Undergraduate Assessment Record

Paediatrics

The TN Dr. M.G.R. Medical University
Chennai

The Tamil Nadu Dr. M.G.R. Medical University
Chennai

Under Graduate Assessment Record

Department of Paediatrics

Preface

Competency based education implemented by this university is an outcome-based learningonaframework of competencies. The present system needs an ongoing and longitudinal assessment to identify the learning, enable learning opportunities and acquire the mandated competency. Consequently, this university is enabling this assessment record to decide if the learner has acquired the mandated competencies.

This assessment record is designed to collect and analyse data of a student's learning in relation to a required competency and the learner's stage of training, based on - use of knowledge, technical skills, clinical reasoning, communication, emotions, values and reflection continuously and consistently and not isolated to the final examination.

As given in the MCI document on "Competency Based Assessment Module for Undergraduate Medical Education-2019" - "Informal assessments should happen during teaching-learning activities with the express purpose of finding out the stage of the student and taking corrective action in teaching-learning methodology on an ongoing basis. During lectures, small groups or seminars, use of techniques like clickers, one-minute papers and muddiest point provide valuable information to check understanding and provide developmental feedback. Same can be done during practical/clinical teaching using one-minute preceptor (OMP) or SNAPPS technique (Summarize history and findings, Narrow the differential; Analyse the differential; Probe preceptor about uncertainties; Plan management; Select case-related issues for self-study). Many of these do not need to be considered for pass/fail decisions but are useful to aid learning and acquire competencies. These can be planned by the teachers on a day to day basis and modified depending on the tasks at hand.

This Assessment Record for the Undergraduates is to be maintained by the Faculty of the concerned Department and shall be shown to the student during the feedback sessions and at the end of the course period.

Table of Contents

1. University Norms for Assessment of the Course

a. Formative / Internal Assessment

No	Type of Assessment	Methods of Assessment	Total Marks	Min Pass Mark
1	Theory Component			
A	Theory Tests (Average of 8 Tests)	MCQ, VSAQ, SAQ, LAQ	40	
B	Formative Assessment	Assignments	4	
		Integrated Sessions	4	
		Self-Directed Learning	2	
	Total		50	
2	Practical Component			
A	Practical (Average of 4 tests)	Clinical case presentation, spotting, OSPE, exercises , Viva	40	
B	Formative Assessment	DOAP	5	
		AETCOM Learning	5	
	Total		50	
	Grand Total		100	50

Note:

1. Internal assessment shall be based on day-to-day assessment. It shall relate to different ways in which learners participate in learning process including assignments, preparation for seminar, integrated classes, participation in AETCOM, SDL, Projects.
2. Regular periodic examinations shall be conducted throughout the course. There shall be no less than 8 internal assessment examinations and no less than 4 practical examinations.
3. Day to day records and log book (including required skill certifications) should be given importance in internal assessment. Internal assessment should be based on competencies and skills. Colleges and teachers should try to build their valid assessment tools.
4. Learners must secure at least 50% marks of the total marks (combined in theory and practical / clinical; not less than 40 % marks in theory and practical separately) assigned for internal assessment in a particular subject in order to be eligible for appearing at the final University examination of that subject. Internal assessment marks will reflect as separate head of passing at the summative examination. 5.

Learners must have completed the required certifiable competencies for that phase of training and completed the log book appropriate for that phase of training to be eligible for appearing at the final university examination of that subject.

6. Feedback should be provided to learners throughout the course so that they are aware of their performance and remedial action can be initiated well in time. The feedbacks need to be structured and the faculty and learners must be sensitized to giving and receiving feedback.
7. The results of IA should be displayed on notice board within 2 weeks of the test and an opportunity provided to the learners to discuss the results and get feedback on making their performance better. Remedial measures for learners who are either not able to score qualifying marks or have missed on some assessments due to any reason(s) shall be allowed with a record.
8. It is also recommended that learners should sign with date whenever they are shown IA records in token of having seen and discussed the marks.

9. Internal assessment marks will not be added to University examination marks and will reflect as a separate head of passing at the summative examination.

b. Summative Assessment - University Examination

University examinations will consist of

1. Theory: 1 paper of 100 marks
2. Practical Exam + Viva: 80+20=100 marks

Note:

1. Theory Examinations: Nature of questions will include different types such as structured essays (Long Answer Questions - LAQ), Short Answers Questions (SAQ) and objective type questions (e.g. Multiple-Choice Questions - MCQ). Marks for each part should be indicated separately. MCQs shall be accorded a weightage of not more than 20% of the total theory marks. In subjects that have two papers, the learner must secure at least 40% marks in each of the papers with minimum 50% of marks in aggregate (both papers together) to pass.
2. Practical/clinical examinations will be conducted in the laboratory/ clinics. The objective will be to assess proficiency and skills in History Taking, conduct physical examination, interpret data and form clinic social case diagnosis Emphasis should be on candidate's capability to demonstrate communication skills, analyse the case etc
3. Viva/oral examination should assess approach to problem solving, applied situations, attitudinal, ethical and professional values. Candidate's skill in interpretation of common factors associated with health and disease
4. Internal assessment marks are not to be added to marks of the University examinations and should be shown separately in the grade card.
5. Pass in University Exam will be 50% marks in theory and practical

2. Curriculum Vitae

Name of Student											
Name of Parent/Guardian											
Date of Birth & Age											
Permanent Address											
Address for Postal Communication											
Landline Phone (Home)											
Mobile Phone (Parent/Guardian)											
Mobile Phone (Parent/Guardian)											
Mobile Phone (Student)											
Email ID (Parent/Guardian)											
Email ID (Student)											

Signature of Student

3. Understanding Competency Based Assessment

Assessment requires specification of measurable and observable entities. This could be in the form of whole tasks that contribute to one or more competencies or assessment of a competency per se. Another approach is to break down the individual competency into learning objectives related to the domains of knowledge, skills, attitudes, communication etc. and then assess them individually. However, as stated earlier, using individual domain framework may not always result in making an accurate assessment of the specific competency. Therefore, efforts should be made to include competencies in the assessment process as much as possible. CBA is very useful to convey a message to the learners to structure their learning around competency framework.

- CBA operates within the framework of competencies. Assessment tools should align competencies/objectives.
- CBA should help to acquire competencies/objectives (Assessment for learning) and their certification (Assessment of learning).
- CBA is continuous and ongoing process with opportunities for providing developmental feedback.
- Direct observations of learners improve utility of CBA and feedback.
- Multiple assessors, multiple tools and multiple assessments improve the validity and reliability of CBA.

Formative & Internal Assessment (IA)

Formative assessment is an assessment conducted during the instruction with the primary purpose of providing feedback for improving learning. It also helps the teachers and learners to modify their teaching learning strategies. The feedback is central to formative assessment and is linked to deep learning, seeking to explore the educational literature and its pedagogical lessons for healthcare educational practice. It provides inputs to both learners and teachers regarding adequacy of teaching-learning. A variety of feedback principles and techniques can be used depending on the context.

Although there can be a debate on the summative or formative nature of IA, it still provides the best opportunities for formative purposes. IA is when assessment is done by the teachers who have taught the subject. It overcomes the limitations of day-to-day variability and allows larger sampling of topics, competencies and skills.

In competency-based curriculum, IA provides useful avenues for both formative and summative assessment. The IA focuses on the process of learning i.e. how the learners have learnt throughout the course. This assessment gives priority to psychomotor, communication and affective domains. These are those domains which are usually not assessed by the traditional assessment methods. It should involve all faculty members of a department (Senior Residents upwards) and not just one or two senior teachers. This helps to build the ownership of teaching-learning and assessment as well as provide 'hands-on' experience in assessment to all teachers. In that way, IA can be a very useful tool for assessing all competencies in any competency-based curriculum. IA should not be considered as an assessment without external controls and can be utilized in a manner to overcome some its perceived weaknesses. Utility of IA can be further improved by involving all teachers in the department and limiting the contribution of individual teacher, test or tool.

