Rajiv Gandhi University of Health Sciences
Bangalore, Karnataka

Paediatrics Curriculum
as per
Competency-Based Medical Education Curriculum

Abbreviations

NMC	-	National Medical Council
IMG	-	Indian Medical Graduate
CBME	-	Competency Based Medical Education
SLO	-	Specific Learning Objectives
TL	-	Teaching Learning
P	-	performed
Y/N	-	yes / no
SGD	-	Small group discussion
OSCE	-	Objective structured clinical examination
AETCOM	-	Attitude, Ethics and communication
SAQ	-	short answer question
MCQ	-	multiple choice question

RGUHS Paediatrics Curriculum as per the new Competency Based Medical Education

Preamble

The NMC envisages that the Indian Medical Graduate, should function as the Physician of first contact in the community, to provide holistic health care to the evolving needs of the nation and the world. To fulfil this the IMG should be able to perform the following roles: a clinician, a communicator, a lifelong learner, a professional and a team leader.

Competency-based medical education (CBME) is an outcomes-based training model that has become the new standard of medical education internationally. This new curriculum is being implemented across the country and the first batch has been enrolled since the academic year 2019. The regulatory and accrediting body NMC had started the process by training faculty across the country in the key principles of CBME and developing key competencies for each speciality with the input from expert groups under each speciality.

Paediatrics is an interesting branch of medicine dealing with health and medical care of children. It encompasses a broad spectrum of services ranging from preventive health care to the diagnosis and treatment of acute and chronic childhood illnesses. It is an ever-evolving branch requiring compassion, dedication and precision of care. The Paediatrics undergraduate curriculum provides the IMG the requisite knowledge, essential skills and appropriate attitudes to be able to diagnose and treat common paediatric disorders and also to be able to recognise serious conditions and refer appropriately.

The NMC, in the Graduate medical regulations 2019, has provided the list of paediatric competencies required for an IMG and these have been included in this curriculum document. The Specific learning objectives (SLO's) to achieve each competency has been listed along with the suggested Teaching-Learning methods and preferred assessment methods.

Following this is a detailed **blueprint** showing the weightage and the assessment tool for a particular chapter. This blueprint will ensure that there is an alignment between the SLOs', TL methods and the assessment. A **question paper layout** has also been added to ensure that there is consistency among different paper setters. Finally, the list of practical skills along with the most appropriate TL and assessment methods has been laid out.

Goals and Objectives of the RGUHS Paediatrics Curriculum

Goals:

The course includes systematic instructions in management of common diseases of infancy and childhood, evaluation of growth and development, nutritional needs, and immunization schedule in children, social pediatrics and counseling is also dealt in the course. The aim of teaching undergraduate medical students is to impart appropriate knowledge and skills to optimally deal with major health problems and also to ensure optimal growth and development of children.

Objectives:

(A) *Knowledge*

At the end of the course, the student shall be able to:

1. Describe normal growth and development during fetal, neonatal, child and adolescence period.
2. Describe the common pediatric disorders and emergencies in terms of epidemiology, etiopathogenesis, clinical manifestations, diagnosis, rational therapy and rehabilitation.
3. State age related requirements of calories, nutrients, fluids, drugs etc. in health and disease.
4. Describe preventive strategies for common infectious disorders, poisonings, accidents and child abuse.
5. Outline national programmes relating to child health including immunization programmes.

(B) *Skills*

At the end of the course, the student shall be able to:

1. Take a detailed pediatric history, conduct an appropriate physical examination of children including neonates, make clinical diagnosis, conduct common bedside investigative procedures, interpret common laboratory investigation results and plan and institute therapy.

2. Distinguish between normal newborn babies and those requiring special care and institute early care to all newborn babies including care of preterm and low birth weight babies.
3. Take anthropometric measurements, resuscitate newborn infants at birth, prepare oral rehydration solution, perform tuberculin test, administer vaccines available under current national programmes, perform venesection, start an intravenous line and provide nasogastric feeding.
4. Would have observed procedures such as lumbar puncture, liver and kidney biopsy, bone marrow aspiration, pleural tap and ascitic tap.
5. Provide appropriate guidance and counseling in breast feeding.
6. Provide ambulatory care to all sick children, identify indications for specialized/inpatient care and ensure timely referral of those who require hospitalization.
7. Be aware and analyse ethical problems that arise during practice and deal with them in an acceptable manner following the code of ethics.

(C) ***Attitude and communication skills***

At the end of the course, the student shall be able to:

1.Communicate effectively with patients, their families and the public at large.

2. Communicate effectively with peers and teachers and demonstrate the ability to work effectively with peers in a team.

3. Demonstrate professional attributes of punctuality, accountability and respect for teachers and peers.

4. Appreciate the issues of equity and social accountability while undergoing early clinical exposure

(D) ***Integration***

The training in pediatrics should prepare the student to deliver preventive, promotive, curative and rehabilitative services for care of children both in the community and at hospital as part of a team in an integrated form with other disciplines.

List of all Paediatrics competencies with their specific learning objectives, with suggested teaching-learning and assessment methods:

Number	Competency&LearningObjective(s)			Core	Suggested TeachingLearningMethod	SuggestedAssessment Method	Number forCertification	VerticalIntegration	Horizontal Integration
Topic:NormalGrowthandDevelopment		**Numberofcompetencies:(7)**				**Numberofproceduresthatrequirecertification:(02)**			
PE1.1	**DefinetheterminologiesGrowthandDevelopment and Discuss the factors affecting normal growth anddevelopment**			**Y**	**Lecture/SGD**	**Written/viva voce**			
1.1.1	DefineGrowthandDevelopment			Y	Lecture/SGD	Written/viva voce			
1.1.2	Enumerate the factors affecting normal growth anddevelopment			Y	Lecture/SGD	Written/viva voce			
PE1.2	**DiscussandDescribethepatternsofgrowthin infants,childrenandadolescents**			**Y**	**Lecture/SGD**	**Written/viva voce**			**Psych**
1.2.1	Describethepatternsofgrowth ininfants,childrenandadolescents			Y	Lecture/SGD	Written/viva voce			
PE1.3	**Discuss and Describe the methods of assessment ofgrowth including use of WHO and Indian nationalstandards. Enumerate the parameters used for assessment ofphysical growth in infants children and adolescents**			**Y**	**Lecture/SGD**	**Written/viva voce**			**ComMed**
1.3.1	Describe themethodsofassessmentofgrowth includinguseofWHOandIndiannational standards.			Y	Lecture/SGD	Written/viva voce			
1.3.2	DescribeWHOandIndiannationalstandardsforgrowthofinfants ,children andadolescents.			Y	Lecture/SGD	Written/ vivavoce			
1.3.3	Enumeratetheparametersusedforassessmentofphysicalgrowt hininfants,children and adolescents.			Y	Lecture/SGD	Written/viva voce			
PE1.4	**PerformAnthropometricmeasurements,document ingrowthchartsandinterpret**			**Y**	**SGD**	**Documentin Logbook**	**3**		
1.4.1	Performanthropometricmeasurements inchildrenofdifferentagegroups.			Y	Clinicalteaching/skilllab	Document inLogbook	3		

1.4.2	Documentthemeasuredparametersingrowthchartsandinterpretthefindingson growthcharts.			Y	Clinicalteaching/skilllab	Document inLogbook	3		
PE1.5	**Define development and Discuss the normaldevelopmentalmilestoneswithrespecttomotor, behavior,social,adaptiveandlanguage**			**Y**	**Lecture/SGD**	**Written/viva voce**			**Psych**
1.5.1	Definedevelopment.			Y	Lecture/SGD	Written/viva voce			
1.5.2	Describe the normal developmental milestones withrespect to motor, behavior, social, adaptive and languagedomains.			Y	Lecture/SGD	Written/viva voce			Psych
PE1.6	**Discussthemethodsofassessmentofdevelopment.**			**Y**	**Lecture/SGD**	**Written/viva voce**			
1.6.1	Discussthemethodsofassessmentofdevelopment			Y	Lecture/SGD	Written/viva voce			
PE1.7	**PerformDevelopmentalassessmentandinterpret**			**N**	**Bedside/skillslab**	**Documentin Logbook**	**3**		
1.7.1	PerformDevelopmentalassessmentininfantsandchildrenandinterpret thefindings.			N	Bedside/skillslab	Document inLogbook/skilllab	3		
Topic:CommonproblemsrelatedtoGrowth		**Numberofcompetencies:(6)**				**Numberofproceduresthatrequirecertification:(NIL)**			
PE2.1	**Discusstheetiopathogenesis,clinicalfeaturesand managementofachildwhofailstothrive**			**Y**	**Lecture/SGD**	**Written/viva voce**			
2.1.1	Discussthe etiopathogenesisofachildwhofailstothrive.			Y	Lecture/SGD	Written/viva voce			
2.1.2	Describetheclinicalfeaturesofachildwhofailstothrive.			Y	Lecture/SGD	Written/viva voce			
2.1.3	Discussthemanagementofachildwhofailstothrive.			Y	Lecture/SGD	Written/viva voce			
PE2.2	**Assessmentofachildwithfailuretothriveincluding elicitinganappropriatehistoryandexamination**			**Y**	**Bedsideclinics**	**Skillsstation**			
2.2.1	Elicitanappropriatehistoryinachildwithfailureto thrive.			Y	Bedsideclinics	OSCE/Clinical case			
2.2.2	Performacompletephysical examinationinachildwithfailureto thrive.			Y	Bedsideclinics	OSCE/Clinical case			
PE2.3	**Counselingaparentwithfailingtothrivechild**			**Y**	**OSCE**	**Documentin Logbook**		**AETCOM**	

2.3.1	Counselaparentofachildwith failuretothrive.			Y	Skilllab/roleplay	OSCE/ Documentin Logbook			
PE2.4	**Discuss the etiopathogenesis, clinical features andmanagementofachildwithshortstature**			**Y**	**Lecture/SGD**	**Written/viva voce**			
2.4.1	Enumeratecausesof shortstatureinchildren.			Y	Lecture/SGD	Written/viva voce			
2.4.2	Describetheclinicalfeaturesofachildwithshortstature.			Y	Lecture/SGD	Written/viva voce			
2.4.3	Discussthemanagementofa childwithshortstature.			Y	Lecture/SGD	Written/viva voce			
PE2.5	**Assessment of a child with short stature: Elicithistory;performexamination,documenta nd present.**			**Y**	**Bedside/skilllab**	**Skillassess ment**			
2.5.1	Elicithistoryinachildwithshortstature.			Y	Bedside/skilllab	Bedside/OSCE			
2.5.2	Performacompletephysical examinationinachildwithshortstature.			Y	Bedside/skilllab	Bedside/OSCE			
2.5.1	Documentandpresentassessmentofachildwithshortstature.			Y	Bedside/skilllab	Skillassessm ent/ bedsidecase			
PE2.6	**Enumeratethereferralcriteriaforgrowthrelated problems**			**Y**	**Lecture/SGD**	**Written/viva voce**			
2.6.1	Enumeratethereferralcriteriaforgrowthrelatedproblems			Y	Lecture/SGD	Written/viva voce			
Topic:CommonproblemsrelatedtoDevelopment-1 (Developmentaldelay,Cerebralpalsy)		**Numberofcompetencies:(8)**				**Numberofproceduresthatrequirecertification:(NIL)**			
PE.3.1	**Define, Enumerate and Discuss the causes ofdevelopmentaldelayanddisabilityincluding intellectualdisabilityinchildren**			**Y**	**Lecture,SGD**	**Written/viva-voce**			
3.1.1	Definedevelopmentaldelay.			Y	Lecture/SGD	Written/viva-voce			
3.1.2	Enumeratecausesofdevelopmentaldelay.			Y	Lecture/SGD	Written/viva-voce			

3.1.3	DefinedisabilityasperWHO.			Y	Lecture/SGD	Written/viva-voce			
3.1.4	DefineIntellectualdisabilityinchildren.			Y	Lecture/SGD	Written/viva-voce			
3.1.5	Gradeintellectualdisabilityintermsofintelligence quotient(IQ).			Y	Lecture/SGD	Written/viva-voce			
PE3.2	**Discusstheapproachtoachildwithdevelopmental delay**			**Y**	**Lecture,SGD**	**Written/viva-voce**			
3.2.1	DiscussclinicalpresentationofcommoncausesofdevelopmentaldelaY.			Y	Lecture,SGD	Written/Viva voce			
3.2.2	Enumerateinvestigationsfordevelopmentaldelay.			Y	Lecture,SGD	Written/ Vivavoce			
3.2.3	Based on clinical presentation, make an investigation planfora childwith developmentaldelay.			Y	Lecture,SGD	Written/ Vivavoce			
3.2.4	Discussdifferentialdiagnosisofdevelopmentaldelay.			Y	Lecture,SGD	Written/Viva voce			
PE3.3	**Assessmentofachildwithdevelopmentaldelay-elicitdocumentandpresenthistory**			**Y**	**Bedside,Skillslab**	**Skill assessment**			
3.3.1	Elicitdevelopmentalhistoryfromaparent/caretaker.			Y	Bedside,Skillslab	Case/OSCE			
3.3.2	Elicitthecurrentdevelopmentalmilestonesofthechild.			Y	Bedside,Skillslab	OSCE			
3.3.3	Interpret developmental status of a child based on thehistoryand examination.			Y	Bedside,Skillslab	OSCE			
3.3.4	Documentandpresentthedevelopmentalassessment.			Y	Bedside,Skillslab	LOGBOOK			
PE3.4	**Counselaparentofachildwithdevelopmentaldelay**			**Y**	**DOAPSession**	**Documentin Logbook**			
3.4.1	Communicatethedevelopmentalstatusofthechildtothe parent.			Y	DOAPSession	Documentin Logbook			
3.4.2	Counseltheparentsofachildwithdevelopmentaldelay.			Y	DOAPSession	Document inLogbook			
PE3.5	**Discusstheroleofthechilddevelopmentalunitin managementofdevelopmentaldelay**			**N**	**Lecture,SGD**	**Written/Viva voce**		**Com Med**	
3.5.1	Enumeratethestructureand compositionofstaffatachild developmentunit.			N	Lecture/SGD	Written/Viva voce		Com Med	
3.5.2	Describerolesofachilddevelopmentunit.			N	Lecture/SGD	Written/ Vivavoce		Com Med	

PE3.6	**Discussthereferralcriteriaforchildrenwith developmentaldelay**			**Y**	**Lecture,SGD**	**Written/viva voce**			
3.6.1	Enumerateclinicalcriteriafor referralofachildwithdevelopmentaldelay.			Y	Lecture/SGD	Written/viva voce			
PE3.7	**VisitaChildDevelopmentalUnitandObserveits functioning**			**Y**	**Lecture,SGD**	**Logbook entry**		**Com Med**	
3.7.1	Observeandlisttheactivitiesinthechilddevelopmental unit.			Y	Lecture,SGD	Logbookentry		Com Med	
PE3.8	**Discuss the etiopathogenesis, clinical presentationandmultidisciplinaryapproachinthema nagement ofcerebralpalsy**			**Y**	Lecture/SGD	**Written/viva voce**			**PMR**
3.8.1	Definecerebralpalsy.			Y	Lecture/SGD	Written/viva voce			
3.8.2	Enumeratecommoncausesofcerebralpalsy.			Y	Lecture/SGD	Written/viva voce			
3.8.3	Describetheetiopathogenesisofcerebralpalsy.			Y	Lecture/SGD	Written/viva voce			
3.8.4	Classifycerebralpalsywithrespecttofunctionand topography.			Y	Lecture/SGD	Written/viva voce			
3.8.5	Describe common clinical presentations of different typesofcerebral palsy.			Y	Lecture/SGD	Written/viva voce			
3.8.6	Listsomecommonco-morbiditiesinachildwith cerebralpalsy.			Y	Lecture/SGD	Written/viva voce			
3.8.7	Describecommoninterventionsformanagementofachild withcerebralpalsy.			Y	Lecture/SGD	Written/viva voce			
Topic: Common problems related to Development-2(Scholasticbackwardness,LearningDisabilities,Autism, ADHD)		**Numberofcompetencies:(6)**				**Numberofproceduresthatrequirecertification:(NIL)**			
PE4.1	**Discussthecausesandapproachtoachildwith scholasticbackwardness**			**N**	**Lecture,SGD**	**Written/viva voce**			
4.1.1	Definescholasticbackwardness.			N	Lecture,SGD	Written/viva voce			
4.1.2	Listcommoncausesofscholasticbackwardness.			N	Lecture,SGD	Written/viva voce			

4.1.3	Discussclinicalassessmentofachildwithscholasticbackwardness.			N	Lecture,SGD	Written/viva voce			
PE4.2	**Discusstheetiology,clinicalfeatures,diagnosisandmanagementofachildwithlearningdisabilities**			N	**Lecture,SGD**	**Written/viva voce**			
4.2.1	Definelearningdisabilities.			N	Lecture,SGD	Written/viva voce			
4.2.2	Enumeratecausesoflearning disabilities.			N	Lecture,SGD	Written/viva voce			
4.2.3	Describeclinicalpresentationofachildwithlearning disabilities.			N	Lecture,SGD	Written/viva voce			
4.2.4	Discussassessmentofachildwithlearningdisabilities.			N	Lecture,SGD	Written/viva voce			
4.2.5	Discussmanagementoptionsforachildwithlearningdisabilities.			N	Lecture,SGD	Written/viva voce			
PE4.3	**Discusstheetiology,clinicalfeatures,diagnosisandmanagementofachildwithAttentionDeficit HyperactivityDisorder(ADHD)**			N	**Lecture,SGD**	**Written/viva voce**			
4.3.1	DefineADHD.			N	Lecture,SGD	Written/viva voce			
4.3.2	DescribeclinicalfeaturesofADHD.			N	Lecture,SGD	Written/viva voce			
4.3.3	Discussdiagnosticassessmentofachildwithsuspected ADHD.			N	Lecture,SGD	Written/viva voce			
4.3.4	EnumeratedrugsfortreatmentofADHD.			N	Lecture,SGD	Written/viva voce			
PE4.4	**Discussetiology,clinicalfeatures,diagnosisandmanagementofa childwithautism**			N	**Lecture,SGD**	**Written/viva voce**			
4.4.1	DefineAutismSpectrumDisorders(ASD).			N	Lecture,SGD	Written/viva voce			
4.4.2	DiscusscausesofASD.			N	Lecture,SGD	Written/viva voce			
4.4.3	DescribeclinicalfeaturesofASD.			N	Lecture,SGD	Written/viva voce			
4.4.4	DiscussclinicalassessmentofASD.			N	Lecture,SGD	Written/viva voce			
4.4.5	DiscussmanagementoptionsforachildwithASD.			N	Lecture,SGD	Written/viva voce			

PE4.5	**DiscusstheroleofChildGuidanceClinicinchildren withDevelopmentalproblems**			**N**	**Lecture,SGD**	**Written/Viva voce**		**Psych**	
4.5.1	DescribethestructureofaChildGuidanceClinicwith respecttostaffandfacilities.			N	Lecture,SGD	Written/Viva voce		Psych	
4.5.2	Enumeratethefunctionsofachild guidanceclinic.			N	Lecture,SGD	Written/Viva voce		Psych	
PE4.6	**VisittotheChildGuidanceClinic**			**N**	**Lecture,SGD**	**Documentin Logbook**		Psych	
4.6.1	Describethefunctioningofchildguidanceclinicintheirinstitution s.			N	Lecture,SGD	Document inLogbook		Psych	
Topic:Commonproblemsrelatedtobehaviour		**Numberofcompetencies:(3)**				**Numberofproceduresthatrequirecertification:(NIL)**			
PE 5.1	**Describetheclinicalfeatures,diagnosisand managementofthumbsucking**			**N**	**Lecture,SGD**	**Written**			
5.1.1	Describeclinicalfeaturesofthumbsucking.			N	Lecture,SGD	Written/viva voce			
5.1.2	Describediagnosisofthumbsucking.			N	Lecture,SGD	Written/viva voce			
5.1.3	Discuss management strategies for a child with thumbsucking.			N	Lecture,SGD	Written/viva voce			
PE 5.2	**Describetheclinicalfeatures,diagnosisand managementoffeedingproblems**			**N**	**Lecture,SGD**	**Written/viva voce**			
5.2.1	Enumeratecommonfeedingproblems.			N	Lecture,SGD	Written/viva voce			
5.2.2	Discussclinicalpresentationsoffeedingproblems.			N	Lecture,SGD	Written/viva voce			
5.2.3	Discussmanagementstrategiesforachildwithfeedingproblems.			N	Lecture,SGD	Written/viva voce			
PE 5.3	**Describetheclinicalfeatures,diagnosisand managementofnail-biting**			**N**	**Lecture,SGD**	**Written/Viva Voce**			
5.3.1	Describefeaturesofnailbiting.			N	Lecture,SGD	Written/Viva Voce			
5.3.2	Discussmanagementofnailbiting.			N	Lecture,SGD	Written/Viva Voce			
PE 5.4	**Describetheclinicalfeatures,diagnosisand managementofbreathholdingspells.**			**N**	**Lecture,SGD**	**Written/Viva Voce**			

5.4.1	Describeabreathholdingspell.			N	Lecture,SGD	Written/Viva Voce			
5.4.2	Describethetypesofbreathholdingspells.			N	Lecture,SGD	Written/Viva Voce			
5.4.3	Discusscausesofbreathholdingspells.			N	Lecture,SGD	Written/Viva Voce			
5.4.4	Discussmanagementofbreathholdingspells.			N	Lecture,SGD	Written/Viva Voce			
PE 5.5	**Describetheclinicalfeatures,diagnosisand managementoftempertantrums**			**N**	**Lecture,SGD**	**Written/Viva Voce**			Psych
5.5.1	Describepresentationofatempertantrum.			N	Lecture,SGD	Written/Viva Voce			
5.5.2	Discusscausesoftempertantrum.			N	Lecture,SGD	Written/Viva Voce			
5.5.3	Discussmanagementoftempertantrums.			N	Lecture,SGD	Written/Viva Voce			
PE 5.6	**Describetheclinicalfeatures,diagnosisand managementofpica**			**N**	**Lecture,SGD**	**Written/Viva Voce**			
5.6.1	Definepica.			N	Lecture,SGD	Written/Viva Voce			
5.6.2	Discusscausesofpica.			N	Lecture,SGD	Written/Viva Voce			
5.6.3	Discusstreatmentofpica.			N	Lecture,SGD	Written/Viva Voce			
PE 5.7	**Describetheclinicalfeatures,diagnosisand managementoffussyinfant**			**N**	**Lecture,SGD**	**Written/Viva Voce**			Psych
5.7.1	Describeafussyinfant.			N	Lecture,SGD	Written/Viva Voce			
5.7.2	Enumeratecausesof fussinessinchildren.			N	Lecture,SGD	Written/Viva Voce			
5.7.3	Discussmanagementoffussinessinachild.			N	Lecture,SGD	Written/Viva Voce			
PE 5.8	**Discusstheetiology,clinicalfeaturesand managementofenuresis.**			**N**	**Lecture,SGD**	**Written/Viva Voce**			
5.8.1	Defineprimaryandsecondary enuresisforboysandgirls.			N	Lecture,SGD	Written/Viva Voce			

5.8.2	Discussetiologyofprimaryandsecondaryenuresis.			N	Lecture,SGD	Written/Viva Voce			
5.8.3	Discusspharmacologicalandnon-pharmacological managementstrategiesforenuresis.			N	Lecture,SGD	Written/Viva Voce			
PE 5.9	**Discusstheetiology,clinicalfeaturesand managementofEncopresis.**			**N**	**Lecture,SGD**	**Written/Viva Voce**			
5.9.1	DescribeEncopresis.			N	Lecture,SGD	Written/Viva Voce			
5.9.2	DiscusscausesofEncopresis.			N	Lecture,SGD	Written/Viva Voce			
5.9.3	DescribemanagementofEncopresis.			N	Lecture,SGD	Written/Viva Voce			
PE 5.10	**Discusstheroleofchildguidanceclinicinchildren withbehaviouralproblemsandthereferralcriteria**			**N**	**Lecture,SGD**	**Written/Viva Voce**			**Psych**
5.10.1	Describetheroleofachildguidanceclinicinchildrenwithbeha viouralproblems.			N	Lecture,SGD	Written/Viva Voce			
5.10.2	Enumeratereferralcriteriaforbehaviouralproblemsin children.			N	Lecture,SGD	Written/Viva Voce			
PE 5.11	**VisittoChildGuidanceClinicandobservefunctioning**			**N**	**Lecture,SGD**	**Documentin Logbooks**			
5.11.1	DescribefunctioningofaChildGuidanceClinic.			N	Lecture,SGD	Documentin Logbooks			
Topic:AdolescentHealth&commonproblemsrelatedto Adolescent Health		**Numberofcompetencies:(13)**			**Numberofproceduresthatrequirecertification:(NIL)**				
PE6.1	**DefineAdolescenceandstagesofadolescence**			**Y**	**Lecture,SGD**	**Written/viva voce**			
6.1.1	Defineadolescence.			Y	Lecture,SGD	Written/viva voce			
6.1.2	Enumeratethestagesofadolescence.			Y	Lecture,SGD	Written/viva voce			
PE 6.2.	**Describethephysical,physiologicalandpsychological changesduringadolescence(Puberty)**			**Y**	**Lecture,SGD**	**Written/viva voce**			**Psych**
6.2.1	Describethephysicalchangesduringadolescence.			Y	Lecture,SGD	Written/viva voce			Psych
6.2.2	Describethephysiologicalchangesduringadolescence.			Y	Lecture,SGD	Written/viva voce			Psych

6.2.3	Describethepsychologicalchangesduringadolescence.			Y	Lecture,SGD	Written/viva voce			Psych
PE6.3	**Discussthegeneralhealthproblemsduring adolescence**			**Y**	**Lecture,SGD**	**Written/viva voce**			
6.3.1	Enumeratethegeneralhealthproblemsofadolescence			Y	Lecture,SGD	Written/viva voce			
6.3.2	Describethegeneralhealthproblemsofadolescence			Y	Lecture,SGD	Written/viva voce			
PE6.4	**Describeadolescentsexualityandcommonproblems relatedtoit**			**N**	**Lecture,SGD**	**Written/viva voce**			**Psych**
6.4.1	Describeadolescentsexuality.			N	Lecture,SGD	Written/viva voce			Psych
6.4.2	Enumeratecommonproblemsrelatedtoadolescentse xuality.			N	Lecture,SGD	Written/viva voce			Psych
PE6.5	**ExplaintheAdolescentNutritionandcommon nutritionalproblem**			**Y**	**Lecture,SGD**	**Written/viva voce**			**Psych**
6.5.1	Describethenutritionalrequirementsofadolescents.			Y	Lecture,SGD	Written/viva voce			
6.5.2	Discussthenutritionalproblemsin adolescents.			Y	Lecture,SGD	Written/viva voce			Psych
PE6.6	**DiscussthecommonAdolescenteatingdisorders (Anorexianervosa,Bulimia)**			**N**	**Lecture,SGD**	**Written/viva voce**			**Psych**
6.6.1	DescribethecommonadolescenteatingproblemslikeAn orexianervosaand Bulimianervosa.			N	Lecture,SGD	Written/viva voce			Psych
PE6.7	**Describethecommonmentalhealthproblemsduring adolescence**			**Y**	**Lecture,SGD**	**Written/viva voce**			**Psych**
6.7.1	Describethecommonmentalhealthproblemsduringad olescence.			Y	Lecture,SGD	Written/viva voce			Psych
PE6.8	**Respectingpatientprivacyandmaintaining confidentialitywhiledealingwithadolescence**			**Y**	**Bedside**	**Skillstation**			
6.8.1	Interactwithanadolescentin privacyandmaintaining confidentiality.			Y	Bedside	Skillstation			AETCOM

PE6.9	**PerformroutineAdolescentHealthcheckupincludingeliciting history, performing examination includingSMR (Sexual Maturity Rating), growth assessments(usingGrowthcharts)andsystemic examincluding thyroidandBreastexamandtheHEADSSscreening**			**Y**	**Bedsideclinic**	**Skillstation**			
6.9.1	Elicitthehistoryfromanadolescent.			Y	Bedside	Skillstation			
6.9.2	Assesssexualmaturityrating(SMR)inanadolescent.			Y	Bedside	Skillstation			
6.9.3	Evaluatethegrowthofanadolescentusinggrowthcharts.			Y	Bedside	Skillstation			
6.9.4	Examinethethyroidglandofanadolescent.			Y	Bedside	Skillstation			
6.9.5	Performabreastexamination ofanadolescent.			Y	Bedside	Skillstation			
6.9.6	ApplyHEADSSscreeninginadolescentworkup.			Y	Bedside	Skillstation			
PE6.10	**Discuss the objectives and functions of AFHS(AdolescentFriendlyHealthServices)andthereferral criteria**			**N**	**Lecture,SGD**	**Written/viva voce**			
6.10.1	Discusstheobjectivesofadolescentfriendlyhealthservices(AFHS).			N	Lecture,SGD	Written/viva voce			
6.10.2	Enumeratethefunctionsofadolescentfriendlyhealth services(AFHS).			N	Lecture,SGD	Written/viva voce			
PE6.11	**VisittotheAdolescentClinic**			**Y**	**DOAPsession**	**Documentin Logbook**			
6.11.1	Visitanadolescentclinicatleastonce.			Y	DOAPsession	Document inLogbook			
PE6.12	**EnumeratetheimportanceofobesityandotherNCD inadolescents**			**Y**	**Lecture,SGD**	**Written/viva voce**			
6.12.1	DefineobesityinadolescenceandEnumeratethe complications.			Y	Lecture,SGD	Written/viva voce			
6.12.2	Analyzetheimportanceofnon-communicablediseasesinadolescence.			Y	Lecture,SGD	Written/viva voce			
PE6.13	**Enumerate the prevalence and the importance ofrecognitionofsexualdrugabuseinadolescentsand children**			**N**	**Lecture,SGD**	**Written/viva voce**			
6.13.1	Statetheprevalenceofsexualanddrugabuseamong adolescentsandchildren.			N	Lecture,SGD	Written/viva voce			

6.13.2	Discuss the importance of recognition of sexual and drugabuseinadolescentsand children.			N	Lecture,SGD	Written/viva voce			Psych
Topic:TopromoteandsupportoptimalBreastfeedingfor Infants		**Numberofcompetencies:(11)**				**Numberofproceduresthatrequirecertification:(01)**			
PE7.1	**Awarenessontheculturalbeliefsandpracticesof breastfeeding**			**N**	**Lecture,SGD**	**Written/Viva**			**OBG**
7.1.1	Explaintheharmlessandharmfulculturalbeliefsandpra cticesof breastfeeding.			N	Lecture,SGD	Written/Viva			
PE7.2	**ExplainthePhysiologyoflactation**			**Y**	**Lecture,SGD**	**Written/Viva**		**Physio**	
7.2.1	DescribetheAnatomy ofbreast.			Y	Lecture,SGD	Written/viva			
7.2.2	ExplainthePhysiologyoflactation.			Y	Lecture,SGD	Written/viva		Physio	
PE7.3	**Describethecompositionandtypesofbreastmilk andDiscussthedifferencesbetweencow'smilkand Humanmilk**			**Y**	**Lecture,SGD**	**Written/viva voce**		**Physio**	
7.3.1	Describethecompositionofbreastmilk.			Y	Lecture,SGD,	Written/viva voce			
7.3.2	Describethecompositionofcow'smilk.			Y	Lecture,SGD	Written/viva voce			
7.3.3	Enumeratethedifferencesbetweenbreastmilkandcow'smilk.			Y	Lecture,SGD,	Written/viva voce			
7.3.4	Describethe varioustypesofbreastmilkandtheircharacteristicco mposition.			Y	Lecture,SGD,	Written/viva voce			
PE7.4	**Discusstheadvantagesofbreastmilk**			**Y**	**Lecture,SGD**	**Written/viva voce**			
7.4.1	Enumeratetheadvantagesofbreastmilk.			Y	Lecture,SGD	Written/viva voce			
PE7.5	**Observethecorrecttechniqueof breastfeedingand distinguishrightfromwrongtechnique**			**Y**	**Bedside,Skillslab**	**Skill assessment**	**3**		
7.5.1	Observecorrecttechniqueof breastfeedingnotingsignsofgoodattachmentandcorrectpositi oningofmotherand baby.			Y	Bedside teaching/video/S killlab	Logbook	3		
7.5.2	Distinguishcorrectfeedingtechniquefromwrongoneonthe mother baby dyad.			Y	Bedside,skillslab	OSCE (videobased	3		

						)			
PE7.6	**Enumeratethebabyfriendlyhospitalinitiatives**			**Y**	**Lecture,SGD**	**Written/viva voce**			
PE7.6.1	Enumeratecomponentsofthebabyfriendlyhospital initiative.			Y	Lecture,SGD	Writtenshort notes/vivavoce			
PE7.7	**Perform breast examination and Identify commonproblems during lactation such as retracted nipples,crackednipples,breastengorgement,breastabsces s**			**Y**	**Bedside,Skillslab**	**skillassessmen t**			**OBG**
7.7.1	Enumeratecommonproblemsinthemotherduring lactation.			Y	Lecture,Bedside, skillslab	Written/viva voce			
7.7.2	Examinebreastofalactating motherinanappropriatemanner.			Y	Bedside,skillslab	Skillassessm ent,OSCE(vi deo based)			
7.7.3	Identifythecommonproblemsafterexaminingthebreastin lactating mother viz retracted nipples, cracked nipples,breastengorgement, breastabscess.			Y	Bedside,skillslab	Skillassessm ent,OSCE(vi deo based)			
PE7.8	**Educatemothersonantenatalbreastcareandpreparemothersf orlactation**			**Y**	**DOAPsession**	**Document inLogbook**			**AETCOM**
7.8.1	Educateandcounselpregnantwomanduringantenatalper iod in preparationforbreastfeeding.			Y	DOAPsession/Clinical session	OSCE			
7.8.2	Educatethepregnantwomanforantenatalbreastcare.			Y	DOAPsession/Clinical Session	OSCE			**OBG**
PE7.9	**EducateandcounselmothersforbestpracticesinBreastfeeding**			**Y**	**DOAPsession**	**Logbook,OSCE**			
7.9.1	Enumeratethebestbreastfeedingpractices.			Y	Lecture,SGD	Written/viva voce			
7.9.2	Educatemothersforthebestbreastfeedingpractices.			Y	DOAPsession	Logbook, OSCEwithSP			
PE7.10	**Respectspatientprivacy**			**Y**	**DOAPsession**	**Document inLogbook**			**AETCOM**
7.10.1	Demonstraterespect foramother'sprivacy.			Y	DOAPsession	OSCE			
PE7.11	**ParticipateinBreastfeedingWeekCelebration**			**Y**	**DOAPsession**	**Document inLogbook**			

