry**	
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			
PE 12.3	**Identify the clinical features of dietary deficiency /excess of Vitamin A**	**S**	**SH**	**Y**	**Bedside, SGD**	**Document in Logbook**		**Biochemistry**	
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		Ophthal	
PE 12.4	**Diagnose patients with Vitamin A deficiency (VAD), classify and plan management**	**S**	**SH**	**N**	**Bedside, Skill Station**	**Document in Logbook**		**Biochemistry**	
12.4.1	Diagnose patients with VAD.	S	SH	N	Bedside	Document in Logbook		Ophthalmo-logy	
12.4.2	Classify the patient with VAD as per WHO.	S	SH	N	Skill Station, Bedside	Skill station, Document in Logbook		Ophthalmo-logy	
12.4.3	Plan management of a child with VAD.	K	K	N	Skill Station, Bedside	Skill station, Document in Logbook			
PE 12.5	**Discuss the Vitamin A prophylaxis program and their Recommendations**	**K**	**K**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**Biochemistry**	
12.5.1	Enumerate the components of the National vitamin A prophylaxis program.	K	K	Y	Lecture, SGD	Written / viva voce		Com Med	
PE 12.6	**Discuss the RDA, dietary sources of Vitamin D and its role in health and disease**	**K**	**K**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**Biochemistry**	
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			

PE 12.7 Rickets	**Describe the causes, clinical features, diagnosis and management of vitamin D deficiency (VDD)/ excess (Rickets & Hypervitaminosis D)**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written / viva voce**		**Biochemistry, Physio, Path**	
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			
PE 12.8	**Identify the clinical features of dietary deficiency of Vitamin D**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Document in Logbook**		**Biochemistry, Physio, Path**	
12.8.1	Identify the clinical features of Rickets (VDD).	S	SH	Y	Clinical case or photographs/ bedside teaching	OSCE/ clinical case			
PE 12.9	**Assess patients with Vitamin D deficiency, diagnose, classify and plan management**	**S**	**SH**	**Y**	**Bedside, skill lab**	**Document in Logbook**		**Biochemistry, Radiology**	
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			
PE 12.10	**Discuss the role of screening for Vitamin D deficiency**	**K**	**K**	**Y**	**Lecture, SGD**	**Written/viva voce**			
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			
PE 12.11	**Discuss the RDA, dietary sources of Vitamin E and its role in health and disease**	**K**	**K**	**N**	**Lecture, SGD**	**Written/ Viva voce**		**Biochemistry**	
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	
PE 12.12	**Describe the causes, clinical features, diagnosis and management of deficiency of Vitamin E**	**K**	**KH**	**N**	**Lecture, SGD**	**Written/ Viva voce**		**Biochemistry**	
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		-	
PE 12.13	**Discuss the RDA, dietary sources of Vitamin K and their role in health and disease**	**K**	**K**	**N**	**Lecture, SGD**	**Written/ Viva voce**		**Biochemistry, Physio, Path**	
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	
PE 12.14	**Describe the causes, clinical features, diagnosis management & prevention of deficiency of Vitamin K**	**K**	**KH**	**N**	**Lecture group, Small Discussion**	**Written/ Viva voce**		**Biochemistry, Physio, Path**	
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	-	-	

PE 12.15	**Discuss the RDA, dietary sources of Vitamin B and its role in health and disease**				**Lecture, SGD**	**Written/ Viva voce**	**-**	**Biochemistry**	
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	
PE 12.16	**Describe the causes, clinical features, diagnosis and management of deficiency of B complex vitamins**	**K**	**KH**	**Y**	**Lecture, SGD**	**Viva/ SAQ/MCQ**	**-**	**Biochemistry, Com Med, Derm, Hematology**	
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	
PE 12.17	**Identify the clinical features of Vitamin B complex deficiency**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Document in Logbook**	**-**	**Derm, Hematology**	
12.17.1	Identify the clinical features of deficiency of B complex vitamins	S	SH	Y	Clinical case /slides/bedside teaching	OSCE	-	Derm, Hematology	
PE 12.18	**Diagnose patients with vitamin B complex deficiency and plan management**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Document in Logbook**	**-**	**Derm Hematology**	
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	-		
PE 12.19	**Discuss the RDA, dietary sources of vitamin C and their role in health and disease**	**K**	**KH**	**N**	**Lecture, SGD**	**Written/ Viva voce**		**Biochemistry**	
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	
PE 12.20	**Describe the causes, clinical features, diagnosis and management of deficiency of vitamin C (scurvy)**	**K**	**KH**	**N**	**Lecture, SGD**	**Written/ Viva voce**		**Biochemistry**	
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	-	-	
PE 12.21	**Identify the clinical features of vitamin C deficiency**	**S**	**SH**	**N**	**Bedside, Skill lab**	**Document in Logbook**		**-**	
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	-	-	
Topic: Micronutrients in Health and disease -2: Iron, Iodine, Calcium, Magnesium		**Number of competencies: (14)**				**Number of procedures that require certification: (NIL)**			
PE 13.1	**Discuss the RDA, dietary sources of Iron and their role in health and disease**	**K**	**K**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**Path, Biochemistry**	
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			
PE 13.2	**Describe the causes, diagnosis and management of Iron deficiency**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/viva voce**		**Path, Biochemistry**	
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			
PE 13.3	**Identify the clinical features of dietary deficiency of Iron and make a diagnosis**	**S**	**SH**	**Y**	**Bedside /skill lab**	**Document in Logbook**		**Path, Biochemistry**	
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			
PE 13.4	**Interpret hemogram and Iron Panel**	**S**	**SH**	**Y**	**Bedside clinic/ Small group discussion**	**Skill Assessment**		**Path, Biochemistry**	
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			
PE 13.5	**Propose a management plan for IRON deficiency anemia**	**S**	**SH**	**Y**	**Bedside /skill lab**	**Skill assessment**		**Path, Pharm**	
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			

PE 13.6	**Discuss the National anemia control program and its recommendations**	**K**	**K**	**Y**	**Lecture, SGD**	**Written/viva voce**		**Pharm, Com Med**	
13.6.1	Describe the components of National anemia control program and its recommendations.	K	K	Y	Lecture, SGD	Written/viva voce			
PE 13.7	**Discuss the RDA, dietary sources of Iodine and its role in Health and disease**	**K**	**K**	**Y**	**Lecture, SGD**	**Written/viva voce**		**Biochemistry**	
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			
PE 13.8	**Describe the causes, diagnosis and management of deficiency of Iodine**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/viva voce**		**Biochemistry**	
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			
PE 13.9	**Identify the clinical features of Iodine deficiency disorders**	**S**	**SH**	**N**	**Bedside clinic**	**Clinical assessment**		**Biochemistry**	
13.9.1	Identify the clinical features of Iodine deficiency disorders.	S	SH	N	Bedside clinic	Clinical assessment			
PE 13.10	**Discuss the National Goiter Control program and its recommendations**	**K**	**K**	**Y**	**Lecture/ Small group discussion**	**Written/viva voce**		**Biochemistry, Com Med**	
13.10.1	Discuss the National Goiter Control program and the Recommendations.	K	K	Y	Lecture/ Small group discussion	Written/viva voce			
PE 13.11	**Discuss the RDA, dietary sources of Calcium and its role in health and disease**	**K**	**K**	**Y**	**Lecture/ Small group discussion**	**Written/viva voce**		**Biochemistry**	
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			
PE 13.12	**Describe the causes, clinical features, diagnosis and management of Calcium Deficiency**	**K**	**KH**	**Y**	**Lecture/ Small group discussion**	**Written/viva voce**		**Biochemistry**	
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			
PE 13.13	**Discuss the RDA, dietary sources of Magnesium and their role in health and disease**	**K**	**K**	**N**	**Lecture/ Small group discussion**	**Written/viva voce**		**Biochemistry**	
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			
PE 13.14	**Describe the causes, clinical features, diagnosis and management of Magnesium Deficiency**	**K**	**KH**	**N**	**Lecture/ Small group discussion**	**Written/viva voce**		**Biochemistry**	
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			
Topic: Toxic elements and free radicals and oxygen toxicity		**Number of competencies: (5)**			**Number of procedures that require certification: (NIL)**				
PE 14.1	**Discuss the risk factors, clinical features, diagnosis and management of Lead Poisoning**				**Lecture/ Small group**	**Written/viva voce**		**Pharm**	