Designing a system of assessment

While designing an internal assessment, all domains of learning i.e. cognitive, psychomotor and affective should be taken into account and weightage should be assigned to these domains for assessment. We can divide various domains into smaller components and assign marks to each component. Make a blueprint of assessment, then circulate to few learners and faculty, take their comments/ views/feedback and revise as per the need. Miller's pyramid (figure 2) provides a

simple way to select appropriate tool for assessment. Efforts should be made to climb higher in the pyramid.6, 13 The following adapted example illustrates this:

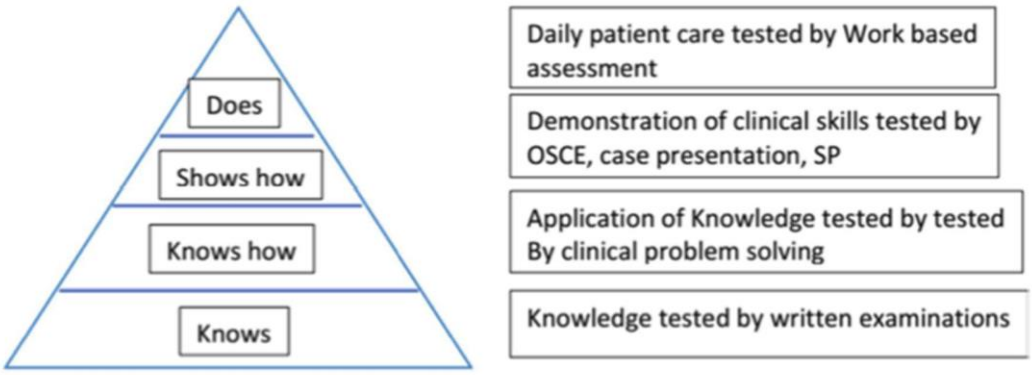

Figure 2. Assessment methods as per levels of competency (Adapted from Ramani) OSCE: Objective Structured Clinical Examination, SP: Standardised/ Simulated Patients

The key to building validity and to make CBA assessment useful is to align it with competencies/objectives. Including some aspects from competencies of other phases is useful to assess integration of concepts. Some examples of such alignment can be seen in the competency sheet given in Table1.

Table 1. Deriving assessment methods from objectives

Competency: An **observable** ability of a health professional, **integrating multiple components** such as knowledge, skills, values and attitudes.

PA42.3	**Identify** the etiology of meningitis based on given CSF parameters	K/S	SH	Y

Objective: Statement of what a learner should be able to do at the end of a specific learning experience

PA42.3.1	At the end of the session **the PII student** must be able to enumerate the most common causes of meningitis correctly	Short note or part of structured essay: Enumerate 5 causes of meningitis based on their prevalence in India
PA42.3.2	At the end of the session the PII student must be able to enumerate the components of a CSF analysis correctly	Short note or part of structured essay: Enumerate the components tested in a CSF analysis
PA4.3.3	At the end of the session the PII student must be able to **describe** the CSF features for a given etiologic of meningitis **accurately**	Short note or part of structured essay:Describe the CSF findings that are characteristic of tuberculous meningitis
PA4.3.4	At the end of the session the PII student must the able to identify the aetiology of meningitis correctly from a **given set of CSF parameters**	Short note / part of the structured essay/ Skill station/ Viva: Review the CSF findings in the following patient and identify (write or vocalise) the most likely ethology

Table 1. Deriving assessment methods from objectives

A useful approach, especially for affective, psychomotor and communication domains, is to adopt the concept of assessment toolbox. A toolbox is a listing of available tools (and rating forms, if required), which are suggested for a particular competency or sub-competency and aims at improving the value of assessment data.14 The listed tools are suggestions only and can be freely used either singly or in combination by teachers to suit particular requirements. Efforts should be made to use multiple tools even for a given competency to improve validity and reliability of assessment. While assessment will continue to be subject based, efforts must be made to ensure

that phase appropriate correlates are assessed to determine if the learner has internalised and integrated the concept and its application.

Internal Assessment

Scheduling of IA

A student who has not taken minimum required number of tests for IA each in theory and practical will not be eligible for University examinations. Proper records of the work should be maintained which will form the basis for the learners' internal assessment and should be available to the assessors at the time of inspection of the college by the Medical Council of India.

Components of IA

(i) Theory IA can include: theory tests, send ups, seminars, quizzes, interest in subject, scientific attitude etc. Written tests should have short notes and creative writing experiences.

(ii) Practical/Clinical IA can include: clinical case presentation, practical tests, Objective Structured Practical Examination (OSPE), Directly Observed Procedural Skills (DOPS), Mini Clinical Evaluation Exercise (mini-CEX), records maintenance and attitudinal assessment.

Colleges and teachers should try to build capacity to use a variety of assessment tools. A number of tools are available in the form of assessment toolbox. The construct validity and predictive utility of internal assessment is high. Many of the tools mentioned for IA may appear subjective. However, by virtue of being high on validity and by conveying a message to the learners to not ignore skills, attitudes and communication (educational impact), they contribute to better learning. Since stakes at IA are low, the use of expert subjective assessments to cover areas which are not assessable by conventional objectivised assessment tools is appropriate. There is plenty of evidence in literature to suggest that expert subjective assessments can be as reliable as highly objective ones.

There should be at least one assessment based on direct observation of skills, attitudes and communication at all levels. Communication and attitudinal assessment should also be built in all assessments as far as possible.

Feedback in IA

Feedback should be provided to learners throughout the course so that they are aware of their performance and remedial action can be initiated well in time. The feedbacks need to be structured and the faculty and learners must be sensitized to giving and receiving feedback. The results of IA should be displayed on notice board within 2 weeks of the test and an opportunity provided to the learners to discuss the results and get feedback on making their performance better. It is also recommended that learners should sign with date whenever they are shown IA records in token of having seen and discussed the marks. Internal assessment marks will not be added to University examination marks and will reflect as a separate head of passing at the summative examination.

(These concepts have been incorporated in the proposed Regulations in Graduate Medical Education, 2019 (GMER 2019) and are reproduced here.

5. Formative Assessment of Classroom / Clinical Training

The term "Classroom Learning" mentioned here includes any learning that happens within the ambit of the department as large group and small group teaching, demonstrations, dissection classes, practical classes, museum classes etc. The learning in the department predominantly fits into the Scale of 1 and2of the 5 level Blooms Taxonomy.

The Assessment Methods would include

1. End of Lecture Class/Module Assessment: 5-8 MCQ's solved over 5-8minutes
2. End of clinical training : OSCE of 10-12minutes
3. End of Practicals /Module: Spotting / OSCE/ Epidemiological exercises

For effective assessment and grading of performances a Likert's scale is given as under:

Grade	Characteristic
1	Score < 35% marks in the end of class assessments
2	Score 35%-50% marks in the end of class assessments
3	Score 50%-60% marks in the end of class assessments
4	Score 60%-75% marks in the end of class assessments
5	Score > 75% marks in the end of class assessments

Number	COMPETENCY: The student should be able to	Level	Grading Scale					Initial of
			1	2	3	4	5	Facilitator
Topic: Normal Growth and Development								
PE1.1	Define the terminologies Growth and development and discuss thefactors affecting normal growth and development	KH						
PE1.2	Discuss and describe the patterns of growth in infants, children andadolescents	KH						
PE1.3	Discuss and describe the methods of assessment of growth including use of WHO and Indian national standards. Enumerate the parameters used for assessment of physical growth in infants, children and adolescents	KH						
PE1.4	Perform Anthropometric measurements, document in growth chartsand interpret	P						
PE1.5	Define development and discuss the normal developmental milestones with respect to motor, behaviour, social, adaptive and language	KH						
PE1.6	Discuss the methods of assessment of development	KH						
PE1.7	Perform Developmental assessment and interpret	P						

Topic: Common problems related to Growth								
PE2.1	Discuss the etio-pathogenesis, clinical features and management ofa child who fails to thrive	KH						
PE2.2	Assessment of a child with failing to thrive including eliciting anappropriate history and examination	SH						
PE2.3	Counselling a parent with failing to thrive child	SH						
PE2.4	Discuss the etio-pathogenesis, clinical features and management ofa child with short stature	KH						
PE2.5	Assessment of a child with short stature: Elicit history, perform examination, document and present	SH						
PE2.6	Enumerate the referral criteria for growth related problems	K						
Topic: Common problems related to Development -1 (Developmental delay , Cerebral palsy)								
PE3.1	Define, enumerate and discuss the causes of developmental delayand disability including intellectual disability in children	K						
PE3.2	Discuss the approach to a child with developmental delay	K						
PE3.3	Assessment of a child with developmental delay - Elicit document and present history	SH						
PE3.4	Counsel a parent of a child with developmental delay	SH						
PE3.5	Discuss the role of the child developmental unit in management of developmental delay	K						
PE3.6	Discuss the referral criteria for children with developmental delay	K						
PE3.7	Visit a Child Developmental Unit and observe its functioning	KH						
PE3.8	Discuss the etio-pathogenesis, clinical presentation and multi-disciplinary approach in the management of Cerebral palsy	KH						