7.11.1	Participateactivelyin breastfeedingweekcelebrations.			Y	ActiveParticipationin theactivities	Documentin Logbook			
Topic:ComplementaryFeeding		**Numberofcompetencies:(5)**				**Numberofproceduresthatrequirecertification:(NIL)**			
PE8.1	**DefinethetermComplementaryFeeding**			**Y**	**Lecture,SGD**	**Written/Viva voce**		**ComMed**	
PE 8.1.1	Definecomplementaryfeeding.			Y	Lecture,SGD	Written/viva voce			
PE8.2	**Discusstheprinciples,theinitiation,attributes,frequency,technique andhygienerelatedtocomplementaryfeeding includingIYCF**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**		**ComMed**	
8.2.1	Describetheprinciplesofcomplementaryfeeding.			Y	Lecture,SGD	Written/viva voce			
8.2.2	Narratethetypesandattributesofgoodcomplementaryfoods.			Y	Lecture,SGD	Written/viva voce			
8.2.3	Describetheinitiationofcomplementaryfeedingin differentsituations.			Y	Lecture,SGD	Written/viva voce			
8.2.4	Describethefrequencyofcomplementaryfeedingindifferent situations.			Y	Lecture,SGD	Written/viva voce			
8.2.5	Describethecorrecttechniqueofcomplementaryfeeding.			Y	Lecture,SGD	Written/viva voce			
8.2.6	Enumeratethehygienicpracticestobefollowedduringcomplementaryfeeding.			Y	Lecture,SGD	Written/viva voce			
PE8.3	**Enumeratethecommoncomplimentaryfoods**			**Y**	**Lecture,SGD**	**Written/Viva voce**		**ComMed**	
PE 8.3.1	Enumeratecommonlocallyavailablecomplementaryfoods.			Y	Lecture,SGD	SAQ,vivavoce			
PE8.4	**ElicithistoryontheComplementaryFeedinghabits**			**Y**	**BEDSIDE,SKILLLAB**	**skill assessment**		**ComMed**	
PE 8.4.1	Elicitafocusedanddetailedhistoryforcomplementary feeding.			Y	Bedside	OSCE			
PE8.5	**Counselandeducatemothersonthebestpracticesin complementaryfeeding**			**Y**	**DOAPsession**	**DOCUMENT INLOGBOOK**		**ComMed**	
8.5.1	Counselthemotherforthebestpracticesinco mplementaryfeeding.			Y	DOAPsession	OSCE			
Topic:Normalnutrition,assessmentandmonitoring		**Numberofcompetencies:(7)**				**Numberofproceduresthatrequirecertification:(NIL)**			

PE9.1	**Describe the age-related nutritional needs of infants,children and adolescents including micronutrientsandvitamins**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**		**ComMed ,Biochem i stry**	
9.1.1	Listthemacronutrientsandmicronutrientsrequiredforgro wth.			Y	Lecture,SGD	Written/Viva voce			
9.1.2	Describe the nutritional needs (calorie, protein,micronutrientsmineralsandvitamins)ofanin fant.			Y	Lecture,SGD	Written/Viva voce			
9.1.3	Describe the nutritional needs (calorie, protein,micronutrientsmineralsandvitamins)forchild renof differentages.			Y	Lecture,SGD	Written/ Vivavoce			
9.1.4	Describe the nutritional needs (calorie, protein,micronutrientsmineralsandvitamins)ofadolesce ntsofboth genders.			Y	Lecture,SGD	Written/ Vivavoce			
PE9.2	**Describe the tools and methods for assessment andclassificationofnutritionalstatusofinfants,children andadolescents**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**		**ComMed**	
9.2.1	Listthetoolsrequiredforanthropometricmeasurements viz.weight,length/height,headcircumference,midarmcir cumference.			Y	Lecture,SGD	Written/ Vivavoce			
9.2.2	Describethemethodofassessmentindetailfordifferentanthrop ometricmeasurementsforallagegroups.			Y	Lecture,SGD	**Written/Viva voce**			
9.2.3	ClassifythenutritionalstatusasperWHOclassification basedonanthropometricmeasurementdataforallagegro ups.			Y	Lecture,SGD	**Written/ Vivavoce**			
PE9.3	**ExplainsthecalorificvalueofcommonIndianfoods**			**Y**	**Lecture,SGD**	**Written/Viva voce**		**Biochemi stry**	
9.3.1	Explainthecalorieandproteincontentofcommonlyuseduncook edand cooked cereals.			Y	Lecture,SGD	**Written/Viva voce**			
9.3.2	Explain the calorie and protein content of commonuncookedfooditemslikedairyproducts,eggs,f ruits, vegetablesetc.			Y	Lecture,SGD	**Written/ Vivavoce**			

9.3.3	ExplainthecalorieandproteincontentofcommonIndiancooked food items e.g. dalia, roti, chapati, khichdi, dal,rice,idli.			Y	Lecture,SGD	**Written/ Vivavoce**			
PE9.4	**Elicit,documentandpresentanappropriate nutritionalhistoryandperformadietaryrecall**			**Y**	**Bedside,skilllab**	**Skill Assessment**		**ComMed**	
9.4.1	Takefocusseddietaryhistorybasedonrecallmethodfrom thecaregiver.			Y	Bedside,skilllab	OSCE			
9.4.2	Documentthedietaryhistory andcalculatecalorieandproteincontent.			Y	Bedside,skilllab	OSCE, VIVAVOCE			
9.4.3	Presentthedietaryhistory.			Y	Bedside,skilllab	LONGCASE, VIVAVOCE			
PE9.5	**Calculate the age appropriate calorie requirement inhealthanddiseaseandIdentifygaps**			**Y**	**Bedsideclinic, SGD**	**OSCE,CLINICAL CASE**		**ComMed**	
9.5.1	Calculatetherecommendedcalorieandproteinrequirementf orchildrenofallagegroups.			Y	Bedsideclinic,SGD	LONGCASE, VIVA VOCE,OSCE			
9.5.2	Calculatethecalorieandproteincontentof24hourdietary intakeby achild.			Y	Bedsideclinic,SGD	LONGCASE, VIVAVOCE			
9.5.3	Calculatethegap(deficit)betweenrecommendedintakeofcalori eand protein and actual intake.			Y	Bedsideclinic,SGD	LONG CASE,VIVAV OCE			
PE9.6	**Assessandclassifythenutritionstatusofinfants, childrenandadolescentsandrecognizedeviations**			**Y**	**Bedsideclinic, SGD**	**Skill Assessment**		**ComMed**	
9.6.1	Assessnutritionalstatusfromanthropometricparametersfo rchildren ofall agegroups.			Y	Bedsideclinic,SGD	OSCE,Bedside			
9.6.2	Interprettheanthropometricmeasurementdataby plottinginappropriateWHOgrowthchartsforchildrenofalla ge groupsand gender.			Y	Bedsideclinic,SGD	OSCE			
9.6.3	Classifythetypeanddegreeofundernutritionusingthe WHOcharts.			Y	Bedsideclinic,SGD	OSCE			
9.6.4	Identifyovernutrition(overweightandobesity)byusingW HOcharts.			Y	Bedsideclinic,SGD	OSCE			
PE9.7	**Plananappropriatedietinhealthanddisease**			**N**	**Bedsideclinic, SGD**	**Documentin Logbook**		**ComMed**	

9.7.1	Planadietforahealthychildofallagegroups.			N	Bedsideclinic,SGD	Document inLogbook			
9.7.2	Plananageappropriatedietforchild ofdifferentage groupswithundernutrition/overnutrition.			N	Bedsideclinic,SGD	Documentin Logbook			
9.7.3	Plan an age appropriate diet for child of different agegroupswithfewcommondiseasesviz.Lactoseintolerance, Celiacdisease,ChronicKidney disease			N	SGD	Document inLogbook			
Topic:Providenutritionalsupport,assessmentand monitoringforcommonnutritionalproblems		**Numberofcompetencies:(6)**				**Numberofproceduresthatrequirecertification:(NIL)**			
P E10.1	**Define and Describe the etiopathogenesis, classifyincluding WHO classification, clinical features,complication and management of severe acutemalnourishment(SAM)andmoderateacute Malnutrition(MAM)**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**		**Physio,Bio chemistry,**	
10.1.1	Definemalnutrition asperWHO.			Y	Lecture,SGD	Written/Viva voce			
10.1.2	Describetheaetiologyofmalnutrition.			Y	Lecture,SGD	Written/Viva voce			
10.1.3	Discussthepathophysiologyofmalnutrition.			Y	Lecture,SGD	Written/Viva voce			
10.1.4	ClassifythemalnutritionasperWHO.			Y	Lecture,SGD	Written/Viva voce			
10.1.5	Describethecriteriaforsevereacutemalnutrition(SAM)and moderateacutemalnutrition(MAM)asperWHO.			Y	Lecture,SGD	Written/Viva voce			
10.1.6	DescribetheclinicalfeaturesofMAMandSAMincludingmar asmusand kwashiorkor.			Y	Lecture,SGD	Written/Viva voce			
10.1.7	DescribethecomplicationsofSAM.			Y	Lecture,SGD	Written/Viva voce			
10.1.8	DescribethestepsofmanagementofSAMinvolvingstabilization and rehabilitationphase.			Y	Lecture,SGD	Written/Viva voce			
10.1.9	Describethedomiciliarymanagementofmoderateacutema lnutrition (MAM).			Y	Lecture,SGD	Written/Viva voce			

P E10.2	**Outline the clinical approach to a child with SAM andMAM**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**		**Physio, Biochemis try**	
10.2.1	Describe the clinical approach (algorithmic approachincludingclinicalhistory,examinationandinvestigati ons)to achild withSAMandMAM.			Y	Lecture,SGD	Written/ Vivavoce			
P E10.3	**Assessment of a patient with SAM and MAM,diagnosis, classification and planning managementincludinghospitalandcommunity-based intervention,rehabilitationandprevention**			**Y**	**Bedside, SkillsLab**	**Skillassess ment**		**Physio,Bio chemistry**	
10.3.1	Takeclinicalhistoryincludingfocusseddietary historyfromthecaregiver.			Y	Bedside	OSCE, Longcase			
10.3.2	Examinethechildincludinganthropometryandsignsof vitamindeficiency.			Y	Bedside	OSCE,Long case			
10.3.3	Diagnose and classify the patient as having SAM or MAMbasedonclinicalhistory,examinationandanthropomet ry.			Y	Bedside	OSCE, Longcase			
10.3.4	Plantheindividualised home-basedmanagementinachild withMAMoruncomplicatedSAM.			Y	Bedside	OSCE,Long case			
10.3.5	Planthehospital-basedmanagementofcomplicatedSAMina child.			Y	Bedside	OSCE, Longcase			
10.3.6	Planthehospital-basedrehabilitationphasemanagementofcomplicated SAM in a child.			Y	Bedside	OSCE, Longcase			
10.3.7	Planpreventionofmalnutritionatalllevels.			Y	Bedside	OSCE,Long case			
P E10.4	**Identifychildrenwithundernutritionasper IMNCI criteriaandplanreferral**			**Y**	**DOAPsession**	**Documentin Logbook**		**ComMed**	
10.4.1	IdentifyundernutritionasperIMNCIcriteria.			Y	DOAPsession	Document inLogbook			
10.4.2	Describepre-referraltreatmentasperIMNCI.			Y	DOAPsession	Documentin Logbook			
10.4.3	Planreferralforchildrenwith undernutritionasperIMNCIguidelines.			Y	DOAPsession	Document inLogbook			

P E10.5	**CounselparentsofchildrenwithSAM andMAM**			**Y**	**Bedsideclinic, SkillsStation**	**Documentin Logbook**		**AETCOM**	
10.5.1	Counseltheparentsonrehabilitationofchildren withSAMandMAM.			Y	Bedsideclinic,skills tation	OSCE			
10.5.2	Addressthequeriesraisedbytheparents.			Y	Bedsideclinic,skill Station	OSCE			
P E10.6	**Enumeratetheroleoflocallypreparedtherapeutic dietsandreadytousetherapeutic diets**			**N**	**Lecture,SGD**	**Written/Viva voce**			
10.6.1	EnumeratethecompositionofReadytousetherapeuticfoods(RUTF).			N	Lecture,SGD	Written/vivav oce			
10.6.2	Enumeratethelocallyavailablehomefoodprepared with cereals,pulses,sugar,oil,milk and/oreggetc.			N	Lecture,SGD	Written/viva voce			
10.6.3	DiscusstheroleofRUTF/locallypreparedfoodtoachievecatch-upgrowthinmalnourishedchild.			N	Lecture,SGD	Written/vivav oce			
Topic:Obesityinchildren				**Numberofcompetencies:(6)**		**Numberofproceduresthatrequirecertification:(01)**			
P E11.1	**Describe the common etiology, clinical features andmanagement of obesityinchildren**			**Y**	**Lecture/SGD**	**Written/Viva voce**	**NIL**	**Physio/Biochemistry/ Path**	
11.1.1	DefineObesityandoverweightasperWHOguidelines.			Y	Lecture,SGD	Written/vivav oce			
11.1.2	EnumeratecommoncausesofObesityamongchildren.			Y	Lecture,SGD	Written/viva voce			
11.1.3	Describeclinicalfeaturesofobesityincludingco-morbidities.			Y	Lecture,SGD	Written/vivav oce			
11.1.3	OutlineprinciplesofmanagementofObesityinchildren.			Y	Lecture,SGD	Written/viva voce			
P E11.2	**DiscusstheriskapproachforobesityandDiscussthe preventionstrategies**			**Y**	Lecture,SGD	**Written/Viva voce**		**Physio, Path**	
11.2.1	EnumerateriskfactorsforObesityamongchildren.			Y	Lecture,SGD	Written/vivav oce			
11.2.2	DescribestrategiesforpreventionofObesity.			Y	Lecture,SGD	Written/vivav oce			
P E11.3	**Assessment of a child with obesity with regard toelicitinghistoryincludingphysicalactivity,charting anddietaryrecall**			**Y**	**Bedside,Standardized patients**	**Document inLogbook**			

11.3.1	Elicitadetailedhistoryinachildwithobesityincluding activitycharting.			Y	Bedsideskilllab	Logbook			
11.3.2	Obtaindetailed dietaryhistorybyrecallmethod.			Y	Bedsideclinics,skilllab	Logbook			
P E11.4	**Examination including calculation of BMI,measurementofwaisthipratio,Identifyingexternal markers like acanthosis, striae, pseudo-gynecomastiaetc**			**Y**	**Bedside,Standardizedpatients, Videos**	**SkillsStation**			
11.4.1	Performanthropometryinanobesechildincludingcalculation ofBMI andWaist HipRatio.			Y	Bedside /Multimediabased tutorial	OSCE			
11.4.2	Identifyphysicalmarkersofobesitylikeacanthosis,striae,pseudogynecomastia.			Y	Videos/patients	OSCE			
P E11.5	**CalculateBMI, documentinBMIchartandinterpret**			**Y**	**Bedside,SGD**	**Documentin Logbook**	**3**		
11.5.1	CalculateandChartBMIaccurately.			Y	Clinicalpostings	Record Logbook	3		
11.5.2	InterpretBMIforagivenpatient.			Y	Bedsideclinic	OSCE	3		
P E11.6	**Discusscriteriaforreferral**			**Y**	**Lecture,SGD**	**Written/Viva voce**			
11.6.2	Enumeratecriteriafor referralinanobesechild.			Y	Lecture/ SGD	Written/vivavoce			
Topic:MicronutrientsinHealthanddisease-1(Vitamins ADEK,BComplexandC)		**Numberofcompetencies:(21)**			**Numberofproceduresthatrequirecertification:(NIL)**				
PE 12.1	**Discuss the RDA, dietary sources of Vitamin A andtheirrole inhealthanddisease**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**		**Biochemistry**	
12.1.1	RecalltheRDAanddietarysourcesofvitaminAforchildrenofdifferent ages.			Y	Lecture,SGD	Written/vivavoce			
12.1.2	Describethephysiologyandroleofvitamin Ainhealthanddisease.			Y	Lecture,SGD	Written/vivavoce			
PE 12.2	**Describethecauses,clinicalfeatures,diagnosisandmanagementofDeficiency/excessofVitaminA**			**Y**	**Lecture,SGD**	**Written/Viva voce**		**Biochemistry**	
12.2.1	EnumeratethecausesofVitaminAdeficiency/excessinchildren.			Y	Lecture,SGD	Written/vivavoce			

12.2.2	DescribetheclinicalfeaturesofVitaminADeficiency/excess inchildren.			Y	Lecture,SGD	Written/viva voce			
12.2.3	DescribethediagnosisandmanagementofVitaminADef iciency/excessinchildren.			Y	Lecture,SGD	Written/vivav oce			
PE 12.3	**Identifytheclinicalfeaturesofdietarydeficiency /excessofVitaminA**			**Y**	**Bedside,SGD**	**Documentin Logbook**		**Biochemistr y**	
12.3.1	IdentifytheclinicalfeaturesofVitaminADeficiency/excessinc hildren.			Y	SGD/clinicalphotogr aphs/bedsid eteaching	OSCE/casepr esentation		Ophthal	
PE 12.4	**DiagnosepatientswithVitaminAdeficiency(VAD), classifyandplanmanagement**			**N**	**Bedside,Skill Station**	**Documentin Logbook**		**Biochemistr y**	
12.4.1	DiagnosepatientswithVAD.			N	Bedside	Document inLogbook		Ophthalmo-logy	
12.4.2	ClassifythepatientwithVADasperWHO.			N	SkillStation,Bedside	Skill station,Docu mentin Logbook		Ophthalmo-logy	
12.4.3	PlanmanagementofachildwithVAD.			N	SkillStation,Bedside	Skill station,Docu mentin Logbook			
PE 12.5	**DiscusstheVitaminAprophylaxisprogramandtheir Recommendations**			**Y**	**Lecture,SGD**	**Written/Viva voce**		**Biochemistr y**	
12.5.1	EnumeratethecomponentsoftheNationalvitaminAprophylaxis program.			Y	Lecture,SGD	Written/vivav oce		ComMed	
PE 12.6	**DiscusstheRDA,dietarysourcesofVitaminDand its roleinhealthanddisease**			**Y**	**Lecture,SGD**	**Written/Viva voce**		**Biochemistr y**	
12.6.1	DescribetheRDAanddietarysourcesofvitaminDforthepediatrica gegroups.			Y	Lecture,SGD	Written/vivav oce			
12.6.2	DescribetheroleofvitaminDinhealthanddisease.				Lecture,SGD	Written/viva voce			
PE 12.7 Rickets	**Describe the causes, clinical features, diagnosis andmanagement of vitamin D deficiency (VDD)/ excess(Rickets&Hypervitaminosis D)**			**Y**	**Lecture,SGD**	**Written / vivavoce**		**Biochemistr y, Physio, Path**	

12.7.1	ListthecausesofRickets/HypervitaminosisD inchildren.			Y	Lecture,SGD	Written/viva voce			
12.7.2	DescribetheclinicalfeaturesandDescribetheunderlyingpathophysiologyofRickets/HypervitaminosisD.			Y	Lecture,SGD	Written/vivavoce			
12.7.3	Describe the diagnosis and management of Rickets /HypervitaminosisD.			Y	Lecture,SGD	Written/vivavoce			
PE 12.8	**Identify the clinical features of dietary deficiency ofVitaminD**			**Y**	**Bedside,Skillslab**	**Document inLogbook**		**Biochemistry, Physio,Path**	
12.8.1	IdentifytheclinicalfeaturesofRickets(VDD).			Y	Clinical case orphotographs/ bedsideteaching	OSCE/ clinicalcase			
PE 12.9	**AssesspatientswithVitaminDdeficiency,diagnose,classifyandplanmanagement**			**Y**	**Bedside,skilllab**	**Document inLogbook**		**Biochemistry,Radiology**	
12.9.1	Diagnosepatientswith Rickets.			Y	Bedside	Documentin Logbook/OSCE			
12.9.2	ClassifythepatientwithRickets.			Y	SkillStation,Bedside	Skill station,Document inLogbook			
12.9.3	Planmanagementand follow-upofpatient withRickets.			Y	Skillstation	Logbook			
12.9.4	Identifynon-responsetoVDDmanagementandIdentify needforreferral.			Y	Skillstation	Logbook			
PE 12.10	**DiscusstheroleofscreeningforVitaminDdeficiency**			**Y**	**Lecture,SGD**	**Written/viva voce**			
12.10.1	Listthesociodemographicfactorsassociatedwithvitamin Ddeficiency.			Y	Lecture,SGD	Written/viva voce			
12.10.2	DescribetheprevalenceandpatternsofVDDintheregion/country.			Y	Lecture,SGD	Written/viva voce			
12.10.3	DiscusstheroleofscreeningforVDDindifferentgroups(high-risk/population).			Y	Lecture/SGD	Written/viva voce			
PE 12.11	**DiscusstheRDA,dietarysourcesofVitaminEand its roleinhealthanddisease**			**N**	**Lecture,SGD**	**Written/Viva voce**		**Biochemistry**	

12.11.1	DescribetheRDAanddietarysourcesofvitaminEforthepediatricage.			**N**	Lecture,SGD	Written/viva voce		Biochemistry	-
12.11.2	Describetheroleofvitamin E inhealthanddisease.			**N**	Lecture,SGD	Written/viva voce		Biochemistry	
PE12.12	**Describethecauses,clinicalfeatures,diagnosisandmanagementofdeficiencyofVitaminE**			**N**	**Lecture,SGD**	**Written/Viva voce**		**Biochemistry**	
12.12.1	ListthecausesofdeficiencyofVitaminEinchildren.			N	Lecture,SGD	Written/viva voce		Biochemistry	
12.12.2	DescribetheclinicalfeaturesofdeficiencyofVitaminE.			N	Lecture,SGD	Written/viva voce		Biochemistry	
12.12.3	Describethediagnosisandmanagementofdeficiencyof VitaminE.			N	Lecture,SGD	Written/viva voce		-	
PE 12.13	**Discuss the RDA, dietary sources of Vitamin K andtheirroleinhealthanddisease**			**N**	**Lecture,SGD**	**Written/ Vivavoce**		**Biochemistry, Physio, Path**	
12.13.1	DescribetheRDAand dietarysourcesofvitaminKforthepediatricage.			N	Lecture,SGD	Written/viva voce		Biochemistry	-
12.13.2	DescribetheroleofvitaminKinhealthanddisease.			N	Lecture,SGD	Written/viva voce		Biochemistry	
PE 12.14	**Describe the causes, clinical features, diagnosismanagement&preventionofdeficiencyofVitaminK**			**N**	**Lecture group,SmallDiscussion**	**Written/ Vivavoce**		**Biochemistry, Physio, Path**	
12.14.1	ListthecausesofdeficiencyofVitaminKinchildrenofdifferentages.			N	Lecture/SGD	Written/viva voce		Biochemistry	
12.14.2	ListtheclinicalfeaturesofdeficiencyofVitaminK.			N	Lecture/SGD	Written/viva voce		Biochemistry	
12.14.3	Describethediagnosisandmanagementofdeficiencyof VitaminK.			N	Lecture/SGD	Written/viva voce	-	-	
PE 12.15	**DiscusstheRDA,dietarysourcesofVitaminBand its roleinhealthanddisease**				**Lecture,SGD**	**Written/Viva voce**	**-**	**Biochemistry**	
12.15.1	Describe the RDA and dietary sources of various vitamins Bforthepediatricagegroup.			Y	Lecture/SGD	Written/viva voce	-	Biochemistry	-

12.15.2	DescribetheroleofvitaminBinhealthanddisease.			Y	Lecture/SGD	Written/viva voce	-	Biochemistry	
PE 12.16	**Describe the causes, clinical features, diagnosis andmanagementofdeficiencyofBcomplexvitamins**			**Y**	**Lecture,SGD**	**Viva/SAQ /MCQ**	**-**	**Biochemistry, Com Med,Derm, Hematology**	
12.16.1	ListthecausesofdeficiencyofBcomplexvitaminsinchildren			Y	Lecture/SGD	Written/viva voce	-	Biochemistry,ComMed	
12.16.2	DescribetheclinicalfeaturesofdeficiencyofBcomplexvitamins			Y	Lecture/SGD	Written/viva voce	-	Biochemistry,Derm, Hematology	
12.16.3	Describethediagnosisand managementofdeficiencyofBcomplexvitamins			Y	Lecture/SGD	Written/viva voce	-	Hematology	
PE 12.17	**IdentifytheclinicalfeaturesofVitaminBcomplex Deficiency**			**Y**	**Bedside,Skillslab**	**Documentin Logbook**	**-**	**Derm, Hematology**	
12.17.1	IdentifytheclinicalfeaturesofdeficiencyofBcomplexvitamins			Y	Clinicalcase /slides/bedside teaching	OSCE	-	Derm,Hematology	
PE 12.18	**DiagnosepatientswithvitaminBcomplexdeficiency andplanmanagement**			**Y**	**Bedside, Skillslab**	**Documentin Logbook**	**-**	**Derm Hematology**	
12.18.1	DiagnosepatientswithvitaminBcomplexdeficiency			Y	Bedside, Clinicalphotographs	Document inLogbook	-	Derm,Hematology	
12.18.2	PlanmanagementforachildwithvitaminBcomplexdeficiency			Y	SkillStation,Bedside, Case-basedlearning	Skill station,Documentin Logbook	-		
PE 12.19	**DiscusstheRDA,dietarysourcesofvitaminCand theirroleinhealthanddisease**			**N**	**Lecture,SGD**	**Written/Viva voce**		**Biochemistry**	
12.19.1	ListtheRDAanddietarysourcesofvitaminC forthepediatricage			N	Lecture,SGD	Written/viva voce	-	Biochemistry	-
12.19.2	DescribetheroleofvitaminCinhealthanddisease			N	Lecture,SGD	Written/viva voce	-	Biochemistry	
PE 12.20	**Describethecauses,clinicalfeatures,diagnosisand managementofdeficiencyofvitaminC(scurvy)**			**N**	**Lecture,SGD**	**Written/Viva voce**		**Biochemistry**	

12.20.1	ListthecausesofdeficiencyofVitaminCinchildren			N	Lecture,SGD	Written/viva voce	-	Biochemistry	
12.20.2	DescribetheclinicalfeaturesofdeficiencyofvitaminC			N	Lecture,SGD	Written/viva voce	-	Biochemistry	
12.20.3	DescribethediagnosisandmanagementofdeficiencyofvitaminC			N	Lecture,SGD	Written/viva voce	-	-	
PE 12.21	**IdentifytheclinicalfeaturesofvitaminCdeficiency**			**N**	**Bedside,Skill lab**	**Documentin Logbook**		**-**	
12.21.1	IdentifytheclinicalfeaturesofdeficiencyofvitaminC.			N	Clinicalcase /slides/bedside teaching	Document inLogbookOSCE	-	-	
12.21.2	DifferentiatetheclinicalfeaturesofdeficiencyofvitaminC(scurvy) fromthosedueto VDD(rickets).			N	Clinical case orphotograph/ bedsideteaching	Documentin Logbook, OSCE/case	-	-	
Topic:MicronutrientsinHealthanddisease-2:Iron,Iodine, Calcium,Magnesium				**Numberofcompetencies:(14)**		**Numberofproceduresthatrequirecertification:(NIL)**			
PE 13.1	**Discuss the RDA, dietary sources of Iron and their roleinhealthanddisease**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**		**Path,Biochemistry**	
13.1.1	RecalltheRDAofIronin childrenofallagegroups.			Y	Lecture,SGD	Written/viva voce			
13.1.2	EnumeratethedietarysourcesofIronandDiscusstheirrole inhealthanddisease.			Y	Lecture,SGD	Written/viva voce			
PE 13.2	**Describe the causes, diagnosis and management ofIrondeficiency**			**Y**	**Lecture,SGD**	**Written/viva voce**		**Path, Biochemistry**	
13.2.1	Enumeratethecausesofirondeficiency.			Y	Lecture,SGD	Written/viva voce			
13.2.2	Describethediagnosisofirondeficiency.			Y	Lecture,SGD	Written/viva voce			
13.2.3	Describemanagementofirondeficiency.			Y	Lecture,SGD	Written/viva voce			

PE 13.3	**Identifytheclinicalfeaturesof dietarydeficiencyofIronandmakeadiagnosis**			**Y**	**Bedside/skilllab**	**Document inLogbook**		**Path,Biochemistry**	
13.3.1	Identifytheclinicalfeaturesofdietaryirondeficiency.			Y	Bedside/skilllab	Document inLogbook/OSCE/Clinical case			
13.3.2	Make a clinical diagnosis of dietary deficiency of Iron afterappropriatehistory and examination.			Y	Bedside/skilllab	Document inLogbook/OSCE/Clinical case			
PE 13.4	**InterprethemogramandIronPanel**			**Y**	**Bedside clinic/Small groupdiscussion**	**SkillAssessment**		**Path,Biochemistry**	
13.4.1	Identifythefeaturesofirondeficiencyanemiainabloodfilm.			Y	Bedsideclinic/Smallgroupdiscussion	SkillAssessment/ OSCE			
13.4.2	Identifyabnormalhematologicalindicesonahemogram.			Y	Bedsideclinic/Smallgroupdiscussion	SkillAssessment/OSCE			
13.4.3	Interprethemogram.			Y	Bedsideclinic/Smallgroupdiscussion	SkillAssessment/ OSCE			
13.4.4	Interpretabnormalvaluesoftheironpanel.			Y	Bedsideclinic/Smallgroupdiscussion	SkillAssessment/ OSCE			
PE 13.5	**ProposeamanagementplanforIRONdeficiency Anemia**			**Y**	**Bedside/skilllab**	**Skill assessment**		**Path, Pharm**	
13.5.1	MakeamanagementplanforIrondeficiencyanemiainchildrenofdifferent ages.			Y	Bedside/skilllab	Skillassessment/OSCE			
PE 13.6	**DiscusstheNationalanemiacontrolprogramanditsrecommendations**			**Y**	**Lecture,SGD**	**Written/viva voce**		**Pharm, ComMed**	
13.6.1	Describe the components of National anemia controlprogramand itsrecommendations.			Y	Lecture,SGD	Written/viva voce			

PE 13.7	**DiscusstheRDA,dietarysourcesofIodineandits role inHealthanddisease**			**Y**	**Lecture,SGD**	**Written/viva voce**		**Biochemistry**	
13.7.1	RecalltheRDAofIodinein children.			Y	Lecture,SGD	Written/viva voce			
13.7.2	EnumeratethedietarysourcesofIodineandtheirroleinHealthand disease.			Y	Lecture,SGD	Written/viva voce			
PE 13.8	**Describethecauses,diagnosisandmanagementof deficiencyofIodine**			**Y**	**Lecture,SGD**	**Written/viva voce**		**Biochemistry**	
13.8.1	Enumeratethecausesof Iodinedeficiency.			Y	Lecture,SGD	Written/viva voce			
13.8.2	Discussthediagnosisof Iodinedeficiency.			Y	Lecture,SGD	Written/viva voce			
13.8.3	Describethemanagementof Iodinedeficiency.			Y	Lecture,SGD	Written/viva voce			
PE 13.9	**IdentifytheclinicalfeaturesofIodinedeficiency disorders**			**N**	**Bedside clinic**	**Clinical assessment**		**Biochemistry**	
13.9.1	IdentifytheclinicalfeaturesofIodinedeficiencydisorders.			N	Bedside clinic	Clinical assessment			
PE 13.10	**Discuss the National Goiter Control program and itsrecommendations**			**Y**	**Lecture/ Smallgroup discussion**	**Written/viva voce**		**Biochemistry, ComMed**	
13.10.1	Discuss the National Goiter Control program and theRecommendations.			Y	Lecture/Smallgroup discussion	Written/viva voce			
PE 13.11	**Discuss the RDA, dietary sources of Calcium and itsroleinhealthanddisease**			**Y**	**Lecture/ Smallgroup discussion**	**Written/viva voce**		**Biochemistry**	
13.11.1	RecalltheRDAofCalciuminchildren.			Y	Lecture/Smallgroup discussion	Written/viva voce			
13.11.2	Enumeratethedietarysourcesofcalcium.			Y	Lecture/Smallgroup discussion	Written/viva voce			
13.11.3	Explaintheroleofcalciuminhealthanddisease.			Y	Lecture/Smallgroup discussion	Written/viva voce			
PE 13.12	**Describe the causes, clinical features, diagnosis andmanagementofCalciumDeficiency**			**Y**	**Lecture/ Smallgroup discussion**	**Written/viva voce**		**Biochemistry**	

13.12.1	EnumeratethecausesofCalciumDeficiency.			Y	Lecture/Smallgroup discussion	Written/viva voce			
13.12.2	DescribetheclinicalfeaturesofCalciumDeficiency.			Y	Lecture/Smallgroup discussion	Written/viva voce			
13.12.3	DiscussthediagnosisofCalciumDeficiency.			Y	Lecture/Smallgroup discussion	Written/viva voce			
13.12.4	DiscussthemanagementofCalciumDeficiency.			Y	Lecture/Smallgroup discussion	Written/viva voce			
PE 13.13	**Discuss the RDA, dietary sources of Magnesium andtheirroleinhealthanddisease**			**N**	**Lecture/ Smallgroup discussion**	**Written/viva voce**		**Biochemistry**	
13.13.1	RecalltheRDAofMagnesiumin children.			N	Lecture/Smallgroup discussion	Written/viva voce			
13.13.2	ListthedietarysourcesofMagnesiumandtheirroleinhealthand disease.			N	Lecture/Smallgroup discussion	Written/viva voce			
PE 13.14	**Describe the causes, clinical features, diagnosis andmanagementofMagnesium Deficiency**			**N**	**Lecture/Small groupdiscussion**	**Written/viva voce**		**Biochemistry**	
13.14.1	EnumeratethecausesofMagnesiumDeficiency.			N	Lecture/Smallgroup discussion	Written/viva voce			
13.14.2	DescribetheclinicalfeaturesofMagnesiumDeficiency.			N	Lecture/Smallgroup discussion	Written/viva voce			
13.14.3	DiscussthediagnosisofMagnesiumDeficiency.			N	Lecture/Smallgroup discussion	Written/viva voce			
13.14.4	DiscussthemanagementofMagnesiumDeficiency.			N	Lecture/Smallgroup discussion	Written/viva voce			
Topic:Toxicelementsandfreeradicalsandoxygentoxicity				**Numberof competencies:(5)**		**Numberofproceduresthatrequirecertification:(NIL)**			
PE 14.1	**Discussthericskfactors,clinicalfeatures,diagnosis andmanagementofLeadPoisoning**				**Lecture/Small Group discussion**	**Written/viva voce**		**Pharm**	
14.1.1	Enumeratetheriskfactorsforleadpoisoninginchildren.			N	Lecture/Smallgroup discussion	Written/viva voce			
14.1.2	Describetheclinicalfeaturesofleadpoisoning.			N	Lecture/Smallgroup discussion	Written/viva voce			
14.1.3	Discussthediagnosisofleadpoisoning.			N	Lecture/Smallgroup discussion	Written/viva voce			