					discussion				
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			
PE 14.2	**Discuss the risk factors, clinical features, diagnosis and management of Kerosene aspiration**	**K**	**KH**	**N**	Lecture/ Small group discussion	Written/viva voce		**ENT**	
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			
PE 14.3	**Discuss the risk factors, clinical features, diagnosis and management of Organophosphorus poisoning**	**K**	**KH**	**N**	**Lecture/ Small group discussion**	**Written/viva voce**		**Pharm**	
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			
PE 14.4	**Discuss the risk factors, clinical features, diagnosis and management of paracetamol poisoning**	**K**	**KH**	**N**	**Lecture/ Small group discussion**	**Written/viva voce**		**Pharm**	
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			
PE 14.5	**Discuss the risk factors, clinical features, diagnosis and management of Oxygen toxicity**	**K**	**KH**	**N**	**Lecture/ Small group discussion**	**Written/viva voce**			
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			
Topic: Fluid and electrolyte balance		**Number of competencies: (7)**			**Number of procedures that require certification: (NIL)**				
PE 15.1	**Discuss the fluid and electrolyte requirement in health and disease**	**K**	**K**	**Y**	**Lecture/ Small group discussion**	**Written/viva voce**			
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				
PE 15.2	**Discuss the clinical features and complications of fluid and electrolyte imbalance and outline the management**				**Lecture/ Small group discussion**				
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			
15.2.8	Outline the management of a child with hypokalemia or Hyperkalemia.	K	SH	Y	Lecture/ Small group discussion	Written/viva voce			
PE 15.3	**Calculate the fluid and electrolyte requirement in health**	**S**	**SH**	**Y**	**Bedside, SGD**	**Skill assessment**			
15.3.1	Calculate fluid requirement in healthy children of different ages.	S	SH	Y	Bedside, SGD	Skill assessment			
15.3.2	Calculate electrolyte requirement in healthy children of different ages.	S	SH	Y	Bedside, SGD	Skill assessment			
PE 15.4	**Interpret electrolyte report**	**S**	**SH**	**Y**	**Bedside /SGD**	**Skill assessment**			
15.4.1	Interpret reports of dyselectrolytemia.	S	SH	Y	Bedside /SGD	Skill assessment			
PE 15.5	**Calculate fluid and electrolyte imbalance**	**S**	**SH**	**Y**	**Bedside /SGD**	**Skill assessment**			
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			
PE 15.6	**Demonstrate the steps of inserting an IV cannula in a model**	**S**	**SH**	**Y**	**Skill lab**	**Skill assessment**			
15.6.1	Demonstrate inserting an intravenous cannula on a model in a skill laboratory.	S	SH	Y	Skill lab	Mannequin			
PE 15.7	**Demonstrate the steps of inserting an interosseous line in a mannequin**	**S**	**SH**	**Y**	**Skill lab**	**Skill assessment**			

15.7.1	Demonstrate inserting an intraosseous cannula in a mannequin.	S	SH	Y	Skill lab	Mannequin			
Topic: Integrated Management of Neonatal and Childhood Illnesses (IMNCI) Guideline		**Number of competencies: (3)**				**Number of procedures that require certification: (NIL)**			
PE 16.1	**Explain the components of Integrated Management of Neonatal and Childhood Illnesses (IMNCI) guidelines and method of Risk stratification**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/viva voce**			
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			
PE 16.2	**Assess children <2 months using IMNCI guidelines**	**S**	**SH**	**Y**	**DOAP**	**Document in Logbook**			
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/			
PE 16.3	**Assess children >2 months to 5 years using IMNCI guidelines and stratify risk**	**S**	**SH**	**Y**	**DOAP**	**Document in Logbook**			
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			
Topic: The National Health programs, NHM		**Number of competencies: (02)**				**Number of procedures that require certification: (NIL)**			
PE 17.1	**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**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/viva voce**		**Com Med**	
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			
PE17.2	**Analyze the outcomes and appraise the monitoring and evaluation of NHM**	**K**	**KH**	**Y**	**Debate**	**Written/viva voce**		**Com Med**	
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			
Topic: The National Health Programs: RCH		**Number of competencies: (8)**				**Number of procedures that require certification: (NIL)**			
PE 18.1	**List and explain the components, plan, outcome of Reproductive Child Health (RCH) program and appraise its monitoring and evaluation**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/viva voce**		**Com Med**	**OBG**
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			
PE 18.2	**Explain preventive interventions for child survival and safe motherhood**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/viva voce**		**Com Med**	**OBG**
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			
PE 18.3	**Conduct antenatal examination of women independently and apply at-risk approach in antenatal care**	**S**	**SH**	**Y**	**Bedside**	**Skill station**		**Com Med**	**OBG**
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			
PE 18.4	**Provide intra-natal care and conduct a normal delivery in a simulated environment**	**S**	**SH**	**Y**	**DOAP session, Skills lab**	**Document in Logbook**		**Com Med**	**OBG**
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			
PE 18.5	**Provide intra-natal care and observe the conduct of a normal delivery**	**S**	**SH**	**Y**	**DOAP session**	**Document in Logbook**			OBG
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			
PE 18.6	**Perform Postnatal assessment of newborn and mother, provide advice on breastfeeding, weaning and on family planning**	**S**	**SH**	**Y**	**Bedside, Skill Lab**	**Skill Assessment**		**Com Med**	**OBG**

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			
PE 18.7	**Educate and counsel caregivers of children**	**A/C**	**SH**	**Y**	**role play**	**OSCE /Skill Assessment**		**AETCOM**	
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			
PE18.8	**Observe the implementation of the program by visiting the Rural Health Center**	**S**	**SH**	**Y**	**Bedside, Skill Lab**	**Document in Logbook**		**Com Med**	OBG
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			
Topic: National Programs, RCH-Universal Immunization program		**Number of competencies: (16)**				**Number of procedures that require certification: (01)**			
PE 19.1	**Explain the components of the Universal Immunization Program (UIP) and the National Immunization Program (NIP)**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/viva voce**		**Com Med, Micro, Biochemistry**	
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			
PE 19.2	**Explain the epidemiology of vaccine preventable diseases (VPDs)**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/viva voce**		**Com Med, Micro, Biochemistry**	
19.2.1	Describe the epidemiology of individual VPDs.	K	KH	Y	Lecture/ SGD	Written/viva voce			
PE 19.3	**Vaccine description with regard to classification of vaccines, strain used, dose, route, schedule, risks,**	**K**	**KH**	**Y**	Lecture/ SGD	**Written/viva voce**		**Com Med, Micro,**	

	benefits and side effects, indications and contraindications							**Biochemistry**	
19.3.1	Classify vaccines according to type of vaccine.	K	KH	Y	Lecture/ SGD	Written/viva voce			
19.3.2	Describe the composition of the NIP vaccines including the strain used.	K	KH	Y	Lecture/ SGD	Written/viva voce			
19.3.3	State the dose, route and schedule of all vaccines under NIP.	K	KH	Y	Lecture/ SGD	Written/viva voce			
19.3.4	Recall the risks, benefits, side effects, indications and contraindications of vaccines under NIP.	K	KH	Y	Lecture/ SGD	Written/viva voce			
PE 19.4	**Define cold chain and discuss the methods of safe storage and handling of vaccines**	**K**	**KH**	**Y**	Lecture/ SGD	**Written/viva voce**		**Com Med, Micro, Biochemistry**	
19.4.1	Define cold chain and discuss its importance for vaccines.	K	KH	Y	Lecture/ SGD	Written/viva voce			
19.4.2	List the various cold chain equipment.	K	KH	Y	Lecture/ SGD	Written/viva 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 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 voce			
19.4.5	Explain the method of cold chain maintenance during a vaccine session.	K	KH	Y	Lecture/ SGD	Written/viva voce			
PE 19.5	**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**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/viva voce**		**Com Med, Micro, Biochemistry**	
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 voce			

PE 19.6	**Assess patient for fitness for immunization and prescribe an age appropriate immunization schedule**	**S**	**P**	**Y**	**Out Patient clinics, Skills lab**	**Skill Assessment**	**5**		
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		
PE 19.7	**Educate and counsel a patient for immunization**	**A/C**	**SH**	**Y**	**DOAP session**	**Document in Logbook**			
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			
PE 19.8	**Demonstrate willingness to participate in the national and subnational immunization days**	**A**	**SH**	**Y**	**Lecture/ small group discussion**	**Document in Logbook**		**Com Med**	
19.8.1	Participate in the national (NIDs) and subnational immunization days (SNIDs).	A	SH	Y	Small group, NIDs and SNIDs	Document in Logbook			
PE 19.9	**Describe the components of safe vaccine practice – Patient education/ counselling; adverse events following immunization, safe injection practices, documentation and medico-legal implications**	**K**	**KH**	**Y**	**Lecture/ small group discussion/ Immunization clinic**	**Written/viva voce**		**AETCOM**	
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			