Topic: Common problems related to Development-2 (Scholastic backwardness, Learning Disabilities , Autism , ADHD)								
PE4.1	Discuss the causes and approach to a child with scholastic backwardness	K						
PE4.2	Discuss the etiology, clinical features, diagnosis and managementof a child with Learning Disabilities	K						
PE4.3	Discuss the etiology, clinical features, diagnosis and managementof a child with Attention Deficit Hyperactivity Disorder (ADHD)	K						
PE4.4	Discuss the etiology, clinical features, diagnosis and managementof a child with Autism	K						
PE4.5	Discuss the role of Child Guidance clinic in children with Developmental problems	K						
PE4.6	Visit to the Child Guidance Clinic	KH						
Topic: Common problems related to behavior								
PE5.1	Describe the clinical features, diagnosis and management of thumbsucking	K						
PE5.2	Describe the clinical features, diagnosis and management of Feeding problems	K						
PE5.3	Describe the clinical features, diagnosis and management of nailbiting	K						
PE5.4	Describe the clinical features, diagnosis and management of BreathHolding spells	K						
PE5.5	Describe the clinical features, diagnosis and management of tempertantrums	K						
PE5.6	Describe the clinical features, diagnosis and management of Pica	K						
PE5.7	Describe the clinical features, diagnosis and management of Fussyinfant	K						
PE5.8	Discuss the etiology, clinical features and management of Enuresis	K						
PE5.9	Discuss the etiology, clinical features and management of Encopresis	K						
PE5.10	Discuss the role of child guidance clinic in children with behaviouralproblems and the referral criteria	K						
PE5.11	Visit to Child Guidance Clinic and observe functioning	KH						

Topic: Adolescent Health & common problems related to Adolescent Health								
PE6.1	Define Adolescence and stages of adolescence	K						
PE6.2	Describe the physical, physiological and psychological changesduring adolescence (Puberty)	KH						
PE6.3	Discuss the general health problems during adolescence	KH						
PE6.4	Describe adolescent sexuality and common problems related to it	KH						
PE6.5	Explain the Adolescent Nutrition and common nutritionalproblems	KH						
PE6.6	Discuss the common Adolescent eating disorders (Anorexia Nervosa, Bulimia)	KH						
PE6.7	Describe the common mental health problems duringadolescence	KH						
PE6.8	Respecting patient privacy and maintaining confidentiality whiledealing with adolescence	SH						
PE6.9	Perform routine Adolescent Health check up including eliciting history, performing examination including SMR (Sexual Maturity Rating), growth assessments (using Growth charts) and systemicexam including thyroid and Breast exam and the HEADSS screening	SH						
PE6.10	Discuss the objectives and functions of AFHS (Adolescent FriendlyHealth Services) and the referral criteria	K						
PE6.11	Visit to the Adolescent Clinic	KH						
PE6.12	Enumerate the importance of obesity and other NCD in adolescents	K						
PE6.13	Enumerate the prevalence and the importance of recognition ofsexual drug abuse in adolescents and children	K						
Topic: To promote and support optimal Breast feeding for Infants								
PE7.1	Awareness on the cultural beliefs and practices of breast feeding	K						
PE7.2	Explain the physiology of lactation	KH						

PE7.3	Describe the composition and types of breast milk and discuss thedifferences between cow's milk and Human milk	KH						
PE7.4	Discuss the advantages of breast milk	KH						
PE7.5	Observe the correct technique of breast feeding and distinguishright from wrong techniques	P						
PE7.6	Enumerate the baby friendly hospital initiatives	KH						
PE7.7	Perform breast examination and identify common problems duringlactation such as retracted nipples, cracked nipples, breast engorgement, breast abscess	SH						
PE7.8	Educate mothers on ante natal breast care and prepare mothers forlactation	SH						
PE7.9	Educate and counsel mothers for best practices in Breast feeding	SH						
PE7.10	Respects patient privacy	SH						
PE7.11	Participate in Breast Feeding Week Celebration	SH						
Topic: Complementary Feeding								
PE8.1	Define the term Complementary Feeding	K						
PE8.2	Discuss the principles, the initiation, attributes, frequency, techniques and hygiene related to Complementary Feedingincluding IYCF	KH						
PE8.3	Enumerate the common complimentary foods	K						
PE8.4	Elicit history on the Complementary Feeding habits	SH						
PE8.5	Counsel and educate mothers on the best practices inComplimentary Feeding	SH						
Topic: Normal nutrition, assessment and monitoring								
PE9.1	Describe the age related nutritional needs of infants, children and adolescents including micronutrients and vitamins	KH						
PE9.2	Describe the tools and methods for assessment and classification ofnutritional status of infants, children and adolescents	KH						
PE9.3	Explains the Calorific value of common Indian foods	K						

PE9.4	Elicit document and present an appropriate nutritional history andperform a dietary recall	SH						
PE9.5	Calculate the age related calorie requirement in Health andDisease and identify gap	SH						
PE9.6	Assess and classify the nutrition status of infants, children andadolescents and recognize deviations	SH						
PE9.7	Plan an appropriate diet in health and disease	SH						
Topic: Provide nutritional support , assessment and monitoring for common nutritional problems								
PE10.1	Define and describe the etio-pathogenesis, classify including WHOclassification, clinical features, complication and management of Severe Acute Malnourishment (SAM) and Moderate Acute Malnutrition (MAM)	KH						
PE10.2	Outline the clinical approach to a child with SAM and MAM	KH						
PE10.3	Assessment of a patient with SAM and MAM, diagnosis, classification and planning management including hospital andcommunity based intervention, rehabilitation and prevention	SH						
PE10.4	Identify children with under nutrition as per IMNCI criteria and planreferral	SH						
PE10.5	Counsel parents of children with SAM and MAM	SH						
PE10.6	Enumerate the role of locally prepared therapeutic diets and readyto use therapeutic diets	K						
Topic: Obesity in children								
PE11.1	Describe the common etiology, clinical features and managementof obesity in children	KH						
PE11.2	Discuss the risk approach for obesity and discuss the preventionstrategies	KH						
PE11.3	Assessment of a child with obesity with regard to eliciting historyincluding physical activity, charting and dietary recall	SH						
PE11.4	Examination including calculation of BMI, measurement of waist hipratio, identifying external markers like acanthosis, striae, pseudogynaecomastia etc	SH						

PE11.5	Calculate BMI, document in BMI chart and interpret	P						
PE11.6	Discuss criteria for referral	K						
Topic: Micronutrients in Health and disease-1 (Vitamins ADEK, B Complex and C)								
PE12.1	Discuss the RDA, dietary sources of Vitamin A and their role inHealth and disease	K						
PE12.2	Describe the causes, clinical features, diagnosis and managementof Deficiency / excess of Vitamin A	KH						
PE12.3	Identify the clinical features of dietary deficiency / excess of VitaminA	SH						
PE12.4	Diagnose patients with Vitamin A deficiency, classify and plan management	SH						
PE12.5	Discuss the Vitamin A prophylaxis program and theirrecommendations	K						
PE12.6	Discuss the RDA, dietary sources of Vitamin D and their role inhealth and disease	K						
PE12.7	Describe the causes, clinical features, diagnosis and managementof Deficiency / excess of Vitamin D (Rickets and HypervitaminosisD)	KH						
PE12.8	Identify the clinical features of dietary deficiency of Vitamin D	SH						
PE12.9	Assess patients with Vitamin D deficiency, diagnose, classify andplan management	SH						
PE12.10	Discuss the role of screening for Vitamin D deficiency	K						
PE12.11	Discuss the RDA, dietary sources of Vitamin E and their role inhealth and disease	K						
PE12.12	Describe the causes, clinical features, diagnosis and managementof deficiency of Vitamin E	KH						
PE12.13	Discuss the RDA, dietary sources of Vitamin K and their role inhealth and disease	K						
PE12.14	Describe the causes, clinical features, diagnosis management andprevention of deficiency of Vitamin K	KH						
PE12.15	Discuss the RDA, dietary sources of Vitamin B and their role inhealth and disease	K						