14.1.4	Describethemanagementofachildwithleadpoisoningincl udingprevention.			N	Lecture/Smallgroup discussion	Written/viva voce			
PE 14.2	**Discusstheriskfactors,clinicalfeatures,diagnosis andmanagementofKeroseneaspiration**			**N**	Lecture/Smallgroup discussion	Written/viva voce		**ENT**	
14.2.1	Enumeratetheriskfactorsfor keroseneaspiration.			N	Lecture/Smallgroup discussion	Written/viva voce			
14.2.2	Describetheclinicalfeatures ofkeroseneaspiration.			N	Lecture/Smallgroup discussion	Written/viva voce			
14.2.3	Discussthediagnosisofkeroseneaspiration.			N	Lecture/Smallgroup discussion	Written/viva voce			
14.2.4	Describe the management of a child with keroseneaspiration.			N	Lecture/Smallgroup discussion	Written/viva voce			
PE 14.3	**Discuss the risk factors, clinical features, diagnosisandmanagementofOrganophosphoruspo isoning**			**N**	**Lecture/ Smallgroup discussion**	**Written/viva voce**		**Pharm**	
14.3.1	Enumeratetheriskfactorsfororganophosphoruspoisoning.			N	Lecture/Smallgroup discussion	Written/viva voce			
14.3.2	Describe the clinical features of organophosphoruspoisoning.			N	Lecture/Smallgroup discussion	Written/viva voce			
14.3.4	Discussthediagnosisoforganophosphoruspoisoning.			N	Lecture/Smallgroup discussion	Written/viva voce			
14.3.5	Describethemanagementofachildwithorganophosphorus poisoning.			N	Lecture/Smallgroup discussion	Written/viva voce			
PE 14.4	**Discusstheriskfactors,clinicalfeatures,diagnosisan dmanagementofparacetamolpoisoning**			**N**	**Lecture/ Smallgroup discussion**	**Written/viva voce**		**Pharm**	
14.4.1	Enumeratetheriskfactorsforparacetamolpoisoning.			N	Lecture/Smallgroup discussion	Written/viva voce			
14.4.2	Describetheclinicalfeaturesofparacetamolpoisoning.			N	Lecture/Smallgroup discussion	Written/viva voce			
14.4.3	Discussthediagnosisofparacetamolpoisoning.			N	Lecture/Smallgroup discussion	Written/viva voce			
14.4.4	Discussthemanagementofa childwithparacetamolpoisoning includingprevention.			N	Lecture/Smallgroup discussion	Written/viva voce			

PE 14.5	**Discussthe riskfactors,clinicalfeatures,diagnosisandmanagement ofOxygentoxicity**			**N**	**Lecture/ Smallgroup discussion**	**Written/viva voce**			
14.5.1	Enumeratetheriskfactorsforoxygentoxicity.			N	Lecture/Smallgroup discussion	Written/viva voce			
14.5.2	Describetheclinicalfeaturesofoxygentoxicity.			N	Lecture/Smallgroup discussion	Written/viva voce			
14.5.3	Discussthediagnosisofoxygentoxicity.			N	Lecture/Smallgroup discussion	Written/viva voce			
14.5.4	Discussthemanagementofa childwithoxygentoxicity.			N	Lecture/Smallgroup discussion	Written/viva voce			
Topic:Fluidandelectrolytebalance				**Numberofcompetencies:(7)**		**Numberofproceduresthatrequirecertification:(NIL)**			
PE 15.1	**Discussthefluidandelectrolyterequirementinhealthanddisease**			**Y**	**Lecture/ Smallgroup discussion**	**Written/viva voce**			
15.1.1	Statethefluidrequirementofahealthyneonate.			Y	Lecture/Smallgroup discussion	Written/viva voce			
15.1.2	Describethefluidandelectrolyterequirementsofhealthychildren ofdifferent ages.			Y	Lecture/Smallgroup discussion	Written/viva voce			
15.1.3	Describethefluidrequirementsincommondiseasesof children.			Y	Lecture/Smallgroup discussion				
PE 15.2	**Discussthe clinicalfeaturesandcomplicationsoffluid and electrolyte imbalance and outline themanagement**				**Lecture/Small groupdiscussion**				
15.2.1	Definehyponatremiaandhypernatremia.			Y	Lecture/Smallgroup discussion	Written/viva voce			
15.2.2	Definehypokalemiaandhyperkalemia.			Y	Lecture/Smallgroup discussion	Written/viva voce			
15.2.3	Describetheclinicalfeaturesofachildwhohasdehydrationorfluid overload.			Y	Lecture/Smallgroup discussion	Written/viva voce			
15.2.4	Outlinethemanagementofachildwhohasdehydrationorfluid overload.			Y	Lecture/Smallgroup discussion	Written/viva voce			
15.2.5	Enumeratethesymptomsandsignsofhyponatremiaand Hypernatremia.			Y	Lecture/Smallgroup discussion	Written/viva voce			
15.2.6	Enumeratethesymptomsandsignsofhypokalemiaandhyperkalemia.			Y	Lecture/Smallgroup discussion	Written/viva voce			

15.2.7	Outline the management of a child with hyponatremia /hypernatremia.			Y	Lecture/Smallgroup discussion	Written/viva			
15.2.8	Outlinethemanagementofachildwithhypokalemiaor Hyperkalemia.			Y	Lecture/Smallgroup discussion	Written/viva voce			
PE 15.3	**Calculatethefluidandelectrolyterequirementin health**			**Y**	**Bedside,SGD**	**Skillassessment**			
15.3.1	Calculatefluidrequirementinhealthychildrenofdifferentages.			Y	Bedside,SGD	Skillassessment			
15.3.2	Calculateelectrolyterequirementinhealthychildrenof differentages.			Y	Bedside,SGD	Skillassessment			
PE 15.4	**Interpretelectrolytereport**			**Y**	**Bedside/SGD**	**Skill assessment**			
15.4.1	Interpretreportsofdyselectrolytemia.			Y	Bedside/SGD	Skillassessment			
PE 15.5	**Calculatefluidandelectrolyteimbalance**			**Y**	**Bedside/SGD**	**Skill assessment**			
15.5.1	Calculatefluidrequirementofthechildtocorrectfluidimbalanc e.			Y	Bedside/SGD	Skillassessment			
15.5.2	Calculateelectrolytecorrectionforagivenscenario.			Y	Bedside/SGD	Skillassessment			
PE 15.6	**Demonstratethesteps ofinserting anIVcannulaina model**			**Y**	**Skilllab**	**Skill assessment**			
15.6.1	Demonstrateinsertingan intravenouscannulaonamodelinaskilllaboratory.			Y	Skilllab	Mannequin			
PE 15.7	**Demonstratethestepsofinsertinganinterosseous lineinamannequin**			**Y**	**Skilllab**	**Skill assessment**			
15.7.1	Demonstrateinsertinganintraosseouscannulainama nnequin.			Y	Skilllab	Mannequin			
Topic:IntegratedManagementof NeonatalandChildhood Illnesses(IMNCI)Guideline		**Numberofcompetencies:(3)**			**Numberofproceduresthatrequirecertification:(NIL)**				
PE16.1	**Explain the components of Integrated Management ofNeonatal and Childhood Illnesses (IMNCI) guidelinesandmethodofRiskstratification**			**Y**	**Lecture,SGD**	**Written/viva voce**			

16.1.1	StatethecomponentsofIMNCIapproach.			Y	Lecture/ SGD, IMNCIvideos	Written/viva voce			
16.1.2	Explaintheriskstratification asperIMNCI.			Y	Lecture/ SGD	Written/viva voce			
PE16.2	**Assesschildren<2monthsusingIMNCIguidelines**			**Y**	**DOAP**	**Documentin Logbook**			
16.2.1	Demonstrateassessmentoftheyounginfant<2monthsageaspe r IMNCIguidelines.			Y	DOAP, Video	Document inLogbook/ bedsidesession			
16.2.2	Classifytheyounginfants<2 monthsageaspertheIMNCIclassification.			Y	DOAP, Video	Document inLogbook/ bedside			
16.2.3	Identifythetreatmentinyounginfants<2monthsasperIMN CI.			Y	DOAP, SGD	Document inLogbook			
16.2.4	CounselparentsasperIMNCIguidelines.			Y	DOAP, SGD,roleplay, Video	Document inLogbook/			
PE16.3	**Assesschildren>2monthsto5yearsusingIMNCIguid elinesandstratify risk**			**Y**	**DOAP**	**Document inLogbook**			
16.3.1	Demonstrateassessmentofthechild>2monthsto5yearsasperIM NCIformat.			Y	DOAP, Video	Document inLogbook,OSC E			
16.3.2	Classifythechildren>2monthsto5yearsasperIMNCIclassifi cation.			Y	DOAP, Video	Document inLogbook,OSC E			
16.3.3	Identifythetreatmentinchildren>2monthsto5yearsasperIMNCIg uidelines.			Y	DOAP, SGD	Document inLogbook			
16.3.4	CounselparentsasperIMNCIguidelines.			Y	DOAP, SGD,roleplay,Video	Documentin Logbook,OSCE			
Topic:TheNational Health programs, NHM				**Numberofcompetencies:(02)**		**Numberofproceduresthatrequirecertification:(NIL)**			

PE17.1	**State the vision and outline the goals, strategies andplan of action of NHM and other important nationalprograms pertaining to maternal and child healthincludingRMNCHA+,RBSK,RKSK, JSSK, mission IndradhanushandICDS**			**Y**	**Lecture/ SGD**	**Written/viva voce**		**ComMed**	
17.1.1	Listthenationalhealthprogramspertainingtomaternalandchil d health.			Y	Lecture/SGD	Written/viva voce			
17.1.2	Outlinevision,goals,strategiesandplan ofactionofNHM.			Y	Lecture/SGD	Written/viva voce			
17.1.3	Outlinethevision,goals,strategiesandplanofactionofothe rimportant nationalprogramsfor maternalandchildhealth –RMNCHA+,RBSK,RKSK,JSSK, missionIndradhanushandICDS.			Y	Lecture/SGD	Written/viva voce			
PE17.2	**Analyze the outcomes and appraise the monitoringandevaluation ofNHM**			**Y**	**Debate**	**Written/viva voce**		**ComMed**	
17.2.1	Critically analyzetheimpactofNHMandothernational healthprogramsonmaternal andchildhealth.			Y	Debate, SGD	Written/viva voce			
17.2.2	AppraisethemonitoringandevaluationofNHMandotherheal thprograms.			Y	Debate, SGD	Written/viva voce			
Topic:TheNationalHealthPrograms:RCH				**Numberofcompetencies:(8)**		**Numberofproceduresthatrequirecertification:(NIL)**			
PE18.1	**List and explain the components, plan, outcome ofReproductive Child Health (RCH) program and appraiseitsmonitoring and evaluation**			**Y**	**Lecture/ SGD**	**Written/viva voce**		**ComMed**	**OBG**
18.1.1	Statethecomponents, strategyandtargetedoutcomeofRCHprogram.			Y	Lecture/SGD	Written/viva voce			
18.1.2	Listtheprerequisitesandroleofaccredited socialhealthactivist(ASHA).			Y	Lecture/SGD	Written/viva voce			

18.1.3	AnalyzethemonitoringandevaluationofRCHprogram.			Y	Lecture/SGD	Written/viva voce			
PE 18.2	**Explainpreventiveinterventionsforchildsurvivaland safemotherhood**			**Y**	**Lecture/ SGD**	**Written/viva voce**		**ComMed**	**OBG**
18.2.1	Listthepreventiveinterventionsforchildsurvivalandsafe motherhood.			Y	Lecture/SGD	Written/viva voce			
18.2.2	Explainthepreventiveinterventionsforchildsurvivalandsafe motherhood.			Y	Lecture/SGD	Written/viva voce			
PE 18.3	**Conduct antenatal examination of womenindependentlyandapplyat-riskapproachinantenatal care**			**Y**	**Bedside**	**Skillstation**		**ComMed**	**OBG**
18.3.1	Conductantenatalexaminationofwomenindependently.			Y	Bedside, Video	Skillstation			
18.3.2	Applyat-riskapproachinantenatalcare.			Y	Bedside, Video	Skillstation			
PE 18.4	**Provideintra-natalcareandconductanormaldelivery inasimulatedenvironment**			**Y**	**DOAPsession, Skillslab**	**Documentin Logbook**		**ComMed**	**OBG**
18.4.1	Demonstratethestepsofintra-natalmonitoringina simulatedenvironment.			Y	DOAPsession,Skills Lab,Video	Documentin Logbook			
18.4.2	Demonstratetheuseofaportogram.			Y	DOAPsession,SkillsL ab, Video	Document inLogbook			
18.4.3	Conductanormaldeliveryinasi mulatedenvironment.			Y	DOAPsession,Skillsl ab, Video	Document inLogbook			
PE 18.5	**Provideintra-natalcareandobservetheconductofa normaldelivery**			**Y**	**DOAPsession**	**Documentin Logbook**			OBG
18.5.1	Demonstratethepreparationofvariouscomponentsofint ranatalcare.			Y	DOAPsession	Document inLogbook			
18.5.2	Observeandassistinconductofanormaldelivery.			Y	DOAPsession	Documentin Logbook			
PE 18.6	**PerformPostnatalassessmentofnewbornand mother, provide advice on breastfeeding, weaning andonfamily planning**			**Y**	**Bedside, SkillLab**	**SkillAssess ment**		**ComMed**	**OBG**

18.6.1	Performpostnatalassessmentofnewborn.			Y	Bedside, SkillLab	SkillAssessment			
18.6.2	Performpostnatalassessmentofmother.			Y	Bedside,Skill Lab	SkillAssessment			
18.6.3	Giveadvicetothemotheroninitiationandmaintenanceofexclusive breastfeeding, common problems seen duringbreastfeeding,weaningand familyplanning.			Y	Bedside, SkillLab	SkillAssessment			
PE 18.7	**Educateandcounselcaregiversofchildren**			**Y**	**roleplay**	**OSCE/Skill Assessment**		**AETCOM**	
18.7.1	Educateandcounselcaregiversofchildrenonnewborncare includingprovidingwarmth,feeding,andprevention ofinfection,immunizationand dangersigns.			Y	Role playVideo	SkillAssessment OSCE			
PE18.8	**Observetheimplementationoftheprogramby visitingtheRuralHealthCenter**			**Y**	**Bedside,Skill Lab**	**Documentin Logbook**		**ComMed**	OBG
18.8.1	Makeobservationsontheimplementationoftheprogramby visitingtheRuralHealth Center.			Y	Ruralhealth center visit	Documentin Logbook			
Topic:NationalPrograms,RCH-UniversalImmunization program		**Numberofcompetencies:(16)**				**Numberofproceduresthatrequirecertification:(01)**			
PE19.1	**Explain the components of the UniversalImmunizationProgram(UIP)andtheNationalImmunization Program(NIP)**			**Y**	**Lecture/ SGD**	**Written/viva voce**		**Com Med,Micro, Biochemistry**	
19.1.1	ExplainthecomponentsofUIPandNIP.			Y	Lecture/ SGD	Written/viva voce			
19.1.2	ListthevaccinescoveredunderUIPandNIP.			Y	Lecture/ SGD	Written/viva voce			
PE 19.2	**Explain the epidemiology of vaccine preventablediseases(VPDs)**			**Y**	**Lecture/ SGD**	**Written/viva voce**		**Com Med,Micro, Biochemistry**	
19.2.1	DescribetheepidemiologyofindividualVPDs.			Y	Lecture/ SGD	Written/viva voce			
PE 19.3	**Vaccinedescriptionwithregardtoclassificationof vaccines,strainused,dose,route,schedule,risks,**			**Y**	Lecture/ SGD	**Written/viva voce**		**ComMed, Micro,**	

	benefitsandsideeffects, indicationsand contraindications							**Biochemistry**	
19.3.1	Classifyvaccinesaccordingtotypeofvaccine.			Y	Lecture/ SGD	Written/viva voce			
19.3.2	DescribethecompositionoftheNIPvaccinesincludingthestrain used.			Y	Lecture/ SGD	Written/viva voce			
19.3.3	Statethedose,routeandscheduleofallvaccinesunderNIP.			Y	Lecture/ SGD	Written/viva voce			
19.3.4	Recalltherisks,benefits,sideeffects,indicationsand contraindicationsofvaccinesunderNIP.			Y	Lecture/ SGD	Written/viva voce			
PE 19.4	**Define cold chain and discuss the methods of safestorageand handlingofvaccines**			**Y**	Lecture/ SGD	**Written/viva voce**		**Com Med,Micro, Biochemistry**	
19.4.1	Definecoldchainanddiscussitsimportanceforvaccines.			Y	Lecture/SGD	Written/viva voce			
19.4.2	Listthevariouscoldchainequipment.			Y	Lecture/SGD	Written/viva voce			
19.4.3	Describe the appropriate storage of vaccines in domesticrefrigerator,icelinedrefrigerator(ILR)andvaccineca rriers.			Y	Lecture/SGD	Written/viva voce			
19.4.4	Enumerate the precautions for maintaining vaccines atappropriatetemperatureincludingtheuseofvaccinevial monitor(VVM).			Y	Lecture/SGD	Written/viva voce			
19.4.5	Explainthemethodofcoldchainmaintenanceduringa vaccinesession.			Y	Lecture/SGD	Written/viva voce			
PE 19.5	**Discuss immunization in special situations – HIVpositive children, immunodeficiency, pre-term, organtransplants, those who received blood and bloodproducts,splenectomisedchildren,adolescents, and travelers**			**Y**	**Lecture/ SGD**	**Written/viva voce**		**Com Med,Micro,Biochemistry**	
19.5.1	Explain immunization in special situations – HIV positivechildren,immunodeficiency,pre-term,organtransplants,thosewhoreceivedbloodandblood products, splenectomisedchildren,adolescents,travelers.			Y	Lecture/SGD	Written/viva voce			

PE 19.6	**Assess patient forfitness for immunization and prescribe an age appropriate immunization schedule**			**Y**	**Out Patient clinics,Skillslab**	**SkillAssess ment**	**5**		
19.6.1	Assesspatientfitnessforimmunization.			Y	OutPatientclinics,S killslab	SkillAssessment OSCE	5		
19.6.2	Makeanageappropriateplanforimmunizationincludingcat chup doses.			Y	OutPatientclinics,S killslab	SkillAssessment OSCE	5		
19.6.3	Prescribethecorrectvaccine,dose,routeofadministration forthechild.			Y	OutPatientclinics, Skillslab	SkillAssessment	5		
PE 19.7	**Educateandcounselapatientforimmunization**			**Y**	**DOAPsession**	**Documentin Logbook**			
19.7.1	Educatetheparentsabouttheimportanceofvaccines.			Y	DOAP session,Role play	Document inLogbook			
19.7.2	Counselparentsforageappropriatevaccines,theschedule andtimingandtheexpectedsideeffects.			Y	DOAPsession, Roleplay	Documentin Logbook,OSCE			
PE 19.8	**Demonstrate willingness to participate in the nationalandsubnational immunizationdays**			**Y**	**Lecture/sm allgroup discussion**	**Document inLogbook**		**ComMed**	
19.8.1	Participateinthenational(NIDs)andsubnationalim munization days(SNIDs).			Y	Small group,NIDsand SNIDs	Document inLogbook			
PE 19.9	**Describe the components of safe vaccine practice – Patient education/ counselling; adverse eventsfollowing immunization, safe injection practices,documentationandmedico-legalimplications**			**Y**	**Lecture/sma ll groupdiscus sion/ Immunization clinic**	**Written/viva voce**		**AETCOM**	
19.9.1	Describethecomponentsofsafevaccinepractices-patient education/counseling.			Y	Lecture/SGD	Written/viva voce		AETCOM	
19.9.2	Describeadverseeventsfollowingimmunizationandst andardprecautionstoprevent them.			Y	Lecture/SGD	Written/viva voce			
19.9.3	Listsafeinjectionpracticesanddocumentationduringim munization.			Y	Lecture/SGD	Written/viva voce			
19.9.4	Demonstratenecessarydocumentationandmedicolegali mplicationsofimmunization.			Y	Lecture/SGD	Written/viva voce			

PE 19.10	**Observethehandlingandstoringofvaccines**			**Y**	**DOAPsession**	**Written/viva voce**			
19.10.1	Observe and note the correct handling and storing ofvaccines.			Y	DOAP session,Videos	Vivavoce/OSCE			
PE 19.11	**DocumentImmunizationinanimmunizationrecord**			**Y**	**OutPatientclinics, Skillslab**	**Skill assessment**			
19.11.1	DocumentImmunizationinanimmunizationrecord.			Y	OutPatien tclinics, Skillslab	Skillassessment OSCE			
PE 19.12	**ObservetheadministrationofUIPvaccines**			**Y**	**DOAPsession**	**Documentin Logbook**		**ComMed**	
19.12.1	Observeanddocumenttheadministrationofvaccines.			Y	DOAPsession	Document inLogbook			
PE 19.13	**Demonstratethecorrectadministrationofdifferent vaccinesinamannequin**			**Y**	**DOAPsession**	**Documentin Logbook**		**ComMed**	
19.13.1	Preparevaccinesbymaintaininghandhygieneandskinster ilization.			Y	DOAP session,Skill station	Document inLogbook,OSC E			
19.13.2	Administeravaccineinthemannequinbycorrectroute(IM,SC,ID)for thecorrectvaccine.			Y	DOAP session,Skill station	Document inLogbook,OSC E			
PE 19.14	**PracticeInfectioncontrolmeasuresandappropriate handlingofthesharps**			**Y**	**DOAPsession**	**Documentin Logbook**		**ComMed**	
19.14.1	PracticeInfectioncontrolmeasures.			Y	DOAPsession	Documentin Logbook			
19.14.2	Practiceappropriatehandlingofthesharps.			Y	DOAPsession	Document inLogbook			
PE 19.15	**ExplainthetermimpliedconsentinImmunization services**			**Y**	**Smallgroup discussion**	**Written/viva voce**			
19.15.1	ExplainthetermimpliedconsentinImmunizationservices.			Y	Smallgroup discussion	Written/viva voce			
PE 19.16	**Enumerate available newer vaccines and theirindicationsincludingpentavalentpneumococcal, rotavirus,JE,typhoidIPV& HPV**			**N**	**Lecture/sm allgroup discussion**	**Written/viva voce**			
19.16.1	Enumeratenewervaccines(pneumococcal,rotavirus,JEty phoid,IPV, influenza&HPVvaccines).			N	Lecture/SGD	Written/viva voce			

19.16.2	Listtheindicationsfornewervaccinessuchaspneumococcal,JE,typhoid, influenza&HPV vaccines			N	Lecture/SGD	Written/viva voce			
Topic:CareoftheNormalNewbornandHighriskNewborn				**Numberofcompetencies:(20)**		**Numberofproceduresthatrequirecertification:(NIL)**			
PE 20.1	**Definethecommonneonatalnomenclaturesincludingthe classification and describe the characteristics of aNormalTermNeonateandHighRiskNeonates**			**Y**	**Lecture/ SGD**	**Written/viva voce**			
20.1.1	DefinetheNeonatalandPerinatalperiod.			Y	Lecture/SGD	Written /Vivavoce			
20.1.2	Definelivebirthandstillbirth.			Y	Lecture/SGD	Written/Viva voce			
20.1.3	Classifytheneonateaccordingtobirthweightintodifferentcategories.			Y	Lecture/SGD	Written /Vivavoce			
20.1.4	Classifytheneonateaccordingtoperiodofgestation.			Y	Lecture/SGD	Written /Vivavoce			
20.1.5	Classifytheneonateasperintrauterinegrowthpercentiles.			Y	Lecture/SGD	Written/Viva voce			
20.1.6	DefineNeonatalMortalityRate(NMR)andPerinatalMortalityRate.			Y	Lecture,SGD.	Written /Vivavoce			
20.1.7	Describethecharacteristicsofanormaltermneonate.			Y	Lecture,SGD.	Written/Viva voce			
20.1.8	Describethecharacteristicsofthehigh-riskneonate.			Y	Lecture,SGD.	Written /Vivavoce			
PE 20.2	**Explainthecareofanormalneonate**			**Y**	**Lecture,SGD**	**Written/Viva voce**			
20.2.1	EnumeratethecomponentsofEssentialNewbornCare			Y	Lecture,SGD	Written /Vivavoce			
20.2.2	Enumeratethestepsofcareofthenormalneonateatbirth.			Y	Lecture,SGD.	Written/Viva voce			
20.2.3	Explainthecareofthenormal neonateduringthepostnatalperiod.			Y	Lecture,SGD.	Written /Vivavoce			
20.2.4	Listthecriteriafordischargeofanormalneonatefromthe Hospital			Y	Lecture,SGD.	Written/Viva voce			
PE 20.3	**PerformNeonatalresuscitationinamanikin**			**Y**	**DOAP/SKILLLAB**	**Logbook**			
20.3.1	Performallthestepsofroutinecareona manikin.			Y	DOAP/skilllab	Logbook/OSCE			

20.3.2	Demonstratetheinitialstepsofneonatalresuscitationinamanikininthecorrectsequence.			Y	DOAP	Logbookentry/OSCE			
20.3.3	Demonstratethemethodofcountingtheheartrateofthe neonateduringresuscitation.			Y	DOAP	Skilllab/OSCE			
20.3.4	Demonstratethemethodofadministeringfreeflowoxygenduringresuscitation.			Y	DOAP	Skillstation/ OSCE			
20.3.5	Checkthefunctionsofallpartsofthe self-inflatingbag.			Y	DOAP	Logbook entry/OSCE			
20.3.6	Demonstrate the method of positive pressure ventilation(PPV)inamanikinusingappropriatesizeofbagandmask.			Y	DOAP	Logbookentry/OSCE			
20.3.7	Checksthesignsofeffectivepositivepressureventilation.			Y	DOAP	Logbook/OSCE			
20.3.8	Initiatecorrectivestepsincorrectsequenceforineffectiveventilationinsimulatedsettings.			Y	DOAP	Logbookentry/OSCE			
20.3.9	Demonstratethemethodofplacementoforogastrictubedurin gprolonged PPV in a manikin.			Y	DOAP	Logbookentry			
20.3.10	Demonstratethe‘thumbtechnique’and‘twofinger technique’ofprovidingchestcompressionina manikin.			Y	DOAP	Logbookentry/skill station/OSCE			
20.3.11	Preparecorrectdilutionofadrenalineinjection.			Y	DOAP	Logbook			
20.3.12	IdentifythecorrectsizeofLaryngoscopeandendotrachealtubebasedongivenbirth weight/gestationcorrectly.			Y	DOAP	Logbookentry/OSCE			
20.3.13	Demonstratethetechniqueofendotrachealintubationina manikincorrectly.			Y	DOAP	Logbookentry			
PE 20.4	**Assessmentofanormalneonate**			**Y**	**Bedside/Skilllab**	**Skill assessment**			
20.4.1	Elicittherelevantgeneral,antenatal,natalandpostnatalhistoryofthemother.			Y	Bedside/Skilllab	Skillassessment			
20.4.2	Demonstratethetouchmethodofassessmentoftemperatureina newborn.			Y	Bedside/Skilllab	Skillassessment			
20.4.3	Demonstratethemethodofrecordingaxillaryandrectal temperatureinaneonatalmanikin.			Y	Bedside/Skilllab	Skillassessment			
20.4.4	Demonstratethecountingofrespiratoryrateinaneonate.			Y	Bedside/Skilllab	Skillassessment			
20.4.5	Demonstratetheelicitingofcapillaryrefilltime CRTinanewborn.			Y	Bedside/Skilllab	Skillassessment			

20.4.6	Demonstratecountingtheheartrateinaneonate.			Y	Bedside/Skilllab	Skillassessment			
20.4.7	Measureweight,length,headcircumferenceandchestcir cumferencein aneonate/manikin accurately.			Y	Bedside/Skilllab	Skillassessment			
20.4.8	Performagestationalassessmentbyphysicaland neurologicalcriteriainaneonate.			Y	Bedside/Skilllab	Skillassessment			
20.4.9	Performaheadtotoeexaminationoftheneonate.			Y	Bedside/Skilllab	Skillassessment			
20.4.10	Elicitcommonneonatalreflexeslikerooting,sucking,grasp, andMoro'sreflexcorrectly.			Y	Bedside/Skilllab	Skillassessment			
20.4.11	Performarelevantsystemicexaminationofaneonate			Y	Bedside/Skilllab	Skillassessment			
PE 20.5	**Counsel/educatemothersonthecareofneonates**			**Y**	**DOAP**	**Logbookentry**			
20.5.1	CounselmothersusingtheGALPACtechnique(Greet,Ask,Listen ,Praise,Advise,Checkforunderstanding) appropriately.			Y	DOAP	Logbookdocum entation/ OSCE			
20.5.2	Educatemothersregardingcareoftheeyes,skinandcordstump ofthe neonate.			Y	DOAP	Logbookdocum entation			
20.5.3	Educatethemotherforpreventionofinfections.			Y	DOAP	Logbookdocum entation/ OSCE			
20.5.4	Educatemothersregardingbathingroutineandcleanliness.			Y	DOAP	Logbookdocum entation/ OSCE			
20.5.5	Counselthemotherregardingherownnutritionandhealth.			Y	DOAP	Logbookdocum entation			
PE 20.6	**Explain the follow-up care for neonates includingBreastfeeding,Temperaturemaintenance, immunization,importanceofgrowthmonitoringandre dflags.**			**Y**	**DOAP**	**Logbookdocu mentation**			
20.6.1	Counselthemothersabouttheimportanceofexclusive breastfeedingappropriately.			Y	DOAP	Logbook documentation			
20.6.2	Educate the mother regarding harmful effects of pre-lactealsandnon-humanmilk.			Y	DOAP	Logbookdocum entation			
20.6.3	Explaintothemothertheimportanceoffrequentbreastfeeding includingnightfeeds.			Y	DOAP	Logbookdocum entation			

20.6.4	Educatethemotherregardingcommonlactationproblems			Y	DOAP	Logbookdocumentation			
20.6.5	Explaintothemotherthemethodsofkeepingthebabywarmathome.			Y	DOAP	Logbookdocumentation/ OSCE			
20.6.6	DemonstratethetechniqueofKangarooMotherCareinamanikinand simulated mother.			Y	DOAP	Logbookdocumentation/ OSCE			
20.6.7	Explainthescheduleofimmunizationasperthenationalimmunizationschedulecorrectly.			Y	DOAP	Logbookdocumentation/OSCE			
20.6.8	Counseltheparentsonimportanceofregularvisitttothewellbabyclinic for growth monitoring.			Y	DOAP	Logbookdocumentation/ OSCE			
20.6.9	Explaintotheparentstheredflagsignsforurgentvisittohospital.			Y	DOAP	Logbookdocumentation/ OSCE			
PE 20.7	**Discusstheetiology,clinicalfeaturesand managementofBirthasphyxia**			**Y**	**Lecture/ SGD**	**Written/Viva voce**			
20.7.1	DefinebirthasphyxiaasperNNF(NationalNeonatologyForum) and WHO,AAP guidelines.			Y	Lecture/SGD	Written /Vivavoce			
20.7.2	Enumeratetheetiologyofbirthasphyxiabasedonantenatal,natala nd postnatal factors.			Y	Lecture,SGD	Written /Vivavoce			
20.7.3	Describetheclinicalfeaturesofbirthasphyxia.			Y	Lecture,SGD	Written/Viva voce			
20.7.4	Listthecomplicationsofhypoxicischemicencephalopathy.			Y	Lecture,SGD	Written /Vivavoce			
20.7.5	Describethepostresuscitationmanagementofthe asphyxiatedneonate.			Y	Lecture,SGD	Written/Viva voce			
PE 20.8	**Discuss the etiology, clinical features and managementofrespiratorydistressinNewborn including meconium aspirationandtransienttachypneaofnewborn.**			**Y**	**Lecture,SGD**	**Written /Vivavoce**			
20.8.1	DefineRespiratoryDistressinaneonate(asperNNFguidelines).			Y	Lecture,SGD	Written /Vivavoce			

20.8.2	Enumeratethecommonetiologiesofrespiratorydistressbased on timeofonset andgestation.			Y	Lecture,SGD	Written /Vivavoce			
20.8.3	EnumeratetheparametersoftheDownesscorefor assessmentofseverityofrespiratorydistress.			Y	Lecture,SGD	Written/Viva voce			
20.8.4	DescribetheclinicalfeaturesandcomplicationsofMeconiumAspiration Syndrome (MAS).			Y	Lecture,SGD	Written /Vivavoce			
20.8.5	DiscussthemanagementofMAS.			Y	Lecture,SGD	Written/Viva voce			
20.8.6	DiscusstheclinicalfeaturesandmanagementofTransientTachypneaofNewborn.			Y	Lecture,SGD	Written /Vivavoce			
20.8.7	DescribetheetiologyandclinicalfeaturesofHyalineMembraneDisease.			Y	Lecture,SGD	Written /Vivavoce			
20.8.8	DiscussthemanagementincludingpreventionofHMD.			Y	Lecture,SGD	Written/Viva voce			
PE 20.9	**Discusstheetiology,clinicalfeaturesandmanagement ofbirthinjuries.**			**Y**	**Lecture,SGD**	**Written/Viva voce**			
20.9.1	Definebirthinjury(asperNationalVitalStatisticsReport).			Y	Lecture,SGD	Written /Vivavoce			
20.9.2	Enumeratethecommonbirthinjuriesinneonates			Y	Lecture,SGD	Written /Vivavoce			
20.9.3	Discusstheetiologyandriskfactorsofbirthinjuries			Y	Lecture,SGD	Written/Viva voce			
20.9.4	Discuss the clinical features of common birth injuries like,cephalhematoma,subgalealhemorrhage,brachialplexusandfacialnerveinjury, boneandsoft tissueinjuriesand intra-abdominalinjuries,fractures.			Y	Lecture,SGD	Written /Vivavoce			
20.9.5	Discussthemanagementincludingpreventionofcommonbirth injuries			Y	Lecture,SGD	Written /Vivavoce			
PE 20.10	**Discusstheetiology,clinicalfeaturesandmanagement ofhemorrhagicdiseaseofnewborn**			**Y**	**Lecture,SGD**	**Written/Viva voce**			
20.10.1	Enumeratethecausesofhemorrhagicdiseaseofnewborn accordingtotimeofonset.			Y	Lecture,SGD	Written/Viva voce			
20.10.2	DiscusstheroleofvitaminKdeficiencyinhemorrhagicdisease ofnewborn.			Y	Lecture,SGD	Written /Vivavoce			