PE 19.10	**Observe the handling and storing of vaccines**	**S**	**SH**	**Y**	**DOAP session**	**Written/viva voce**			
19.10.1	Observe and note the correct handling and storing of vaccines.	S	SH	Y	DOAP session, Videos	Viva voce/OSCE			
PE 19.11	**Document Immunization in an immunization record**	**S**	**SH**	**Y**	**Out Patient clinics, Skills lab**	**Skill assessment**			
19.11.1	Document Immunization in an immunization record.	S	SH	Y	Out Patient clinics, Skills lab	Skill assessment OSCE			
PE 19.12	**Observe the administration of UIP vaccines**	**S**	**SH**	**Y**	**DOAP session**	**Document in Logbook**		**Com Med**	
19.12.1	Observe and document the administration of vaccines.	S	SH	Y	DOAP session	Document in Logbook			
PE 19.13	**Demonstrate the correct administration of different vaccines in a mannequin**	**S**	**SH**	**Y**	**DOAP session**	**Document in Logbook**		**Com Med**	
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			
PE 19.14	**Practice Infection control measures and appropriate handling of the sharps**	**S**	**SH**	**Y**	**DOAP session**	**Document in Logbook**		**Com Med**	
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			
PE 19.15	**Explain the term implied consent in Immunization services**	**K**	**K**	**Y**	**Small group discussion**	**Written/viva voce**			
19.15.1	Explain the term implied consent in Immunization services.	K	K	Y	Small group discussion	Written/viva voce			
PE 19.16	**Enumerate available newer vaccines and their indications including pentavalent pneumococcal, rotavirus, JE, typhoid IPV & HPV**	**K**	**K**	**N**	**Lecture/ small group discussion**	**Written/viva voce**			
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			
Topic: Care of the Normal Newborn and High risk Newborn		**Number of competencies: (20)**			**Number of procedures that require certification: (NIL)**				
PE 20.1	**Define the common neonatal nomenclatures including the classification and describe the characteristics of a Normal Term Neonate and High Risk Neonates**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/viva voce**			
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			
PE 20.2	**Explain the care of a normal neonate**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written /Viva voce**			
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			
PE 20.3	**Perform Neonatal resuscitation in a manikin**	**S**	**SH**	**Y**	**DOAP/SKILL LAB**	**Logbook**			
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			
PE 20.4	**Assessment of a normal neonate**	**S**	**SH**	**Y**	**Bedside /Skill lab**	**Skill assessment**			
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			
PE 20.5	**Counsel/educate mothers on the care of neonates**	**A/C**	**SH**	**Y**	**DOAP**	**Logbook entry**			
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			
PE 20.6	**Explain the follow-up care for neonates including Breastfeeding, Temperature maintenance, immunization, importance of growth monitoring and red flags.**	**A/C**	**SH**	**Y**	**DOAP**	**Logbook documentation**			
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			
PE 20.7	**Discuss the etiology, clinical features and management of Birth asphyxia**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written /Viva voce**			
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			
PE 20.8	**Discuss the etiology, clinical features and management of respiratory distress in Newborn including meconium aspiration and transient tachypnea of newborn.**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written /Viva voce**			
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			
PE 20.9	**Discuss the etiology, clinical features and management of birth injuries.**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written /Viva voce**			
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			
PE 20.10	**Discuss the etiology, clinical features and management of hemorrhagic disease of newborn**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written /Viva voce**			
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			
PE 20.11	**Discuss the clinical characteristics, complications and management of low birth weight (preterm and small for gestation).**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written /Viva voce**			
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			
PE 20.12	**Discuss the temperature regulation in neonates, clinical features and management of Neonatal Hypothermia.**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written /Viva voce**			
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			

PE 20.13	**Discuss the etiology, clinical features and management of Neonatal hypoglycemia.**	**K**	**KH**	**Y**	**Lecture, SGD**	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			
PE 20.14	**Discuss the etiology, clinical features and management of Neonatal hypocalcemia.**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written /Viva voce**			
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			
PE 20.15	**Discuss the etiology, clinical features and management of neonatal seizures.**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written /Viva voce**			
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			
PE 20.16	**Discuss the etiology, clinical features and management of neonatal sepsis.**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written /Viva voce**			
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			
PE 20.17	**Discuss the etiology, clinical features and management of Perinatal infections.**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written /Viva voce**			
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			
PE 20.18	**Identify and stratify risk in a sick neonate using IMNCI guidelines**	**S**	**SH**	**Y**	**DOAP**	**Document in Logbook**			
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			
PE 20.19	**Discuss the etiology, clinical features and management of Neonatal hyperbilirubinemia.**	**K**	**KH**	**Y**	**Lecture /SGD**	**Written /Viva voce**			
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			
PE 20.20	**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.**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/ viva voce**			
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)**				
PE 21.1	**Enumerate the etiopathogenesis, clinical features, complications and management of Urinary Tract infection (UTI) in children**	**K**	**KH**	**Y**	**Small group discussion**	**Written/ Viva voce**		**Micro**	
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			
PE 21.2	**Enumerate the etiopathogenesis, clinical features, complications and management of acute post-streptococcal Glomerular Nephritis in children**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written /Viva voce**		**Path**	
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			

PE 21.3	**Discuss the approach and referral criteria to a child with Proteinuria**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written /Viva voce**		**Path**	
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			
PE 21.4	**Discuss the approach and referral criteria to a child with hematuria**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written /Viva voce**		**Anat**	
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			
PE 21.5	**Enumerate the etiopathogenesis, clinical features, complications and management of Acute Renal Failure in children**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written /Viva voce**		**Path**	
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			
PE 21.6	**Enumerate the etiopathogenesis, clinical features, complications and management of chronic kidney disease in children.**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written /Viva voce**		**Path**	
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			
PE 21.7	**Enumerate the etiopathogenesis, clinical features, complications and management of Wilms Tumor.**	**K**	**KH**	**Y**	**Lecture/ SGD**	Written /Viva voce		**Path**	
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			

PE 21.8	**Elicit, document and present a history pertaining to diseases of the Genitourinary tract**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Skill Assessment**			
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			
PE 21.9	**Identify external markers for Kidney disease, like Failing to thrive, hypertension, pallor, Icthyosis, anasarca**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Document in Logbook**			
21.9.1	Identify external markers for Kidney disease, like Failing to thrive, hypertension, pallor, Icthyosis, anasarca.	S	SH	Y	Bedside, Skills lab	Document in Logbook			
PE21.10	**Analyze symptom and interpret the physical findings and arrive at an appropriate provisional differential diagnosis**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Logbook**			
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			
PE 21.11	**Perform and interpret the common analytes in a Urine examination**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Skill assessment**		**Biochemistr, Path**	
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			
PE 21.12	**Interpret report of Plain X Ray of KUB**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Logbook**			**Radio D**
21.12.1	Identify any abnormalities on X-Ray KUB.	S	SH	Y	Bedside, Skills lab	Logbook			
PE 21.13	**Enumerate the indications for and Interpret the written report of Ultra sonogram of KUB**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Logbook**			**Radio D**

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			
PE 21.14	**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**			**Surg**
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			
PE 21.15	**Discuss and enumerate the referral criteria for children with genitourinary disorder**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written / viva voce**			
21.15.1	Enumerate referral criteria in a child with Genitourinary disorder.	K	KH	Y	Lecture/ SGD	Written / viva voce			
PE 21.16	**Counsel / educate a patient for referral appropriately**	**A/C**	**SH**	**Y**	**DOAP**	**Logbook**		AETCOM	
21.16.1	Counsel / educate a patient for referral appropriately.	A/C	SH	Y	DOAP	Logbook			
PE 21.17	**Describe the etiopathogenesis, grading, clinical features and management of hypertension in children**	**K**	**KH**	**Y**	**Lecture / SGD**	**Written/ viva voce**			
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			