PE12.16	Describe the causes, clinical features, diagnosis and managementof deficiency of B complex Vitamins	KH						
PE12.17	Identify the clinical features of Vitamin B complex deficiency	SH						
PE12.18	Diagnose patients with Vitamin B complex deficiency and plan management	SH						
PE12.19	Discuss the RDA , dietary sources of Vitamin C and their role inHealth and disease	KH						
PE12.20	Describe the causes, clinical features, diagnosis and managementof deficiency of Vitamin C (scurvy)	KH						
PE12.21	Identify the clinical features of Vitamin C deficiency	SH						
Topic: Micronutrients in Health and disease -2: Iron, Iodine, Calcium, Magnesium								
PE13.1	Discuss the RDA, dietary sources of Iron and their role in healthand disease	K						
PE13.2	Describe the causes, diagnosis and management of Fe deficiency	KH						
PE13.3	Identify the clinical features of dietary deficiency of Iron and make adiagnosis	SH						
PE13.4	Interpret hemogram and Iron Panel	SH						
PE13.5	Propose a management plan for Fe deficiency anaemia	SH						
PE13.6	Discuss the National anaemia control program and itsrecommendations	K						
PE13.7	Discuss the RDA , dietary sources of Iodine and their role in Healthand disease	K						
PE13.8	Describe the causes, diagnosis and management of deficiency ofIodine	KH						
PE13.9	Identify the clinical features of Iodine deficiency disorders	SH						
PE13.10	Discuss the National Goiter Control program and their recommendations	K						
PE13.11	Discuss the RDA, dietary sources of Calcium and their role in healthand disease	K						
PE13.12	Describe the causes, clinical features, diagnosis and managementof Ca Deficiency	KH						
PE13.13	Discuss the RDA, dietary sources of Magnesium and their role inhealth and disease	K						

PE13.14	Describe the causes, clinical features, diagnosis and managementof Magnesium Deficiency	KH						
Topic: Toxic elements and free radicals and oxygen toxicity								
PE14.1	Discuss the risk factors, clinical features, diagnosis and management of Lead Poisoning	KH						
PE14.2	Discuss the risk factors, clinical features, diagnosis and management of Kerosene ingestion	KH						
PE14.3	Discuss the risk factors, clinical features, diagnosis and management of Organophosphorous poisoning	KH						
PE14.4	Discuss the risk factors, clinical features, diagnosis and management of paracetamol poisoning	KH						
PE14.5	Discuss the risk factors, clinical features, diagnosis and management of Oxygen toxicity	KH						
Topic: Fluid and electrolyte balance								
PE15.1	Discuss the fluid and electrolyte requirement in health and disease	KH						
PE15.2	Discuss the clinical features and complications of fluid and electrolyte imbalance and outline the management	KH						
PE15.3	Calculate the fluid and electrolyte requirement in health	SH						
PE15.4	Interpret electrolyte report	SH						
PE15.5	Calculate fluid and electrolyte imbalance	SH						
PE15.6	Demonstrate the steps of inserting an IV cannula in a model	SH						
PE15.7	Demonstrate the steps of inserting an interosseous line in a mannequin	SH						
Topic: Integrated Management of Neonatal and Childhood Illnesses (IMNCI) Guideline								
PE16.1	Explain the components of Integrated Management of Neonatal andChildhood Illnesses (IMNCI) guidelines and method of Risk stratification	KH						

PE16.2	Assess children <2 months using IMNCI Guidelines	SH						
PE16.3	Assess children >2 to 5 years using IMNCI guidelines and StratifyRisk	SH						
Topic: The National Health programs, NHM								
PE17.1	State the vision and outline the goals, strategies and plan of actionof NHM and other important national programs pertaining to maternal and child health including RMNCH A+, RBSK, RKSK, JSSK mission Indradhanush and ICDS	KH						
PE17.2	Analyse the outcomes and appraise the monitoring and evaluationof NHM	KH						
Topic: The National Health Programs: RCH								
PE18.1	List and explain the components, plan, outcome of ReproductiveChild Health (RCH) program and appraise its monitoring and evaluation	KH						
PE18.2	Explain preventive interventions for child survival and safemotherhood	KH						
PE18.3	Conduct Antenatal examination of women independently and applyat-risk approach in antenatal care	SH						
PE18.4	Provide intra-natal care and conduct a normal delivery in a simulated environment	SH						
PE18.5	Provide intra-natal care and observe the conduct of a normaldelivery	SH						
PE18.6	Perform Postnatal assessment of newborn and mother, provideadvice on breast feeding, weaning and on family planning	SH						
PE18.7	Educate and counsel caregivers of children	SH						
PE18.8	Observe the implementation of the program by visiting the RuralHealth Centre	KH						
Topic: National Programs, RCH - Universal Immunizations program								
PE19.1	Explain the components of the Universal Immunization Program andthe National Immunization Program	KH						
PE19.2	Explain the epidemiology of Vaccine preventable diseases	KH						
PE19.3	Vaccine description with regard to classification of vaccines, strainused, dose, route, schedule, risks, benefits and side effects, indications and contraindications	KH						

PE19.4	Define cold chain and discuss the methods of safe storage andhandling of vaccines	KH						
PE19.5	Discuss immunization in special situations – HIV positive children, immunodeficiency, pre-term, organ transplants, those who receivedblood and blood products, splenectomised children, adolescents, travellers	KH						
PE19.6	Assess patient for fitness for immunization and prescribe an age appropriate immunization schedule	P						
PE19.7	Educate and counsel a patient for immunization	SH						
PE19.8	Demonstrate willingness to participate in the National and subnational immunisation days	SH						
PE19.9	Describe the components of safe vaccine practice – Patient education/ counselling; adverse events following immunization, safeinjection practices, documentation and Medico-legal implications	KH						
PE19.10	Observe the handling and storing of vaccines	SH						
PE19.11	Document Immunization in an immunization record	SH						
PE19.12	Observe the administration of UIP vaccines	SH						
PE19.13	Demonstrate the correct administration of different vaccines in amannequin	SH						
PE19.14	Practice Infection control measures and appropriate handling of thesharps	SH						
PE19.15	Explain the term implied consent in Immunization services	K						
PE19.16	Enumerate available newer vaccines and their indications includingpentavalent pneumococcal, rotavirus, JE, typhoid IPV & HPV	K						
Topic: Care of the Normal New born, and High risk New born								
PE20.1	Define the common neonatal nomenclatures including the classification and describe the characteristics of a Normal Term Neonate and High Risk Neonates	KH						
PE20.2	Explain the care of a normal neonate	KH						
PE20.3	Perform Neonatal resuscitation in a manikin	SH						

PE20.4	Assessment of a normal neonate	SH						
PE20.5	Counsel / educate mothers on the care of neonates	SH						
PE20.6	Explain the follow up care for neonates including Breast Feeding,Temperature maintenance, immunization, importance of growth monitoring and red flags	SH						
PE20.7	Discuss the etiology, clinical features and management of Birthasphyxia	KH						
PE20.8	Discuss the etiology, clinical features and management of respiratory distress in New born including meconium aspiration andtransient tachypnoea of newborn	KH						
PE20.9	Discuss the etiology, clinical features and management of Birthinjuries	KH						
PE20.10	Discuss the etiology, clinical features and management of Hemorrhagic disease of New born	KH						
PE20.11	Discuss the clinical characteristics, complications and managementof Low birth weight (preterm and Small for gestation)	KH						
PE20.12	Discuss the temperature regulation in neonates, clinical featuresand management of Neonatal Hypothermia	KH						
PE20.13	Discuss the temperature regulation in neonates, clinical featuresand management of Neonatal Hypoglycemia	KH						
PE20.14	Discuss the etiology, clinical features and management of Neonatalhypocalcemia	KH						
PE20.15	Discuss the etiology, clinical features and management of Neonatalseizures	KH						
PE20.16	Discuss the etiology, clinical features and management of NeonatalSepsis	KH						
PE20.17	Discuss the etiology, clinical features and management of Perinatalinfections	KH						
PE20.18	Identify and stratify risk in a sick neonate using IMNCI guidelines	SH						
PE20.19	Discuss the etiology, clinical features and management of Neonatal hyperbilirubinemia	KH						
PE20.20	Identify clinical presentations of common surgical conditions in thenew born including TEF, esophageal atresia, anal atresia, cleft lip and palate, congenital diaphragmatic hernia and causes of acute abdomen	KH						