20.10.3	Describetheclinicalfeaturesofearly,classicalandlateonsethemorrhagicdiseaseofnewborn.			Y	Lecture,SGD	Written /Vivavoce			
20.10.4	Outlinethestepsofmanagementandpreventionof hemorrhagicdiseaseofnewborn.			Y	Lecture,SGD	Written/Viva voce			
PE 20.11	**Discusstheclinicalcharacteristics,complicationsandmanagementoflowbirthweight(pretermandsmall forgestation).**			**Y**	**Lecture,SGD**	**Written /Vivavoce**			
20.11.1	Describetheclinicalcharacteristicsofpreterm,smallforgestationand lowbirthweightnewborns.			Y	Lecture,SGD	Written /Vivavoce			
20.11.2	Enumeratethecomplicationsinthepreterm,smallfor gestationandlowbirthweightnewborns			Y	Lecture,SGD	Written/Viva voce			
20.11.3	Describethemanagementofthepreterm,small fordateandlowbirthweight newborns.			Y	Lecture,SGD	Written /Vivavoce			
20.11.4	Enumeratethecriteriafordischargeoflowbirthweightbabiesfrom hospital-basedcare.			Y	Lecture,SGD	Written /Vivavoce			
20.11.5	Listthefollowupadvicefor lowbirthweightnewborns.			Y	Lecture,SGD	Written/Viva voce			
PE 20.12	**Discussthetemperatureregulationinneonates, clinicalfeaturesandmanagementofNeonatalHypothermia.**			**Y**	**Lecture,SGD**	**Written /Vivavoce**			
20.12.1	Enumeratethemodesofheatlossinanewborn.			Y	Lecture,SGD	Written/Viva voce			
20.12.2	Describethemechanismofthermoregulationinthe newborn.			Y	Lecture,SGD	Written/Viva voce			
20.12.3	ClassifyhypothermiainnewbornsasperNNFcriteria.			Y	Lecture,SGD	Written /Vivavoce			
20.12.4	Describetheclinicalfeaturesofanewbornwithcoldstress,moderatehypothermiaandseverehypothermia.			Y	Lecture,SGD	Written /Vivavoce			
20.12.5	Discussthemanagementofcoldstress,moderate hypothermiaandseverehypothermia.			Y	Lecture,SGD	Written/Viva voce			
20.12.6	Outlinethepreventionofhypothermiainnewbornby‘tenstepsofthewarmchain’.			Y	Lecture,SGD	Written /Vivavoce			
20.12.7	ExplaintheKangarooMotherCareforpreventionof hypothermiainnewborns.			Y	Lecture,SGD	Written/Viva voce			

PE 20.13	**Discusstheetiology,clinicalfeaturesandmanagement ofNeonatalhypoglycemia.**			**Y**	**Lecture,SGD**	Written/Viva voce			
20.13.1	Definehypoglycemiainnewborn.			Y	Lecture,SGD	Written /Vivavoce			
20.13.2	Enumeratetheetiologyofhypoglycemiainthenewborn.			Y	Lecture,SGD	Written/Viva voce			
20.13.3	Enumeratethe“atrisknewborns”needingroutineblood sugarmonitoringforhypoglycemia.			Y	Lecture,SGD	Written /Vivavoce			
20.13.4	Describetheclinicalfeaturesofhypoglycemiainthe newborn.			Y	Lecture,SGD	Written/Viva voce			
20.13.5	Discussthemanagementofa newbornwithasymptomaticandsymptomatic hypoglycemia.			Y	Lecture,SGD	Written /Vivavoce			
20.13.6	Enumeratethemeasuresfor preventionofhypoglycemiainnewborn.			Y	Lecture,SGD	Written /Vivavoce			
PE 20.14	**Discusstheetiology,clinicalfeaturesandmanagement ofNeonatalhypocalcemia.**			**Y**	**Lecture,SGD**	**Written/Viva voce**			
20.14.1	Defineneonatalhypocalcemia.			Y	Lecture,SGD	Written/Viva voce			
20.14.2	Enumeratetheriskfactorsfor earlyandlateonset hypocalcemia.			Y	Lecture,SGD	Written/Viva voce			
20.14.3	Describetheclinicalfeaturesofneonatalhypocalcemia.			Y	Lecture,SGD	Written/Viva voce			
20.14.4	Outlinethemanagementofneonatalhypocalcemia.			Y	Lecture,SGD	Written /Vivavoce			
PE 20.15	**Discusstheetiology,clinicalfeaturesandmanagement ofneonatalseizures.**			**Y**	**Lecture,SGD**	**Written/Viva voce**			
20.15.1	Enumeratetheclinicaltypesofseizuresinthenewborn.			Y	Lecture,SGD	Written /Vivavoce			
20.15.2	Enumeratethekeydifferentiatingfeaturesbetweenseizures andjitteriness.			Y	Lecture,SGD	Written/Viva voce			
20.15.3	Describethecommoncausesofneonatalseizuresaccordingtoti meofonset ofseizure.			Y	Lecture,SGD	Written /Vivavoce			
20.15.4	Discusstheclinicalfeaturesofthecommoncausesofneonatalse izures.			Y	Lecture,SGD	Written /Vivavoce			

20.15.5	Listtheprimarydiagnostictestsindicatedinneonatalseizures.			Y	Lecture,SGD	Written /Vivavoce			
20.15.6	Elaboratethestepwisealgorithmicapproachforthe managementofneonatalseizures.			Y	Lecture,SGD	Written/Viva voce			
PE 20.16	**Discusstheetiology,clinicalfeaturesandmanagement ofneonatalsepsis.**			**Y**	**Lecture,SGD**	**Written/Viva voce**			
20.16.1	Defineneonatalsepsis,probablesepsis,severesepsis,septicshock			Y	Lecture,SGD	Written /Vivavoce			
20.16.2	ClassifyEarlyandlateneonatalsepsis.			Y	Lecture,SGD	Written/Viva voce			
20.16.3	Enumeratetheorganismsresponsibleforcausingearlyandlate onset sepsis.			Y					
20.16.4	Enumeratetheriskfactorsofearlyandlateonsetneonatalsepsis correctly.			Y	Lecture,SGD	Written /Vivavoce			
20.16.5	Describetheclinicalfeaturesofearlyonsetandlateonset neonatalsepsis			Y	Lecture,SGD	Written/Viva voce			
20.16.6	Enumeratethecommonlyusedlaboratorytestsfordiagnosisofn eonatal sepsis.			Y	Lecture,SGD	Written /Vivavoce			
20.16.7	Recalltheinterpretationofapositive sepsisscreen.			Y	Lecture/SGD	Written /Vivavoce			
20.16.8	Describetheapproachtoanewbornwithsuspectedearly onsetsepsis.			Y	Lecture,SGD	Written/Viva voce			
20.16.9	Describetheapproachtoanewbornwithsuspectedlateons et sepsis.			Y	Lecture,SGD	Written /Vivavoce			
20.16.8	Listthecommonlyusedantibiotics(withdosageandduration oftherapy)inthemanagementofneonatalsepsis.			Y	Lecture,SGD	Written/Viva voce			
20.16.9	Describethesupportiveand adjunctivetherapyinmanagementofneonatalsepsi s.			N	Lecture/SGD	Written/viva voce			
20.16.9	Discussthemeasuresforpreventionofearlyonsetandlateonset sepsis.			Y	Lecture,SGD	Written /Vivavoce			
PE 20.17	**Discusstheetiology,clinicalfeaturesandmanagement ofPerinatalinfections.**			**Y**	**Lecture,SGD**	**Written/Viva voce**			
20.17.1	DefinePerinatalinfection.			Y	Lecture,SGD	Written/Viva voce			

20.17.2	Discuss the etiology and risk factors for acquisition ofcommon Perinatal infections like Herpes, Cytomegalovirus,Toxoplasmosis,Rubella,HIV,Varicella,Hepat itisBvirusand syphilis.			Y	Lecture,SGD	Written /Vivavoce			
20.17.3	DescribetheclinicalfeaturesofthecommonPerinatalinfe ctions.			Y	Lecture,SGD	Written /Vivavoce			
20.17.4	OutlinethemanagementofthecommonPerinatalinfections.			Y	Lecture,SGD	Written/Viva voce			
20.17.5	Enumeratethemeasuresfor preventionofcommonPerinatalinfections.			Y	Lecture,SGD	Written /Vivavoce			
PE 20.18	**IdentifyandstratifyriskinasickneonateusingIMNCI guidelines**			**Y**	**DOAP**	**Documentin Logbook**			
20.18.1	Identifypossibleseriousbacterialinfection/jaundiceand stratifythesickneonateasperIMNCI.			Y	DOAP	Documentin Logbook			
20.18.2	Identifyandstratifydehydrationinasickneonatewithdiar rheaasper IMNCI.			Y	DOAP	Document inLogbook			
20.18.3	Classifydiarrheaintoseverepersistentdiarrheaandseveredyse nteryasper IMNCIguidelines.			Y	DOAP	Document inLogbook			
20.18.4	Checkforfeedingproblemandmalnutritionandstratify.			Y	DOAP	Documentin Logbook			
20.18.5	Assessbreastfeedingandcheckforsignsofgoodattachmenttoth ebreastina neonate.			Y	DOAP	Document inLogbook			
20.18.6	Interpretandclassifytheneonateonthebasisofweightforagez scoresweightcategoriesaccurately.			Y	DOAP	Document inLogbook			
PE 20.19	**Discusstheetiology,clinicalfeaturesandmanagement ofNeonatalhyperbilirubinemia.**			**Y**	**Lecture/SGD**	**Written/Viva voce**			
20.19.1	Describetheetiologyofneonatalhyperbilirubinemia			Y	Lecture/SGD	Written/Viva voce			
20.19.2	Differentiatethecausesofneonataljaundicebasedonageofonset and duration ofjaundice.			Y	LectureSGD	Written /Vivavoce			
20.19.3	Enumeratethecommoncausesofunconjugatedand conjugatedhyperbilirubinemiainthenewborn.			Y	Lecture/SGD	Written/Viva voce			
20.19.4	Differentiatebetweenphysiologicalandpathologicaljaundiceinth enewborn.			Y	Lecture/SGD	Written /Vivavoce			

20.19.5	Discusstheclinicalfeaturesofcommoncausesofneonataljaundice			Y	Lecture/SGD	Written /Vivavoce			
20.19.6	Describetheimportantclinicalfeaturesofacutebilirubin encephalopathy.			Y	LectureSGD	Written/Viva voce			
20.19.7	Listtheinvestigationstobeperformedintheevaluationofneo natalhyperbilirubinemia.			Y	Lecture/SGD	Written /Vivavoce			
20.19.8	Categorizetheriskinneonatalhyperbilirubinemiabasedon theAmericanAcademyofPediatricsBilirubinNomogram.			Y	Lecture/SGD	Written/Viva voce			
20.19.9	Identify a neonate requiring phototherapy as per theAmericanAcademyofPediatricsBilirubinNomogram .			Y	Lecture/SGD	Written /Vivavoce			
20.19.10	IdentifyaneonaterequiringexchangetransfusionaspertheAmeric an AcademyofPediatricsBilirubinNomogram correctly.			Y	Lecture/SGD	Written /Vivavoce			
20.19.11	Describethecareofthebabyreceivingphototherapy.			Y	Lecture/SGD	Written /Vivavoce			
20.19.12	Explainthemechanismofphototherapy.			Y	Lecture/SGD	Written /Vivavoce			
20.19.13	Detailthemethodofadministeringphototherapy.			Y	Lecture/SGD	Written/Viva voce			
PE 20.20	**Identify clinical presentations of common surgicalconditions in the newborn including TEF, esophagealatresia,analatresia,cleftlipandpalate,congenital diaphragmaticherniaandcausesofacuteabdomen.**			**Y**	**Lecture/ SGD**	**Written/ vivavoce**			
20.20.1	Describeclinicalpresentationsofcommonsurgicalconditionsin the newborn like Tracheo-esophageal fistula (TEF),esophagealatresia,analatresia,cleftlip andpalateand congenitaldiaphragmaticherniacorrectly.			Y	Lecture/SGD	Written /Vivavoce			
20.20.2	Enumeratethecausesofacuteabdomeninthenewborn			Y	Lecture/SGD	Written /Vivavoce			
20.20.3	Recallthecausesofacuteabdomeninthenewbornbasedon thepresentingclinicalfeatures.			Y	Lecture/SGD	Written/Viva voce			

Topic:Genito-Urinarysystem		Numberofcompetencies:(17)				Numberofproceduresthatrequirecertification:(NIL)			
PE21.1	**Enumeratetheetiopathogenesis,clinicalfeatures,complicationsandmanagementofUrinaryTract infection(UTI)inchildren**			**Y**	**Small groupdiscussion**	**Written/ Vivavoce**		**Micro**	
21.1.1	DefineUTIasperstandardcriteria.			Y	Lecture/SGD	Written/Vivavoce			
21.1.2	EnumeratetheorganismscausingUTIinchildrenofdifferentages.			Y	Lecture/SGD	Written /Vivavoce			
21.1.3	Describetheclinicalfeaturesofsimple&complicatedUTI.			Y	Lecture/SGD	Written/Vivavoce			
21.1.4	OutlinediagnosticworkupforchildrenwithUTIatdifferentages.			Y	Lecture/SGD	Written /Vivavoce			
21.1.5	Describe the treatment including the choice of antibiotics anddurationofantibiotic therapyfor treatingsimple& complicatedUTI.			Y	Lecture/SGD	Written /Vivavoce			
21.1.6	EnumeratethecomplicationsofUTIchildren.			Y	Lecture/SGD	Written /Vivavoce			
PE21.2	**Enumeratetheetiopathogenesis,clinicalfeatures, complications and management of acute post-streptococcalGlomerularNephritisinchildren**			**Y**	**Lecture/ SGD**	**Written /Vivavoce**		**Path**	
21.2.1	Defineacuteglomerulonephritis.			Y	Lecture/SGD	Written/Vivavoce			
21.2.2	Elaboratepathogenesisofimmunemediatednephriticsyndrome			Y	Lecture/SGD	Written /Vivavoce			
21.2.3	DescribetheclinicalfeaturesofPost-StreptococcalGlomerulonephritis(PSGN)			Y	Lecture/SGD	Written /Vivavoce			
21.2.4	EnumeratethecomplicationsofPSGN.			Y	Lecture/SGD	Written/Vivavoce			
21.2.5	EnumeratetheinvestigationsforPSGN.			Y	Lecture/SGD	Written /Vivavoce			
21.2.6	EnumerateindicationsofkidneybiopsyinPSGN.			Y	Lecture/SGD	Written/Vivavoce			
21.2.7	OutlinemanagementofPSGN.			Y	Lecture/SGD	Written /Vivavoce			

PE21.3	**Discusstheapproachandreferralcriteriatoachild withProteinuria**			**Y**	**Lecture/ SGD**	**Written/Viva voce**		**Path**	
21.3.1	Listcausesofglomerular&nonglomerularProteinuria.			Y	Lecture/SGD	Written /Vivavoce			
21.3.2	Definenephroticsyndrome.			Y	Lecture/SGD	Written/Viva voce			
21.3.3	Enumeratecausesofnephroticsyndrome.			Y	Lecture/SGD	Written /Vivavoce			
21.3.4	Outlinetheapproachtoachildwithfirstepisodeofnephrotic syndrome.			Y	Lecture/SGD	Written/Viva voce			
21.3.5	Listthecomplicationsofnephroticsyndrome.			Y	Lecture/SGD	Written /Vivavoce			
21.3.6	Listindicationsofkidneybiopsyinnephroticsyndrome.			Y	Lecture/SGD	Written /Vivavoce			
21.3.7	Outlinethemanagementofinitialepisode nephrotic syndromeandsubsequentrelapse.			Y	Lecture/SGD	Written/Viva voce			
21.3.8	ListtheCriteriaforreferralofachildwithproteinuria.			Y	Lecture/SGD	Written /Vivavoce			
PE21.4	**Discusstheapproachandreferralcriteriatoachild withhematuria**			**Y**	**Lecture/ SGD**	**Written/Viva voce**		**Anat**	
21.4.1	Enumeratecausesofhematuriainchildrenofdifferentages			Y	Lecture/SGD	Written/Viva voce			
21.4.2	Outlinedifferencesbetweenglomerular&nonglomerularhe maturia			Y	Lecture/SGD	Written /Vivavoce			
21.4.3	Listinvestigationsforachildwithhematuria			Y	Lecture/SGD	Written /Vivavoce			
21.4.4	Listindicationsofkidneybiopsyin hematuria			Y	Lecture/SGD	Written/Viva voce			
21.4.5	Listcriteria forreferralforachildwithhematuria			Y	Lecture/SGD	Written /Vivavoce			
PE21.5	**Enumerate the etiopathogenesis, clinical features,complicationsandmanagementofAcuteRenalFa ilure inchildren**			**Y**	**Lecture/ SGD**	**Written /Vivavoce**		**Path**	
21.5.1	Defineacutekidneyinjury(AKI)asperKDIGO.			Y	Lecture/SGD	Written/Viva voce			

21.5.2	OutlineclassificationofAKI.			Y	Lecture/SGD	Written /Vivavoce			
21.5.3	EnumeratecausesofAKI.			Y	Lecture/SGD	Written/Viva voce			
21.5.4	ListinvestigationsforAKIinchildren.			Y	Lecture/SGD	Written /Vivavoce			
21.5.5	DescribethemanagementofAKI.			Y	Lecture/SGD	Written/Viva voce			
21.5.6	ListindicationsofrenalreplacementtherapyinAKI.			Y	Lecture/SGD	Written /Vivavoce			
21.5.7	EnumeratecomplicationsofAKI.			Y	Lecture/SGD	Written /Vivavoce			
PE21.6	**Enumerate the etiopathogenesis, clinical features,complicationsandmanagementofchronic kidney disease in children.**			**Y**	**Lecture/ SGD**	**Written /Vivavoce**		**Path**	
21.6.1	Definechronickidneydisease(CKD)&itsstaginginchildren.			Y	Lecture/SGD	Written/Viva voce			
21.6.2	OutlinetheclinicalfeaturesofCKDinchildren.			Y	Lecture/SGD	Written /Vivavoce			
21.6.3	ListcausesofCKDinchildren.			Y	Lecture/SGD	Written/Viva voce			
21.6.4	EnumeratecomplicationsofCKDinchildren.			Y	Lecture/SGD	Written /Vivavoce			
21.6.5	OutlinemanagementofCKD &itscomplications.			Y	Lecture/SGD	Written /Vivavoce			
PE21.7	**Enumeratetheetiopathogenesis,clinicalfeatures, complicationsandmanagementofWilmsTumor.**			**Y**	**Lecture/ SGD**	Written/Viva voce		**Path**	
21.7.1	DescribeEtiopathogenesisofWilmstumor.			Y	Lecture/SGD	Written/Viva voce			
21.7.2	DescribeclinicalfeaturesofWilmstumor.			Y	Lecture/SGD	Written /Vivavoce			
21.7.3	ListinvestigationsforapatientwithWilmstumor.			Y	Lecture/SGD	Written/Viva voce			
21.7.4	OutlinethemanagementofWilmstumor.			Y	Lecture/SGD	Written /Vivavoce			

PE21.8	**Elicit, documentandpresentahistorypertainingto diseasesoftheGenitourinarytract**			**Y**	**Bedside,Skillslab**	**Skill Assessment**			
21.8.1	Elicitclinicalhistorypertainingtogenitourinarydiseasesinchildren.			Y	Bedside,Skillslab	SkillAssessment			
21.8.2	Performacompletephysicalexaminationforachildwith genitourinarydiseases.			Y	Bedside,Skillslab	SkillAssessment			
21.8.4	Documentthecompletehistoryinthe Logbook.			Y	Bedside,Skillslab	SkillAssessment			
PE21.9	**IdentifyexternalmarkersforKidneydisease,like Failingtothrive,hypertension,pallor,Icthyosis,anasarca**			**Y**	**Bedside,Skillslab**	**Document inLogbook**			
21.9.1	IdentifyexternalmarkersforKidneydisease,likeFailingto thrive,hypertension,pallor,Icthyosis,anasarca.			Y	Bedside,Skillslab	Documentin Logbook			
PE21.10	**Analyzesymptomandinterpretthephysicalfindingsand arriveatanappropriateprovisionaldifferential diagnosis**			**Y**	**Bedside,Skillslab**	**Logbook**			
21.10.1	Analyzesymptomsandinterpretthephysicalfindingsand arriveatanappropriateprovisionaldifferentialdiagnosis.			Y	Bedside,Skillslab	Logbook			
PE21.11	**PerformandinterpretthecommonanalytesinaUrine examination**			**Y**	**Bedside,Skillslab**	**Skill assessment**		**Biochemistr, Path**	
21.11.1	PerformatleastonetesttoelicitProteinuria.			Y	Bedside,Skillslab	Skillassessment			
21.11.2	Interpretthetestsforproteinuriaandtheirsignificance.			Y	Bedside,Skillslab	Skillassessment			
21.11.3	Performtest forevaluatingUrinePH.			Y	Bedside,Skillslab	Skillassessment			
21.11.4	Performurinemicroscopy.			Y	Bedside,Skillslab	Skillassessment			
21.11.5	IdentifytheabnormaldepositsandInterprettheurinemicroscopyfindings.			Y	Bedside,Skillslab	Skillassessment			
21.11.6	Testtheurineforglucosuria.			Y	Bedside,Skillslab	Skillassessment			
21.11,7	Interprettheurinesugarresults.			Y	Bedside,Skillslab	Skillassessment			
PE21.12	**InterpretreportofPlainXRayofKUB**			**Y**	**Bedside,Skillslab**	**Logbook**			**Radio D**
21.12.1	Identifyany abnormalitiesonX-Ray KUB.			Y	Bedside,Skillslab	Logbook			
PE21.13	**EnumeratetheindicationsforandInterpretthe writtenreportofUltrasonogramofKUB**			**Y**	**Bedside,Skillslab**	**Logbook**			**Radio D**

21.13.1	EnumerateindicationsforUltrasoundKUB.			Y	Bedside,Skillslab	Logbook			
21.13.2	InterpretthewrittenreportofultrasonogramofKUB.			Y	Bedside,Skillslab	Logbook			
PE21.14	**Recognize common surgical conditions of theabdomen and genitourinary system and enumeratethe indications for referral including acute andsubacute intestinal obstruction, appendicitis,pancreatitis, perforation intussusception, Phimosis, undescendedtestis,Chordee,hypospadias,Torsion testis,herniaHydrocele,VulvalSynechiae**			**Y**	**Bedside,Skillslab**	**Bedside, Skillslab**			**Surg**
21.14.1	Recognize common surgical conditions of the abdomen andgenitourinary system and enumerate the indications forreferral including acute and subacute intestinal obstruction,appendicitis, pancreatitis, perforation intussusception,Phimosis,undescendedtestis,Chordee,hypospadias,Torsion testis,herniaHydrocele,VulvalSynechiae.			Y	Bedside,Skillslab	Bedside, Skillslab			
PE21.15	**Discussandenumeratethereferralcriteriaforchildren withgenitourinarydisorder**			**Y**	**Lecture/ SGD**	**Written/viva voce**			
21.15.1	EnumeratereferralcriteriainachildwithGenitourinarydisorder.			Y	Lecture/SGD	Written/vivavoce			
PE21.16	**Counsel/educateapatientforreferralappropriately**			**Y**	**DOAP**	**Logbook**		AETCOM	
21.16.1	Counsel/educateapatientforreferralappropriately.			Y	DOAP	Logbook			
PE21.17	**Describetheetiopathogenesis,grading,clinical featuresandmanagementofhypertensioninchildren**			**Y**	**Lecture/ SGD**	**Written/viva voce**			
21.17.1	DefineHypertension(HTN)&itsstagingasperAAP2017guidelines.			Y	Lecture/SGD	Written/ vivavoce			
21.17.2	Enumeratecausesofhypertensioninchildren.			Y	Lecture/SGD	Written/viva voce			
21.17.3	DescribetheclinicalpresentationofachildwithHT.			Y	Lecture/SGD	Written/ vivavoce			
21.17.4	ListcomplicationsofHTin children.			Y	Lecture/SGD	Written/ vivavoce			
21.17.5	Enumerateinvestigationsforhypertensioninchildren.			Y	Lecture/SGD	Written/viva voce			

21.17.6	Outlinetreatmentofhypertension(asperguidelines)inchildren.			Y	Lecture/SGD	Written/ vivavoce			
Topic:Approachtoandrecognitionofachildwithpossible Rheumatologicproblem		**Numberofcompetencies:(3)**				**Numberofproceduresthatrequirecertification:(NIL)**			
PE 22.1	**EnumeratethecommonRheumatologicalproblemsinchildren.Discuss the clinical approach to recognitionandreferralofachildwithRheumatologicalproblem**			**Y**	**Lecture/SGD**	**Written / vivavoce**			
22.1.1	EnumeratethecommonRheumatologicalproblemsinchildren.			Y	Lecture/SGD	Written/vivavoce			
22.1.2	Describetheclinicalapproachtoachild withRheumatologicalproblem.			Y	Lecture/SGD	Written/vivavoce			
22.1.3	Enumeratetheindicationsfor referralofachildwithRheumatologicalproblem.			Y	Lecture/SGD	Written/vivavoce			
PE 22.2	**CounselapatientwithChronicillness**			**N**	**Bedsideclinic/skill lab**	**Logbook**			
22.2.1	Counselachild /parentsofachildwithachronicillness.			N	Bedsideclinic/skill lab	Logbook			
PE 22.3	**Describethediagnosisandmanagementofcommon vasculitic disorders including Henoch SchonleinPurpura, KawasakiDisease, SLE, JIA**			**N**	**Lecture/SGD**	**Written / vivavoce**			
22.3.1	Listthecommoncausesofvasculitisinchildren.			Y	Lecture/SGD	Written/Viva voce			
22.3.2	EnumerateClinical featuressuggestiveofvasculitisinachild			N	Lecture/SGD	Written/viva voce			
22.3.3.	ListtheclinicalfeaturesofHenochSchonleinPurpura(HSP).			N	Lecture/SGD	Written/vivavoce			
22.3.4	ListthediagnosticcriteriaofHSP.			N	Lecture/SGD	Written/vivavoce			
22.3.5	OutlinethemanagementofachildwithHSP.			N	Lecture/SGD	Written/viva voce			
22.3.6	Enumeratetheclinical featuresofKawasakidisease(KD).			N	Lecture/SGD	Written/vivavoce			

22.3.7	DefinediagnosticcriteriaofKawasakidisease.			N	Lecture/SGD	Written/vivavoce			
22.3.8	OutlinethemanagementofachildwithKawasaki Disease.			N	Lecture/SGD	Written/viva voce			
22.3.9	DefinediagnosticcriteriaofSLE.			N	Lecture/SGD	Written/vivavoce			
22.3.10	OutlinethemanagementofachildwithSLE.			N	Lecture/SGD	Written/viva voce			
22.3.11	DefinediagnosticcriteriaofJIA.			N	Lecture/SGD	Written/vivavoce			
22.3.12	OutlinethemanagementofachildwithJIA.			N	Lecture/SGD	Written/vivavoce			
Topic:Cardiovascularsystem-HeartDiseases		**Numberofcompetencies:(18)**				**Numberofproceduresthatrequirecertification:(NIL)**			
PE 23.1	**Discuss the Hemodynamic changes, clinicalpresentation, complications and management ofacyanoticHeartDiseases-VSD,ASDandPDA**			**Y**	**Lecture/SGD**	**Written/ Vivavoce**		**Physio,Path**	
23.1.1	Explain and illustrate diagrammatically the hemodynamicchangesseeninacyanoticcongenitalheart diseases viz VSD,ASD,PDA.			Y	Lecture/SGD	Written/Viva Voce		Physio,Path	
23.1.2	Describethesignsandsymptoms,timingofpresentationofabovecyanotic congenitalheart diseases.			Y	Lecture/SGD	Written/Viva Voce			
23.1.3	Enumeratethecomplicationsofacyanoticcongenitalheartdiseases.			Y	Lecture/SGD	Written/Viva Voce			
23.1.4	Outlinethemedicalmanagementofcongenitalacyanotic heartdiseaseasabove.			Y	Lecture/SGD	Written/Viva Voce			
23.1.5	Enumeratethesurgicaltreatments forVSA,ASD,PDA.			Y	Lecture/SGD	Written/Viva Voce			
PE 23.2	**Discuss the Hemodynamic changes, clinicalpresentation,complicationsandmanagementof CyanoticHeartDiseases–FallotPhysiology**			**Y**	**Lecture/SGD**	**Written/Viva Voce**		**Physio,Path**	
23.2.1	Enumeratetheessentialcomponentsof FallotPhysiologyand ListthecardiacconditionswiththeFallotPhysiology.			Y	Lecture/SGD	Written/Viva Voce			
23.2.2	Describe and illustrate diagrammatically the hemodynamicchangesseeninFallotPhysiologycyanoticcongenitalheartdiseases.			Y	Lecture/SGD	Written/Viva Voce			

23.2.3	ExplaintheclinicalpresentationandcomplicationsofFallotPhysiologycyanoticcongenitalheart diseases.			Y	Lecture/SGD	Written/Viva Voce			
23.2.5	Describeacyanoticspellandthepharmacologicalandnon-pharmacologicalmanagementofcyanoticspells.			Y	Lecture/SGD	Written/Viva Voce			
23.2.6	DescribethetreatmentoptionsforlesionswithFallotPhysiology.			Y	Lecture/SGD	Written/Viva Voce			
PE 23.3	**Discusstheetiopathogenesis,clinicalpresentationandmanagementofcardiacfailureininfantandchildren**			**Y**	**Lecture/SGD**	**Written/Viva Voce**		**Physio,Path**	
23.3.1	Enumeratecausesofcongestiveheartfailurein childrenaspertheageofpresentation.			Y	Lecture/SGD	Written/Viva Voce			
23.3.2	Describethehemodynamicchangesincongestiveheartfailure.			Y	Lecture/SGD	Written/Viva Voce			
23.3.3	Describethesignsandsymptomsofleft side,rightsideandcombinedcongestiveheart failure.			Y	Lecture/SGD	Written/Viva Voce			
23.3.4	Enumeratethevariousmanagementoptionsavailablefor congestiveheartfailure.			Y	Lecture/SGD	Written/Viva Voce			
23.3.5	Explaintheroleofdiuretics,inotropes,inodilators,andafterload reducingagentsintreatmentof CCF.			Y	Lecture/SGD	Written/Viva Voce			
PE 23.4	**Discusstheetiopathogenesis,clinicalpresentationandmanagementofAcuteRheumaticFeverinchildren**			**Y**	**Lecture/SGD**	**Written/Viva Voce**		**Physio,Path**	
23.4.1	ExplaintheetiopathogenesisofAcuterheumaticfever.			Y	Lecture/SGD	Written/Viva Voce			
23.4.2	Describethemodified JonescriteriatodiagnosetheAcuterheumaticfever.			Y	Lecture/SGD	Written/Viva Voce			
23.4.3	DescribelaboratorychangesinAcuterheumaticfever.			Y	Lecture/SGD	Written/Viva Voce			
PE 23.5	**Discusstheclinicalfeatures,complications, diagnosis,managementand preventionofAcuteRheumaticFever**			**Y**	**Lecture/SGD**	**Written/Viva Voce**		**Physio, Path**	
23.5.1	Describetheclinicalfeaturesofacuterheumatic fever.			Y	Lecture/SGD	Written/Viva Voce			
23.5.2	Listthelong-termcomplicationsofAcuteRheumaticfever.			Y	Lecture/SGD	Written/Viva Voce			

23.5.3	Outlinethemedical managementofacuterheumatic fever.			Y	Lecture/SGD	Written/Viva Voce			
23.5.4	Discussstrategiesfortheprimaryand secondaryprevention oftheacuterheumatic fever.			Y	Lecture/SGD	Written/Viva Voce			
PE 23.6	**Discusstheetiopathogenesis,clinicalfeaturesand managementofInfectiveendocarditisinchildren**			**Y**	**Lecture/SGD**	**Written/Viva Voce**		**Physio,Path, Micro**	
23.6.1	Enumerate the common predisposing conditions andetiopathogenesisofInfectiveendocarditisinchildren			Y	Lecture/SGD	Written/Viva Voce			
23.6.2	ListcriteriausedtodiagnoseInfectiveendocarditis.			Y	Lecture/SGD	Written/Viva Voce			
23.6.3	Describetheclinicalfeaturesofinfectiveendocarditisinchil dren.			Y	Lecture/SGD	Written/Viva Voce			
23.6.4	Outlinethemanagementofinfectiveendocarditisinchildren.			Y	Lecture/SGD	Written /Vivavoce			
23.6.5	Statethelong-termcomplicationsofInfectiveendocarditis.			Y	Lecture/SGD	Written/Viva Voce			
23.6.6	Enumeratetheconditionsrequiringprophylaxisforinfectiveendoc arditis.			Y	Lecture/SGD	Written/Viva Voce			
PE 23.7	**Elicitappropriatehistoryforacardiacdisease,analyzethe symptoms e.g. breathlessness, chest pain,tachycardia, feeding difficulty, failing to thrive,reducedurinaryoutput,swelling, syncope,cyanotic spells,Suckrestcycle,frontalswellingininfants.**			**Y**	**Bedside,Skillslab**	**Bed side/skillasse ssment**			
23.7.1	Elicitappropriatehistoryrelevanttothecardiacdiseaseandanal yze the importance of symptoms e.g. breathlessness,chest pain, tachycardia, feeding difficulty, failing to thrive,reducedurinaryoutput,swelling,syncope,cyanoticspell s, Suckrestcycle,frontalswellingininfants.			Y	Bedside,skillslab	Bed side/skillasse ssment			
23.7.2	Documentandpresentthehistorytakeninappropriatema nner.			Y	Bedside,skillslab	Bedside/skill assessment			
PE 23.8	**Identify external markers of a cardiac disease e.g.Cyanosis,Clubbing,dependentedema,dentalcaries arthritis, erythema rash, chorea, subcutaneousnodules,Oslernode,Janewaylesionsand document**			**Y**	**Bedside,SkillsLab**	**Bed side/skillasse ssment**			