21.17.6	Outline treatment of hypertension (as per guidelines) in children.	K	KH	Y	Lecture /SGD	Written/ viva voce			
Topic: Approach to and recognition of a child with possible Rheumatologic problem		**Number of competencies: (3)**				**Number of procedures that require certification: (NIL)**			
PE 22.1	**Enumerate the common Rheumatological problems in children. Discuss the clinical approach to recognition and referral of a child with Rheumatological problem**	**K**	**KH**	**Y**	**Lecture /SGD**	**Written / viva voce**			
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			
PE 22.2	**Counsel a patient with Chronic illness**	**S**	**SH**	**N**	**Bedside clinic/skill lab**	**Logbook**			
22.2.1	Counsel a child / parents of a child with a chronic illness.	S	SH	N	Bedside clinic/skill lab	Logbook			
PE 22.3	**Describe the diagnosis and management of common vasculitic disorders including Henoch Schonlein Purpura, Kawasaki Disease, SLE, JIA**	**K**	**KH**	**N**	**Lecture /SGD**	**Written / viva voce**			
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			
Topic: Cardiovascular system- Heart Diseases		**Number of competencies: (18)**				**Number of procedures that require certification: (NIL)**			
PE 23.1	**Discuss the Hemodynamic changes, clinical presentation, complications and management of acyanotic Heart Diseases -VSD, ASD and PDA**	**K**	**KH**	**Y**	**Lecture /SGD**	**Written/ Viva voce**		**Physio, Path**	
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			
PE 23.2	**Discuss the Hemodynamic changes, clinical presentation, complications and management of Cyanotic Heart Diseases – Fallot Physiology**	**K**	**KH**	**Y**	**Lecture /SGD**	**Written/Viva Voce**		**Physio, Path**	
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			
PE 23.3	**Discuss the etiopathogenesis, clinical presentation and management of cardiac failure in infant and children**	**K**	**KH**	**Y**	**Lecture /SGD**	**Written/Viva Voce**		**Physio, Path**	
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			
PE 23.4	**Discuss the etiopathogenesis, clinical presentation and management of Acute Rheumatic Fever in children**	**K**	**KH**	**Y**	**Lecture /SGD**	**Written/Viva Voce**		**Physio, Path**	
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			
PE 23.5	**Discuss the clinical features, complications, diagnosis, management and prevention of Acute Rheumatic Fever**	**K**	**KH**	**Y**	**Lecture /SGD**	**Written/Viva Voce**		**Physio, Path**	
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			
PE 23.6	**Discuss the etiopathogenesis, clinical features and management of Infective endocarditis in children**	**K**	**KH**	**Y**	**Lecture /SGD**	**Written/Viva Voce**		**Physio, Path, Micro**	
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			
PE 23.7	**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.**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Bed side/skill assessment**			
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			
PE 23.8	**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**	**S**	**SH**	**Y**	**Bedside, Skills Lab**	**Bed side/skill assessment**			

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			
PE 23.9	**Record pulse, blood pressure, temperature and respiratory rate and interpret as per the age**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Bed side/skill assessment**			
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			
PE 23.10	**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**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Bed side/skill assessment**			
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			
PE 23.11	**Develop a treatment plan and prescribe appropriate drugs including fluids in cardiac diseases, anti -failure drugs, and inotropic agents**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**written/Viva voce**			

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

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	
Topic: Diarrhoeal diseases and Dehydration		**Number of competencies: (17)**					**Number of procedures that require certification: (03)**		
PE 24.1	**Discuss the etiopathogenesis, classification, clinical presentation and management of diarrheal diseases in children.**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written / viva voce**		**Path Micro**	
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			
PE 24.2	**Discuss the classification and clinical presentation of various types of diarrheal dehydration**	**K**	**KH**	**Y**	**Lecture / SGD**	**Written / viva voce**		**Path, Micro**	
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			
PE 24.3	**Discuss the physiological basis of ORT, types of ORS and the composition of various types of ORS in children**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/ viva voce**			

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			
PE 24.4	**Discuss the types of fluid used in Pediatric diarrheal diseases and their composition**	**K**	**KH**	**Y**	**Lecture / SGD**	**Written/ viva voce**			
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			
PE 24.5	**Discuss the role of antibiotics, antispasmodics, anti-secretory drugs, probiotics, anti-emetics in acute diarrheal diseases**	**K**	**KH**	**Y**	**Lecture / SGD**	**Written / viva voce**		**Pharm, Micro**	
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			
PE 24.6	**Discuss the causes, clinical presentation and management of persistent diarrhea in children**	**K**	**KH**	**Y**	**Lecture / SGD**	**Written/ viva voce**	**Nil**	**Micro**	
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			
PE 24.7	**Discuss the causes, clinical presentation and management of chronic diarrhea in children.**	**K**	**KH**	**Y**	**Lecture / SGD**	**Written / via voce**			
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			
PE 24.8	**Discuss the causes, clinical presentation and management of dysentery in children**	**K**	**KH**	**Y**	**Lecture /SGD**	**Written / viva voce**	**Nil**	**Pharm, Micro**	
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	
PE 24.9	**Elicit, document and present history pertaining to diarrheal diseases**	**S**	**SH**	**Y**	**Bedside, Skill lab**	**Clinical case/ OSCE/skill assessment**			
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/ skill assessment			
24.9.3	Present the history pertaining to diarrheal diseases.	S	SH	Y	Bedside, Skill lab	Clinical case, skill assessment,			
PE 24.10	**Assess for signs of dehydration, document and present**	**S**	**SH**	**Y**	**Bedside, skill lab**	**Skill Assessment**			
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			
PE 24.11	**Apply the IMNCI guidelines in risk stratification of children with diarrheal dehydration and refer**	**S**	**SH**	**Y**	**Bedside / skill lab**	**Document in Logbook**			
24.11.1	Apply risk stratification of children with diarrheal dehydration as per IMNCI guidelines.	S	SH	Y	Bedside / skill lab	Document in 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 Logbook			
PE 24.12.1	**Perform and interpret stool examination including Hanging Drop**	**S**	**SH**	**N**	**Bedside, Skill lab**	**Document in Logbook**		**Micro**	
24.12.1	Prepare slide for stool examination under microscope.	S	SH	N	Bedside, Skill lab	Document in Logbook			
24.12.2	Correctly identify pathogen after microscopic examination of stool.	S	SH	N	Bedside, Skill lab	Document in Logbook			
24.12.3	Correctly perform hanging drop preparation from stool sample given.	S	SH	N	Bedside, Skill lab	Document in Logbook			
PE 24.13	**Interpret RFT and electrolyte report**	**S**	**SH**	**Y**	**Bedside/ skill lab/ SGD**	**Document in Logbook**			
24.13.1	Interpret the given reports for values of urea, creatinine, sodium and potassium.	S	SH	Y	Bedside/ skill lab/ SGD	Document in Logbook			
PE 24.14	**Plan fluid management as per the WHO criteria**	**S**	**SH**	**Y**	**Bedside, Small group activity**	**Skill lab**			

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			
PE 24.15	**Perform NG tube insertion in a manikin**	**S**	**P**	**Y**	**DOAP session**	**Document in Logbook**	**2**		
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		
PE 24.16	**Perform IV cannulation in a model**	**S**	**P**	**Y**	**DOAP session**	**Document in Logbook**	**2**		
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		

PE 24.17	**Perform Interosseous insertion model**	**S**	**P**	**Y**	**DOAP session**	**Document in Logbook**	**2**		
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		
Topic: Malabsorption		**Number of competencies: (1)**				**Number of procedures that require certification: (NIL)**			
PE 25.1	**Discuss the etiopathogenesis, clinical presentation and management of Malabsorption in Children and its causes including celiac disease.**	**K**	**KH**	**N**	**Lecture /SGD**	**Written/ viva voce**		**Path**	
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			
Topic: Acute and chronic liver disorders		**Number of competencies: (13)**				**Number of procedures that require certification: (NIL)**			
PE 26.1	**Discuss the etiopathogenesis, clinical features and management of acute hepatitis in children**	**K**	**K**	**Y**	**Lecture/ SGD**	**Written/ Viva Voce**		**Path Micro**	
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			
PE 26.2	**Discuss the etiopathogenesis, clinical features and management of Fulminant Hepatic Failure in children**	**K**	**K**	**Y**	**Lecture/ SGD**	**Written/Viva Voce**		**Path Micro**	
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			
PE 26.3	**Discuss the etiopathogenesis, clinical features and management of chronic liver diseases in children.**	**K**	**K**	**Y**	**Lecture/ SGD**	**Written/Viva voce**		**Path Micro**	
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			
PE 26.4	**Discuss the etiopathogenesis, clinical features and management of Portal Hypertension in children**	**K**	**K**	**Y**	**Lecture /SGD**	**Written / Viva voce**		**Path**	
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			
PE 26.5	**Elicit document and present the history related to diseases of Gastrointestinal system**	**S**	**S**	**Y**	**Bedside, Skills Lab**	**Skills station/bedside/OSCE**			
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			
PE 26.6	**Identify external markers for GI and Liver disorders e.g. Jaundice, Pallor, Gynecomastia, Spider angioma, Palmar erythema, Icthyosis, Caput medusa, Clubbing, Failing to thrive, Vitamin A and D deficiency**	**S**	**SH**	**Y**	**Bedside, Skills Lab**	**Skill Assessment/ OSCE**			
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	**Perform examination of the abdomen, demonstrate organomegaly, ascites etc.**	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			
PE 26.8	**Analyze symptoms and interpret physical signs to make a provisional/ differential diagnosis**	**S**	**SH**	**Y**	**Bedside clinic, Skills Lab**	**Skill Assessment**			
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			
PE 26. 9	**Interpret Liver Function Tests, viral markers, Ultra sonogram report**	**S**	**SH**	**Y**	**Bedside / skill lab**	**Bedside/ OSCE**		**Path Biochemistry**	
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			
PE 26.10	**Demonstrate the technique of liver biopsy in a Perform Liver Biopsy in a simulated environment**	**S**	**SH**	**Y**	**DOAP**	**Document in Logbook**			
26.10.1	Demonstrate the technique of liver biopsy in a simulated environment.	S	SH	Y	DOAP	Document in Logbook			
PE 26.11	**Enumerate the indications for Upper GI endoscopy**	**K**	**KH**	**Y**	**Lecture /SGD**	**Written, Viva voce**			
26.11.1	Enumerate the indications of upper GI endoscopy in children.	K	KH	Y	Lecture /SGD	Written, Viva voce			