Topic: Genito-Urinary system								
PE21.1	Enumerate the etio-pathogenesis, clinical features, complicationsand management of Urinary Tract infection in children	KH						
PE21.2	Enumerate the etio-pathogenesis, clinical features, complications and management of acute post-streptococcal Glomerular Nephritisin children	KH						
PE21.3	Discuss the approach and referral criteria to a child with Proteinuria	KH						
PE21.4	Discuss the approach and referral criteria to a child with Hematuria	KH						
PE21.5	Enumerate the etio-pathogenesis, clinical features, complicationsand management of Acute Renal Failure in children	KH						
PE21.6	Enumerate the etio-pathogenesis, clinical features, complicationsand management of Chronic Renal Failure in Children	KH						
PE21.7	Enumerate the etio-pathogenesis, clinical features, complicationsand management of Wilms Tumor	KH						
PE21.8	Elicit, document and present a history pertaining to diseases of theGenitourinary tract	SH						
PE21.9	Identify external markers for Kidney disease, like Failing to thrive, hypertension, pallor, Icthyosis, anasarca	SH						
PE21.10	Analyse symptom and interpret the physical findings and arrive atan appropriate provisional / differential diagnosis	SH						
PE21.11	Perform and interpret the common analytes in a Urine examination	SH						
PE21.12	Interpret report of Plain X Ray of KUB	SH						
PE21.13	Enumerate the indications for and Interpret the written report of Ultrasonogram of KUB	SH						
PE21.14	Recognize common surgical conditions of the abdomen and genitourinary system and enumerate the indications for referral including acute and subacute intestinal obstruction, appendicitis, pancreatitis, perforation intussusception, Phimosis, undescendedtestis, Chordee, hypospadiasis, Torsion testis, hernia Hydrocele, Vulval Synechiae	SH						

PE21.15	Discuss and enumerate the referral criteria for children with genitourinary disorder	SH						
PE21.16	Counsel / educate a patient for referral appropriately	SH						
PE21.17	Describe the etiopathogenesis, grading, clinical features and management of hypertension in children	KH						
Topic: Approach to and recognition of a child with possible Rheumatologic problem								
PE22.1	Enumerate the common Rheumatological problems in children. Discuss the clinical approach to recognition and referral of a childwith Rheumatological problem	KH						
PE22.2	Counsel a patient with Chronic illness	SH						
PE22.3	Describe the diagnosis and management of common vasculitic disorders including Henoch Schonlein Purpura, Kawasaki Disease,SLE, JIA	K						
Topic: Cardiovascular system- Heart Diseases								
PE23.1	Discuss the Hemodynamic changes, clinical presentation, complications and management of Acyanotic Heart Diseases –VSD, ASD and PDA	KH						
PE23.2	Discuss the Hemodynamic changes, clinical presentation, complications and management of Cyanotic Heart Diseases –Fallot's Physiology	KH						
PE23.3	Discuss the etio-pathogenesis, clinical presentation and management of cardiac failure in infant and children	KH						
PE23.4	Discuss the etio-pathogenesis, clinical presentation and management of Acute Rheumatic Fever in children	KH						
PE23.5	Discuss the clinical features, complications, diagnosis, managementand prevention of Acute Rheumatic Fever	KH						
PE23.6	Discuss the etio-pathogenesis, clinical features and management ofInfective endocarditis in children	KH						
PE23.7	Elicit appropriate history for a cardiac disease, analyse the symptoms e.g. breathlessness, chest pain, tachycardia, feeding difficulty, failing to thrive, reduced urinary output, swelling, syncope,cyanotic spells, Suck rest cycle, frontal swelling in infants. Document and present	SH						

PE23.8	Identify external markers of a cardiac disease e.g. Cyanosis, Clubbing, dependent edema, dental caries, arthritis, erythema rash,chorea, subcutaneous nodules, Oslers node, Janeway lesions and document	SH						
PE23.9	Record pulse, blood pressure, temperature and respiratory rate and interpret as per the age	SH						
PE23.10	Perform independently examination of the cardiovascular system –look for precordial bulge, pulsations in the precordium, JVP and itssignificance in children and infants, relevance of percussion in Pediatric examination, Auscultation and other system examination and document	SH						
PE23.11	Develop a treatment plan and prescribe appropriate drugs includingfluids in cardiac diseases, anti -failure drugs, and inotropic agents	SH						
PE23.12	Interpret a chest X ray and recognize Cardiomegaly	SH						
PE23.13	Choose and Interpret blood reports in Cardiac illness	P						
PE23.14	Interpret Pediatric ECG	SH						
PE23.15	Use the ECHO reports in management of cases	SH						
PE23.16	Discuss the indications and limitations of Cardiac catheterization	K						
PE23.17	Enumerate some common cardiac surgeries like BT shunt, Pottsand Waterston's and corrective surgeries	K						
PE23.18	Demonstrate empathy while dealing with children with cardiacdiseases in every patient encounter	SH						
Topic:Diarrhoeal diseases and Dehydration								
PE24.1	Discuss the etio-pathogenesis, classification, clinical presentationand management of diarrheal diseases in children	KH						
PE24.2	Discuss the classification and clinical presentation of various typesof diarrheal dehydration	KH						
PE24.3	Discuss the physiological basis of ORT, types of ORS and the composition of various types of ORS	KH						

PE24.4	Discuss the types of fluid used in Paediatric diarrheal diseases andtheir composition	KH						
PE24.5	Discuss the role of antibiotics, antispasmodics, anti-secretorydrugs, probiotics, anti-emetics in acute diarrheal diseases	KH						
PE24.6	Discuss the causes, clinical presentation and management of persistent diarrhoea in children	KH						
PE24.7	Discuss the causes, clinical presentation and management of chronic diarrhoea in children	KH						
PE24.8	Discuss the causes, clinical presentation and management of dysentery in children	KH						
PE24.9	Elicit, document and present history pertaining to diarrheal diseases	SH						
PE24.10	Assess for signs of dehydration, document and present	SH						
PE24.11	Apply the IMNCI guidelines in risk stratification of children withdiarrheal dehydration and refer	SH						
PE24.12	Perform and interpret stool examination including Hanging Drop	SH						
PE24.13	Interpret RFT and electrolyte report	SH						
PE24.14	Plan fluid management as per the WHO criteria	SH						
PE24.15	Perform NG tube insertion in a manikin	P						
PE24.16	Perform IV cannulation in a model	P						
PE24.17	Perform Interosseous insertion model	P						
Topic: Malabsorption								
PE25.1	Discuss the etio-pathogenesis, clinical presentation and management of Malabsorption in Children and its causes includingceliac disease	KH						

Topic: Acute and chronic liver disorders								
PE26.1	Discuss the etio-pathogenesis, clinical features and management ofacute hepatitis in children	KH						
PE26.2	Discuss the etio-pathogenesis, clinical features and management ofFulminant Hepatic Failure in children	KH						
PE26.3	Discuss the etio-pathogenesis, clinical features and management ofchronic liver diseases in children	KH						
PE26.4	Discuss the etio-pathogenesis, clinical features and management ofPortal Hypertension in children	KH						
PE26.5	Elicit document and present the history related to diseases of Gastrointestinal system	SH						
PE26.6	Identify external markers for GI and Liver disorders e.g.. Jaundice, Pallor, Gynaecomastia, Spider angioma, Palmar erythema, Icthyosis, Caput medusa, Clubbing, Failing to thrive, Vitamin A and D deficiency	SH						
PE26.7	Perform examination of the abdomen, demonstrate organomegaly,ascites etc.	SH						
PE26.8	Analyse symptoms and interpret physical signs to make a provisional/ differential diagnosis	SH						
PE26.9	Interpret Liver Function Tests, viral markers, ultra sonogram report	SH						
PE26.10	Demonstrate the technique of liver biopsy in a Perform Liver Biopsyin a simulated environment	SH						
PE26.11	Enumerate the indications for Upper GI endoscopy	K						
PE26.12	Discuss the prevention of Hep B infection – Universal precautionsand Immunisation	KH						
PE26.13	Counsel and educate patients and their family appropriately on liverdiseases	P						
Topic: Pediatric Emergencies – Common Pediatric Emergencies								
PE27.1	List the common causes of morbidity and mortality in the under fivechildren	K						
PE27.2	Describe the etio-pathogenesis, clinical approach and managementof cardiorespiratory arrest in children	KH						

PE27.3	Describe the etio-pathogenesis of respiratory distress in children	KH						
PE27.4	Describe the clinical approach and management of respiratorydistress in children	KH						
PE27.5	Describe the etio-pathogenesis, clinical approach and managementof Shock in children	KH						
PE27.6	Describe the etio-pathogenesis, clinical approach and managementof Status epilepticus	KH						
PE27.7	Describe the etio-pathogenesis, clinical approach and managementof an unconscious child	KH						
PE27.8	Discuss the common types, clinical presentations and managementof poisoning in children	KH						
PE27.9	Discuss oxygen therapy, in Pediatric emergencies and modes of administration	KH						
PE27.10	Observe the various methods of administering Oxygen	KH						
PE27.11	Explain the need and process of triage of sick children brought tohealth facility	KH						
PE27.12	Enumerate emergency signs and priority signs	KH						
PE27.13	List the sequential approach of assessment of emergency andpriority signs	KH						
PE27.14	Assess emergency signs and prioritize	SH						
PE27.15	Assess airway and breathing: recognise signs of severe respiratorydistress. Check for cyanosis, severe chest indrawing, grunting	P						
PE27.16	Assess airway and breathing. Demonstrate the method of positioning of an infant & child to open airway i n a simulatedenvironment	P						
PE27.17	Assess airway and breathing: administer oxygen using correct technique and appropriate flow rate	P						
PE27.18	Assess airway and breathing: perform assisted ventilation by Bagand mask in a simulated environment	P						
PE27.19	Check for signs of shock i.e. pulse, Blood pressure, CRT	P						