23.8.1	Identify and document the external markers of heartdisease in general physical examination e.g. Cyanosis,Clubbing, dependent edema, dental caries, arthritis,erythemarash,chorea,subcutaneousnodules, Osler node, Janewaylesions.			Y	Bedside, skills lab	Bed side/skillasse ssment			
PE 23.9	**Recordpulse,bloodpressure,temperatureand respiratoryrateandinterpretaspertheage**			**Y**	**Bedside,Skillslab**	**Bedside/skill assessment**			
23.9.1	Recordanddemonstratevariousparametersofthepulse.			Y	Bedside,Skillslab	OSCE/bedside assessment			
23.9.2	Recordcorrectlythesystolicanddiastolicbloodpressureusi ngappropriateequipment.			Y	Bedside/skilllab	OSCE /bedsideasses sment			
23.9.3	UsetheagespecificnomogramstointerprettheBPreadings.			Y	Bedside,Skillslab	OSCE/bedside assessment			
23.9.4	Measurebodytemperatureusingathermometer.			Y	Bedside,Skillslab	OSCE /bedsideasses sment			
23.9.5	Countttherespiratoryrateandinterpretaspertheage.			Y	Bedside,Skillslab	OSCE /bedsideasses sment			
PE 23.10	**Perform independently examination of thecardiovascular system – look for precordial bulge,pulsations in the precordium, JVP and its significancein children and infants, relevance of percussion inPediatricexamination,Auscultationandothersystem examinationanddocument**			**Y**	**Bedside,Skillslab**	**Bed side/skillasse ssment**			
23.10.1	PerformindependentCVSexaminationlookingforprecordialbulg eandpulsations,auscultationofareasofprecordium.			Y	Bedside,Skillslab	Bedside,OSCE			
23.10.2	LookforandmeasureJVP.			Y	Bedside,Skillslab	bedside assessment			
23.10.3	Describerelevanceofpercussioninthecardiovascularex amination.			Y	SGD	Viva			
23.10.4	Documentthefindingsofthecardiovascularandothersystemex am.			Y	Bedside,Skillslab	Logbook			

PE 23.11	**Develop a treatment plan and prescribe appropriatedrugsincludingfluidsincardiacdiseases,anti -failure drugs,andinotropicagents**			**Y**	**Bedside,Skillslab**	**written/Viva voce**			
23.11.1	Makeanappropriatetreatmentplanforachildwithcardiacdiseaseincludingantifailure drugs,inotropsandfluids.			Y	Bedside class/papercases	OSCE/Logbook			
PE 23.12	**InterpretachestXrayandrecognizeCardiomegaly**			**Y**	**Bedside,Skillslab**	**Logbookentry**		**RadioD**	
23.12.1	Calculatecardiothoracicratioandinterpretaccordingtoage.			Y	Bedside,Skillslab	vivavoce,OSCE		**RadioD**	
23.12.2	StatefeaturesofcardiomegalyonthechestX-ray.			Y	Bedside,Skillslab	OSCE,vivavoce		**RadioD**	
23.12.3	Identifythepathognomonicradiologicalfeaturesofvariousco ngenitalheart diseaseson chest xray.			Y	Bedside,Skillslab	OSCE,vivavoce			
23.12.4	IdentifypleuraleffusionandthepulmonaryedemaonachestX-ray.			Y	Bedside,Skillslab	OSCE,vivavoce			
PE 23.13	**ChooseandInterpretbloodreportsinCardiacillness**			**Y**	**Bedside,SGD**	**Logbookentry**			
23.13.1	Listbloodtestsrelevantforthecardiacdiseases.			Y	Bedside,Skillslab	vivavoce			
23.13.2	Interpretthebloodtestsreportsforthecardiacdisease.			Y	Bedside,Skillslab	vivavoce,OSCE			
PE 23.14	**InterpretPediatricECG**			**Y**	**Bedside,Skillslab**	**Logbookentry**			
23.14.2	InterpretfewcommonECGabnormalitiesinchildren.			Y	SGD,skilllab	OSCE,vivavoce			
PE 23.15	**UsetheECHOreportsinmanagementofcases**			**Y**	**Bedside**	**Logbookentry**		**Cardio**	
23.15.1	UsetheECHOreportsinmanagementofcases.			Y	Bedside,Skillslab	Logbookentry			
PE 23.16	**DiscusstheindicationsandlimitationsofCardiac catheterization**			**Y**	**Lecture/ SGD**	**Written/Viva Voce**			
23.16.1	EnumeratetheindicationsofCardiaccatheterization.			**Y**	Lecture/SGD	Written/ VivaVoce			
23.16.2	ListthelimitationsofCardiaccatheterization.			**Y**	Lecture/SGD	Written/Viva Voce			
PE 23.17	**EnumeratesomecommoncardiacsurgerieslikeBT shunt,PottsandWaterston'sandcorrectivesurgeries**			**Y**	**Lecture/ SGD**	**Written/Viva Voce**			
23.17.1	Enumeratecommoncardiacsurgeriesandtheirindicationsinchildren.			Y	Lecture/SGD	Written/ VivaVoce			

PE23.18	**Demonstrateempathywhiledealingwithchildrenwithcardiac diseasesineverypatientencounter**			**Y**	**SGD, Bedside,Skills lab**	**Document inLogbook,Directobservation, OSCE**		**AETCOM**	
23.18.1	Demonstrateempathywhiledealingwithchildrenwithcardiacdiseasesineverypatient encounter.			Y	Bedside,Skillslab	Directobservation, OSCE		AETCOM	
23.18.2	Demonstrateempathywhiledealingwithparentsofchildrenwithcardiac diseasesin everycontact.			Y	Bedside,Skillslab	Directobservation,OSCE		AETCOM	
Topic:DiarrhoealdiseasesandDehydration		**Numberofcompetencies:(17)**				**Numberofproceduresthatrequirecertification:(03)**			
PE 24.1	**Discusstheetiopathogenesis,classification,clinical presentation and management of diarrheal diseases inchildren.**			**Y**	**Lecture/ SGD**	**Written / vivavoce**		**Path Micro**	
24.1.1	ExplainetiopathogenesisofDiarrhealdiseasesinchildren.			Y	Lecture/SGD	Written/ VivaVoce		Path Micro	
24.1.2	ClassifyDiarrhealdiseasebasedondurationandetiology.			Y	Lecture/SGD	Written/Viva Voce		Path Micro	
24.1.3	DescribesymptomsandsignsofDiarrhealdiseaseinchildren.			Y	Lecture/SGD	Written/ VivaVoce			
24.1.4	EnumerateinvestigationsrequiredforDiarrhealdiseaseinchildren.			Y	Lecture/SGD	Written/ VivaVoce		Path Micro	
24.1.5	OutlinethetreatmentplanofDiarrhealdiseaseinchildren.			Y	Lecture/SGD	Written/Viva Voce			
PE 24.2	**Discusstheclassificationandclinicalpresentationofvarioustypesofdiarrhealdehydration**			**Y**	**Lecture/SGD**	**Written/viva voce**		**Path, Micro**	
24.2.1	Enumerateallthesignsandsymptomsofdehydrationinchildren.			Y	Lecture/Smallgroup activity	Written/ VivaVoce			
24.2.2	ClassifydehydrationasperWHOguidelines.			Y	Lecture/SGD	Written/Viva Voce			
24.2.3	Enumeratetheclinicalfeaturesofdehydrationofdifferentseverity.			Y	Lecture/SGD	Written/Viva Voce			

PE 24.3	**DiscussthephysiologicalbasisofORT,typesofORSand the composition of various types of ORS inchildren**			**Y**	**Lecture/ SGD**	**Written/ vivavoce**			
24.3.1	ExplainpathophysiologyoffluidandelectrolytelossinDiarrheal diseases.			Y	Lecture/SGD	Written/Viva voce			
24.3.2	StatethebasisoffluidandelectrolytereplacementinDiarrheald iseases.			Y	Lecture/SGD	Written/Viva voce			
24.3.3	RecallcompositionofWHOstandardORS.			Y	Lecture/SGD	Written/Viva voce			
24.3.4	RecallcompositionofothertypeofORS vizResoMal,Low osmolarityORS.			Y	Lecture/SGD	Written/Viva voce			
PE 24.4	**Discussthetypesoffluidusedin Pediatricdiarrheal diseasesandtheircomposition**			**Y**	**Lecture/SGD**	**Written/viva voce**			
24.4.1	Enumeratethetypesoffluidsusedinmanagementofdehydrati oninchildren.			Y	LectureSGD	Written/Vivav oce			
24.4.2	DescribethecompositionofRingerlactateandNormalsaline andrationaleoftheirusein correctionofdehydration.			Y	LectureSGD	Written/Viva voce			
PE 24.5	**Discuss the role of antibiotics, antispasmodics, anti-secretorydrugs,probiotics, anti-emeticsinacute diarrhealdiseases**			**Y**	**Lecture/SGD**	**Written / vivavoce**		**Pharm, Micro**	
24.5.1	Describeharmfulpracticesintreatmentofdiarrhealdiseasesin children			Y	LectureSGD	Written/Vivav oce			
24.5.2	Enumeratetheindicationsofantibiotictherapyindiarrheal diseasesinchildren			Y	LectureSGD	Written/Viva voce			
24.5.3	Describerole,dosageanddurationofZinctherapyinDiarrhealdi seasesinchildren			Y	LectureSGD	Written/Vivav oce			
24.5.4	Interpret selective role of probiotics, anti-secretory drugs,antispasmodicsandantiemeticsinacutediarrhealdisea ses.			Y	LectureSGD	Written/Vivav oce			
PE 24.6	**Discussthecauses,clinicalpresentationand managementofpersistentdiarrheainchildren**			**Y**	**Lecture/SGD**	**Written/viva voce**	**Nil**	**Micro**	
24.6.1	DefinePersistentdiarrheainchildren.			Y	LectureSGD	Writtenand vivavoce			

24.6.2	Enumeratecausesofpersistentdiarrheainchildren.			Y	SGD	Written andvivavoce			
24.6.3	Describeclinicalpresentationinchildwithpersistentdiarrhea.			Y	LectureSGD	Written andvivavoce			
24.6.4	Listinvestigationsinpersistentdiarrhea.			Y	LectureSGD	Written andvivavoce			
24.6.5	Outlinethetreatmentplaninpersistentdiarrhea.			Y	LectureSGD	Writtenand vivavoce			
PE 24.7	**Discussthecauses,clinicalpresentationand managementofchronicdiarrheainchildren.**			**Y**	**Lecture/SGD**	**Written/ via voce**			
24.7.1.	Definechronicdiarrheainchildren.			Y	Lecture/SGD	Written/viva			
24.7.2	Enumeratethecommoncausesofchronicdiarrheainchildren.			Y	Lecture/SGD	Written andvivavoce			
24.7.3	Describesymptomsandsignsofchronicdiarrhea.			Y	Lecture/SGD	Writtenand vivavoce			
24.7.4	Enumerateinvestigationsfor chronicdiarrhea.			Y	Lecture/SGD	Written andvivavoce			
24.7.5	Outlinetreatmentofchronicdiarrhea.			Y	Lecture/SGD	Written andvivavoce			
24.7.6	Identifyneedofreferralinacaseofchronicdiarrhea.			Y	Lecture/SGD	Writtenand vivavoce			
PE 24.8	**Discussthecauses,clinicalpresentationand managementofdysenteryinchildren**			**Y**	**Lecture/SGD**	**Written/viva voce**	**Nil**	**Pharm, Micro**	
24.8.1	Definedysenteryinchildren.			Y	Lecture/SGD	Written, Vivavoce			
24.8.2	Enumeratetheetiologicalagentscausingdysenteryin children.			Y	Lecture/SGD	Written/viva		Micro	
24.8.3	Describesymptomsandsignsofdysenteryinchildren.			Y	Lecture/SGD	Written, Vivavoce			
24.8.4	Outlinetheantibiotictherapyinchildrenwithdysentery.			Y	Lecture/SGD	Written/viva		Pharm	

PE 24.9	**Elicit, document and present history pertaining todiarrhealdiseases**			**Y**	**Bedside,Skilllab**	**Clinicalcase/ OSCE/skilla ssessment**			
24.9.1	Elicithistoryfordiarrhealdiseasesinchildren.			Y	Bedside,Skilllab	Clinical case/OSCE/s kill assessment			
24.9.2	Documentgatheredinformationinhistorysheet.			Y	Bedside,Skilllab	clinicalcase/ skill assessment			
24.9.3	Presentthehistorypertainingtodiarrhealdiseases.			Y	Bedside,Skilllab	Clinicalcase, skill assessment,			
PE 24.10	**Assessforsignsofdehydration,documentandpresent**			**Y**	**Bedside,skilllab**	**Skill Assessment**			
24.10.1	Assessclinicalsignsofdehydration.			Y	Bedside,skilllab	SkillAssessment			
24.10.2	Correlateclinicalsignstoseverityofdehydration.			Y	Bedside,skilllab	SkillAssessment			
24.10.3	Documentandpresentthesignsofdehydrationpertainingto diarrhealdiseases.			Y	Bedside,skilllab	SkillAssessment			
PE 24.11	**ApplytheIMNCIguidelinesinriskstratificationof childrenwithdiarrhealdehydrationandrefer**			**Y**	**Bedside/skilllab**	**Documentin Logbook**			
24.11.1	Applyriskstratificationofchildrenwithdiarrhealdehydrationaspe r IMNCIguidelines.			Y	Bedside/skilllab	Document inLogbook			
24.11.2	Identifyneedforreferralinacaseofdiarrhealdehydrationbased on riskstratification as perIMNCI.			Y	Bedside,Skilllab	Document inLogbook			
PE24.12.1	**Performandinterpretstoolexaminationincluding HangingDrop**			**N**	**Bedside,Skilllab**	**Documentin Logbook**		**Micro**	
24.12.1	Prepareslideforstoolexaminationunder microscope.			N	Bedside,Skilllab	Documentin Logbook			
24.12.2	Correctlyidentifypathogenaftermicroscopicexaminationofstool .			N	Bedside,Skilllab	Document inLogbook			
24.12.3	Correctlyperformhangingdroppreparationfromstool samplegiven.			N	Bedside,Skilllab	Documentin Logbook			
PE 24.13	**InterpretRFTandelectrolyte report**			**Y**	**Bedside/skilllab/ SGD**	**Documentin Logbook**			

24.13.1	Interpretthegivenreportsfor valuesofurea,creatinine,sodiumandpotassium.			Y	Bedside/skilllab/SGD	Document inLogbook			
PE 24.14	**PlanfluidmanagementaspertheWHOcriteria**			**Y**	**Bedside,Small groupactivity**	**Skilllab**			
24.14.1	Select appropriate type of fluid and Calculate amount, routeanddurationoftherapyoffluidtobegivenasperPlanA,fora given ageand weight ofa child.			Y	Bedside,Smallgroup activity	Skilllab			
24.14.2	Select appropriate type of fluid and Calculate amount, routeanddurationoftherapyoffluidtobegivenasperPlanB,for agivenageandweight ofa child.			Y	Bedside,Smallgroup activity	Skilllab			
24.14.3	SelectappropriatetypeoffluidandCalculateamount,routeanddurationoftherapyoffluidtobegivenasperPlan Cfor ageand weightofachild.			Y	Bedside,Smallgroup activity	Skilllab			
PE 24.15	**PerformNGtubeinsertioninamanikin**			**Y**	**DOAPsession**	**Documentin Logbook**	**2**		
24.15.1	Identifysizeofnasogastrictubeasperageof child.			Y	DOAPsession	Documentin Logbook	2		
24.15.2	DemonstratelandmarksformeasurementoflengthofNGtubeto beinserted on a manikin.			Y	DOAPsession	Document inLogbook	2		
24.15.3	CorrectlymeasurethelengthofNGtubetobeinserted.			Y	DOAPsession	Document inLogbook	2		
24.15.4	Insertthetubeandcheckits position.			Y	DOAPsession	Documentin Logbook	2		
24.15.5	DemonstratesallthestepstocheckcorrectpositionofNGtubeand fixNGtube.			Y	DOAPsession	Document inLogbook	2		
PE 24.16	**PerformIVcannulationinamodel**			**Y**	**DOAPsession**	**Documentin Logbook**	**2**		
24.16.1	IdentifysizeofIVcannulaasperageofchild.			Y	DOAPsession	Documentin Logbook	2		
24.16.2	Demonstrate all steps of infection control policy likehandwashing,wearinggloves,properfillingoffluidinsyringe.			Y	DOAPsession	Document inLogbook	2		
24,16.3	DemonstratecommonsitesforIVcannulationinchildrenand preparationofsite.			Y	DOAPsession	Documentin Logbook	2		
24.16.4	CorrectlyinsertIVcannulainamodelandlookforfreeflowofblood.			Y	DOAPsession	Document inLogbook	2		

24.16.5	ProperlyfixIVcannulaandcorrectlydemonstratedisposalofbiomedicalwaste.			Y	DOAPsession	Document inLogbook	2		
PE 24.17	**PerformInterosseousinsertionmodel**			**Y**	**DOAPsession**	**Documentin Logbook**	**2**		
24.17.1	Identifysiteforintraosseousinsertioninchildrenbasedonland marks.			Y	DOAPsession	Document inLogbook	2		
24.17.2	Demonstrateallstepsofinfectioncontrol.			Y	DOAPsession	Documentin Logbook	2		
24.17.3	InserttheIntraosseouscannulaanddemonstratehowtocheckit sproper insertioninmodel.			Y	DOAPsession	Document inLogbook	2		
24.17.4	FixIntraosseouscannulaandcorrectlydemonstratedisposal ofbiomedical waste.			Y	DOAPsession	Documentin Logbook	2		
Topic:Malabsorption		**Numberofcompetencies:(1)**				**Numberofproceduresthatrequirecertification:(NIL)**			
PE25.1	**Discuss the etiopathogenesis, clinical presentation andmanagement of Malabsorption in Children and itscausesincludingceliacdisease.**			**N**	**Lecture/SGD**	**Written/ vivavoce**		**Path**	
25.1.1	Definemalabsorptioninchildren.			N	Lecture/SGD	Written/Viva Voce			
25.1.2	Enumeratecausesofmalabsorptionin children.			N	Lecture/SGD	Written/ VivaVoce			
25.1.3	Describeetiopathogenesisofmalabsorptioninchildren.			N	Lecture/SGD	Written/ VivaVoce			
25.1.4	Describecommonsymptomsandsignsofmalabsorptionin children.			N	Lecture/SGD	Written/Viva Voce			
25.1.5	Describepresentationsofceliacdiseaseinchildren.			N	Lecture/SGD	Written/ VivaVoce			
25.1.6	Enumerateinvestigationsincaseofceliacdisease.			N	Lecture/SGD	Written/ VivaVoce			
25.1.7	Enumeratestepsoftreatmentplanin caseofceliacdisease.			N	Lecture/SGD	Written/Viva Voce			
Topic:Acuteandchronicliverdisorders		**Numberofcompetencies:(13)**				**Numberofproceduresthatrequirecertification:(NIL)**			
PE26.1	**Discuss the etiopathogenesis, clinical features andmanagementofacutehepatitis inchildren**			**Y**	**Lecture/ SGD**	**Written/ VivaVoce**		**Path Micro**	
26.1.1	DefineAcuteHepatitisinchildren.			Y	Lecture/SGD	Written/Viva Voce			

26.1.2	EnumeratecommoncausesofAcuteHepatitisinchildren.			Y	Lecture/SGD	Written/ VivaVoce			
26.1.3	DescribepathogenesisofAcuteHepatitisinchildren.			Y	Lecture/SGD	Written/Viva Voce			
26.1.4	DescribetheclinicalfeaturesandcomplicationsofAcuteHepatitis.			Y	Lecture/SGD	Written/ VivaVoce			
26.1.5	Listtheinvestigationsrequiredfordiagnosisof Acute Hepatitis.			Y	Lecture/SGD	Written/Viva Voce			
26.1.6	Describethemanagement andprevention ofAcuteHepatitis.			Y	Lecture/SGD	Written/ VivaVoce			
PE 26.2	**Discusstheetiopathogenesis,clinicalfeaturesand managementofFulminantHepaticFailureinchildren**			**Y**	**Lecture/ SGD**	**Written/Viva Voce**		**Path Micro**	
26.2.1	DefineFulminantHepaticFailureinChildren.			Y	Lecture/SGD	Written/Viva Voce			
26.2.2	Enumeratethefactorswhich precipitateFulminantHepatic Failure.			Y	Lecture/SGD	Written/Viva Voce			
26.2.3	DescribethepathogenesisofFulminantHepaticFailure.			Y	Lecture/SGD	Written/Viva Voce			
26.2.4	DescribetheclinicalfeaturesofFulminantHepaticFailure.			Y	Lecture/SGD	Written/Viva Voce			
26.2.5	EnumeratetheinvestigationsforachildwithFulminant HepaticFailure.			Y	Lecture/Smallgroup activity	Written/Viva Voce			
26.2.6	DescribethemanagementofFulminantHepaticFailure.			Y	Lecture/Smallgroup activity	Written/Viva Voce			
PE 26.3	**Discusstheetiopathogenesis,clinicalfeaturesand managementofchronicliverdiseasesinchildren.**			**Y**	**Lecture/ SGD**	**Written/Viva voce**		**Path Micro**	
26.3.1	DefineChronicLiverDiseaseinchildren.			Y	Lecture/SGD	Written/Viva voce			
26.3.2	Enumeratethecausesofchronicliverdiseasesinchildren.			Y	Lecture/SGD	Written/Viva voce			
26.3.3	DiscussthepathogenesisofcommonchronicLiverDiseases.			Y	Lecture/SGD	Written/Viva voce			
26.3.4	Describetheclinicalfeaturesofchronicliverdisease.			Y	Lecture/SGD	Written/Viva voce			

26.3.5	EnumeratetheinvestigationsfordiagnosisofChronicLiverDisease.			Y	Lecture/SGD	Written/Viva voce			
26.3.6	DescribethemanagementofChronicliverdisease.			Y	Lecture/SGD	Written/Viva voce			
PE 26.4	**Discusstheetiopathogenesis,clinicalfeaturesandmanagementofPortalHypertensioninchildren**			**Y**	**Lecture/SGD**	**Written/Viva voce**		**Path**	
26.4.1	DefinePortalHypertensioninchildren.			Y	Lecture/SGD	Written/Vivavoce			
26.4.2	Classifydifferenttypesofportalhypertension.			Y	Lecture/SGD	Written/Viva voce			
26.4.3	Enumeratethecausesofportalhypertension.			Y	Lecture/SGD	Written/Vivavoce			
26.4.4	Explainthepathogenesisofportalhypertension.			Y	Lecture/SGD	Written/Vivavoce			
26.4.5	Describetheclinicalfeaturesofportalhypertension.			Y	Lecture/SGD	Written/Viva voce			
26.4.6	Outlinethemanagementofportalhypertension.			Y	Lecture/SGD	Written/Vivavoce			
PE 26.5	**Elicit document and present the history related todiseasesofGastrointestinalsystem**			**Y**	**Bedside,SkillsLab**	**Skillsstation/bedside/OSCE**			
26.5.1	ElicitthehistoryfordiseasesofGastrointestinalsystem.			Y	Bedside,SkillsLab	Skillsstation/bedside /OSCE			
26.5.2	Documentthehistory.			Y	Bedside,SkillsLab	Skillsstation			
26.5.3	PresentthehistoryrelatedtoGastrointestinalsystem.			Y	Bedside,SkillsLab	Skillsstation/ bedside			
PE 26.6	**IdentifyexternalmarkersforGIandLiverdisorders e.g. Jaundice, Pallor, Gynecomastia, Spider angioma,Palmar erythema, Icthyosis, Caput medusa, Clubbing,Failingtothrive, VitaminAandDdeficiency**			**Y**	**Bedside,SkillsLab**	**SkillAssessment/OSCE**			
26.6.1	Detect Jaundice, pallor, Gynecomastia, Spider angioma,clubbing,Caputmedusa,Ichthyosisandfailuretothrive,signs ofvitamindeficiency.			Y	Bedside,SkillsLab	SkillAssessment/OSCE			

PE26.7	**Performexaminationoftheabdomen,demonstrate organomegaly,ascitesetc.**			Y	Bedside clinic,Skills Lab	Skill Assessment			
26.7.1	Performanexaminationoftheabdomeninchildrenofdiff erentages.			Y	Bedsideclinic,SkillsLab	SkillAssessment			
26.7.2	Detectorganomegalyonabdominalexaminationgiving detailsoftheaffectedorgan/s.			Y	Bedsideclinic,Skills Lab	Bedside/skill lab/OSCE			
26.7.3	Examineforascitesinchildren.			Y	Bedsideclinic,SkillsLab	SkillAssessment			
26.7.4	Examineforotherpalpablemassesinabdomen.			Y	Bedsideclinic,Skills Lab	SkillAssessment			
PE 26.8	**Analyzesymptomsandinterpretphysicalsignsto makeaprovisional/differentialdiagnosis**			**Y**	**Bedsideclinic, SkillsLab**	**Skill Assessment**			
26.8.1	Analyzethesymptomsinachildwithgastrointestinaldis order.			Y	Bedside clinic,SkillsLab	SkillAssessment			
26.8.2	Interpretthephysicalsignsinachildwithgastrointestinaldiso rder.			Y	Bedside clinic,SkillsLab	SkillAssessment			
26.8.3	Formulateaprovisionalanddifferentialdiagnosisrelatedto clinicalpresentation.			Y	Bedsideclinic,Skills Lab	SkillAssessment			
PE26.9	**InterpretLiverFunctionTests,viralmarkers,Ultra sonogramreport**			**Y**	**Bedside/skilllab**	**Bedside/ OSCE**		**Path Biochemistry**	
26.9.1	Interpretthegivenreportsofliver functiontests.			Y	Bedside/skilllab	Bedside/OSCE			
26.9.2	Interpretheviralmarkersrelatedtoviralhepatitis.			Y	Bedside/skilllab	Bedside/OSCE			
26.9.3	Interpretthegivenreportofabdominal/liverUlt rasonography.			Y	Bedsideclinic,SkillsLab	SkillAssessment			
PE 26.10	**Demonstratethetechniqueofliverbiopsyina PerformLiverBiopsyinasimulatedenvironment**			**Y**	**DOAP**	**Documentin Logbook**			
26.10.1	Demonstratethetechniqueofliverbiopsyinasimulated environment.			Y	DOAP	Documentin Logbook			
PE 26.11	**EnumeratetheindicationsforUpperGIendoscopy**			**Y**	**Lecture/SGD**	**Written,Viva voce**			
26.11.1	Enumeratetheindicationsof upperGIendoscopyin children.			Y	Lecture/SGD	Written, Vivavoce			

PE26.12	**DiscussthepreventionofHepB infection– Universal precautionsandImmunization**			**Y**	**Lecture/SGD**	**Written,Viva voce**		**Micro**	
26.12.1	Enumeratedifferentpreventivemeasuresagainsthepatitis Bvirusinfection.			Y	Lecture/SGD	Written, Vivavoce			
26.12.2	Listuniversalprecautions.			Y	Lecture/SGD	Written,Viva voce			
26.12.3	DescribetheimmunizationscheduleofHepatitisB.			Y	Lecture/SGD	Written/Viva voce			
PE 26.13	**Counselandeducatepatientsandtheirfamily appropriatelyonliverdiseases**			**Y**	**Bedsideclinic, SkillsLab**	**Documentin Logbook**			
26.13.1	Counselthefamily onliverdiseasein thechild.			Y	Bedsideclinic SkillsLab	Documentin Logbook			
26.13.2	Educatethefamilyaboutpreventionofliverdisease.			Y	Bedsideclinic,SkillsLab	Documentin Logbook			
Topic:PediatricEmergencies–CommonPediatric Emergencies		**Numberofcompetencies:(35)**				**Numberofproceduresthatrequirecertification:(10)**			
PE 27.1	**Listthecommoncausesofmorbidityandmortalityinthe under fivechildren**			**Y**	**Lecture/SGD**	**Written/viva-voce**			
27.1.1	Enumeratethecommoncausesofmorbidityandmortalityin underfivechildren.			Y	Lecture/SGD	Written/viva			
PE 27.2	**Describetheetiopathogenesis,clinicalapproachand managementofcardiorespiratoryarrestinchildren**			**Y**	**Lecture/SGD**	**Written/Viva voce**			
27.2.1	Enumeratethecausesofcardiorespiratoryarrestinchildren.			Y	Lecture/SGD	Written/ Vivavoce			
27.2.2	Discussthepathogenesisofrespiratoryandcardiacfailure leadingtocardiorespiratoryarrest.			Y	Lecture/SGD	Written/Viva voce			
27.2.3	Describetheclinicalapproachtoachildincardiorespiratoryarrest.			Y	Lecture/SGD	Written/ Vivavoce			
27.2.4	Describethemanagementofachildincardiorespiratoryarrest.			Y	Lecture/SGD	Written/ Vivavoce			
PE 27.3	**Describetheetiopathogenesisofrespiratorydistress inchildren**			**Y**	**Lecture/SGD**	**Written/Viva voce**			
27.3.1	Enumeratethecausesofrespiratorydistressinchildrenof differentagegroups.			Y	Lecture/SGD	Written/Viva voce			

27.3.2	Explainthepathogenesisofrespiratorydistressinchildren.			Y	Lecture/SGD	Written/ Vivavoce			
PE 27.4	**Describetheclinicalapproachandmanagementof respiratorydistressinchildren**			**Y**	**Lecture/SGD**	**Written/Viva voce**			
27.4.1	Discusstheclinicalapproachbasedonhistory,examinationandi nvestigationalgorithmof childrenofdifferentages presentingwithrespiratorydistress.			Y	Lecture/SGD	Written/ Vivavoce			
27.4.2	Outlinethetreatmentinchildrenwithrespiratorydistress.			Y	Lecture/SGD	Written/ Vivavoce			
PE 27.5	**Describetheetiopathogenesis,clinicalapproachand managementofShockinchildren**			**Y**	**Lecture/SGD**	**Written/Viva voce**			
27.5.1	Defineshockincludingdifferenttypesofshock.			Y	Lecture/SGD	Written/Viva voce			
27.5.2	Enumeratethecausesleadingtodifferenttypesofshockvizhypo volemic,septicand cardiogenicshock.			Y	Lecture/SGD	Written/ Vivavoce			
27.5.3	Explainpathogenesisofdifferenttypesofshockinchildren.			Y	Lecture/SGD	Written/Viva voce			
27.5.4	Describeclinicalapproachtoidentifydifferenttypesofshock.			Y	Lecture/SGD	Written/ Vivavoce			
27.5.4	Outlineanalgorithmapproachtothemanagementofdiff erenttypesofshockin children.			Y	Lecture/SGD	Written/ Vivavoce			
PE 27.6	**Describetheetiopathogenesis,clinicalapproachand managementofStatusepilepticus**			**Y**	**Lecture/SGD**	**Written/ Viva voce**			
27.6.1	DefineStatusepilepticus.			Y	Lecture/SGD	Written/Viva voce			
27.6.2	Discussthepathogenesisofstatusepilepticusin children.			Y	Lecture/SGD	Written/ Vivavoce			
27.6.3	Discuss the underlying diagnosis based on clinical history,examinationandinvestigationalgorithminachildwithsta tus epilepticus.			Y	Lecture/SGD	Written/ Vivavoce			
27.6.4	Outlinethetreatmentalgorithmasperrecentguidelinesinachild with statusepilepticus.			Y	Lecture/SGD	Written/ Vivavoce			
PE 27.7	**Describetheetiopathogenesis,clinicalapproachand managementofanunconsciouschild**			**Y**	**Lecture,SGD**	**Written/Viva voce**			

PE27.7.1	Define differentlevelsofconsciousnessinchildren.			Y	Lecture/SGD	Written/Viva voce			
27.7.2	Enumeratethe causesofalteredsensorium/comain children.			Y	Lecture/SGD	Written/Viva voce			
27.7.3	Explainpathogenesisofalteredsensorium/coma.			Y	Lecture/SGD	Written/Viva voce			
27.7.4	Describetheclinicalapproachbasedonclinicalhistory, examinationina childwithaltered sensorium/coma.			Y	Lecture/SGD	Written/Viva voce			
27.7.5	Listtheinvestigationsasguided bytheclinical assessmentofthepatient.			Y	Lecture/SGD	Written/Viva voce			
27.7.4	Outline thetreatmentplanfor acomatose child.			Y	Lecture/SGD	Written/Viva voce			
PE 27.8	**Discussthecommontypes,clinicalpresentationsand managementofpoisoninginchildren**			**Y**	**Lecture,Small groupdiscussion**	**Written/Viva voce**			
27.8.1	Enumeratethecommonpoisoninginchildren.			Y	Lecture/SGD	Written/Viva voce			
27.8.1	Elaborateontheclinicalsignandsymptomsofcommon poisoninginchildren(kerosene,organophosphorus,p aracetamoland corrosive).			Y	Lecture/SGD	Written/ Vivavoce			
27.8.1	Discussthemanagementofcommonpoisoninginchildren (kerosene,organophosphorus,paracetamolandcorrosive).			Y	Lecture/SGD	Written/Viva voce			
PE 27.9	**Discussoxygentherapy,inPediatricemergenciesand modesofadministration**			**Y**	**Lecture/SGD**	**Written/Viva voce**			
27.9.1	Enumeratetheindicationsofoxygentherapyinpediatricemerg encies.			Y	Lecture/SGD	Written/ Vivavoce			
27.9.2	Describedifferentmodalitiesforoxygendelivery.			Y	Lecture/SGD	Written/ Vivavoce			
PE 27.10	**ObservethevariousmethodsofadministeringOxygen**			**Y**	**Demonstration**	**Documentin Logbook**			
27.10.1	Observedandnotedvariousmethodsofoxygendelivery.			Y	Demonstration Bedside	Document inLogbook			
27.10.2	Monitoroxygen deliveryinapatient.			Y	Demonstration Bedside	Document inLogbook			