PE 26.12	**Discuss the prevention of Hep B infection – Universal precautions and Immunization**	**K**	**K**	**Y**	**Lecture /SGD**	**Written, Viva voce**		**Micro**	
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			
PE 26.13	**Counsel and educate patients and their family appropriately on liver diseases**	**A/C**	**P**	**Y**	**Bedside clinic, Skills Lab**	**Document in Logbook**			
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			
Topic: Pediatric Emergencies – Common Pediatric Emergencies		**Number of competencies: (35)**				**Number of procedures that require certification: (10)**			
PE 27.1	**List the common causes of morbidity and mortality in the under five children**	**K**	**K**	**Y**	**Lecture /SGD**	**Written/viva-voce**			
27.1.1	Enumerate the common causes of morbidity and mortality in under five children.	K	K	Y	Lecture /SGD	Written /viva			
PE 27.2	**Describe the etiopathogenesis, clinical approach and management of cardiorespiratory arrest in children**	**K**	**KH**	**Y**	**Lecture /SGD**	**Written/ Viva voce**			
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			
PE 27.3	**Describe the etiopathogenesis of respiratory distress in children**	**K**	**KH**	**Y**	**Lecture /SGD**	**Written/ Viva voce**			
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			
PE 27.4	**Describe the clinical approach and management of respiratory distress in children**	**K**	**KH**	**Y**	**Lecture /SGD**	**Written/ Viva voce**			
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			
PE 27.5	**Describe the etiopathogenesis, clinical approach and management of Shock in children**	**K**	**KH**	**Y**	**Lecture /SGD**	**Written/ Viva voce**			
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			
PE 27.6	**Describe the etiopathogenesis, clinical approach and management of Status epilepticus**	**K**	**KH**	**Y**	**Lecture /SGD**	**Written/ Viva voce**			
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			
PE 27.7	**Describe the etiopathogenesis, clinical approach and management of an unconscious child**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			

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			
PE 27.8	**Discuss the common types, clinical presentations and management of poisoning in children**	**K**	**KH**	**Y**	**Lecture, Small group discussion**	**Written/ Viva voce**			
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			
PE 27.9	**Discuss oxygen therapy, in Pediatric emergencies and modes of administration**	**K**	**KH**	**Y**	**Lecture /SGD**	**Written/ Viva voce**			
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			
PE 27.10	**Observe the various methods of administering Oxygen**	**S**	**KH**	**Y**	**Demonstration**	**Document in Logbook**			
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			

PE 27.11	**Explain the need and process of triage of sick children brought to health facility**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
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			
PE 27.12	**Enumerate emergency signs and priority signs**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
27.12.1	Enumerate various emergency and priority signs in a sick child.	K	K	Y	Lecture, SGD,	Written/ Viva voce			
PE 27.13	**List the sequential approach of assessment of emergency and priority signs**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
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			
PE 27.14	**Assess emergency signs and prioritize**	**S**	**SH**	**Y**	**DOAP session, Skills lab**	**Skills Assessment**			
27.14.1	Assess and recognize emergency signs in a sick child and prioritize treatment.	S	SH	Y	Bedside, skill lab	Skill assessment			
PE 27.15	**Assess airway and breathing: recognize signs of severe respiratory distress. Check for cyanosis, severe chest indrawing, grunting**	**S**	**P**	**Y**	**DOAP session, Skills lab**	**Skills Assessment**			
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		
PE 27.16	**Assess airway and breathing. Demonstrate the method of positioning of an infant & child to open airway in a simulated environment**	**S**	**P**	**Y**	**DOAP session, Skills Lab**	**Skills Assessment**	**3**		
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		
PE 27.17	**Assess airway and breathing: administer oxygen using correct technique and appropriate flow rate**	**S**	**P**	**Y**	**DOAP session, Skills Lab**	**Skills Assessment**	**3**		

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		
PE 27.18	**Assess airway and breathing: perform assisted ventilation by Bag and mask in a simulated environment**	**S**	**p**	**y**	**DOAP session, Skills Lab**	**Skill assessment, OSCE using mannequin**	**3**		
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		
PE 27.19	**Check for signs of shock i.e. pulse, Blood pressure, CRT**	**S**	**p**	**y**	**DOAP session, Skills Lab**	**Skill assessment,**	**3**		
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		
PE 27.20	**Secure an IV access in a simulated environment**	**S**	**P**	**Y**	**DOAP session, Skills Lab**	**Skill assessment,**	**3**		
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		

PE 27.21	**Choose the type of fluid and calculate the fluid requirement in shock**	**S**	**P**	**Y**	**DOAP session, Skills Lab**	**Skill assessment**	**3**		
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		
PE 27.22	**Assess level of consciousness & provide emergency treatment to a child with convulsions/ coma - Position an unconscious child - Position a child with suspected trauma - Administer IV/per rectal Diazepam for a convulsing child in a simulated environment**	**S**	**P**	**Y**	**DOAP session, Skills Lab**	**Skill assessment**	**3**		
27.22.1	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		
PE 27.23	**Assess signs of severe dehydration**	**S**	**P**	**Y**	**DOAP session, Skills Lab**	**Skill assessment**	**3**		
27.23.1	Identify signs of severe dehydration	S	P	Y	DOAP session, Skills Lab	Skill assessment	3		
PE 27.24	**Monitoring and maintaining temperature: define hypothermia. Describe the clinical features, complications and management of Hypothermia**	**K**	**K**	**Y**	**Lecture / SGD**	**Written/ Viva voce**			
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			
PE 27.25	**Describe the advantages and correct method of keeping an infant warm by skin to skin contact**	**K**	**K**	**Y**	**Lecture / SGD**	**Written/ Viva voce**			
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			
PE 27.26	**Describe the environmental measures to maintain temperature**	**K**	**K**	**Y**	**Lecture / SGD**	**Written/ Viva voce**			
27.26.1	Describe the environmental measures to maintain temperature in sick children.	K	K	Y	Lecture / SGD	Written/ Viva voce			
PE 27.27	**Assess for hypothermia and maintain temperature**	**S**	**SH**	**Y**	**Skills Lab**	**Skill assessment**			
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			
PE 27.28	**Provide BLS for children in manikin**	**S**	**P**	**Y**	**Skills Lab**	**Skill assessment**	**3**		
27.28.1	Perform all the steps of BLS in children.	S	P	Y	Skills Lab	Skill assessment	3		
PE 27.29	**Discuss the common causes, clinical presentation, medico-legal implications of abuse**	**K**	**K**	**Y**	**Lecture / SGD**	**Written/ Viva voce**			
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			
PE 27.30	**Demonstrate confidentiality with regard to abuse**	**A**	**SH**	**Y**	**Skill lab, simulated patients**	**Skill assessment**			
27.30.1	Maintains confidentiality with regard to child abuse in a simulated setting	A	SH	Y	Skill lab, simulated patients	Skill assessment			