PE27.20	Secure an IV access in a simulated environment	P						
PF27.21	Choose the type of fluid and calculate the fluid requirement in shock	P						
PE27.22	Assess level of consciousness & provide emergency treatment to achild with convulsions/ coma - Position an unconscious child - Position a child with suspected trauma - Administer IV/per rectal Diazepam for a convulsing child in asimulated environment	P						
PE27.23	Assess for signs of severe dehydration	P						
PE27.24	Monitoring and maintaining temperature: define hypothermia. Describe the clinical features, complications and management ofHypothermia	KH						
PE27.25	Describe the advantages and correct method of keeping an infantwarm by skin to skin contact	KH						
PE27.26	Describe the environmental measures to maintain temperature	KH						
PE27.27	Assess for hypothermia and maintain temperature	SH						
PE27.28	Provide BLS for children in manikin	P						
PE.27.29	Discuss the common causes, clinical presentation, medico-legalimplications of abuse	KH						
PE27.30	Demonstrate confidentiality with regard to abuse	SH						
PE27.31	Assess child for signs of abuse	SH						
PE27.32	Counsel parents of dangerously ill / terminally ill child to break abad news	SH						
PE27.33	Obtain Informed Consent	SH						
PE27.34	Willing to be a part of the ER team	SH						
PE27.35	Attends to emergency calls promptly	SH						

Topic: Respiratory system								
PE28.1	Discuss the etio-pathogenesis, clinical features and management ofNaso pharyngitis	KH						
PE28.2	Discuss the etio-pathogenesis of Pharyngo Tonsillitis	KH						
PE28.3	Discuss the clinical features and management of Pharyngo Tonsillitis	KH						
PE28.4	Discuss the etio-pathogenesis, clinical features and management ofAcute Otitis Media (AOM)	KH						
PE28.5	Discuss the etio-pathogenesis, clinical features and management ofEpiglottitis	KH						
PE28.6	Discuss the etio-pathogenesis, clinical features and management ofAcute laryngo- trachea-bronchitis	KH						
PE28.7	Discuss the etiology, clinical features and management of Stridor inchildren	KH						
PE28.8	Discuss the types, clinical presentation, and management of foreignbody aspiration in infants and children	KH						
PE28.9	Elicit, document and present age appropriate history of a child withupper respiratory problem including Stridor	SH						
PE28.10	Perform otoscopic examination of the ear	SH						
PE28.11	Perform throat examination using tongue depressor	SH						
PE28.12	Perform examination of the nose	SH						
PE28.13	Analyse the clinical symptoms and interpret physical findings andmake a provisional / differential diagnosis in a child with ENT symptoms	SH						
PE28.14	Develop a treatment plan and document appropriately in a child withupper respiratory symptoms	SH						
PE28.15	Stratify risk in children with stridor using IMNCI guidelines	SH						
PE28.16	Interpret blood tests relevant to upper respiratory problems	SH						
PE28.17	Interpret X-ray of the paranasal sinuses and mastoid; and /or use written report in case of management Interpret CXR in foreign body aspiration and lower respiratory tract infection, understand the significance of thymic shadow in pediatricchest X-rays	SH						

PE28.18	Describe the etio-pathogenesis, diagnosis, clinical features, management and prevention of lower respiratory infections includingbronchiolitis, wheeze associated LRTI Pneumonia and empyema	SH						
PE28.19	Describe the etio-pathogenesis, diagnosis, clinical features,management and prevention of asthma in children	SH						
PE28.20	Counsel the child with asthma on the correct use of inhalers in asimulated environment	SH						
Topic: Anemia and other Hemato-oncologic disorders in children								
PE29.1	Discuss the etio-pathogenesis, clinical features, classification andapproach to a child with anaemia	KH						
PE29.2	Discuss the etio-pathogenesis, clinical features and management ofIron Deficiency anaemia	KH						
PE29.3	Discuss the etiopathogenesis, clinical features and management ofVIT B12, Folate deficiency anaemia	KH						
PE29.4	Discuss the etio-pathogenesis, clinical features and management ofHemolytic anemia, Thalassemia Major, Sickle cell anaemia, Hereditary spherocytosis, Auto-immune hemolytic anaemia and hemolytic uremic syndrome	KH						
PE29.5	Discuss the National Anaemia Control Program	KH						
PE29.6	Discuss the cause of thrombocytopenia in children: describe the clinical features and management of Idiopathic ThrombocytopenicPurpura (ITP)	KH						
PE29.7	Discuss the etiology, classification, pathogenesis and clinicalfeatures of Hemophilia in children	KH						
PE29.8	Discuss the etiology, clinical presentation and management of AcuteLymphoblastic Leukemia in children	KH						
PE29.9	Discuss the etiology, clinical presentation and management of lymphoma in children	KH						
PE29.10	Elicit, document and present the history related to Hematology	SH						
PE29.11	Identify external markers for hematological disorders e.g.. Jaundice,Pallor, Petechiae purpura, Ecchymosis, Lymphadenopathy, bone tenderness, loss of weight, Mucosal and large joint bleed	SH						
PE29.12	Perform examination of the abdomen, demonstrate organomegaly	SH						

PE29.13	Analyse symptoms and interpret physical signs to make a provisional/ differential diagnosis	SH						
PE29.14	Interpret CBC, LFT	SH						
PE29.15	Perform and interpret peripheral smear	SH						
PE29.16	Discuss the indications for Hemoglobin electrophoresis and interpretreport	K						
PE29.17	Demonstrate performance of bone marrow aspiration in manikin	SH						
PE29.18	Enumerate the referral criteria for Hematological conditions	SH						
PE29.19	Counsel and educate patients about prevention and treatment ofanemia	SH						
PE29.20	Enumerate the indications for splenectomy and precautions	K						
Topic: Systemic Pediatrics-Central Nervous system								
PE30.1	Discuss the etio-pathogenesis, clinical features , complications,management and prevention of meningitis in children	KH						
PE30.2	Distinguish bacterial, viral and tuberculous meningitis	KH						
PE30.3	Discuss the etio-pathogenesis, classification, clinical features, complication and management of Hydrocephalus in children	KH						
PE30.4	Discuss the etio-pathogenesis, classification, clinical features, and management of Microcephaly in children	KH						
PE30.5	Enumerate the Neural tube defects. Discuss the causes, clinicalfeatures, types, and management of Neural Tube defect	KH						
PE30.6	Discuss the etio-pathogenesis, clinical features, and managementof Infantile hemiplegia	KH						
PE30.7	Discuss the etio-pathogenesis, clinical features, complications andmanagement of Febrile seizures in children	KH						
PE30.8	Define epilepsy. Discuss the pathogenesis, clinical types,presentation and management of Epilepsy in children	KH						
PE30.9	Define status Epilepticus. Discuss the clinical presentation andmanagement	KH						
PE30.10	Discuss the etio-pathogenesis, clinical features and management ofMental retardation in children	KH						
PE30.11	Discuss the etio-pathogenesis, clinical features and management ofchildren with cerebral palsy	KH						