PE 27.11	**Explaintheneedandprocessoftriageofsickchildren broughttohealthfacility**			**Y**	**Lecture,SGD**	**Written/Viva voce**			
27.11.1	Discussttheneedoftriageofsickchildespeciallyinresourcelimitedsetting.			Y	Lecture,SGD	Written/ Vivavoce			
27.11.2	Explaintheprocessoftriageofsickchildren.			Y	Lecture,SGD	Written/Viva voce			
PE 27.12	**Enumerateemergencysignsandprioritysigns**			**Y**	**Lecture,SGD**	**Written/Viva voce**			
27.12.1	Enumeratevariousemergencyandprioritysignsinasickchild.			Y	Lecture,SGD,	Written/ Vivavoce			
PE 27.13	**Listthesequentialapproachof assessmentof emergencyandprioritysigns**			**Y**	**Lecture,SGD**	**Written/Viva voce**			
27.13.1	Discuss the systematic approach for assessing a sick childbasedon emergencyandprioritysignsasperWHO–ETAT guidelines.			Y	Lecture,SGD	Written/ Vivavoce			
PE 27.14	**Assessemergencysignsandprioritize**			**Y**	**DOAPsession, Skills lab**	**Skills Assessment**			
27.14.1	Assessandrecognize emergencysignsinasickchild andprioritizetreatment.			Y	Bedside,skilllab	Skillassessment			
PE 27.15	**Assessairwayandbreathing:recognizesignsofsevere respiratorydistress.Checkforcyanosis,severechestindrawing,grunting**			**Y**	**DOAPsession, Skills lab**	**SkillsAssessment**			
27.15.1	Recognizesignsofsevererespiratorydistressbyassessing cyanosis,severechestindrawingandgrunting.			Y	Bedside,DOAP session	skillassessment, OSCEwithvideo	3		
PE 27.16	**Assessairwayandbreathing.Demonstratethemethod of positioning of an infant & child to open airway in asimulatedenvironment**			**Y**	**DOAP session,Skills Lab**	**SkillsAssessment**	**3**		
27.16.1	Demonstrate the methods of opening the airway in infantsandchildrenbyhead tilt–chinliftandjawthrustmethodson mannequin.			Y	BLStrainingsession usingmannequin	OSCE usingmannequin	3		
PE 27.17	**Assessairwayandbreathing:administeroxygenusing correcttechniqueandappropriateflowrate**			**Y**	**DOAPsession, Skills Lab**	**Skills Assessment**	**3**		

27.17.1	Demonstratetheappropriateuseofvariousoxygendeliverysystems in different clinical scenarios along withrecommendedflow rateofoxygen			Y	DOAPsession,SkillsLab	Skillassessment,OSCEusing mannequin	3		
PE 27.18	**Assess airway and breathing: perform assistedventilation by Bag and mask in a simulatedenvironment**			**y**	**DOAP session,Skills Lab**	**Skillassessment,OSCEusing mannequin**	**3**		
27.18.1	Demonstrateassistedventilationusingbagandmaskinasimulatedenvironment			y	DOAPsession,SkillsLab	Skillassessment,OSCEusing mannequin	3		
PE 27.19	**Checkforsignsofshocki.e.pulse,Bloodpressure,CRT**			**y**	**DOAP session,SkillsLab**	**Skillassessment,**	**3**		
27.19.1	Checkpulseasasignofshock.			Y	DOAPsession,SkillsLab	Skillassessment,	3		
27.19.2	Measurebloodpressuretocheckforshock.			Y	DOAPsession,SkillsLab	Skillassessment,	3		
27.19.3	AssessCRTforcheckingfor shock.			Y	DOAPsession,Skills Lab	Skillassessment	3		
PE 27.20	**SecureanIVaccessinasimulatedenvironment**			**Y**	**DOAP session,SkillsLab**	**Skillassessment,**	**3**		
27.20.1	CollectallthenecessaryitemsforIVaccess.			Y	DOAPsession,SkillsLab	Skillassessment	3		
27.20.2	Identifyanappropriatesiteandvein.			Y	DOAPsession,Skills Lab	Skillassessment	3		
27.20.3	ObtainIVaccessinthemanikin.			Y	DOAPsession,SkillsLab	Skillassessment	3		
27.20.4	SecuretheIVlineappropriately.			Y	DOAPsession,SkillsLab	Skillassessment	3		
27.20.5	Maintainasepsisthroughouttheprocedure.			Y	DOAPsession,Skills Lab	Skillassessment	3		

PE 27.21	**Choosethetypeoffluidandcalculatethefluid requirementinshock**			**Y**	**DOAPsession, SkillsLab**	**Skill assessment**	**3**		
27.21.1	Chooseappropriatefluidaccordingtodifferenttypesofshock.			Y	DOAPsession,SkillsLab	Skillassessment	3		
27.21.2	Calculatethefluidfor managingdifferenttypesofshockat differentage/sizeofthechild.			Y	DOAPsession,Skills Lab	Skillassessment	3		
PE 27.22	**Assess level of consciousness & provide emergencytreatment to a child with convulsions/ coma - Positionanunconsciouschild - Positionachildwithsuspectedtrauma - AdministerIV/perrectalDiazepamforaconvulsingchildinasimulatedenvironment**			**Y**	**DOAP session,SkillsLab**	**Skillassessment**	**3**		
27.22.1	Assesslevelofconsciousness			Y	DOAPsession,Skills Lab	Skillassessment	3		
27.22.2	Provideemergencytreatmenttoachildwithconvulsions/comaincludingABCDE			Y	DOAPsession,SkillsLab	Skillassessment	3		
27.22.3	AdministerIV/perrectalDiazepamforaconvulsingchildinasimulatedenvironment			Y	DOAPsession,SkillsLab	Skillassessment	3		
27.22.4	Positionanunconsciouschildappropriately.			Y	DOAPsession,Skills Lab	Skillassessment	3		
27.22.5	Positionachildwithsuspectedtraumakeepingthenecessaryprecautions.			Y	DOAPsession,SkillsLab	Skillassessment	3		
PE 27.23	**Assesssignsofseveredehydration**			**Y**	**DOAPsession, SkillsLab**	**Skill assessment**	**3**		
27.23.1	Identifysignsofseveredehydration			Y	DOAPsession,Skills Lab	Skillassessment	3		
PE 27.24	**Monitoringandmaintainingtemperature:define hypothermia. Describe the clinical features,complicationsandmanagementofHypothermia**			**Y**	**Lecture/SGD**	**Written/ Vivavoce**			
27.24.1	DefineHypothermia.			Y	Lecture/SGD	Written/Viva voce			
27.24.2	DescribeclinicalfeaturesofHypothermia.			Y	Lecture/SGD	Written/ Vivavoce			

27.24.3	Enumeratecomplicationsofhypothermia.			Y	Lecture/SGD	Written/ Vivavoce			
27.24.4	DescribemanagementofHypothermia.			Y	Lecture/SGD	Written/Viva voce			
PE 27.25	**Describetheadvantagesandcorrectmethodof keepinganinfant warmbyskintoskincontact**			**Y**	**Lecture/SGD**	**Written/Viva voce**			
27.25.1	Describethecorrectmethodofkeepinginfantwarmbyskintoskincontact			Y	Lecture/SGD	Written/ Vivavoce			
27.25.2	Enumeratetheadvantagesofprovidingwarmthbyskintoskincontact			Y	Lecture/SGD	Written/Viva voce			
PE 27.26	**Describetheenvironmentalmeasurestomaintain temperature**			**Y**	**Lecture/SGD**	**Written/Viva voce**			
27.26.1	Describetheenvironmentalmeasurestomaintaintemperatureinsick children.			Y	Lecture/SGD	Written/ Vivavoce			
PE 27.27	**Assessforhypothermiaandmaintaintemperature**			**Y**	**SkillsLab**	**Skill assessment**			
27.27.1	Assessasickchildforhypothermia.			Y	SkillsLab	Skillassessment			
27.27.2	Applymeasurestomaintaintemperatureinsickchildren.			Y	SkillsLab	Skillassessment			
PE 27.28	**ProvideBLSforchildreninmanikin**			**Y**	**SkillsLab**	**Skill assessment**	**3**		
27.28.1	PerformallthestepsofBLSinchildren.			Y	SkillsLab	Skillassessment	3		
PE 27.29	**Discussthecommoncauses,clinicalpresentation, medico-legalimplicationsofabuse**			**Y**	**Lecture/SGD**	**Written/Viva voce**			
27.29.1	Enumeratecommoncausesofchildabuse.			Y	Lecture/SGD	Written/Viva voce			
27.29.2	Describeclinicalpresentationsofchildabuse.			Y	Lecture/SGD	Written/ Vivavoce			
27.29.3	Discussmedicolegalimplicationsofchildabuse.			Y	Lecture/SGD	Written/Viva voce			
PE 27.30	**Demonstrateconfidentialitywithregardtoabuse**			**Y**	**Skilllab,simulated patients**	**Skill assessment**			
27.30.1	Maintains confidentiality with regard to child abuse in asimulatedsetting			Y	Skilllab,simulated patients	Skillassessment			

PE 27.31	**Assesschildforsignsofabuse**			**Y**	**DOAP,SkillsLab**	**Logbook,**			
27.31.1	Elicitappropriatehistoryforsuspectedchildabuse.			Y	DOAP,SkillsLab	Logbook			
27.31.2	Examinethechildforevidenceofchildabuse.			Y	DOAP,SkillsLab	Logbook			
27.31.3	Basedonhistoryandexaminationmakeaprovisionaldia gnosisofspecifictypeofchildabuse			Y	DOAP,SkillsLab	Logbook			
PE 27.32	**Counselparentsofdangerouslyill/terminallyillchild tobreak abadnews**			**Y**	**DOAP,SkillsLab**	**Logbook,**			
27.32.1	Communicate with empathy and counsel parents ofdangerouslyill/terminallyillchild tobreakabadnewsusing anappropriatetechnique			Y	DOAP,SkillsLab	Logbook			
27.32.2	Answerthequeries/questionsofparentsappropriately			Y	DOAP,SkillsLab	Logbook			
27.32.3	Provideemotionalsupporttoparents			Y	DOAP,SkillsLab	Logbook			
PE 27.33	**ObtainInformedConsent**			**Y**	**DOAP,SkillsLab**	**Logbook,**			
27.33.1	Provideadequateinformationaspertheneedinalanguage understoodbytheconsentgiver			Y	DOAP,SkillsLab	Logbook			
27.33.2	Answerqueries/questionsappropriately			Y	DOAP,SkillsLab	Logbook			
27.33.3	Obtaintheconsentonanappropriatedocument.			Y	DOAP,SkillsLab	Logbook			
PE 27.34	**Willingtobeapart oftheER team**			**Y**	**DOAP,SkillsLab**	**Logbook,**			
27.34.1	TakesanactivepartintheERteamperformingtheassignedrolea nd responsibilities			Y	DOAP,SkillsLab	Logbook			
PE 27.35	**Attendstoemergencycalls promptly**			**Y**	**DOAP,SkillsLab**	**Logbook,**			
27.35.1	Respondspromptlytoemergencycalls			Y	DOAP,SkillsLab	**Logbook,**			
Topic:Respiratorysystem		**Numberofcompetencies:(20)**				**Numberofproceduresthatrequirecertification:(NIL)**			
PE28.1	**Discuss the etiopathogenesis, clinical features andmanagementofNasopharyngitis**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**		**ENT**	

28.1.1	EnumeratetheetiologicalfactorsforNasopharyngitis.			Y	lecture, SGD	Written/ Vivavoce			
28.1.2	DescribetheclinicalfeaturesofNasopharyngitis			Y	lecture, SGD	Written/Viva voce			
28.1.3	OutlinethemanagementofNasopharyngitis			Y	lecture, SGD	Written/ Vivavoce			
PE28.2	**DiscusstheetiopathogenesisofPharyngotonsillitis**			**Y**	**Lecture,SGD**	**Written/Viva voce**		**ENT**	
28.2.1	EnumeratetheetiologicalfactorscausingPharyngo-tonsillitis.			Y	lecture,SGD	Written/ Vivavoce			
PE28.3	**Discusstheclinicalfeaturesandmanagementof Pharyngotonsillitis**			**Y**	**Lecture,SGD**	**Written/Viva voce**		**ENT**	
28.3.1	DescribetheclinicalfeaturesofPharyngotonsillitis.			Y	lecture, SGD	Written/Viva voce			
28.3.2	OutlinethemanagementofacutePharyngo-tonsillitis.			Y	lecture, SGD	Written/ Vivavoce			
PE28.4	**Discusstheetiopathogenesis,clinicalfeaturesand managementofAcuteOtitisMedia(AOM)**			**Y**	**Lecture,SGD**	**Written/Viva voce**		**ENT**	
28.4.1	ListthecommonetiologicalagentcausingAcuteOtitisMedia (AOM)			Y	lecture, SGD	Written/Viva voce			
28.4.2	DiscussthepathogenesisofAcuteOtitisMedia(AOM),			Y	lecture,SGD	Written/ Vivavoce			
28.4.3	EnumeratetheclinicalfeaturesofAcuteOtitisMedia(AOM),recurrentAOM and OMwitheffusion			Y	lecture, SGD	Written/ Vivavoce			
28.4.4	OutlinethemanagementofAcuteOtitisMedia(AOM),recurrentAOM andOM witheffusion			Y	lecture, SGD	Written/ Vivavoce			
PE28.5	**Discusstheetiopathogenesis,clinicalfeaturesand managementofEpiglottitis**			**Y**	**Lecture,SGD**	**Written/Viva voce**		**ENT**	
28.5.1	DescribetheetiopathogenesisofEpiglottitis			Y	Lecture,SGD	Written/ Vivavoce			
28.5.2	EnumeratetheclinicalfeaturesofEpiglottitis			Y	Lecture,SGD	Written/ Vivavoce			

28.5.3	OutlinethemanagementofEpiglottitisincludingacutecare			Y	Lecture,SGD	Written/ Vivavoce			
PE28.6	**Discuss the etiopathogenesis, clinical features andmanagementofAcutelaryngotracheobronchitis**			**Y**	**Lecture, Smallgroup Discussion**	**Written/ Vivavoce**		**ENT**	
28.6.1	DescribetheetiopathogenesisofAcutelaryngo-tracheo-bronchitis(croup)			Y	Lecture,SGD	Written/ Vivavoce			
28.6.2	Describe the clinical features of Acute laryngo-tracheo-bronchitis			Y	Lecture,SGD	Written/ Vivavoce			
28.6.3	OutlinethemanagementofAcutelaryngo-tracheo-bronchitis.			Y	Lecture,SGD	Written/Viva voce			
PE28.7	**Discusstheetiology,clinicalfeaturesandmanagement ofStridorinchildren**			**Y**	**Lecture,SGD**	**Written/Viva voce**		**ENT**	
28.7.1	Enumeratetheetiologyofstridorinchildren			Y	lecture, SGD	Written/ Vivavoce			
28.7.2	Describetheclinicalfeaturesofstridorinchildren			Y	Lecture,SGD	Written/ Vivavoce			
28.7.3	Discussthedifferentialdiagnosisofstridor			Y	Lecture,SGD	Written/Viva voce			
28.7.4	Outlinethemanagementofstridor.			Y	Lecture,SGD	Written/ Vivavoce			
PE28.8	**Discuss the types, clinical presentation, andmanagementofforeignbodyaspirationininfantsand children**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**		**ENT**	
28.8.1	Listtheobjectscommonlyaspiratedbychildren			Y	Lecture,SGD	Written/Viva voce			
28.8.2	EnumeratetheclinicalfeaturesofFBaspiration			Y	Lecture,SGD	Written/ Vivavoce			
28.8.3	Describe'Heimlich maneuver'forachildand'5backslaps and5chestthrust'foran infant			Y	Lecture,SGD	Written/Viva voce			
28.8.5	OutlinethemanagementofFBaspiration			Y	Lecture,SGD	Written/ Vivavoce			

PE28.9	**Elicit, document and present age appropriate historyofachildwithupperrespiratoryproblemincludi ng Stridor**			**Y**	**Bedside, skilllab**	**SkillAssess ment**		**ENT**	
28.9.1	Elicitdetailedhistoryofachildwithupperrespiratory problemincludingstridor			Y	Bedside,skilllab	OSCE/Skills Assessment			
28.9.2	Documentthehistoryofachildwithupperrespiratoryproblemi ncludingstridor			Y	Bedside,skilllab	Logbook			
28.9.3	Presentthehistoryofachildwithupperrespiratoryproblemincludi ngstridor			Y	Bedside,skilllab	Logbook			
PE28.10	**Performotoscopicexaminationoftheear**			**Y**	**DOAPsession**	**Skills Assessment**		**ENT**	
28.10.1	Counseltheparentand childtoprepareforotoscopic examination			Y	Bedside,skilllab	OSCE/Skills Assessment			
28.10.2	Positionthechildandperformotoscopicexamination			Y	Bedside,skilllab	OSCE/ SkillsAssess ment			
PE28.11	**Performthroatexaminationusingtonguedepressor**			**Y**	**DOAPsession**	**Skills Assessment**		**ENT**	
28.11.1	Counseltheparentandchildtoprepareforthroat examination			Y	Bedside,skilllab	OSCE/Skills Assessment			
28.11.2	Positionthechildandperformthroatexaminationusingaton guedepressor			Y	Bedside,skilllab	OSCE/Skills Assessment			
PE28.12	**Performexaminationofthenose**			**Y**	**DOAPsession**	**Skills Assessment**		**ENT**	
28.12.1	Positionthechildandperformnoseexamination			Y	Bedside,skilllab	OSCE/Skills Assessment			
PE 28.13	**Analyze the clinical symptoms and interpret physicalfindingsandmakeaprovisional/differentialdiagn osis inachildwithENTsymptoms**			**Y**	**Bedside**	**SkillsAssess ment**			
28.13.1	Discusstheprovisional/differentialdiagnosisinachildwithENT symptomsafteranalysis ofhistoryandphysical examination.			Y	Bedside	SkillsAssessme nt/OS CE/ClinicalCase			
PE 28.14	**Developatreatmentplananddocumentappropriately inachildwithupperrespiratorysymptoms**			**Y**	**Bedside**	**Skills Assessment**			

28.14.1	Plantreatmentinachildwithupperrespiratorysymptoms			Y	Bedside	OSCE/Skills Assessment			
28.14.2	Prescribesupportiveandsymptomatictreatmentforupperrespiratorysymptoms			Y	Bedside	OSCE/ SkillsAssessment			
PE 28.15	**StratifyriskinchildrenwithstridorusingIMNCIguidelines**			**Y**	**Bedside**	**Logbookdocumentation**			
28.15.1	Classifythechildwith stridorasperIMNCIguidelines			Y	Bedside	Logbookdocumentation/ clinicalcase			
PE 28.16	**Interpretbloodtestsrelevanttoupperrespiratory problems**			**N**	**Bedside,SGD**	**Logbook**			
28.16.1	Planandinterprettherelevantbloodtestinapatientwithupperrespiratory problems			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 lowerrespiratorytractinfection,understandthesignificance ofthymicshadow inpediatricchestX-rays**			**Y**	**Bedside,SGD**	**SkillsAssessment**		**ENT,RadioD**	
28.17.1	InterprettheX-rayofparanasalsinusesandmastoidforvariouscommon diseases			Y	Bedside,SGD	OSCE/ SkillsAssessment			
28.17.2	InterpretthechestX-rayforidentifyingsuspectedFBaspirationandlowerrespiratorytractinfection			Y	Bedside,SGD	SkillsAssessment/OSCE			
28.17.3	IdentifythymicshadowinchestX-ray.			Y	Bedside,SGD	SkillsAssessment/OSCE			
28.17.4	Plan the treatment after interpreting X-ray and/or its writtenreport.			Y	Bedside,SGD	SkillsAssessment/ OSCE			

PE 28.18	**Describetheetiopathogenesis,diagnosis,clinical features,managementandpreventionoflower**			**Y**	**SGD, Lecture**	**Written,Viva voce**			
	respiratoryinfectionsincludingbronchiolitis,wheeze associatedLRTIPneumoniaandempyema								
28.18.1	EnumeratethecommonorganismscausingLRTI			Y	Lecture,SGD,	Written /Vivavoce			
28.18.2	DiscussthepathogenesisofLRTIincludingbronchiolitis, WALRI,pneumoniaandempyema.			Y	Lecture,SGD,	Written/Viva voce			
28.18.3	DescribetheclinicalfeaturesofLRTIincludingbronchiolitis,WALRI,pneumonia and empyema			Y	Lecture,SGD,	Written/Viva voce			
28.18.4	DiscussthediagnosisofLRTIincludingbronchiolitis,WALRI,pneumoniaandempyemaaftertakingrelevantclinical historyandexamination.			Y	Lecture,SGD,	Written/Viva voce			
28.18.5	DescriberelevantinvestigationsinachildwithLRI			Y	Lecture,SGD,	Written,Vivavoce			
28.18.6	DiscussthetreatmentofLRTI includingbronchiolitis,WALRI, pneumoniaandempyema			Y	Lecture,SGD,	Written,Viva voce			
28.18.7	DiscussthepreventivestrategiesforLRTI			Y	Lecture,SGD,	Viva voce,SAQ /MCQ			
PE 28.19	**Describetheetiopathogenesis,diagnosis,clinical features, management and prevention of asthma inchildren**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**		**Resp Med**	
28.19.1	DefineAsthmainchildrenasperATMguidelines.			Y	Lecture,SGD,	Written,Viva voce			
28.19.2	Discussthepathophysiologyofasthmainchildren.			Y	Lecture,SGD,	Written test,Vivavoce			
28.19.3	Describetheclinicalfeaturesofasthma			Y	Lecture,SGD,	Written test,Vivavoce			
28.19.4	Discussthediagnosisofasthmabasedonrelevantclinical history,familyhistoryandphysicalexamination.			Y	Lecture,SGD,	Vivavoce			
28.19.5	EnumeratetheinvestigationsinachildwithAsthma			Y	Lecture,SGD,	Vivavoce			
28.19.6	Listthedrugsusedfortreatingasthmainchildren			Y	Lecture,SGD,	Written test,Vivavoce			

28.19.7	Describethetreatmentofacuteattackofasthma			Y	Lecture,SGD,	Writtentest, Vivavoce			
28.19.8	Describethestepwiseapproachofpreventer therapyforasthmaasper ATM/GINA guidelines			Y	Lecture,SGD,	Written test,Vivavoce			
28.19.9	Describevariousdrugdelivery devicesforasthma			Y	Lecture,SGD	Written, Vivavoce			
28.19.10	Enumerateasthmatriggers			Y	Lecture,SGD,	Written,Viva voce			
PE 28.20	**Counsel the child with asthma on the correct use ofinhalersinasimulatedenvironment**			**Y**	**Bedside, SGD,Lecture**	**SkillsAssessmentWrittenViva voce**		**Resp Med**	
28.20.1	CounselthechildandthecaretakerforcorrectuseofMDIandspaceratinitiationoftherapyandonfollowup			Y	Skilllab,clinics,lecture	OSCE			
Topic:AnemiaandotherHemato-oncologicdisordersin Children				**Numberofcompetencies:(20)**		**Numberofproceduresthatrequirecertification:(NIL)**			
PE29.1	**Discuss the etiopathogenesis, clinical features,classificationandapproachtoachildwith anemia**			**Y**	**Lecture,SGD**	**Written, viva-voce**		**Path,Physio**	
29.1.1	DefineanemiaasperWHOGUIDELINES			Y	Lecture,SGD	Written, viva-voce			
29.1.2	Enumeratethecausesofanemia.			Y	Lecture,SGD	Written,viva-voce			
29.1.3	Describethepathogenesisofanemia.			Y	Lecture,SGD	Written, viva-voce			
29.1.4	Enumerateclinicalfeaturesofanemia			Y	Lecture,SGD	Written, viva-voce			
29.1.5	ClassifyAnemiaaccordingtoredcellmorphology			Y	Lecture,SGD	Written,viva-voce			
29.1.6	DescribetheapproachtoachildwithAnemia.			Y	Lecture,SGD	Written, viva-voce			
29.1.7	Listtheinvestigationsinchildwithanemia.			Y	Lecture,SGD	Written, viva-voce			
PE 29.2	**Discusstheetiopathogenesis,clinicalfeaturesand managementofirondeficiencyanemia.**			**Y**	**Lecture,SGD**	**Written/Viva-voce**		**Path, Physio**	

29.2.1	Enumeratethecausesofirondeficiencyanemiainchildren			Y	Lecture,SGD	Written, viva-voce			
29.2.2	Describethepathogenesisofirondeficiencyanemia.			Y	Lecture,SGD	Written, viva-voce			
29.2.3	Describeclinicalfeaturesofirondeficiencyanemiainchildren.			Y	Lecture,SGD	Written, viva-voce			
29.2.4	Listtheinvestigationsinachildwithirondeficiency.			Y	Lecture,SGD	Written,viva-voce			
29.2.5	Describethetreatmentofirondeficiencyanemiainchildren.			Y	Lecture,SGD	Written, viva-voce			
PE 29.3	**Discusstheetiopathogenesis,clinicalfeaturesandmanagementofVitaminB-12,Folatedeficiency anemia.**			**Y**	**Lecture,SGD**	**Written/Viva-voce**		**Path,Physio**	
29.3.1	EnumeratethecausesofvitaminB-12andfolicacid deficiency.			Y	Lecture,SGD	Written,viva-voce			
29.3.2	DescribethepathogenesisofVitaminB-12deficiency.			Y	Lecture,SGD	Written, viva-voce			
29.3.3	Describethepathogenesisoffolatedeficiency.			Y	Lecture,SGD	Written, viva-voce			
29.3.4	DescribetheclinicalfeaturesofvitaminB-12andFolate deficiency.			Y	Lecture,SGD	Written,viva-voce			
29.3.5	Enumerate the investigations for a child of Vitamin B-12 andFolatedeficiency.			Y	Lecture,SGD	Written, viva-voce			
29.3.6	Describethetreatmentforachildsufferingfrom VitaminB-12andFolicaciddeficiency.			Y	Lecture,SGD	Written,viva-voce			
PE29.4	**Discuss the etiopathogenesis, clinical features andmanagement of Hemolytic anemia, ThalassemiaMajor, Sickle cell anemia, Hereditary spherocytosis,Auto-immunehemolyticanemiaandhemolyticuremic syndrome.**			**Y**	**Lecture,SGD**	**Written, viva-voce**		**Path,Physio**	
29.4.1	DefineHemolyticAnemia.			Y	Lecture,SGD	Written, viva-voce			
29.4.2	Enumeratethecausesofhemolyticanemiainchildren.			Y	Lecture,SGD	Written,viva-voce			

29.4.3	Describethepathogenesisofdifferenttypesofhemolyticanemia.			Y	Lecture,SGD	Written, viva-voce			
29.4.4	Describetheclinicalfeaturesofhemolyticanemia,ThalassemiaMajor,Sicklecellanemia,Hereditary			Y	Lecture,SGD	Written, viva-voce			
	spherocytosis,Auto-immunehemolyticanemiaandhemolyticuremic syndrome								
29.4.5	Listtheinvestigationsfordiagnosisofhemolyticanemia.			Y	Lecture,SGD	Written,viva-voce			
29.4.6	Differentiatevarioustypesofhemolyticanemiabasedonclinicalfeaturesandinvestigations.			Y	Lecture,SGD	Written, viva-voce			
29.4.7	DescribetreatmentofhemolyticanemiaThalassemiaMajor, Sicklecellanemia,Hereditaryspherocytosis,Auto-immunehemolyticanemiaandhemolyticuremic syndrome**.**			Y	Lecture,SGD	Written, viva-voce			
29.4.8	Describetheroleofchelationtherapyandrecallthedrugs,dosagesand side-effectsofthedrugs.			Y	Lecture,SGD	Written, viva-voce			
PE29.5	**DiscusstheNationalAnemiaControlProgram.**			**Y**	**Lecture,SGD**	Written,viva-voce		**ComMed**	
29.5.1	DescribeNationalAnemiaControlProgram.			Y	Lecture,SGD	Written, viva-voce			
PE29.6	**Discussthecauseofthrombocytopeniainchildren:describetheclinicalfeaturesandmanagementofidiopathicThrombocytopenicPurpura.**			**Y**	**Lecture,SGD**	Written, viva-voce		**Path**	
29.6.1	Definethrombocytopenia			Y	Lecture,SGD	Written, viva-voce			
29.6.2	Enumeratethecausesofthrombocytopeniainchildren.			Y	Lecture,SGD	Written,viva-voce			
29.6.3	DescribethepathogenesisofITP.			Y	Lecture,SGD	Written, viva-voce			
29.6.4	DescribetheclinicalfeaturesofITP.			Y	Lecture,SGD	Written,viva-voce			
29.6.5	OutlinetheinvestigationsofITP			Y	Lecture,SGD	Written, viva-voce			
29.6.6	OutlinethemanagementofITP.			Y	Lecture,SGD	Written, viva-voce			

PE29.7	**Discusstheetiology,classification,pathogenesisand clinicalfeaturesofHemophiliainchildren.**			**Y**	**Lecture,SGD**	Written,viva-voce		**Path**	
29.7.1	Describetheetiologyofhemophilia.			Y	Lecture,SGD	Written,viva-voce			
29.7.2	Classifyhemophilia.			Y	Lecture,SGD	Written, viva-voce			
29.7.3	Describethepathogenesisofhemophilia.			Y	Lecture,SGD	Written,viva-voce			
29.7.4	Enumeratetheclinicalfeaturesofhemophilia.			Y	Lecture,SGD	Written, viva-voce			
PE29.8	**Discuss the etiology, clinical presentation andmanagementofAcuteLymphoblasticLeukemiain Children.**			**N**	**Lecture,SGD**	**Written, Viva-voce**		**Path**	
29.8.1	StatetheetiologiesofAcuteLymphoblasticLeukemia(ALL).			N	Lecture,SGD	Written,viva-voce			
29.8.2	Enumerateriskfactorsforchildhoodleukemia.			N	Lecture,SGD	Written, viva-voce			
29.8.3	DescribetheclinicalpresentationofALL.			N	Lecture,SGD	Written, viva-voce			
29.8.4	Outlinetheinvestigationsfor diagnosisofALL.			N	Lecture,SGD	Written,viva-voce			
29.8.5	OutlinethetreatmentforALL.			N	Lecture,SGD	Written, viva-voce			
PE29.9	**Discusstheetiology,clinicalpresentationand managementofLymphomainchildren.**			**N**	**Lecture,SGD**	**Written,Viva-Voce**		**Path**	
29.9.1	Definelymphoma.			N	Lecture,SGD	Written,viva-voce			
29.9.2	StatetheetiologyofLymphomaanditstypes.			N	Lecture,SGD	Written, viva-voce			
29.9.3	Describethepathologyoflymphomas.			N	Lecture,SGD	Written, viva-voce			
29.9.4	RecalltheclinicalfeaturesofLymphomas.			N	Lecture,SGD	Written,viva-voce			
29.9.5	Outlinetheinvestigations(diagnosticworkup)forLy mphomas.			N	Lecture,SGD	Written, viva-voce			
29.9.6	Enumeratethetreatmentmodalitiesfor Lymphomas.			N	Lecture,SGD	Written,viva-voce			

PE29.10	**Elicit,documentandpresentthehistoryrelatedto Hematology.**			**Y**	**Bedside,Skillslab**	**SkillStation**			
29.10.1	Elicitthehistoryrelatedtoahematologicaldisorder.			Y	Bedside,Skillslab	SkillStation			
29.10.2	Documentthehistory.			Y	Bedside,Skillslab	SkillStation			
29.10.3	Presentthehistory			Y	Bedside,Skillslab	SkillStation			
PE29.11	**Identifyexternalmarkersforhematologicaldisorders e.g.Jaundice,Pallor,Petechiae,Purpura,Ecchymosis,Lymphadenopathy,bonetenderness,lossofweight, Mucosalandlargejointbleed.**			**Y**	**Bedside,SkillsLab**	**Skillassessment**			
29.11.1	Identifyjaundice,pallor,petechialspots,purpura, ecchymosis, lymphadenopathy, bone tenderness, Mucosalandlargejointbleedinapatientofhematologicaldisorder.			Y	Bedside,SkillsLab	Skillassessment			
PE29.12	**Performexaminationoftheabdomen,demonstrate Organomegaly.**			**Y**	**Bedside,SkillsLab.**	**Skill assessment**			
29.12.1	Performperabdomenexamination.			Y	Bedside,SkillsLab	Skillassessment			
29.12.2	Demonstrateorganomegalyinachildafterabdominal examination.			Y	Bedside,SkillsLab	Skillassessment			
PE29.13	**Analyzesymptomsandinterpretphysicalsignsto makeaprovisional/differentialdiagnosis.**			**Y**	**Bedside,SkillsLab**	**Skill assessment**			
29.13.1	Analyzesymptomsrelatedtohemato-oncologicalconditions.			Y	Bedside,SkillsLab	Skillassessment			
29.13.2	interpretphysicalsignstomakeaprovisionaldiagnosis			Y	Bedside,SkillsLab	Skillassessment			
29.13.3	Producedifferentialdiagnosiskeepinginmindthesymptoms andsignsrelatedtohaemato-oncologicalconditions.			Y	Bedside,SkillsLab	Skillassessment			
PE29.14	**InterpretCBC, LFT**			**Y**	**Bedside,SkillsLab**	**Skill assessment**			
29.14.1	interpretCompleteBloodCountReport			Y	Bedside,SkillsLab	Skillassessment			
29.14.2	InterpretLiverFunctionTestsReport.			Y	Bedside,SkillsLab	Skillassessment			
PE29.15	**PerformandInterpretperipheralsmear.**			**Y**	**DOAPsession**	**Documentin Logbook**			
29.15.1	Prepareaperipheralbloodfilm.			Y	DOAPsession	Documentin Logbook			
29.15.2	Interprettheperipheralbloodfilm.			Y	DOAPsession	Document inLogbook			