PE 27.31	**Assess child for signs of abuse**	**S**	**SH**	**Y**	**DOAP, Skills Lab**	**Logbook,**			
27.31.1	Elicit appropriate history for suspected child abuse.	S	SH	Y	DOAP, Skills Lab	Logbook			
27.31.2	Examine the child for evidence of child abuse.	S	SH	Y	DOAP, Skills Lab	Logbook			
27.31.3	Based on history and examination make a provisional diagnosis of specific type of child abuse	S	SH	Y	DOAP, Skills Lab	Logbook			
PE 27.32	**Counsel parents of dangerously ill/ terminally ill child to break a bad news**	**S**	**SH**	**Y**	**DOAP, Skills Lab**	**Logbook,**			
27.32.1	Communicate with empathy and counsel parents of dangerously ill/ terminally ill child to break a bad news using an appropriate technique	S	SH	Y	DOAP, Skills Lab	Logbook			
27.32.2	Answer the queries/questions of parents appropriately	S	SH	Y	DOAP, Skills Lab	Logbook			
27.32.3	Provide emotional support to parents	S	SH	Y	DOAP, Skills Lab	Logbook			
PE 27.33	**Obtain Informed Consent**	**S**	**SH**	**Y**	**DOAP, Skills Lab**	**Logbook,**			
27.33.1	Provide adequate information as per the need in a language understood by the consent giver	S	SH	Y	DOAP, Skills Lab	Logbook			
27.33.2	Answer queries/ questions appropriately	S	SH	Y	DOAP, Skills Lab	Logbook			
27.33.3	Obtain the consent on an appropriate document.	S	SH	Y	DOAP, Skills Lab	Logbook			
PE 27.34	**Willing to be a part of the ER team**	**S**	**SH**	**Y**	**DOAP, Skills Lab**	**Logbook,**			
27.34.1	Takes an active part in the ER team performing the assigned role and responsibilities	S	SH	Y	DOAP, Skills Lab	Logbook			
PE 27.35	**Attends to emergency calls promptly**	**S**	**SH**	**Y**	**DOAP, Skills Lab**	**Logbook,**			
27.35.1	Responds promptly to emergency calls	S	SH	Y	DOAP, Skills Lab	**Logbook,**			
Topic: Respiratory system		**Number of competencies: (20)**				**Number of procedures that require certification: (NIL)**			
PE 28.1	**Discuss the etiopathogenesis, clinical features and management of Naso pharyngitis**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**ENT**	

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			
PE 28.2	**Discuss the etiopathogenesis of Pharyngotonsillitis**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**ENT**	
28.2.1	Enumerate the etiological factors causing Pharyngo-tonsillitis.	K	KH	Y	lecture, SGD	Written/ Viva voce			
PE 28.3	**Discuss the clinical features and management of Pharyngotonsillitis**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**ENT**	
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			
PE28.4	**Discuss the etiopathogenesis, clinical features and management of Acute Otitis Media (AOM)**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**ENT**	
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			
PE28.5	**Discuss the etiopathogenesis, clinical features and management of Epiglottitis**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**ENT**	
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			
PE28.6	**Discuss the etiopathogenesis, clinical features and management of Acute laryngotracheobronchitis**	**K**	**KH**	**Y**	**Lecture, Small group Discussion**	**Written/ Viva voce**		**ENT**	
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			
PE 28.7	**Discuss the etiology, clinical features and management of Stridor in children**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**ENT**	
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			
PE 28.8	**Discuss the types, clinical presentation, and management of foreign body aspiration in infants and children**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**ENT**	
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			

PE 28.9	**Elicit, document and present age appropriate history of a child with upper respiratory problem including Stridor**	**S**	**SH**	**Y**	**Bedside, skill lab**	**Skill Assessment**		**ENT**	
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			
PE 28.10	**Perform otoscopic examination of the ear**	**S**	**SH**	**Y**	**DOAP session**	**Skills Assessment**		**ENT**	
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			
PE 28.11	**Perform throat examination using tongue depressor**	**S**	**SH**	**Y**	**DOAP session**	**Skills Assessment**		**ENT**	
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			
PE 28.12	**Perform examination of the nose**	**S**	**SH**	**Y**	**DOAP session**	**Skills Assessment**		**ENT**	
28.12.1	Position the child and perform nose examination	S	SH	Y	Bedside, skill lab	OSCE / Skills Assessment			
PE 28.13	**Analyze the clinical symptoms and interpret physical findings and make a provisional / differential diagnosis in a child with ENT symptoms**	**S**	**SH**	**Y**	**Bedside**	**Skills Assessment**			
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			
PE 28.14	**Develop a treatment plan and document appropriately in a child with upper respiratory symptoms**	**S**	**SH**	**Y**	**Bedside**	**Skills Assessment**			

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			
PE 28.15	**Stratify risk in children with stridor using IMNCI guidelines**	**S**	**SH**	**Y**	**Bedside**	**Logbook documentation**			
28.15.1	Classify the child with stridor as per IMNCI guidelines	S	SH	Y	Bedside	Logbook documentation/ clinical case			
PE 28.16	**Interpret blood tests relevant to upper respiratory problems**	**S**	**SH**	**N**	**Bedside, SGD**	**Logbook**			
28.16.1	Plan and interpret the relevant blood test in a patient with upper respiratory problems	S	SH	N	Bedside, SGD	Logbook			
PE 28.17	**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**	**S**	**SH**	**Y**	**Bedside, SGD**	**Skills Assessment**		**ENT, RadioD**	
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			
PE 28.18	**Describe the etiopathogenesis, diagnosis, clinical features, management and prevention of lower**	**K**	**KH**	**Y**	**SGD, Lecture**	**Written, Viva voce**			

	respiratory infections including bronchiolitis, wheeze associated LRTI Pneumonia and empyema								
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			
PE 28.19	**Describe the etiopathogenesis, diagnosis, clinical features, management and prevention of asthma in children**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**Resp Med**	
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			
PE 28.20	**Counsel the child with asthma on the correct use of inhalers in a simulated environment**	**S**	**SH**	**Y**	**Bedside, SGD, Lecture**	**Skills Assessment Written Viva voce**		**Resp Med**	
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			
Topic: Anemia and other Hemato-oncologic disorders in children		**Number of competencies: (20)**				**Number of procedures that require certification: (NIL)**			
PE 29.1	**Discuss the etiopathogenesis, clinical features, classification and approach to a child with anemia**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written, viva-voce**		**Path, Physio**	
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			
PE 29.2	**Discuss the etiopathogenesis, clinical features and management of iron deficiency anemia.**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/Viva-voce**		**Path, Physio**	
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			
PE 29.3	**Discuss the etiopathogenesis, clinical features and management of Vitamin B-12, Folate deficiency anemia.**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/Viva-voce**		**Path, Physio**	
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			
PE 29.4	**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.**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written, viva-voce**		**Path, Physio**	
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			
PE 29.5	**Discuss the National Anemia Control Program.**	**K**	**KH**	**Y**	**Lecture, SGD**	Written, viva-voce		**Com Med**	
29.5.1	Describe National Anemia Control Program.	K	KH	Y	Lecture, SGD	Written, viva-voce			
PE 29.6	**Discuss the cause of thrombocytopenia in children: describe the clinical features and management of idiopathic Thrombocytopenic Purpura.**	**K**	**KH**	**Y**	**Lecture, SGD**	Written, viva-voce		**Path**	
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			
PE 29.7	**Discuss the etiology, classification, pathogenesis and clinical features of Hemophilia in children.**	**K**	**KH**	**Y**	**Lecture, SGD**	Written, viva-voce		**Path**	
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			
PE 29.8	**Discuss the etiology, clinical presentation and management of Acute Lymphoblastic Leukemia in Children.**	**K**	**KH**	**N**	**Lecture, SGD**	**Written, Viva-voce**		**Path**	
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			
PE 29.9	**Discuss the etiology, clinical presentation and management of Lymphoma in children.**	**K**	**KH**	**N**	**Lecture, SGD**	**Written, Viva-Voce**		**Path**	
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			
PE 29.10	**Elicit, document and present the history related to Hematology.**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Skill Station**			

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			
PE 29.11	**Identify external markers for hematological disorders e.g. Jaundice, Pallor, Petechiae, Purpura, Ecchymosis, Lymphadenopathy, bone tenderness, loss of weight, Mucosal and large joint bleed.**	**S**	**SH**	**Y**	**Bedside, Skills Lab**	**Skill assessment**			
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			
PE 29.12	**Perform examination of the abdomen, demonstrate Organomegaly.**	**S**	**SH**	**Y**	**Bedside, Skills Lab.**	**Skill assessment**			
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			
PE 29.13	**Analyze symptoms and interpret physical signs to make a provisional /differential diagnosis.**	**S**	**SH**	**Y**	**Bedside, Skills Lab**	**Skill assessment**			
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			
PE 29.14	**Interpret CBC, LFT**	**S**	**SH**	**Y**	**Bedside, Skills Lab**	**Skill assessment**			
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			
PE 29.15	**Perform and Interpret peripheral smear.**	**S**	**SH**	**Y**	**DOAP session**	**Document in Logbook**			
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			