PE30.12	Enumerate the causes of floppiness in an infant and discuss theclinical features, differential diagnosis and management	KH						
PE30.13	Discuss the etio-pathogenesis, clinical features, management andprevention of Poliomyelitis in children	KH						
PE30.14	Discuss the etio-pathogenesis, clinical features and management ofDuchene muscular dystrophy	KH						
PE30.15	Discuss the etio-pathogenesis, clinical features and management ofAtaxia in children	KH						
PE30.16	Discuss the approach to and management of a child with headache	KH						
PE30.17	Elicit document and present an age appropriate history pertaining tothe CNS	SH						
PE30.18	Demonstrate the correct method for physical examination of CNS including identification of external markers. Document and presentclinical findings	SH						
PE30.19	Analyse symptoms and interpret physical findings and propose a provisional / differential diagnosis	SH						
PE30.20	Interpret and explain the findings in a CSF analysis	SH						
PE30.21	Enumerate the indication and discuss the limitations of EEG, CT,MRI	K						
PE30.22	Interpret the reports of EEG, CT, MRI	SH						
PE30.23	Perform in a mannequin lumbar puncture. Discuss the indications, contraindication of the procedure	SH						
Topic: Allergic Rhinitis , Atopic Dermatitis, Bronchial Asthma , Urticaria Angioedema								
PE31.1	Describe the etio-pathogenesis, management and prevention ofAllergic Rhinitis in Children	KH						
PE31.2	Recognize the clinical signs of Allergic Rhinitis	SH						
PE31.3	Describe the etio-pathogenesis, clinical features and managementof Atopic dermatitis in Children	KH						
PE31.4	Identify Atopic dermatitis and manage	SH						
PE31.5	Discuss the etio-pathogenesis, clinical types, presentations,management and prevention of childhood Asthma	KH						

PE31.6	Recognise symptoms and signs of Asthma	SH						
PE31.7	Develop a treatment plan for Asthma appropriate to clinical presentation & severity	SH						
PE31.8	Enumerate criteria for referral	KH						
PE31.9	Interpret CBC and CX Ray in Asthma	SH						
PE31.10	Enumerate the indications for PFT	K						
PE31.11	Observe administration of Nebulisation	SH						
PE31.12	Discuss the etio-pathogenesis, clinical features and complicationsand management of Urticaria Angioedema	KH						
Topic: Chromosomal Abnormalities								
PE32.1	Discuss the genetic basis, risk factors, complications, prenataldiagnosis, management and genetic counselling in Down's Syndrome	KH						
PE32.2	Identify the clinical features of Down's Syndrome	SH						
PE32.3	Interpret normal Karyotype and recognize Trisomy 21	SH						
PE32.4	Discuss the referral criteria and Multidisciplinary approach to management	KH						
PE32.5	Counsel parents regarding 1. Present child 2. Risk in the next pregnancy	SH						
PE32.6	Discuss the genetic basis, risk factors, clinical features, complications, prenatal diagnosis, management and genetic counselling in Turner's Syndrome	KH						
PE32.7	Identify the clinical features of Turner Syndrome	SH						
PE32.8	Interpret normal Karyotype and recognize the Turner Karyotype	SH						
PE32.9	Discuss the referral criteria and multidisciplinary approach to management of Turner Syndrome	KH						
PE32.10	Counsel parents regarding 1. Present child 2. Risk in the next pregnancy	SH						
PE32.11	Discuss the genetic basis, risk factors, complications, prenatal diagnosis, management and genetic counselling in Klineferlter Syndrome	KH						
PE32.12	Identify the clinical features of Klineferlter Syndrome	SH						

PE32.13	Interpret normal Karyotype and recognize the KlineferIter Karyotype	SH						
Topic: Endocrinology								
PE33.1	Describe the etio-pathogenesis clinical features, management of Hypothyroidism in children	KH						
PE33.2	Recognize the clinical signs of Hypothyroidism and refer	SH						
PE33.3	Interpret and explain neonatal thyroid screening report	SH						
PE33.4	Discuss the etio-pathogenesis, clinical types, presentations, complication and management of Diabetes mellitus in children	KH						
PE33.5	Interpret Blood sugar reports and explain the diagnostic criteria forType 1 Diabetes	SH						
PE33.6	Perform and interpret Urine Dip Stick for Sugar	P						
PE33.7	Perform genital examination and recognize Ambiguous Genitaliaand refer appropriately	SH						
PE33.8	Define precocious and delayed Puberty	KH						
PE33.9	Perform Sexual Maturity Rating (SMR) and interpret	SH						
PE33.10	Recognize precocious and delayed Puberty and refer	SH						
PE33.11	Identify deviations in growth and plan appropriate referral	P						
Topic:Vaccine preventable Diseases - Tuberculosis								
PE34.1	Discuss the epidemiology, clinical features, clinical types, complications of Tuberculosis in Children and Adolescents	KH						
PE34.2	Discuss the various diagnostic tools for childhood tuberculosis	KH						
PE34.3	Discuss the various regimens for management of Tuberculosis asper National Guidelines	KH						
PE34.4	Discuss the preventive strategies adopted and the objectives andoutcome of the National Tuberculosis Control Program	KH						

PE34.5	Able to elicit, document and present history of contact with tuberculosis in every patient encounter	SH						
PE34.6	Identify a BCG scar	P						
PE34.7	Interpret a Mantoux test	P						
PE34.8	Interpret a Chest Radiograph	SH						
PE34.9	Interpret blood tests in the context of laboratory evidence for tuberculosis	SH						
PE34.10	Discuss the various samples for demonstrating the organism e.g.Gastric Aspirate, Sputum , CSF, FNAC	KH						
PE34.11	Perform AFB staining	P						
PE34.12	Enumerate the indications and discuss the limitations of methods ofculturing M.Tuberculii	KH						
PE34.13	Enumerate the newer diagnostic tools for Tuberculosis includingBACTEC CBNAAT and their indications	K						
PE34.14	Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of fever in children	KH						
PE34.15	Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with exanthematous illnesses like Measles, Mumps, Rubella& Chicken pox	KH						
PE34.16	Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Diphtheria, Pertussis, Tetanus.	KH						
PE34.17	Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Typhoid	KH						
PE34.18	Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Dengue, Chikungunya and other vector born diseases	KH						
PE34.19	Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of children with Common Parasitic infections, malaria, leishmaniasis, filariasis, helminthic infestations, amebiasis, giardiasis	KH						

PE34.20	Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Ricketsial diseases	KH						
Topic: The role of the physician in the community								
PE35.1	Identify, discuss and defend medicolegal, socio-cultural and ethical issues as they pertain to health care in children (including parental rights and right to refuse treatment)	KH						

5. Formative Assessment of Assignments

Note:

1. Formative Assessment involves various methods of which out of class assignments are important instruments.
2. The structure for the assignment should be clear mentioned at the start. The structure should include an introduction, main body of the assignment and a conclusion if it is an essay work. Illustrations, flow charts, tables and graphs should be part of the submission where ever necessary.
3. Plagiarism should be discouraged.
4. The grading of the assignment shall be done by the faculty team as follows

Faculty Decision	Grade
Poor content & presentation	1
Below Average content & presentation	2
Average content & presentation	3
Above Average content & presentation	4
Excellent content & presentation	5

No	Title of Assignment	1	2	3	4	5	Initial of Facilitator
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

6. Formative Assessment of Integrated Sessions

Note:

1. Formative Assessment of integrated teaching sessions involves assessment of student level of sessional learning.
2. The student shall be given a 15-20 MCQ test at the end of the session. This can be both in the offline and online modes,
3. The grading of the same shall be done by the faculty team as follows:

   Scale

   1 : End of Session Assessment <35%
   2 : End of Session Assessment 35-50%
   3 : End of Session Assessment 50-60%
   4 : End of Session Assessment 60-75%
   5 : End of Session Assessment >75%

No	Topic of Integrated Session	1	2	3	4	5	Initial of Facilitator
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

7. Formative Assessment of Self-Directed Learning

Note:

1. Formative Assessment of SDL sessions involves assessment of student level of learning through assessment of the synopsis and biblliography
2. The student shall submit the same at the end of the session. This can be both in the offline and online modes.
3. The grading of the same shall be done by the faculty team as follows:

Scale

Faculty Decision	Grade
Poor content & presentation	1
Below Average content & presentation	2
Average content & presentation	3
Above Average content & presentation	4
Excellent content & presentation	5

No	Assigned SDL Topic	1	2	3	4	5	Initial of Facilitator
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

8. Formative Assessment of AETCOM Learning

Note:

1. Formative Assessment of AETCOM sessions involves assessment of student level of learning through DOPS, OSPE sessions
2. The grading of the same shall be done by the faculty team as follows:

Scale

1 : End of Session Assessment <35%
2 : End of Session Assessment 35-50%
3 : End of Session Assessment 50-60%
4 : End of Session Assessment 60-75%
5 : End of Session Assessment >75%

No	Competency The student should be able to	Level (K/KH/SH)	1	2	3	4	5	Initial of Facilitator
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

9. Formative Feedback Record

Note:

1. Feedback should be provided to learners throughout the course so that they are aware of their performance and remedial action can be initiated well in time.
2. The feedbacks need to be structured and the faculty and learners must be sensitized to giving and receiving feedback.
3. The results of IA should be displayed on notice board within 2 weeks of the test and an opportunity provided to the learners to discuss the results and get feedback on making their performance better.
4. Thelearner should sign with date whenever they are shown IA records in token of having seen and discussed the marks.
5. The learner Internal assessment marks will not be added to University examination marks and will reflect as a separate head of passing at the summative examination
6. Some suggestions for handling the Feedback process
    a. Start with the learner's agenda for the session
    b. Evaluate the performance of the learner in the previous sessions and outcomes the learner is trying to achieve
    c. Enquire about problems faced by the learner in the process of learning in the classroom, at home and during the assessments.
    d. Encourage the learner to think about goal setting
    e. Encourage self-assessment and self-solving problems
    f. Offer space for the learner to make suggestions, to generate solutions
    g. Be non-judgmental and specific, prevent vague generalisation, provide balanced feedback
    h. Offers suggestions and alternatives, make suggestions rather than prescriptive comments. Be valuing and supportive
    i. Structure and summarise the session to ensure that learner has some specifics to take home.