29.15.3	Makediagnosisofperipheral bloodfilm.			Y	DOAPsession	Documentin Logbook			
PE29.16	**DiscusstheindicationsforHemoglobinelectrophoresis andinterpret thereport.**			**N**	**Lecture,SGD**	**Written/Viva-voce**		**Biochemistry**	
29.16.1	EnumeratetheindicationsforHemoglobinelectrophoresis			N	Lecture,SGD	Written/Viva-voce			
29.16.2	interpretthereportofHemoglobinelectrophoresis			N	Lecture,SGD	Written/Viva-voce			
PE29.17	**Demonstrateperformanceofbonemarrowaspiration inmannequin.**			**Y**	**Skillslab**	**Documentin Logbook**			
29.17.1	identifythesitesofbonemarrowaspiration			Y	SkillsLab	Document inLogbook			
29.17.2	Demonstratethecorrectstepsofbonemarrowaspiration underasepticconditionsonamannequin.			Y	SkillsLab	Document inLogbook			
PE29.18	**EnumeratethereferralcriteriaforHematological conditions.**			**Y**	**Bedside,Small groupactivity**	**Written/Viva-voce**			
29.18.1	Enumeratethecriteria forreferringapatientwithHematologicalconditions			Y	Smallgroupactivity	Written/ Viva-voce			
PE29.19	**Counselandeducatepatientsaboutpreventionand treatmentofanemia.**			**Y**	**Bedside,SkillsLab**	**Documentin Logbook**			
29.19.1	Counseltheparentsempatheticallyaboutthedietand preventivemeasuresforanemia.			Y	Bedside,SkillsLab	Document inLogbook			
29.192	Educatethepatients/parentsaboutthecorrectusageof drugs.			Y	Bedside,SkillsLab	Document inLogbook			
PE29.20	**Enumeratetheindicationsforsplenectomyand precautions**			**N**	**Smallgroup activity**	**Written/Viva-voce**			
29.20.1	Enumeratetheindicationsforsplenectomy			N	Smallgroupactivity	Written/ Viva-voce			
29.20.2	Explainabouttheimmunizationandantibioticprophylaxis			N	Smallgroupactivity	Written/ Viva-voce			
Topic:SystemicPediatrics-CentralNervoussystem		**Numberofcompetencies:(23)**			**Numberofproceduresthatrequirecertification:(NIL)**				
PE 30.1	**Discusstheetiopathogenesis,clinicalfeatures, complications, management and prevention ofmeningitisinchildren**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**		**Micro**	
30.1.1	Enumerateallcommoncausesofmeningitisinchildren.			Y	Lecture,SGD	Written/Viva			

						voce			
30.1.2	Describepathogenesisofmeningitisinchildren.			Y	Lecture,SGD	Written/ Vivavoce			
30.1.3	Describealltheclinicalfeaturesofmeningitisinchildren.			Y	Lecture,SGD	Written/ Vivavoce			
30.1.4	Enumerateallthecomplicationsofmeningitisinchildren.			Y	Lecture,SGD	Written/ Vivavoce			
30.1.6	Enumeratealltheinvestigationstodiagnosemeningitisinchildren.			Y	Lecture,SGD	Written/ Vivavoce			
30.1.7	DescribetheCSFpicturediagnosticofpyogenicmeningitis.			Y	Lecture,SGD	Written/ Vivavoce			
30.1.8	Describethestandardtreatmentofmeningitisbasedonageofpatient and organismifidentified.			Y	Lecture,SGD	Written/ Vivavoce			
30.1.9	Enumeratevariouspreventivemeasuresformeningitis.			Y	Lecture,SGD	Written/ Vivavoce			
PE 30.2	**Distinguishbacterial,viralandtuberculousmeningitis**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**		**Micro**	
30.2.1	Differentiatetheclinicalfeaturesofbacterial,viralandtuberculmeningitisina child			Y	Lecture,SGD	Written/ Vivavoce			
30.2.2	Differentiatethecerebrospinalfluid(CSF)pictureofbacterial,viralandtubercularmeningitisin achild			Y	Lecture,SGD	Written/ Vivavoce			
PE 30.3	**Discusstheetiopathogenesis,classification,clinical features, complication and management ofHydrocephalusinchildren**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**			
30.3.1	Definehydrocephalus.			Y	Lecture,SGD	Written/ Vivavoce			
30.3.2	Enumerateallcausesofhydrocephalus.			Y	Lecture,SGD	Written/Vivavoce			
30.3.3	DescribenormalCSFcirculationandpathogenesisof hydrocephalus			Y	Lecture,SGD	Written/ Vivavoce			
30.3.4	Classifytypesofhydrocephalus			Y	Lecture,SGD	Written/ Vivavoce			
30.3.5	Describealltheclinicalfeaturesofhydrocephalus.			Y	Lecture,SGD	Written/ Vivavoce			

30.3.6	Enumerateallthecomplicationsofhydrocephalus.			Y	Lecture,SGD	Written/ Vivavoce			
30.3.7	Describetheradiologicalpicture(USG,CTscanorMRI) diagnosticofhydrocephalus			Y	Lecture,SGD	Written/ Vivavoce			
30.3.8	Enumeratetheinvestigationsrequiredtomakeanetiological diagnosisofhydrocephalus			Y	Lecture,SGD	Written/ Vivavoce			
30.3.9	Describethestandardtreatmentforhydrocephalusincluding medicalandsurgicalmodalities.			Y	Lecture,SGD	Written/ Vivavoce			
PE 30.4	**Discuss the etiopathogenesis, classification, clinicalfeatures,andmanagementofMicrocephalyin children**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**			
30.4.1	Definemicrocephaly.			Y	Lecture,SGD	Written/ Vivavoce			
30.4.2	Enumerateallcausesofmicrocephalyinchildren			Y	Lecture,SGD	Written/ Vivavoce			
30.4.3	Describepathogenesisofmicrocephalyinchildren			Y	Lecture,SGD	Written/Viva voce			
30.4.4	Classifytypesofmicrocephalyinchildren			Y	Lecture,SGD	Written/ Vivavoce			
30.4.5	Describealltheclinicalfeaturesofmicrocephaly			Y	Lecture,SGD	Written/ Vivavoce			
30.4.6	Describetreatmentformicrocephaly.			Y	Lecture,SGD	Written/ Vivavoce			
PE 30.5	**Enumerate the Neural tube defects. Discuss thecauses,clinicalfeatures,types,andmanagement ofNeuralTubedefect**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**			
30.5.1	DefineNeuraltubedefects.			Y	Lecture,SGD	Written/ Vivavoce			
30.5.2	EnumerateallcausesofNeuraltubedefects.			Y	Lecture,SGD	Written/Viva voce			
30.5.3	DescribepathogenesisofNeuraltubedefects.			Y	Lecture,SGD	Written/Viva voce			
30.5.4	ClassifytypesofNeuraltubedefects.			Y	Lecture,SGD	Written/ Vivavoce			
30.5.5	Describealltheclinicalfeaturesofthecommontypesof Neuraltubedefects			Y	Lecture,SGD	Written/ Vivavoce			

30.5.6	Describeradiologicalinvestigations(USGlocalandUSGHead, CTscanandMRI)andtherelevantfindingstodiagnoseNeuraltubedefectsandassociated conditions			Y	Lecture,SGD	Written/ Vivavoce			
30.5.7	Outlinemedicalandsurgicalmanagementincluding immediatetreatmentofneuraltubedefects.			Y	Lecture,SGD	Written/ Vivavoce			
30.5.8	Enumerateindicationsandcontraindicationsof conservativeandsurgicalmodalitiestotreatneuraltubedefects.			Y	Lecture,SGD	Written/ Vivavoce			
30.5.9	Enumeratestepsforpreventionofneuraltubedefects.			Y	Lecture,SGD	Written/Viva voce			
PE 30.6	**Discusstheetiopathogenesis,clinicalfeatures,and managementofInfantilehemiplegia**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**			
30.6.1	Defineinfantilehemiplegia.			Y	Lecture,SGD	Written/ Vivavoce			
30.6.2	Enumerateallcausesofinfantilehemiplegia.			Y	Lecture,SGD	Written/ Vivavoce			
30.6.3	Describepathogenesisofinfantilehemiplegia.			Y	Lecture,SGD	Written/Viva voce			
30.6.4	Describealltheclinicalfeaturesofinfantilehemiplegia.			Y	Lecture,SGD	Written/ Vivavoce			
30.6.5	Enumerateinvestigationstodiagnoseinfantilehemiplegia.			Y	Lecture,SGD	Written/ Vivavoce			
30.6.6	Describeallthetreatmentmodalitiesforinfantilehemiplegiaincluding medical management, occupational therapy andphysiotherapy.			Y	Lecture,SGD	Written/ Vivavoce			
PE 30.7	**Discuss the etiopathogenesis, clinical features,complicationsandmanagementofFebrileseizuresin children**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**			
30.7.1	DefineFebrileseizures.			Y	Lecture,SGD	Written/Viva voce			
30.7.2	EnumeratecausesofFebrileseizures.			Y	Lecture,SGD	Written/ Vivavoce			
30.7.3	DescribethepathogenesisofFebrileseizures.			Y	Lecture,SGD	Written/ Vivavoce			
30.7.4	ClassifytypesofFebrileseizures.			Y	Lecture,SGD	Written/Viva			

						voce			
30.7.5	DescribetheclinicalfeaturesofdifferenttypesofFebrile seizures.			Y	Lecture,SGD	Written/ Vivavoce			
30.7.6	EnumeratecomplicationsofFebrileseizures.			Y	Lecture,SGD	Written/ Vivavoce			
30.7.7	EnumeratetheinvestigationsfordiagnosisofFebrileseizures andthecauseoftheunderlyingfever.			Y	Lecture,SGD	Written/ Vivavoce			
30.7.8	Describe the standard treatment for Febrile seizures inchildrenincludingintermittentprophylaxisandtreatmentof causeoffever.			KH	Lecture,SGD	Written/ Vivavoce			
PE 30.8	**Defineepilepsy.Discussthepathogenesis,clinical types, presentation and management of Epilepsy inchildren**			K	**Lecture,SGD**	**Written/ Vivavoce**			
30.8.1	DefineEpilepsy.			KH	Lecture,SGD	Written/ Vivavoce			
30.8.2	DescribethepathogenesisofEpilepsy.			Y	Lecture,SGD	Written/Viva voce			
30.8.3	ClassifyclinicaltypesofEpilepsy.			Y	Lecture,SGD	Written/ Vivavoce			
30.8.4	DescribethevariouspresentationsofEpilepsy.			Y	Lecture,SGD	Written/ Vivavoce			
30.8.5	EnumerateandDescribetheinvestigationsrequiredto diagnoseEpilepsy.			Y	Lecture,SGD	Written/ Vivavoce			
30.8.6	OutlinethemedicalandsurgicalmanagementofEpilepsy			Y	Lecture,SGD	Written/ Vivavoce			
30.8.7	EnumeratecommonAntiepilepticdrugsandthetypesof Epilepsyinwhichtheyareindicated.			Y	Lecture,SGD	Written/ Vivavoce			
30.8.8	EnumeratethesideeffectsofcommonlyusedAntiepileptic drugs.			Y	Lecture,SGD	Written/ Vivavoce			
PE 30.9	**DefineStatusEpilepticus.Discusstheclinical presentationandmanagement**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**			
30.9.1	DefineStatusepilepticus.			Y	Lecture,SGD	Written/ Vivavoce			
30.9.2	Describetheclinicalpresentationofstatusepilepticus			Y	Lecture,SGD	Written/ Vivavoce			
30.9.4	Enumerateinvestigationsrequiredfordiagnosisofstatus			Y	Lecture,SGD	Written/Viva			

	epilepticus					voce			
30.9.5	Describe management of status epilepticus in a step wisemannerbasedonthestandardalgorithmofmanagementof statusepilepticusofthePICU			Y	Lecture,SGD	Written/ Vivavoce			
PE 30.10	**Discusstheetiopathogenesis,clinicalfeaturesand managementofMentalretardationinchildren**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**			
30.10.1	DefineMentalRetardation(Intellectualdisability)			Y	Lecture,SGD	Written/Viva voce			
30.10.2	EnumeratethecausesofMentalRetardation(Intellectual disability)			Y	Lecture,SGD	Written/ Vivavoce			
30.10.3	DescribethepathogenesisofMentalRetardation (Intellectualdisability)			Y	Lecture,SGD	Written/ Vivavoce			
30.10.4	ClassifyMentalRetardation(Intellectualdisability).			Y	Lecture,SGD	Written/ Vivavoce			
30.10.5	EnumerateandDescribeclinicalfeaturesofMental Retardation(Intellectualdisability)includingdysmorphicfe atures.			Y	Lecture,SGD	Written/ Vivavoce			
30.10.6	DescribetheinvestigationsfordiagnosisofMental Retardation(Intellectualdisability).			Y	Lecture,SGD	Written/ Vivavoce			
30.10.7	Describetheinvestigations(includinggenetictests)required foridentifyingtheetiologyofMentalRetardation(In tellectualdisability).			Y	Lecture,SGD	Written/ Vivavoce			
30.10.8	Describethemultidisciplinary approachtomanagementof MentalRetardation(Intellectualdisability).			Y	Lecture,SGD	Written/ Vivavoce			
30.10.9	Describethetreatmentofpreventableandtreatablecauses ofMentalRetardation(Intellectualdisability).			Y	Lecture,SGD	Written/ Vivavoce			
PE 30.11	**Discusstheetiopathogenesis,clinicalfeaturesand managementofchildrenwithcerebralpalsy**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**			
30.11.1	DefineCerebralPalsy			Y	Lecture,SGD	Written/ Vivavoce			
30.11.2	EnumeratethecausesofCerebralPalsy			Y	Lecture,SGD	Written/Viva voce			
30.11.3	DescribethepathogenesisofCerebralPalsy			Y	Lecture,SGD	Written/Viva voce			
30.11.4	ClassifyCerebralPalsy.			Y	Lecture,SGD	Written/Viva			

						voce			
30.11.5	EnumerateandDescribeclinicalfeaturesofdifferenttypes ofCerebralPalsy			Y	Lecture,SGD	Written/ Vivavoce			
30.11.6	Describetheinvestigationsrequiredforidentifyingthe etiologyofCerebralPalsy.			Y	Lecture,SGD	Written/ Vivavoce			
30.11.7	Describethemultidisciplinary approachtomanagementof CerebralPalsy.			Y	Lecture,SGD	Written/ Vivavoce			
30.11.8	Describethetreatmentofpreventableandtreatablecauses ofCerebralPalsy.			Y	Lecture,SGD	Written/ Vivavoce			
PE30.12	**Enumerate the causes of floppiness in an infant anddiscusstheclinicalfeatures,differentialdiagnosisand management**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**			
30.12.1	Definefloppinessinaninfant.			Y	Lecture,SGD	Written/Viva voce			
30.12.2	Enumeratethecausesoffloppinessinaninfant.			Y	Lecture,SGD	Written/ Vivavoce			
30.12.3	Describethepathogenesisoffloppinessinaninfant			Y	Lecture,SGD	Written/ Vivavoce			
30.12.4	Describetheclinicalfeaturesoffloppinessinaninfant			Y	Lecture,SGD	Written/Viva voce			
30.12.5	Describethedifferentialdiagnosisof floppinessinaninfant			Y	Lecture,SGD	Written/ Vivavoce			
30.12.6	Enumeratetheinvestigationsforfloppinessinaninfant			Y	Lecture,SGD	Written/ Vivavoce			
30.12.7	Describetreatmentapproachtoafloppyinfant,including occupationaltherapyandphysiotherapy.			Y	Lecture,SGD	Written/ Vivavoce			
PE30.13	**Discuss the etiopathogenesis, clinical features,managementandpreventionofPoliomyelitisi n children**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**		**Micro**	
30.13.1	Defineacuteflaccidparalysis(AFP).			Y	Lecture,SGD	Written/ Vivavoce			
30.13.2	ListcausesofAcuteFlaccidParalysis.			Y	Lecture,SGD	Written/ Vivavoce			
30.13.3	EnumeratethevirusescausingPoliomyelitis.			Y	Lecture,SGD	Written/ Vivavoce		**Micro**	
30.13.4	DescribethepathogenesisofPoliomyelitis			Y	Lecture,SGD	Written/Viva			

						voce			
30.13.5	DescribealltheclinicalfeaturesofPoliomyelitis.			Y	Lecture,SGD	Written/ Vivavoce			
30.13.6	DiscussthedifferentialdiagnosisofAFP.			Y	Lecture,SGD	Written/ Vivavoce			
30.13.7	DescribeallthetreatmentmodalitiesforPoliomyelitis/AFPincludingmedicalmanagement,occupationaltherapyand physiotherapy.			Y	Lecture,SGD	Written/ Vivavoce			
30.13.8	DescribethevariousavailablePoliovaccinesandtheirrole inpreventionofpoliomyelitis.			Y	Lecture,SGD	Written/ Vivavoce			
PE30.14	**Discusstheetiopathogenesis,clinicalfeaturesand managementofDuchenemusculardystrophy**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**			
30.14.1	DefineDuchenemusculardystrophy.			Y	Lecture,SGD	Written/ Vivavoce			
30.14.2	DescribetheetiopathogenesisofDuchenemuscular dystrophy			Y	Lecture,SGD	Written/ Vivavoce			
30.14.3	DescribetheclinicalfeaturesofDuchenemuscular dystrophy.			Y	Lecture,SGD	Written/ Vivavoce			
30.14.4	Enumerateinvestigationsrequiredincludinggenetic testingtodiagnoseDuchenemusculardystrophy.			Y	Lecture,SGD	Written/ Vivavoce			
30.14.5	DescribethetreatmentmodalitiesforDuchenemuscular dystrophyincludingoccupationaltherapyandphysiotherapy.			Y	Lecture,SGD	Written/ Vivavoce			
PE30.15	**Discusstheetiopathogenesis,clinicalfeaturesand managementofAtaxiainchildren**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**			
30.15.1	DefineAtaxiainchildren.			Y	Lecture,SGD	Written/ Vivavoce			
30.15.2	EnumerateallcausesofAtaxiainchildren.			Y	Lecture,SGD	Written/ Vivavoce			
30.15.3	DescribethepathogenesisofAtaxiainchildren.			Y	Lecture,SGD	Written/ Vivavoce			
30.15.4	DescribealltheclinicalfeaturesofAtaxiainchildren.			Y	Lecture,SGD	Written/ Vivavoce			
30.15.5	EnumeratetheinvestigationsinevaluationofAtaxiain children.			Y	Lecture,SGD	Written/ Vivavoce			
30.15.7	Describethetreatmentavailableforthevariouscausesof			Y	Lecture,SGD	Written/Viva voce			

	Ataxiainchildren.								
PE30.16	**Discuss the approach to and management of a childwithheadache**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**			
30.16.1	Enumeratecausesofheadacheinchildren			Y	Lecture,SGD	Written/Viva voce			
30.16.2	Enumeratethetypesofheadache			Y	Lecture,SGD	Written/ Vivavoce			
30.16.3	Describetheclinicalfeaturesofvarioustypesofheadachesinchi ldren			Y	Lecture,SGD	Written/ Vivavoce			
30.16.4	Enumerateallinvestigationstodiagnosecauseandtypeof headache.			Y	Lecture,SGD	Written/ Vivavoce			
30.16.5	Analysethehistoryandinterprettheexaminationfindingsand investigations using an algorithm to come to adifferentialdiagnosis/diagnosisofheadache			Y	Lecture,SGD	Written/ Vivavoce			
30.16.6	Discussapproachtomanagementofheadachebasedonhist ory,examination andinvestigations			Y	Lecture,SGD	Written/ Vivavoce			
30.16.7	Describetreatmentofachildwithheadache.			Y	Lecture,SGD	Written/Viva voce			
PE30.17	**Elicit,documentandpresentanageappropriate historypertainingtotheCNS**			**Y**	**Bedside, Skillslab**	**SkillAssess ment**			
30.17.1	Elicitageappropriatedetailed historypertainingtoCNS			Y	Bedside,Skills lab	Clinical case/OSCE			
30.17.2	Writedownageappropriatehistoryincludinghistory pertainingtoCNSunderappropriateheadings			Y	Bedside,Skills lab	Logbook			
30.17.3	Presentthedocumentedageappropriatehistorypertaining toCNS			Y	Bedside,Skills lab	Logbook			
PE30.18	**Demonstrate the correct method for physicalexamination of CNS including identification ofexternalmarkers.Documentandpresentclinical findings**			**Y**	**Bedside,Skillslab**	**SkillAssess ment**			
30.18.1	Measureheadcircumferenceaccurately.			Y	Bedside,Skills lab	OSCE			
30.18.2	Recognizeneurocutaneousmarkers.				Bedside/skilllab/ pictures/video	OSCE			
30.18.3	DoacompleteCNSexaminationinchildrenofdifferent				Bedside/skilllab	Skilllab			

	ages.								
30.18.4	Recognizeinvoluntarymovements.				Bedside/skilllab/ pictures/video	OSCE			
30.18.5	Examineforsignsofmeningealirritation.				Bedside/skilllab	Skilllab			
30.18.6	Documentandpresentclinicalfindings.				Bedside/skilllab	Clinicalcase			
PE30.19	**Analysesymptomsandinterpretphysicalfindings andproposeaprovisional/differentialdiagnosis**			**Y**	**Bedside,Skillslab**	**SkillAssess ment**			
30.19.1	Analysesymptomsandproposeaprovisional/ differentialdiagnosis			Y	Bedside/skilllab	Clinicalcase			
30.19.2	Interpretphysicalfindingsandproposeaprovisional/ differentialdiagnosis			Y	Bedside/skilllab	Clinicalcase			
30.19.3	Combine analysis of symptoms and interpretation ofphysicalfindingstoproposea provisional/differential diagnosis			Y	Bedside/skilllab	Clinicalcase			
PE30.20	**InterpretandexplainthefindingsinaCSFanalysis**			**Y**	**SGD**	**Logbook**		**Micro**	
30.20.1	Interpretthefindings(cells,proteinsandsugarlevels)inaCSFan alysis. .			Y	Skilllab	OSCE			
30.20.2	Explainthesignificanceoffindings(cells, proteinsandsugarlevels)in a CSFanalysis			Y	SGD	SAQ/viva			
PE30.21	**Enumeratetheindicationanddiscussthe limitationsofEEG,CT,MRI**			**N**	**Bedside**	**Logbook**			
30.21.1	EnumeratetheindicationsofEEG.			N	Bedside	Logbook			
30.21.2	DiscussthelimitationsofEEG.			N	Bedside	Logbook			
30.21.3	EnumeratetheindicationsofCTscan			N	Bedside	Logbook			
30.21.4	DiscussthelimitationsofCTscan.			N	Bedside	Logbook			
30.21.5	EnumeratetheindicationsofMRI.			N	Bedside	Logbook			
30.21.6	DiscussthelimitationsofMRI.			N	Bedside	Logbook			
PE30.22	**InterpretthereportsofEEG,CT,MRI**			**Y**	**Bedside,Skills lab**	**Logbook**		**RadioD**	
30.22.1	InterpretEEGreports			Y	Bedside,Skillslab	Logbook			
30.22.2	InterpretCTscan(BrainandSpine)reports			Y	Bedside,Skillslab	Logbook		**RadioD**	
30.22.3	InterpretMRI(Brain&Spine) reports			Y	Bedside,Skillslab	Logbook		**RadioD**	

PE30.23	**Perform in a mannequin lumbar puncture. Discusstheindications,contraindicationoftheproce dure**			**Y**	**Bedside, Skillslab**	**SkillAssess ment**			
30.23.1	Performlumbarpunctureonamannequin.			Y	Skilllab	SKILL assessment			
30.23.2	Enumerateallindicationsoflumbarpuncture.			Y	SGD	OSCE/VIVA			
30.23.3	Enumeratecontraindicationsoflumbarpuncture			Y	SGD	OSCE/VIVA			
Topic:AllergicRhinitis,AtopicDermatitis,Bronchial Asthma,UrticariaAngioedema		**Numberof competencies:(12)**				**Numberofproceduresthatrequirecertification:(NIL)**			
PE 31.1	**DescribetheetiopathogenesisandpreventionofAllergicRhinitisinChildren**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**		**ENT**	
31.1.1	Defineallergicrhinitisin children			Y	Lecture,SGD	Written/ Vivavoce		ENT	
31.1.2	Enumerateriskfactorsanddescribepathogenesisforallergic rhinitisin children			Y	Lecture,SGD	Writtenand vivavoce		ENT	
31.1.3	Describetreatmentandpreventionfor allergicrhinitisinchildren			Y	Lecture,SGD	Written andvivavoc e		ENT	
PE 31.2	**RecognizetheclinicalsignsofAllergicRhinitis**			**Y**	**Bedside,SkillLab**	**Skill assessment**		**ENT**	
31.2.1	identifyclinicalsignofallergicrhinitisin children			Y	Bedside,SkillLab	Skillassessment		ENT	
PE 31.3	**DescribetheetiopathogenesisandmanagementofAtopicdermatitisinChildren**			**Y**	**Lecture,SGD**	**Written/Viva voce**		**Derm**	
31.3.1	Describeetiopathogenesisofatopicdermatitisinchildren.			Y	Lecture,SGD	Written/Viva voce		Derm	
31.3.2	Describeclinicalfeaturesofatopicdermatitisinchildren.			Y	Lecture,SGD	Written andvivavoc e			
31.3.3	Describetreatmentforpreventionandcontrolofatopic dermatitisinchildren			Y	Lecture,SGD	Writtenand vivavoce			
PE 31.4	**Identifyclinicalfeaturesofatopicdermatitisand manage**			**Y**	**Bedside,skilllab**	**Skill assessment**		**Derm**	
31.4.1	Identifyclinicalfeaturesofatopicdermatitis			Y	Bedside,skilllab	Skillassessment		Derm	

31.4.2	Makeaplanforlocalandsupportivetherapyforchildrenwithatopic dermatitis			Y	Bedside,skilllab	Skillassessment			
31.4.3	Planappropriatesystemictherapyforchildrenwithatopicdermatitis			Y	Bedside,skilllab	Skillassessment			
PE 31.5	**Discuss the etiopathogenesis, clinical types,presentations,managementandpreventionof childhoodAsthma**			**Y**	**Lecture/SGD**	**Written / vivavoce**			
31.5.1	Describeetiopathogenesisofchildhoodasthma			Y	Lecture/SGD	Written/Vivavoce			
31.5.2	Describetypes/patternsofchildhoodasthmaasperATMmodule.			Y	Lecture/SGD	Written andvivavoce			
31.5.3	Enumeratecommontriggersinchildhoodasthma			Y	Lecture/SGD	Written andvivavoce			
31.5.4	Describeclinicalpresentationsofchildhoodasthma			Y	Lecture/SGD	Written andvivavoce			
31.5.5	Enumerateinvestigationsinchildhoodasthma			Y	Lecture/SGD	Written andvivavoce			
31.5.6	Discusstreatmentoptionsforchildhoodasthma.			Y	Lecture/SGD	Writtenand vivavoce			
31.5.7	Discusspreventionforchildhoodasthma.			Y	Lecture/SGD	Written andvivavoce			
PE 31.6	**Recognizesymptomsandsignsofasthmainachild**			**Y**	**Bedside,skilllab**	**Skill assessment**			
31.6.1	Recognize symptomsandsignsofasthmainachild			Y	Bedside,skilllab	Skillassessment			
PE 31.7	**Developatreatmentplanforachildwithappropriate totheseverityandclinicalpresentation**			**Y**	**Bedside,skilllab**	**Skill assessment**			
31.7.1	Developatreatmentplanappropriatefortheseverityand clinicalpresentationofachildwithasthma			Y	Bedside,skilllab	Skillassessment			

31.7.2	Makeatreatmentplanforachildwithacutesevereasthma(status asthmaticus)			Y	Bedside,skilllab	Skillassessment			
31.7.3	Observeanddocumentstepsofuseofmetereddoseinhalerwithspacer in a child withasthma.			Y	Bedside,skilllab	Skillassessment			
PE 31.8	**Enumeratethecriteriaforreferralinachildwith asthma**			**Y**	**Lecture,SGD**	**Written/Viva voce**			
31.8.1	EnumeratethecriteriaforreferralinachildwithAsthma.			Y	Lecture,SGD	Written/ Vivavoce			
PE 31.9	**InterpretCBC andCXRayinAsthma**			**Y**	**Bedsideclinic, SGD**	**Skillassessment/ OSCE**			
31.9.1	InterpretCBCfindingsinrelationtoasthmafromgivencasereport.			Y	Bedsideclinic,SGD	Skill assessment/ OSCE			
31.9.2	InterpretfindingsonagivenX-Rayofachildwithasthma			Y	Bedsideclinic,	Skillassessment			
PE 31.10	**EnumeratetheindicationsforPFT.**			**N**	**Lecture,SGD**	**Written/Viva voce**		**Pulmonary medicine**	
31.10.1	EnumeratetheindicationsofpulmonaryfunctionTest(PFT) inchildhoodasthma			N	Lecture,SGD	Written/Viva voce		Pulmonary medicine	
PE 31.11	**ObserveadministrationofNebulization**			**Y**	**DOAP**	**Documentin Logbook**			
31.11.1	ObserveanddocumentstepsofadministrationofNebulizationto achildwithasthma			Y	DOAP	Document inLogbook			
PE 31.12	**Discusstheetiopathogenesis,clinicalfeatures, complications and management of UrticariaAngioedema.**			**Y**	**Lecture,SGD**	**Written/ Vivavoce**			
31.12.1	Describeetiopathogenesisofurticaria/angioedemain children			Y	Lecture/SGD	Written/Viva voce			
31.12.2	Describeclinicalfeaturesofurticaria/angioedema			Y	Lecture/SGD	Written andvivavoce			
31.12.3	Enumeratecommoncomplicationsofurticaria/angioedemainchildren			Y	Lecture/SGD	Written andvivavoce			

31.12.4	Enumerateinvestigationsincaseofurticaria/angioedemain children			Y	Lecture/SGD	Writtenand vivavoce			
31.12.5	Describetreatmentplanofurticaria/angioedemainchildren			Y	Lecture/SGD	Written andvivavoc e			
Topic:ChromosomalAbnormalities		**Numberofcompetencies:(13)**			**Numberofproceduresthatrequirecertification:(NIL)**				
PE32.1	**Discussthegeneticbasis,riskfactors,complications,pre natal diagnosis, management and geneticcounsellingin Down Syndrome**			**Y**	**Lecture, Smallgroupdis cussion**	**Written**		**HumanAnat**	
32.1.1	Describethegeneticbasisof Downsyndrome			Y	Lecture/SGD	MCQ/SAQ,/ Vivavoce		Anat,Bioche mistry	OBG
32.1.2	EnumeratetheriskfactorsforDownsyndrome			Y	Lecture/SGD	MCQ/SAQ,/ Vivavoce			
32.1.3	EnumeratethecomplicationsofDownsyndrome			Y	Lecture/SGD	MCQ/SAQ,/ Vivavoce			
32.1.4	DescribetheprenataldiagnosisofDown syndrome			Y	Lecture/SGD	MCQ/SAQ,/ Vivavoce			
32.1.5	DescribethemanagementofDownsyndrome			Y	Lecture/SGD	MCQ/SAQ,/ Vivavoce			
32.1.6	DescribethegeneticcounselingforDownsyndrome			Y	Lecture/SGD	MCQ/SAQ,/ Vivavoce			
PE 32.2	**IdentifytheclinicalfeaturesofDownSyndrome**			**Y**	**Bedside,Skillslab**	**Logbook**		**Med**	
32.2.1	IdentifycommonclinicalfeaturesinachildwithDownsyn drome			Y	Bedsideclinic	Bedside/OSCE			
PE 32.3	**InterpretnormalKaryotypeandrecognizeTrisomy21**			**Y**	**Bedside,Skillslab**	**Logbook**			**Med**
32.3.1	ReadanormalKaryotypeandrecognizetrueTrisomy21			Y	Skilllab	OSCE/Logbook			
32.3.2	RecognizedifferenttypesofKaryotype abnormalitiesin DownSyndrome			N	Skilllab	OSCE		Anat/Path	**Med**
PE 32.4	**DiscussthereferralcriteriaandMultidisciplinary approachtomanagement**			**Y**	**Lecture,SGD**	**Written/Viva voce**			
32.4.1	EnumeratethereferralcriteriaforDownsyndrome.			Y	SGD	SAQ/Viva		AnatBioche mistry	Med
32.4.2	Describeamultidisciplinaryapproachtomanagementofa childwithDownsyndrome			Y	Lecture/SGD	MCQ/SAQ			
PE 32.5	**Counselparentsregarding1.Presentchild 2.Riskinthenextpregnancy**			**N**	**Bedside,Skillslab**	**Logbook**			

32.5.1	CounseltheparentsofachildwithDownsyndromeinacompreh ensive manner including care, possiblecomplications,futureoutcomes			Y	DOAP/bedside/skillla b/roleplay	Logbook/role play			
32.5.2	Counselparentsforriskinfuturepregnancies			Y	Simulation,Roleplay	OSCE/Logbook			
PE 32.6	**Discussthegeneticbasis,riskfactors,clinicalfeatures,comp lications,prenataldiagnosis,managementand geneticcounselinginTurnerSyndrome**			**N**	**Lecture,SGD**	**Written/ Vivavoce**		**Med,OBG**	
32.6.1	DescribethegeneticbasisofTurnersyndrome			N	Lecture/SGD	MCQ/SAQ,/ Vivavoce		Anat, Biochemistry	OBG
32.6.2	EnumeratetheriskfactorsforTurnersyndrome			N	Lecture/SGD	MCQ/SAQ,/ Vivavoce			
32.6.3	Describetheclinicalfeaturesof Turnersyndrome			N	Lecture/SGD	MCQ/SAQ,/ Vivavoce			
32.6.4	EnumeratethecomplicationsofTurnersyndrome			N	Lecture/SGD	MCQ/SAQ,/ Vivavoce			
32.6.5	DescribetheprenataldiagnosisofTurnersyndrome			N	Lecture/SGD	MCQ/SAQ,/ Vivavoce			
32.6.6	DescribethemanagementofTurnersyndrome			N	Lecture/SGD	MCQ/SAQ,/ Vivavoce			
32.6.7	DescribethegeneticcounselingforTurnersyndrome			N	Lecture/SGD	MCQ/SAQ,/ Vivavoce			
PE 32.7	**IdentifytheclinicalfeaturesofTurnerSyndrome**			**N**	**Bedside,Skillslab**	**Logbook**		**Med**	
32.7.1	Identifyclinicalfeaturesof Turnersyndrome			N	Bedside,Photo	Bedside /Logbook			
PE 32.8	**Interpret normal Karyotype and recognize TurnerKaryotype**			**N**	**Bedside,Skillslab**	**Logbook**			**Med**
32.8.1	ReadanormalKaryotypeandrecognize Turnerkaryotype			N	Skilllab	Logbook			
PE 32.9	**Discuss the referral criteria and Multidisciplinaryapproachtomanagement**			**N**	**Lecture,SGD**	**Written/Viva voce**			
32.9.1	Enumeratethereferralcriteriafor Turnersyndrome.			N	SGD	SAQ/Viva		Anat Biochemistry	**Med**
32.9.2	Describeamultidisciplinaryapproachtomanagementofachil d withTurner syndrome			N	Lecture/SGD	MCQ/SAQ			
PE 32.10	**Counselparentsregarding1.Presentchild 2.Riskinthenextpregnancy**			**N**	**Bedside,Skillslab**	**Logbook**			Med, ObsGy nae