PE 29.16	**Discuss the indications for Hemoglobin electrophoresis and interpret the report.**	**K**	**K**	**N**	**Lecture, SGD**	**Written /Viva-voce**		**Biochemistry**	
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			
PE 29.17	**Demonstrate performance of bone marrow aspiration in mannequin.**	**S**	**SH**	**Y**	**Skills lab**	**Document in Logbook**			
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			
PE 29.18	**Enumerate the referral criteria for Hematological conditions.**	**S**	**SH**	**Y**	**Bedside, Small group activity**	**Written /Viva-voce**			
29.18.1	Enumerate the criteria for referring a patient with Hematological conditions	S	SH	Y	Small group activity	Written/ Viva-voce			
PE 29.19	**Counsel and educate patients about prevention and treatment of anemia.**	**A/C**	**SH**	**Y**	**Bedside, Skills Lab**	**Document in Logbook**			
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			
PE 29.20	**Enumerate the indications for splenectomy and precautions**	**K**	**K**	**N**	**Small group activity**	**Written/ Viva-voce**			
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			
Topic: Systemic Pediatrics-Central Nervous system		**Number of competencies: (23)**				**Number of procedures that require certification: (NIL)**			
PE 30.1	**Discuss the etiopathogenesis, clinical features, complications, management and prevention of meningitis in children**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**Micro**	
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			
PE 30.2	**Distinguish bacterial, viral and tuberculous meningitis**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**Micro**	
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			
PE 30.3	**Discuss the etiopathogenesis, classification, clinical features, complication and management of Hydrocephalus in children**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
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			

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			
PE 30.4	**Discuss the etiopathogenesis, classification, clinical features, and management of Microcephaly in children**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
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			
PE 30.5	**Enumerate the Neural tube defects. Discuss the causes, clinical features, types, and management of Neural Tube defect**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
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			
PE 30.6	**Discuss the etiopathogenesis, clinical features, and management of Infantile hemiplegia**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
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			
PE 30.7	**Discuss the etiopathogenesis, clinical features, complications and management of Febrile seizures in children**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
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			
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			
PE 30.8	**Define epilepsy. Discuss the pathogenesis, clinical types, presentation and management of Epilepsy in children**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
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			
PE 30.9	**Define Status Epilepticus. Discuss the clinical presentation and management**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
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			

	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			
PE 30.10	**Discuss the etiopathogenesis, clinical features and management of Mental retardation in children**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
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			
PE 30.11	**Discuss the etiopathogenesis, clinical features and management of children with cerebral palsy**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
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			

						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			
PE 30.12	**Enumerate the causes of floppiness in an infant and discuss the clinical features, differential diagnosis and management**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
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			
PE 30.13	**Discuss the etiopathogenesis, clinical features, management and prevention of Poliomyelitis in children**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**Micro**	
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		**Micro**	
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			
PE 30.14	**Discuss the etiopathogenesis, clinical features and management of Duchene muscular dystrophy**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
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			
PE 30.15	**Discuss the etiopathogenesis, clinical features and management of Ataxia in children**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
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.								
PE 30.16	**Discuss the approach to and management of a child with headache**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
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			
PE 30.17	**Elicit, document and present an age appropriate history pertaining to the CNS**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Skill Assessment**			
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			
PE 30.18	**Demonstrate the correct method for physical examination of CNS including identification of external markers. Document and present clinical findings**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Skill Assessment**			
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/ 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			
PE 30.19	**Analyse symptoms and interpret physical findings and propose a provisional / differential diagnosis**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Skill Assessment**			
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			
PE 30.20	**Interpret and explain the findings in a CSF analysis**	**S**	**SH**	**Y**	**SGD**	**Logbook**		**Micro**	
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			
PE 30.21	**Enumerate the indication and discuss the limitations of EEG, CT, MRI**	**K**	**K**	**N**	**Bedside**	**Logbook**			
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			
PE 30.22	**Interpret the reports of EEG, CT, MRI**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Logbook**		**RadioD**	
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		**RadioD**	
30.22.3	Interpret MRI (Brain & Spine) reports	S	SH	Y	Bedside, Skills lab	Logbook		**RadioD**	

PE 30.23	**Perform in a mannequin lumbar puncture. Discuss the indications, contraindication of the procedure**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Skill Assessment**			
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			
Topic: Allergic Rhinitis, Atopic Dermatitis, Bronchial Asthma, Urticaria Angioedema		**Number of competencies: (12)**				**Number of procedures that require certification: (NIL)**			
PE 31.1	**Describe the etiopathogenesis, management and prevention of Allergic Rhinitis in Children**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**ENT**	
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	
PE 31.2	**Recognize the clinical signs of Allergic Rhinitis**	**S**	**SH**	**Y**	**Bedside, Skill Lab**	**Skill assessment**		**ENT**	
31.2.1	identify clinical sign of allergic rhinitis in children	S	SH	Y	Bedside, Skill Lab	Skill assessment		ENT	
PE 31.3	**Describe the etiopathogenesis, clinical features and management of Atopic dermatitis in Children**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**		**Derm**	
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			
PE 31.4	**Identify clinical features of atopic dermatitis and manage**	**S**	**SH**	**Y**	**Bedside, skill lab**	**Skill assessment**		**Derm**	
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			
PE 31.5	**Discuss the etiopathogenesis, clinical types, presentations, management and prevention of childhood Asthma**	**K**	**KH**	**Y**	**Lecture / SGD**	**Written / viva voce**			
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			
PE 31.6	**Recognize symptoms and signs of asthma in a child**	**S**	**SH**	**Y**	**Bedside, skill lab**	**Skill assessment**			
31.6.1	Recognize symptoms and signs of asthma in a child	S	SH	Y	Bedside, skill lab	Skill assessment			
PE 31.7	**Develop a treatment plan for a child with appropriate to the severity and clinical presentation**	**S**	**SH**	**Y**	**Bedside, skill lab**	**Skill assessment**			
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			

PE 31.8	**Enumerate the criteria for referral in a child with asthma**	**K**	**K**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
31.8.1	Enumerate the criteria for referral in a child with Asthma.	K	K	Y	Lecture, SGD	Written/ Viva voce			
PE 31.9	**Interpret CBC and CX Ray in Asthma**	**S**	**SH**	**Y**	**Bedside clinic, SGD**	**Skill assessment/ OSCE**			
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			
PE 31.10	**Enumerate the indications for PFT.**	**K**	**K**	**N**	**Lecture, SGD**	**Written/ Viva voce**		**Pulmonary medicine**	
31.10.1	Enumerate the indications of pulmonary function Test (PFT) in childhood asthma	K	K	N	Lecture, SGD	Written/ Viva voce		Pulmonary medicine	
PE 31.11	**Observe administration of Nebulization**	**S**	**SH**	**Y**	**DOAP**	**Document in Logbook**			
31.11.1	Observe and document steps of administration of Nebulization to a child with asthma	S	SH	Y	DOAP	Document in Logbook			
PE 31.12	**Discuss the etiopathogenesis, clinical features, complications and management of Urticaria Angioedema.**	**K**	**K**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
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)**		
PE 32.1	**Discuss the genetic basis, risk factors, complications, prenatal diagnosis, management and genetic counselling in Down Syndrome**	**K**	**KH**	**Y**	**Lecture, Small group discussion**	**Written**		**Human Anat**	
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			
PE 32.2	**Identify the clinical features of Down Syndrome**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Logbook**		**Med**	
32.2.1	Identify common clinical features in a child with Down syndrome	S	SH	Y	Bedside clinic	Bedside /OSCE			
PE 32.3	**Interpret normal Karyotype and recognize Trisomy 21**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Logbook**			**Med**
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	**Med**
PE 32.4	**Discuss the referral criteria and Multidisciplinary approach to management**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
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			
PE 32.5	**Counsel parents regarding 1. Present child 2. Risk in the next pregnancy**	**A/C**	**SH**	**N**	**Bedside, Skills lab**	**Logbook**			
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			