Formative Feedback Session	1
Date	

Type of Assessment			
Topic of Assessment			
Feed Back received from Student			
Feed Back given to the Student			
Remedial Action Suggested			
Timeline of Remedial Action			
Signature of Mentor		Signature of Student	

Formative Feedback Session	2
Date	

Type of Assessment			
Topic of Assessment			
Feed Back received from Student			
Feed Back given to the Student			
Remedial Action Suggested			
Timeline of Remedial Action			
Signature of Mentor		Signature of Student	

Formative Feedback Session	3
Date	

Type of Assessment			
Topic of Assessment			
Feed Back received from Student			
Feed Back given to the Student			
Remedial Action Suggested			
Timeline of Remedial Action			
Signature of Mentor		Signature of Student	

Formative Feedback Session			4
Date			
Type of Assessment			
Topic of Assessment			
Feed Back received from Student			
Feed Back given to the Student			
Remedial Action Suggested			
Timeline of Remedial Action			
Signature of Mentor		Signature of Student	

Formative Feedback Session	5
Date	

Type of Assessment			
Topic of Assessment			
Feed Back received from Student			
Feed Back given to the Student			
Remedial Action Suggested			
Timeline of Remedial Action			
Signature of Mentor		Signature of Student	

10.Certification of Skills

Note:

1. certification of skills should be provided to learners at all points of the course so that they are aware of their performance and remedial action can be initiated well in time to achieve the goal of obtaining a certified skill..
2. The feedbacks need to be structured and the faculty and learners must be sensitized to giving and receiving feedback.
2. The results of assessment of COS should be discussed at the end of the assessment and an opportunity provided to the learners to discuss the results and get feedback on making their performance better.
4. The learner should be given a date for remedial session wherein they will be reassessed.
5. A mximum of 5 remedial sessions may be offered beyond which he/she shall not be certified for the current academic session.

Certification of skills :competency no.		
Type of skill		
Type of assessment		
Performance of student		
Feedback of learner		
Feedback of Facilitator		
Remedial action suggested		
Remedial assessment	1.Date	
Performance of student		
Remedial assessment	2.Date	
Performance of student		
Remedial assessment	3.Date	
Performance of student		
Remedial assessment	4.Date	
Performance of student		
Remedial assessment	5.Date	
Performance of student		
Certification of skill	Certified/Non certified	
Date of COS		
Signatures	Learner	Facilitator

Certification of skills :competency no.		
Type of skill		
Type of assessment		
Performance of student		
Feedback of learner		
Feedback of Facilitator		
Remedial action suggested		
Remedial assessment	1.Date	
Performance of student		
Remedial assessment	2.Date	
Performance of student		
Remedial assessment	3.Date	
Performance of student		
Remedial assessment	4.Date	
Performance of student		
Remedial assessment	5.Date	
Performance of student		
Certification of skill	Certified/Non certified	
Date of COS		
Signatures	Learner	Facilitator

Certification of skills :competency no.		
Type of skill		
Type of assessment		
Performance of student		
Feedback of learner		
Feedback of Facilitator		
Remedial action suggested		
Remedial assessment	1.Date	
Performance of student		
Remedial assessment	2.Date	
Performance of student		
Remedial assessment	3.Date	
Performance of student		
Remedial assessment	4.Date	
Performance of student		
Remedial assessment	5.Date	
Performance of student		
Certification of skill	Certified/Non certified	
Date of COS		
Signatures	Learner	Facilitator

Certification of skills :competency no.		
Type of skill		
Type of assessment		
Performance of student		
Feedback of learner		
Feedback of Facilitator		
Remedial action suggested		
Remedial assessment	1.Date	
Performance of student		
Remedial assessment	2.Date	
Performance of student		
Remedial assessment	3.Date	
Performance of student		
Remedial assessment	4.Date	
Performance of student		
Remedial assessment	5.Date	
Performance of student		
Certification of skill	Certified/Non certified	
Date of COS		
Signatures	Learner	Facilitator

Certification of skills :competency no.		
Type of skill		
Type of assessment		
Performance of student		
Feedback of learner		
Feedback of Facilitator		
Remedial action suggested		
Remedial assessment	1.Date	
Performance of student		
Remedial assessment	2.Date	
Performance of student		
Remedial assessment	3.Date	
Performance of student		
Remedial assessment	4.Date	
Performance of student		
Remedial assessment	5.Date	
Performance of student		
Certification of skill	Certified/Non certified	
Date of COS		
Signatures	Learner	Facilitator

Certification of skills :competency no.		
Type of skill		
Type of assessment		
Performance of student		
Feedback of learner		
Feedback of Facilitator		
Remedial action suggested		
Remedial assessment	1.Date	
Performance of student		
Remedial assessment	2.Date	
Performance of student		
Remedial assessment	3.Date	
Performance of student		
Remedial assessment	4.Date	
Performance of student		
Remedial assessment	5.Date	
Performance of student		
Certification of skill	Certified/Non certified	
Date of COS		
Signatures	Learner	Facilitator

Certification of skills :competency no.		
Type of skill		
Type of assessment		
Performance of student		
Feedback of learner		
Feedback of Facilitator		
Remedial action suggested		
Remedial assessment	1.Date	
Performance of student		
Remedial assessment	2.Date	
Performance of student		
Remedial assessment	3.Date	
Performance of student		
Remedial assessment	4.Date	
Performance of student		
Remedial assessment	5.Date	
Performance of student		
Certification of skill	Certified/Non certified	
Date of COS		
Signatures	Learner	Facilitator

Certification of skills :competency no.		
Type of skill		
Type of assessment		
Performance of student		
Feedback of learner		
Feedback of Facilitator		
Remedial action suggested		
Remedial assessment	1.Date	
Performance of student		
Remedial assessment	2.Date	
Performance of student		
Remedial assessment	3.Date	
Performance of student		
Remedial assessment	4.Date	
Performance of student		
Remedial assessment	5.Date	
Performance of student		
Certification of skill	Certified/Non certified	
Date of COS		
Signatures	Learner	Facilitator

Certification of skills :competency no.		
Type of skill		
Type of assessment		
Performance of student		
Feedback of learner		
Feedback of Facilitator		
Remedial action suggested		
Remedial assessment	1.Date	
Performance of student		
Remedial assessment	2.Date	
Performance of student		
Remedial assessment	3.Date	
Performance of student		
Remedial assessment	4.Date	
Performance of student		
Remedial assessment	5.Date	
Performance of student		
Certification of skill	Certified/Non certified	
Date of COS		
Signatures	Learner	Facilitator

Certification of skills :competency no.		
Type of skill		
Type of assessment		
Performance of student		
Feedback of learner		
Feedback of Facilitator		
Remedial action suggested		
Remedial assessment	1.Date	
Performance of student		
Remedial assessment	2.Date	
Performance of student		
Remedial assessment	3.Date	
Performance of student		
Remedial assessment	4.Date	
Performance of student		
Remedial assessment	5.Date	
Performance of student		
Certification of skill	Certified/Non certified	
Date of COS		
Signatures	Learner	Facilitator

11 A. Record of Internal Assessment Tests-Theory

No	Topic of Assessment	Type of Assessment	Max Mark	Mark Given	% Mark	Initals of FIC
1						
2						
3						
4						
5						
6						
7						
8						

11B. Record of Internal Assessment Tests-Practical

No	Topic of Assessment	Type of Assessment	Max Mark	Mark Given	% Mark	Initals of FIC
1						
2						
3						
4						

12.Attendance Record

Details	Attendance Percent		
	Second Professional MBBS	Third Professional MBBS Part I	Third Professional MBBS Part II
Theory			
Practicals			