32.10.1	Counseltheparentsofachildwith Turnersyndromeinacomprehensivemannerincludingcare, possible complications,futureoutcomes			N	DOAP/bedside/skilll ab/roleplay	Logbook/role play			
32.10.2	Counselparentsforriskinfuturepregnancies			N	Simulation,Roleplay	Logbook			
PE 32.11	**Discussthegeneticbasis,riskfactors,complications,pre nataldiagnosis,managementandgenetic counsellinginKlinefelterSyndrome**			**Y**	**Lecture/ SGD**	**Written/viva**			Med
32.1.1	Discussthegeneticbasis,riskfactors,complications,prenataldiagn osis,managementandgeneticcounsellinginKlinefelter Syndrome			Y	Lecture/SGD	Written/viva			
PE 32.12	**IdentifytheclinicalfeaturesofKlinefelterSyndrome**			**N**	**Bedside/ photo**	**LOGBOOK**			Med
	IdentifytheclinicalfeaturesofKlinefelterSyndrome			N	Bedside/photo/	LOGBOOK			
PE 32.13	**InterpretnormalKaryotypeandrecognizethe KlinefelterKaryotype**			**N**	**Bedside/ photo**	**LOGBOOK**			Med
Topic:Endocrinology		**Numberofcompetencies:(11)**			**Numberofproceduresthatrequirecertification:(02)**				
PE33.1	**Describe the etiopathogenesis clinical features,managementofHypothyroidisminchild ren**			**Y**	**Lecture,SGD**	**written/viva voce**			
33.1.1	Describethepathogenesisofhypothyroidisminchildren			Y	**Lecture/ SGD**	Written/viva			
33.1.2	Enumeratethecausesofcongenitalandacquiredhy pothyroidisminchildren.			Y	Lecture,SGD	Written/viva			
33.1.4	Describetheclinicalfeaturesofcongenitalandacquiredhyp othyroidism			Y	Lecture,SGD	Written/viva			
33.1.5	Discusstheapproachtoacaseofcongenital/acquired hypothyroidisminchildren			Y	Lecture,SGD	Written/viva			
33.1.6	Outlinethetreatmentofhypothyroidisminchildren.			Y	Lecture,SGD	Written/viva			
PE33.2	**RecognizetheclinicalsignsofHypothyroidismand refer**			**Y**	**Bedside,SkillLab**	**Skill Assessment**			
33.2.1	Recognizehypothyroidismbytakingappropriatehistoryandfocus ed physicalexamination			Y	Bedside	Skillassessment			
33.2.2	Identifytheneedtoreferthechildtohighercenter			Y	Bedside,skilllab	OSCEwithSP			
PE33.3	**Interpretandexplainneonatalthyroidscreening report**			Y	**Bedside,SGD**	**Skill Assessment**			
33.3.1	Interpretthegivenneonatalthyroidscreeningreport			Y	SGD,Bedside	OSCE/vivavoce			

33.3.2	Explainthegiventhyroidscreeningreport			Y	Bedside,SGD	OSCE			
PE33.4	**Discuss the etiopathogenesis, clinical types,presentations,complicationandmanagementof Diabetesmellitusinchildren**			Y	**Lecture,SGD**	**Written/ Vivavoce**			
33.4.1	ExplaintheetiopathogenesisofDiabetesmellitusinchildren.			Y	Lecture/SGD	Written/viva		Biochemistry, Physio	
33.4.2	DiscussclinicaltypesofDMinchildren.			Y	Lecture/SGD	Written/viva			
33.4.4	DescribetheclinicalfeaturesofDMinchildren.			Y	Lecture/SGD	Written/viva			
33.4.5	EnumeratethecomplicationsofDM.			Y	Lecture/SGD	Written/viva			
33.4.6	Describethecomprehensivemanagementforchildren withDM.			Y	Lecture/SGD	Written/viva			
PE33.5	**Interpret Blood sugar reports and explain thediagnosticcriteriaforType1 Diabetes**			**Y**	**Bedside clinic,smallgro up activity**	**SkillAssess ment**			
33.5.1	IdentifyType1Diabetesfromagivenbloodreportasperlatestdi agnosticcriteriaof DM (AmericanDiabetes Association,2016)			Y	Bedside,SGD	OSCE			
PE33.6	**PerformandinterpretUrineDipStickforSugar**			**Y**	**DOAPsession**	**Skill Assessment**	**3**	**Biochemistry**	
33.6.1	Performurinedipsticktestfor sugarandinterpretitcorrectly			Y	DOAPsession	OSPE			
PE33.7	**PerformgenitalexaminationandrecognizeAmbiguous Genitaliaandreferappropriately**			**Y**	**Bedside,skilllab**	**Skill Assessment**			
33.7.1	Identifythedeviationfromnormalwhileperforminggenital examinationmaintainingfulldignityofthepatient			Y	Bedside,skilllab	OSCE			
33.7.2	Counseltheparentsforreferraltospecialistafterrecognizingambig uousgenitalia			Y	Bedside,skilllab	OSCEstation withSP			
PE33.8	**DefineprecociousanddelayedPuberty**			**Y**	**Lecture,SGD**	**Written/Viva voce**			
33.8.1	DiscussnormalPhysiologyofpubertyanddefineprecociousand delayed puberty			Y	Lecture,SGD	Written/viva			
PE33.9	**PerformSexualMaturityRating(SMR)and interpret**			**Y**	**Bedside,skilllab**	**Skill Assessment**			
33.9.1	PerformSMR stagingmaintainingfulldignityofthe adolescentpatientandinterpretitcorrectly			Y	Bedside,skilllab	OSCE			
PE33.10	**RecognizeprecociousanddelayedPubertyandrefer**			**Y**	**Bedside,skilllab**	**Logbook**			

33.10.1	Recognize featuresofprecociousanddelayedpubertyin achild			Y	Bedside/skilllab	Logbook			
33.10.2	Counseltheparentsforneedtoreferthechildtohigher centerafterdiagnosingprecociousordelayedPuberty			Y	Bedside,skilllab	OSCEwithSP			
PE33.11	**Identifydeviationsingrowthandplanappropriate referral**			**Y**	**Bedside,skilllab**	**Logbook**	2		
33.11.1	Identifytheabnormalgrowthpatternin achild			Y	Bedside,skilllab	OSCE	2		
33.11.2	Planthereferralofachild withabnormalgrowthtoaspecialistandcounselthepare ntsaccordingly			Y	Bedside,skilllab	OSCEwithSP	2		
Topic:VaccinepreventableDiseases-Tuberculosis		**Numberofcompetencies:(20)**				**Numberofproceduresthatrequirecertification:(03)**			
PE 34.1	**Discuss the epidemiology, clinical features, clinicaltypes, complications of Tuberculosis in Children andAdolescents**			**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro**	**Resp Med**
34.1.1	discusstheepidemiologyofTuberculosisinChildrenandAdoles cents			Y	Lecture/ SGD	Written/viva voce			
34.1.2	DescribetheclinicalfeaturesofTuberculosisinChildrenand Adolescents			Y	Lecture/ SGD	Written/viva voce			
34.1.3	EnumeratetheclinicaltypesofTuberculosisinChildrenandAdol escents			Y	Lecture/ SGD	Written/viva voce			
34.1.4	ListthecomplicationsofTuberculosisin ChildrenandAdolescents			Y	Lecture/ SGD	Written/viva voce			
PE 34.2	**Discussthevariousdiagnostictoolsforchildhood tuberculosis**			**Y**	**Lecture/** SGD	**Written/viva voce**		**Micro**	**Resp Med**
34.2.1	Describethe variousdiagnostictoolsforchildhood tuberculosis			Y	Lecture/ SGD	Written/viva voce			
PE 34.3	**DiscussthevariousregimensformanagementofTuberc ulosisasperNationalGuidelines**			**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro,Co mMed, Pharm**	**Resp Med**
34.3.1	DescribethevariousregimensformanagementofTu berculosisasperNational Guidelines			Y	Lecture/ SGD	Written/viva voce			
PE 34.4	**Discussthepreventivestrategiesadoptedandthe objectives and outcome of the National TuberculosisProgram**			**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro, Com Med,Phar m**	**Resp Med**

34.4.1	DescribethepreventivestrategiesadoptedundertheNationalTuberculosisProgram			Y	Lecture/SGD	Written/viva voce			
34.4.2	ListtheobjectivesoftheNationalTuberculosisProgram			Y	Lecture/SGD	Written/viva voce			
34.4.3	DiscusstheoutcomeoftheNationalTuberculosisProgram			Y	Lecture/SGD	Written/viva voce			
PE 34.5	**Abletoelicit,documentandpresenthistoryofcontact withtuberculosisineverypatientencounter**			**Y**	**Bedside,Skillslab**	**Skill Assessment**			**Resp Med**
34.5.1	Elicithistoryofcontactwithtuberculosisineverypatient encounter			Y	Bedside,Skillslab	SkillAssessment			
34.5.2	Documenthistoryofcontactwithtuberculosisineverypatientencounter			Y	Bedside,Skillslab	SkillAssessment			
34.5.3	Presenthistoryofcontactwithtuberculosisineverypatientencounter			Y	Bedside,Skillslab	SkillAssessment			
PE 34.6	**IdentifyaBCGscar**			**Y**	**Bedside,Skillslab**	**Skill Assessment**	**3**	**Micro**	**Resp Med**
34.6.1	IdentifyaBCG scarinachild			Y	Bedside,Skillslab	SkillAssessment	3		
PE 34.7	**InterpretaMantouxTest**			**Y**	**Bedside**	**Skill Assessment**	**3**	**Micro**	**Resp Med**
34.7.1	ReadaMantouxTest			Y	Bedside	SkillAssessment	3		
34.7.2	InterpretaMantouxTest			Y	Bedside	SkillAssessment	3		
PE 34.8	**Interpretachestradiograph**			**Y**	**Bedside**	**Skill Assessment**		**Radiod**	**Resp Med**
34.8.1	Identifyabnormalitiescausedbytuberculosisinachestradiograph			Y	Bedside	SkillAssessment			
PE 34.9	**Interpretbloodtestsinthecontextoflaboratory evidencefortuberculosis**			**N**	**Bedside,SGD**	**Logbook**		**Micro**	**Resp Med**
34.9.1	interpretbloodtestsinthecontextoflaboratoryevidence fortuberculosis			N	Bedside,SGD	Logbook			
PE 34.10	**Discussthevarioussamplesfordemonstratingthe organisme.g.GastricAspirate,Sputum,CSF,FNAC**			**Y**	**Bedside,SGD**	**Written/viva voce**		**Micro**	**Resp Med**
34.10.1	Describe the various samples for demonstrating themycobacteriae.g.GastricAspirate,Sputum,CSF,FNAC			Y	Bedside,SGD	Written/viva voce			

PE 34.11	**PerformAFBstaining**			**Y**	**DOAPsession**	**Logbook/Journal**	**3**	**Micro**	**Resp Med**
34.11.1	PerformAFB staining			Y	DOAPsession	Logbook/Journal	3		
PE 34.12	**Enumeratetheindicationsanddiscussthelimitations ofmethodsofculturingM.Tuberculosis**			**Y**	**SGD**	**Written/viva voce**		**Micro**	**Resp Med**
34.12.1	EnumeratetheindicationsofculturingM.tuberculosis			Y	SGD	Written/viva voce			
34.12.2	EnumeratethemethodsofculturingM. tuberculosis			Y	SGD	Written/viva			
34.12.3	DescribethelimitationsofdifferentmethodsofculturingM.tuberculosis			Y	SGD	Written/viva voce			
PE 34.13	**EnumeratethenewerdiagnostictoolsforTuberculosis includingBACTECCBNAATandtheirindications**			**N**	**Lecture/ SGD**	**Written/viva voce**			
34.13.1	EnumeratethenewerdiagnostictoolsforTuberculosis includingBACTECandCBNAAT			N	Lecture/SGD	Written/viva voce			
34.13.2	recalltheindicationsforusingthenewerdiagnostictoolsforTuberculosisincludingBACTECand CBNAAT			N	Lecture/SGD	Written/viva voce			
PE 34.14	**Enumerate the common causes of fever and discusstheetiopathogenesis,clinicalfeatures,complications andmanagementoffeverinchildren**			**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro**	
34.14.1	Enumeratethecommoncausesoffeverinchildren.			Y	Lecture/SGD	Written/viva voce			
34.14.2	Describethepathophysiologyoffeverinchildren.			Y	Lecture/SGD	Written/viva voce			
34.14.3	List the clinical features associated with fever in childrenwhich aidindiagnosis.			Y	Lecture/SGD	Written/viva voce			
34.14.4	Recallthecomplicationsoffeverinchildren.			Y	Lecture/SGD	Written/viva voce			
34.14.5	Elaboratethemanagementoffeverinchildren.			Y	Lecture/SGD	Written/viva voce			
PE 34.15	**Enumerate the common causes of fever and discusstheetiopathogenesis,clinicalfeatures,complications andmanagementofchildwithexanthematousillnesslikeMeasles,Mumps,Rubella&Chickenpox**			**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro**	

34.15.1	Enumeratethecommoncausesofexanthematousillness(fever with rash) in children			Y	Lecture/SGD	Written/viva voce			
34.15.2	discussthepathogenesisofMeasles,Mumps,Rubella& Chickenpox			Y	Lecture/SGD	Written/viva voce			
34.15.3	DescribetheclinicalfeaturesofMeasles,Mumps,Rubella&Chic kenpox inchildren andadolescents			Y	Lecture/SGD	Written/viva voce			
34.15.4	EnumeratethecomplicationsofMeasles,Mumps,Rubella & Chickenpoxinchildrenand adolescents			Y	Lecture/SGD	Written/viva voce			
34.15.5	outlinethemanagementofMeasles,Mumps,Rubella&Chi ckenpoxin childrenand adolescents			Y	Lecture/SGD	Written/viva voce			
PE 34.16	**Enumerate the common causes of fever and discusstheetiopathogenesis,clinicalfeatures,complica tionsandmanagementofchildwithDiphtheria,Pertussi s, Tetanus**			**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro**	
34.16.1	discussthepathogenesisofDiphtheria,PertussisandTetanus			Y	Lecture/SGD	Written/viva voce			
34.16.2	DescribetheclinicalfeaturesofDiphtheria,PertussisandTetanu sinchildrenand adolescents.			Y	Lecture/SGD	Written/viva voce			
34.16.3	EnumeratethecomplicationsofDiphtheria,PertussisandTetan usinchildren andadolescents			Y	Lecture/SGD	Written/viva voce			
34.16.4	outlinethemanagementofDiphtheria,PertussisandTetanus inchildrenandadolescents			Y	Lecture/SGD	Written/viva voce			
PE 34.17	**Enumerate the common causes of fever and discusstheetiopathogenesis,clinicalfeatures,complica tions andmanagementofchildwithTyphoid**			**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro**	**-**
34.17.1	discussthepathophysiologyofTyphoidfever			Y	Lecture/SGD	Written/viva voce			
34.17.2	DescribetheclinicalfeaturesofTyphoidfeverinchildren			Y	Lecture/SGD	Written/viva voce			
34.17.3	EnumeratethecomplicationsofTyphoidfeverinchildren			Y	Lecture/SGD	Written/viva voce			
34.17.4	outlinethemanagementofTyphoidfeverinchildren			Y	Lecture/SGD	Written/viva voce			

PE 34.18	**Enumerate the common causes of fever and discusstheetiopathogenesis,clinicalfeatures,complicationsandmanagementofchildwithDengue,Chikungunya andothervectorbornediseases**			**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro**	**-**
34.18.1	Enumeratecommoncausesoffeverresultingfromvectorborne diseasesinchildren(EgDengue,Chikungunyaand others)			Y	Lecture/SGD	Written/viva voce			
34.18.2	discussthepathophysiologyofvectorbornediseasesinchildren (EgDengue,Chikungunya,andothers)			Y	Lecture/SGD	Written/viva voce			
34.18.3	listtheclinicalfeaturesofvectorbornediseasesinchildren (EgDengue,Chikungunya,andothers)			Y	Lecture/SGD	Written/viva voce			
34.18.4	recallthecomplicationsofvectorbornediseasesinchildren(EgDengue, Chikungunya,and others)			Y	Lecture/SGD	Written/viva voce			
34.18.5	elaboratethemanagementofvectorbornediseasesinchildren(EgDengue,Chikungunya,andothers)			Y	Lecture/SGD	Written/viva voce			
PE 34.19	**Enumerate the common causes of fever and discussthe etiopathogenesis, clinical features, complicationsand management of children with Common ParasiticInfections,malaria,leishmaniasis,filariasis,helminthic infestations,amebiasis,giardiasis**			**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro**	**-**
34.19.1	Enumerate the common causes of fever resulting fromparasiticinfectionslikemalaria,leishmaniasis,filariasis,helminthicinfestations,amebiasisandgiardiasis			Y	Lecture/ SGD	Written/viva voce			
34.19.2	DiscussthepathophysiologyofCommonParasiticInfectionslikemalaria,leishmaniasis,filariasis,helminthicinfestations, amebiasisandgiardiasis			Y	Lecture/ SGD	Written/viva voce			
34.19.3	ListtheclinicalfeaturesofCommonParasiticInfectionslikemalaria,leishmaniasis,filariasis,helminthicinfestations, amebiasisandgiardiasis			Y	Lecture/ SGD	Written/viva voce			
34.19.4	RecallthecomplicationsofCommonParasiticInfectionslikemalaria, leishmaniasis, filariasis, helminthic infestations,amebiasisand giardiasis			Y	Lecture/ SGD	Written/viva voce			

34.19.5	Elaborate the management of Common Parasitic Infectionslikemalaria,leishmaniasis,filariasis,helminthicinfestations, amebiasisandgiardiasis			Y	Lecture/ SGD	Written/viva voce			
PE 34.20	**Enumerate the common causes of fever and discusstheetiopathogenesis,clinicalfeatures,complications andmanagementofchildwithRickettsialdiseases**			**Y**	**Lecture/ SGD**	**Written/viva voce**		**Micro**	**-**
34.20.1	EnumeratethecommoncausesoffeverresultingfromRickettsialdiseases			Y	Lecture/ SGD	Written/viva voce			
34.20.2	DiscussthepathophysiologyofRickettsialdiseases			Y	Lecture/ SGD	Written/viva voce			
34.20.3	ListtheclinicalfeaturesofRickettsialdiseasesinchildren			Y	Lecture/ SGD	Written/viva voce			
34.20.4	RecallthecomplicationsofRickettsialdiseasesin children			Y	Lecture/ SGD	Written/viva voce			
34.20.5	ElaboratethemanagementofRickettsialdiseasesinchildren			Y	Lecture/ SGD	Written/viva voce			
Topic:Theroleofthephysicianin thecommunity				**Numberofcompetencies:(1)**		**Numberofproceduresthatrequirecertification:(NIL)**			
PE 35.1	**Identify, discuss and defend medicolegal, socio-cultural and ethical issues as they pertain to healthcareinchildren(includingparentalrightsandright to refusetreatment)**			**Y**	**Small groupdiscussion**	**Written/ Vivavoce**			
35.1.1	ListcommonmedicolegalissuesrelatedtohealthcareinchildrenListcommonsocio-culturalissuesrelatedtohealthcareinchildren			Y	Interactivelecture	Written/viva	-	Forensic	
35.1.2				Y	Interactive lecture/community visit	Written/viva	-	ComMed	
35.1.3	Identify the important socio-cultural and ethical issuesrelatedtohealthcareinchildreninaclinicalcasedurin gbedsideteaching			Y	Bedsideteaching	Long caseOSCE Reflective writing			
35.1.4	Discuss the common medico-legal, socio-cultural and ethicalissuesrelated to healthcareinchildren			Y	Case-based learning/SGD	OSCE Reflective writing			

Summary of course content, teaching and learning methods and student assessment for the undergraduate (MBBS) Curriculum in Paediatrics

Course content

The course content has been given in detail in the above Table, which includes competencies, specific learning objectives for each competencies and the suggested Teaching-Learning methods and assessment methods. The competencies have been developed by an expert group nominated by NMC, while the SLOs, T-L methods and assessments methods have been written by the expert committee constituted by Rajiv Gandhi University of Health Sciences, with inputs taken from IAP Taskforce.

Teaching-Learning methods and Time allotted

	Clinics	Lectures	Small group discussion	Self-directed learning	No. of hours	Total hours
Professional year II	2 weeks (3 hours per day, 6 days a week)	-	-	-	36 hours	**300 hours**
Professional year III Part I	4 weeks (3 hours per day, 6 days a week)	20	30	5	127 hours	
Professional year III Part II	4 weeks (3 hours per day, 6 days a week)	20	35	10	137 hours	

Teaching-learning methods shall be learner centric and shall predominantly include small group learning, interactive teaching methods and case-based learning. Didactic lectures not to exceed one-third of the total teaching time. The teaching learning activity focus should be on application of knowledge rather than acquisition of knowledge.

The curricular contents shall be vertically and horizontally aligned and integrated to the maximum extent possible to enhance learner's interest and eliminate redundancy and overlap. Integration allows the student to understand the structural basis of paediatric problems, their management and correlation with function, rehabilitation and quality of life.

Acquisition and certification of skills shall be through experiences in patient care, diagnostic and skill laboratories. Use of skill lab to train undergraduates is desirable.

Newer T-L method like Learner-doctor method (Clinical clerkship) should be mandatorily implemented, from 1st clinical postings itself.
The goal of this type of T-L activity is to provide learners with experience in longitudinal patient care, being part of the health care team, and participate in hands-on care of patients in outpatient and inpatient setting. During the 1st clinical postings, the students are oriented to the working of the department. During the subsequent clinical postings the students are allotted patients, whom they follow-up through their stay in the hospital, participating in that patient's care including case work-up, following-up on investigations, presenting patient findings on rounds, observing procedures, if any, till patient is discharged.

The development of ethical values and overall professional growth as integral part of curriculum shall be emphasized through a structured longitudinal and dedicated programme on professional development including attitude, ethics, and communication which is called the AETCOM module. The purpose is to help the students apply principles of bioethics, system based care, apply empathy and other human values in patient care, communicate effectively with patients and relatives and to become a professional who exhibits all these values. This will be a longitudinal programme spread across the continuum of the MBBS programme including internship.

Assessment
Eligibility to appear for University examinations is dependent on fulfilling criteria in two main areas – attendance and internal assessment marks

Attendance
Attendance requirements are 75% in theory and 80% in clinical postings for eligibility to appear for the examinations in Paediatrics.
75% attendance in AETCOM Module is required for eligibility to appear for final examination in Professional year III part II.

Internal Assessment
Progress of the medical learner shall be documented through structured periodic assessment that includes formative and summative assessments. Logs of skill-based training shall be also maintained.
There shall be no less than three internal assessment examinations in Paediatrics. An end of posting clinical assessment shall be conducted for each of the Paediatric clinical postings.
Day to day records and logbook (including required skill certifications) should be given importance in internal assessment. Internal assessment should be based on competencies and skills.
Learners must secure at least 50% marks of the total marks (combined in theory and clinical; not less than 40 % marks in theory and practical separately) assigned for internal assessment in Paediatrics in order to be eligible for appearing at the final University examination.
Internal assessment marks will reflect as separate head of passing at the summative examination.
The results of internal assessment should be displayed on the notice board within 1-2 weeks of the test.
Remedial measures should be offered to students who are either not able to score qualifying marks or have missed on some assessments due to any reason.
Learners must have completed the required certifiable competencies for that phase of training and Paediatric logbook entry completed to be eligible for appearing at the final university examination.

AETCOM assessment will include: (a) Written tests comprising of short notes and creative writing experiences, (b) OSCE based clinical scenarios / viva voce.

University examinations
University exam shall be held at the end of Professional year III part II of training (Final year MBBS) in the subjects of Paediatrics, General Medicine, Obstetrics and gynaecology and General Surgery.
University examinations are to be designed with a view to ascertain whether the candidate has acquired the necessary knowledge, minimal level of skills, ethical and professional values with clear concepts of the fundamentals which are necessary for him/her to function effectively and appropriately as a physician of first contact. Assessment shall be carried out on an objective basis to the extent possible.

Marks allotted:

Paediatrics	**Theory**	**Clinical examination**
Total marks	100 marks	100 marks
	Long essay 2X10= 20	Two cases x40marks=80marks
	Short essay 8x5=40 marks	Viva voce 4 x 5=20marks
	Short answer question 10x3=30marks	
	MCQs 10x1=10marks	

The theory paper should include different types such as structured essays, short essays, Short Answers Questions (SAQ) and MCQs (Multiple Choice Questions). Marks for each part should be indicated separately.

All the question papers to follow the suggested **blueprint(APPENDIX 1). It is desirable that t**he marks allotted to a particular topic are adhered to.

A minimum of **80%** of the marks should be from the **must know (core)** component of the curriculum. A maximum of **20%** can be from the **desirable to know** component.

All **main essay questions** to be from the **must know component** of the curriculum.

Main essay questions to be of the **modified variety** containing a clinical case scenario. At least 30% of questions should be clinical case scenario based. Questions to be constructed to test higher cognitive levels.

Clinical examinations will be conducted in the hospital wards. Clinical cases kept in the examination must be common conditions that the learner may encounter as a physician of first contact in the community. Selection of rare syndromes and disorders asexamination cases is to be discouraged. Emphasis should be on candidate's capability to elicit history, demonstrate physical signs, write a case record, analyze the case and develop a management plan.

Viva/oral examination should assess approach to patient management, emergencies, attitudinal, ethical and professional values. Candidate's skill in interpretation of common investigative data, X-rays, identification of specimens, ECG, etc. is to be also assessed.

At least one question in each paper of the clinical specialties in the University examination should test knowledge competencies acquired during the professional development programme. Skill competencies acquired during the Professional Development Programme must be tested during the clinical, practical and viva voce.

There shall be one main examination in an academic year and a supplementary to be held not later than 90 days after the declaration of the results of the main examination.

Pass criteria
Internal Assessment: 50% combined in theory and practical (not less than 40% in each) for eligibility for appearing for University Examinations
University Examination: Mandatory 50% marks separately in theory and clinicals (clinicals = clinical + viva)
The grace marks up to a maximum of five marks may be awarded at the discretion of the University to a learner for clearing the examination as a whole but not for clearing a subject resulting in exemption.

Appointment of Examiners
Person appointed as an examiner in the particular subject must have at least four years of total teaching experience as assistant professor after obtaining postgraduate degree in the subject in a college affiliated to a recognized/approved/permitted medical college.

For the Practical/ Clinical examinations, there shall be at least four examiners for 100 learners, out of whom not less than 50% must be external examiners. Of the four examiners, the senior-most internal examiner will act as the Chairman and coordinator of the whole examination programme so that uniformity in the matter of assessment of candidates is maintained.

Where candidates appearing are more than 100, two additional examiners (one external & one internal) for every additional 50 or part there of candidates appearing, be appointed.

All eligible examiners with requisite qualifications and experience can be appointed as internal examiners by rotation.
External examiners may not be from the same University.

There shall be a Chairman of the Board of paper-setters who shall be an internal examiner and shall moderate the questions.
All theory paper assessment should be done as central assessment program (CAP) of concerned university.

APPENDIX 1: Blueprint for Paediatric theory Examinations

Topics	Marks allotted
• Growth, development & Adolescent health • Nutrition and micronutrients	15
Neonatology	10
Fluid & Electrolytes	3
• Immunity & Immunization • Infections & Infestation	15
Gastrointestinal system	5
Hematology including malignancies	10
• Respiratory system • Cardiovascular system	15
Endocrine, metabolic & genetic disorders	3
Central Nervous system, neuromuscular disorders	10
Disorders of kidney & urinary tract	5
Pediatric emergencies	3
Miscellaneous – Eye, ENT, skin, Rheumatology, Psychiatry & social paediatrics	6
Total	100

Sample Paediatrics Question Paper

Paediatrics Paper –MBBS , Phase III Part 2

Time: 3 hours
Marks: 100

Your answers should be specific to the questions asked.
Draw neat, labelled diagrams wherever necessary.

Long essays (2 X 10 = 20 marks)

1. 3 year old female child from low socio economic background presented with 3 days history of watery diarrhea and vomiting. There was no fever or other complaints. There was history of similar illness in many children in neighbourhood. On Examination, child was irritable and thirsty. Weight was 10 kg. Vitals were normal and systemic examination was non contributory.
   i) Assess and classify dehydration in this child.
   ii) Plan fluid & nutritional therapy for this child.

2. A 6 month old boy was brought to the emergency room with complaints of fever for the last 2 days and excessive crying and vomiting for the last 12 hours. He also had an episode of stiffening of body. Discuss the differential diagnosis and justify the most likely diagnosis. Add a note on management.

Short essays (8x5=40marks)

3. A 34 week male baby delivered by caesarean section developed fast breathing soon after birth and was taken to the NICU. There was history of PROM 24 hours before delivery. Birth weight of the baby was 1.5 kg. On examination, respiratory rate was 80/min. with retractions and grunting. Discuss the causes for distress in this newborn.
4. 4 year old girl presented with epistaxis of one day duration. On examination she was afebrile, echymotic patches were seen over lower limbs and trunk, otherwise clinical examination was unremarkable. How do you approach and manage this child ?
5. Complicated malaria
6. Clinical features and management of hypothyroidism
7. Management of cyanotic spell
8. Define failure to thrive and outline management
9. WHO classification of vitamin A deficiency
10. Nocturnal enuresis

Short answer questions (10x3=30)

11. APGAR score components
12. Urine examination in Nephrotic syndrome
13. Classify Hydrocephalus
14. Age independent anthropometric indices
15. Genetic patterns in Down Syndrome
16. HPV vaccine – Age and schedule
17. Advantages of breast feeding
18. Management of hyperkalemia
19. Normal Moro's reflex
20. Mantoux test

Multiple choice questions (10x1=10marks, with no negative marking)

21. While examining 2 days old infant, small vesicles on erythematous base are noted on face and chest. Wright stain of the lesions revealed sheets of Eosinophils. Diagnosis of this rash is

A) miliaria rubra
B) milia
C) neonatal acne
D) erythema toxicum

22. A 2 year old, active, asymptomatic boy is examined by a physician for the first time. His blood pressure is 130/86 in the right arm with a barely palpable right femoral pulse. The most likely diagnosis is

A) Coarctation of aorta
B) Tetralogy of Fallot
C) Aortic stenosis
D) Pulmonary stenosis

23. Which of the following hemolytic anemias is associated with an extracorpuscular defect?

A) Hereditary spherocytosis
B) Sickle cell anemia
C) Autoimmune hemolytic anemia
D) Glucose-6-phosphate dehydrogenase (G6PD) deficiency

24. Calorie requirement in a 3 year old is (kcal/day)

A) 1000
B) 1100
C) 1200
D) 1300

25. A 6 week old infant presents with a history of noisy breathing. The noise was first noted shortly after birth, is inspiratory in nature, is worse now that the infant has a viral respiratory illness, and remits almost completely when the child is asleep. The most likely etiology of this child's noisy breathing is

A) asthma
B) bronchopulmonary dysplasia
C) cystic fibrosis
D) laryngomalacia

26. A 10 year old develops nephrotic syndrome. Several urinalyses reveal the presence of red blood cell casts. The creatinine is 2.8 mg/dl and the blood pressure is 146/96 mm Hg. The next best course of action is

A) begin a course of oral prednisone
B) follow the child and see if the nephrotic syndrome resolves
C) perform a diagnostic renal biopsy
D) collect a 24 hour urine for creatinine clearance and protein excretion

27. All the following conditions are characterized by hypochromic, microcytic red cells EXCEPT

A) iron deficiency anemia
B) thalassemia major
C) glucose-6-phosphate dehydrogenase
D) anemia of chronic disease

28. Drug used for treatment of autonomic storm due to scorpion sting is

A) Adrenaline
B) Propranolol
C) Prazosin
D) Noradrenaline

29. An 8 month old girl is noted to have asymmetric use of her arms. The right arm is held in a flexed position with the hand in a fist. The neurologic examination also reveals increased tone in the right ankle and hyper reflexia on the right side. The past history is significant for premature delivery at 28 weeks gestation. The most likely diagnosis for this child is

a) Duchenne muscular dystrophy
b) Spinomuscular atrophy
c) Brachial palsy
d) Cerebral palsy

30. 2 year old child was brought with history of fever, cough and cold for 1 day and 1 episode of generalized tonic clonic seiure. Temperature was 102^{o}F. What information would like to elicit?

a) Duration of seizure
b) Any features suggestive of meningitis
c) Is she developmentally normal?
d) All of the above

Acknowledgement of contributors

IAP task force CBME curriculum for Paediatrics

Ophthalmology curriculum prepared by faculty from St Johns

RGUHS CBME curriculum for RS 4 Batch

NMC Document - Regulations on Graduate Medical Education

Dr. K. Shreedhara Avabratha, Professor & HOD, Dept. of Paediatrics, Father Muller Medical College Hospital, Mangalore

Dr. Sweta Shanbhag, Senior Resident, Dept. of Paediatrics, Father Muller Medical College Hospital, Mangalore