PE 32.6	**Discuss the genetic basis, risk factors, clinical features, complications, prenatal diagnosis, management and genetic counseling in Turner Syndrome**	**K**	**KH**	**N**	**Lecture, SGD**	**Written/ Viva voce**		**Med, OBG**	
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			
PE 32.7	**Identify the clinical features of Turner Syndrome**	**S**	**SH**	**N**	**Bedside, Skills lab**	**Logbook**		**Med**	
32.7.1	Identify clinical features of Turner syndrome	S	SH	N	Bedside, Photo	Bedside /Logbook			
PE 32.8	**Interpret normal Karyotype and recognize Turner Karyotype**	**S**	**SH**	**N**	**Bedside, Skills lab**	**Logbook**			**Med**
32.8.1	Read a normal Karyotype and recognize Turner karyotype	S	KH	N	Skill lab	Logbook			
PE 32.9	**Discuss the referral criteria and Multidisciplinary approach to management**	**K**	**KH**	**N**	**Lecture, SGD**	**Written/ Viva voce**			
32.9.1	Enumerate the referral criteria for Turner syndrome.	K	KH	N	SGD	SAQ/ Viva		Anat Biochemistry	**Med**
32.9.2	Describe a multidisciplinary approach to management of a child with Turner syndrome	K	KH	N	Lecture/ SGD	MCQ/SAQ			
PE 32.10	**Counsel parents regarding 1. Present child 2. Risk in the next pregnancy**	**A/C**	**SH**	**N**	**Bedside, Skills lab**	**Logbook**			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			
PE 32.11	**Discuss the genetic basis, risk factors, complications, prenatal diagnosis, management and genetic counselling in Klinefelter Syndrome**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/ viva**			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			
PE 32.12	**Identify the clinical features of Klinefelter Syndrome**	**S**	**SH**	**N**	**Bedside/ photo**	**LOGBOOK**			Med
	Identify the clinical features of Klinefelter Syndrome	S	SH	N	Bedside/ photo/	LOGBOOK			
PE 32.13	**Interpret normal Karyotype and recognize the Klinefelter Karyotype**	**S**	**SH**	**N**	**Bedside/ photo**	**LOGBOOK**			Med
Topic: Endocrinology		**Number of competencies: (11)**			**Number of procedures that require certification: (02)**				
PE 33.1	**Describe the etiopathogenesis clinical features, management of Hypothyroidism in children**	**K**	**KH**	**Y**	**Lecture, SGD**	**written/viva voce**			
33.1.1	Describe the pathogenesis of hypothyroidism in children	K	KH	Y	**Lecture / SGD**	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			
PE 33.2	**Recognize the clinical signs of Hypothyroidism and refer**	**S**	**SH**	**Y**	**Bedside, Skill Lab**	**Skill Assessment**			
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			
PE 33.3	**Interpret and explain neonatal thyroid screening report**	S	SH	Y	**Bedside, SGD**	**Skill Assessment**			
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			

PE 33.4	**Discuss the etiopathogenesis, clinical types, presentations, complication and management of Diabetes mellitus in children**	K	KH	Y	**Lecture, SGD**	**Written/ Viva voce**			
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			
PE 33.5	**Interpret Blood sugar reports and explain the diagnostic criteria for Type 1 Diabetes**	**S**	**SH**	**Y**	**Bedside clinic, small group activity**	**Skill Assessment**			
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			
PE 33.6	**Perform and interpret Urine Dip Stick for Sugar**	**S**	**P**	**Y**	**DOAP session**	**Skill Assessment**	**3**	**Biochemistry**	
33.6.1	Perform urine dipstick test for sugar and interpret it correctly	S	P	Y	DOAP session	OSPE			
PE 33.7	**Perform genital examination and recognize Ambiguous Genitalia and refer appropriately**	**S**	**SH**	**Y**	**Bedside, skill lab**	**Skill Assessment**			
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			
PE 33.8	**Define precocious and delayed Puberty**	**K**	**KH**	**Y**	**Lecture, SGD**	**Written/ Viva voce**			
33.8.1	Discuss normal Physiology of puberty and define precocious and delayed puberty	K	KH	Y	Lecture, SGD	Written/ viva			
PE 33.9	**Perform Sexual Maturity Rating (SMR) and interpret**	**S**	**SH**	**Y**	**Bedside, skill lab**	**Skill Assessment**			
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			
PE 33.10	**Recognize precocious and delayed Puberty and refer**	**S**	**SH**	**Y**	**Bedside, skill lab**	**Logbook**			

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			
PE 33.11	**Identify deviations in growth and plan appropriate referral**	**S**	**P**	**Y**	**Bedside, skill lab**	**Logbook**	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		
Topic: Vaccine preventable Diseases-Tuberculosis		**Number of competencies: (20)**			**Number of procedures that require certification: (03)**				
PE 34.1	**Discuss the epidemiology, clinical features, clinical types, complications of Tuberculosis in Children and Adolescents**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro**	**Resp Med**
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			
PE 34.2	**Discuss the various diagnostic tools for childhood tuberculosis**	**K**	**KH**	**Y**	**Lecture/** SGD	**Written/viva voce**		**Micro**	**Resp Med**
34.2.1	Describe the various diagnostic tools for childhood tuberculosis	K	KH	Y	Lecture/ SGD	Written/viva voce			
PE 34.3	**Discuss the various regimens for management of Tuberculosis as per National Guidelines**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro, Com Med, Pharm**	**Resp Med**
34.3.1	Describe the various regimens for management of Tuberculosis as per National Guidelines	K	KH	Y	Lecture/ SGD	Written/viva voce			
PE 34.4	**Discuss the preventive strategies adopted and the objectives and outcome of the National Tuberculosis Program**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro, Com Med, Pharm**	**Resp Med**

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			
PE 34.5	**Able to elicit, document and present history of contact with tuberculosis in every patient encounter**	**S**	**SH**	**Y**	**Bedside, Skills lab**	**Skill Assessment**			**Resp Med**
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			
PE 34.6	**Identify a BCG scar**	**S**	**P**	**Y**	**Bedside, Skills lab**	**Skill Assessment**	**3**	**Micro**	**Resp Med**
34.6.1	Identify a BCG scar in a child	S	P	Y	Bedside, Skills lab	Skill Assessment	3		
PE 34.7	**Interpret a Mantoux Test**	**S**	**P**	**Y**	**Bedside**	**Skill Assessment**	**3**	**Micro**	**Resp Med**
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		
PE 34.8	**Interpret a chest radiograph**	**S**	**SH**	**Y**	**Bedside**	**Skill Assessment**		**Radiod**	**Resp Med**
34.8.1	Identify abnormalities caused by tuberculosis in a chest radiograph	S	SH	Y	Bedside	Skill Assessment			
PE 34.9	**Interpret blood tests in the context of laboratory evidence for tuberculosis**	**S**	**SH**	**N**	**Bedside, SGD**	**Logbook**		**Micro**	**Resp Med**
34.9.1	interpret blood tests in the context of laboratory evidence for tuberculosis	S	SH	N	Bedside, SGD	Logbook			
PE 34.10	**Discuss the various samples for demonstrating the organism e.g. Gastric Aspirate, Sputum, CSF, FNAC**	**K**	**KH**	**Y**	**Bedside, SGD**	**Written/viva voce**		**Micro**	**Resp Med**
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			

PE 34.11	**Perform AFB staining**	**S**	**P**	**Y**	**DOAP session**	**Logbook/Journal**	**3**	**Micro**	**Resp Med**
34.11.1	Perform AFB staining	S	P	Y	DOAP session	Logbook/Journal	3		
PE 34.12	**Enumerate the indications and discuss the limitations of methods of culturing M. Tuberculosis**	**K**	**KH**	**Y**	**SGD**	**Written/viva voce**		**Micro**	**Resp Med**
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			
PE 34.13	**Enumerate the newer diagnostic tools for Tuberculosis including BACTEC CBNAAT and their indications**	**K**	**K**	**N**	**Lecture/ SGD**	**Written/viva voce**			
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			
PE 34.14	**Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of fever in children**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro**	
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			
PE 34.15	**Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with exanthematous illness like Measles, Mumps, Rubella & Chicken pox**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro**	

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			
PE 34.16	**Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Diphtheria, Pertussis, Tetanus**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro**	
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			
PE 34.17	**Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Typhoid**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro**	**-**
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			

PE 34.18	**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**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro**	**-**
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			
PE 34.19	**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**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro**	**-**
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			

PE 34.20	**Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Rickettsial diseases**	**K**	**KH**	**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro**	**-**
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			
Topic: The role of the physician in the community					**Number of competencies: (1)**		**Number of procedures that require certification: (NIL)**		
PE 35.1	**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)**	**K**	**KH**	**Y**	**Small group discussion**	**Written/ Viva voce**			
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/SH	Y	Bedside teaching	Long case OSCE Reflective writing			
35.1.4	Discuss the common medico-legal, socio-cultural and ethical issues related to healthcare in children	K	KH/SH	Y	Case-based learning/ SGD	OSCE 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