



MGM INSTITUTE OF HEALTH SCIENCES

(Deemed to be University u/s 3 of UGC Act, 1956)

Grade 'A' Accredited by NAAC

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COMPETENCY BASED MEDICAL EDUCATION (CBME)

(with effect from 2024-2025 Batches)

Curriculum for Third M.B.B.S – Part II Paediatrics

Amended as per AC-51/2025, dated 29/04/2025

Amended History

1. Amended as per AC- 51/2025, [Resolution No. 4.40, (Annexure-62)]; [Resolution No. 4.41, (Annexure-63)]; [Resolution No. 4.43, (Annexure-65)]; [Resolution No. 4.44, (Annexure-66B)];[Resolution No. 4.45, (Annexure-67)];dated 29/04/2025.
(For admission batch 2024-25 onwards)



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WITH EFFECT FROM ADMISSION BATCH 2024
CURRICULUM FOR THIRD M.B.B.S. – PART II

PAEDIATRICS

AS PER AC-51/2025, dated 29/04/2025

Annexure-62 of AC-51/2025

Curriculum - PEDIATRICS UG MBBS 2024 admission batch

Subject Goals

At end of training in pediatrics, the student should be able to:

- (i) Assess and promote optimal growth, development and nutrition of children and adolescents and identify deviations from normal.
- (ii) Recognize and provide emergency and routine ambulatory and First Level Referral Unit care for neonates, infants, children and adolescents and refer as may be appropriate.
- (iii) Perform procedures as indicated for children of all ages in the primary care setting.
- (iv) Recognize children with special needs and refer appropriately.
- (v) Promote health and prevent diseases in children.
- (vi) Participate in National Programmes related to child health and in conformation with the Integrated Management of Neonatal and Childhood Illnesses (IMNCI) Strategy.
- (vii) Communicate appropriately and effectively.
- (viii) Describe the normal Growth and Development during fetal life, Neonatal period, Childhood and Adolescence and the deviations thereof.
- (ix) Describe the common Pediatric disorders and emergencies in terms of Epidemiology, Etiopathogenesis, Clinical manifestations, Diagnosis and also describe the rational therapy and rehabilitation services
- (x) Workout age related requirements of calories, nutrients, fluids, dosages of drugs etc. in health and disease.
- (xi) Describe preventive strategies for common infectious disorders, Malnutrition, Genetic and Metabolic disorders, Poisonings, Accidents and Child abuse.
- (xii) Outline national programs related to child health including Immunization programs.
- (xiii) Take detailed Pediatric and Neonatal history and conduct an appropriate physical examination of children and neonates, make clinical diagnosis, conduct common
- (xiv) bedside investigative procedures, interpret common laboratory investigations, plan and institute therapy
- (xv) Take anthropometric measurements, resuscitate newborn, prepare oral rehydration solution, perform tuberculin test, administer vaccines available under current National programs, perform venesection, start intravenous fluids and provide nasogastric feeding.
- (xvi) Demonstrate knowledge about all steps of the diagnostic procedures such as lumbar puncture, liver and kidney biopsy, bone marrow aspiration, pleural and ascitic tap.
- (xvii) Distinguish between normal Newborn babies and those requiring special care and institute early care to all new born babies including care of preterm and low birth weight babies, provide correct guidance and counseling about Breastfeeding and Complementary feeding.
- (xviii) Provide ambulatory care to all not so sick children, identify indications for specialized/ inpatient care and ensure timely referral to those who require hospitalization.

PHASE WISE TRAINING AND TIME DISTRIBUTION FOR PROFESSIONAL DEVELOPMENT

Subject wise competencies published in Competency Based Undergraduate Curriculum 2024 on NMC website and Attitude, Ethics and Communication (AETCOM) course available on the NMC website, is the curriculum for the batches admitted in MBBS from the academic year 2024-25 onwards. Teaching learning and assessment may be carried out using bilingual mode (Assamese, Bangla, Gujarati, Hindi, Kannada, Malayalam, Marathi, Odiya, Punjabi, Tamil, and Telugu) along with English language

Training period and time distribution:

Every learner shall undergo a period of certified study extending over 4 ½ academic years, divided into four professional years from the date of commencement of course to the date of completion of examination which shall be followed by one year of compulsory rotating medical internship.

Each academic year will have at least 39 teaching weeks with a minimum of 39 hours a week.

Large group teaching shall not exceed one third of the total allotted hours for a subject. Two third of the total allotted hours shall include small group teaching, interactive sessions, practical, clinical, small group teaching, self- directed learning and tutorials etc. The learning process shall include clinical experiences, problem- oriented approach, case studies and community health care activities.

Learner centered teaching learning methods shall include early clinical exposure, problem/case-based learning, case studies, community-oriented learning, self-directed, integrated learning, experiential learning & electives. Teaching and learning shall be aligned and integrated across specialties both vertically and horizontally for better learner comprehension.

At the end of each professional year university examination will be conducted. If any student fails to clear the regular university examination, student will appear in supplementary examination.

Supplementary examinations and declaration of results shall be processed by universities within 6-8 weeks from the date of declaration of the results of the main examination for every professional year, so that the candidates, who pass, can join the main batch for progression.

If the student fails in the supplementary examination in phase 1 of MBBS, the student goes to the junior batch for teaching learning as well as for university examinations. There shall be no supplementary batches. If a candidate has not appeared for university examination (both theory and practical) for a subject then it shall not be counted as an attempt for that subject. Partial attendance in examination (only theory or only

practical) in any subject shall be counted as an attempt. A learner shall not be entitled to graduate later than ten (10) years of her/his joining the first MBBS course (including continuous rotatory medical internship).

Phase wise details are:

- A candidate, who fails in the Phase-I examination, shall not be allowed to join the Phase-II until the candidate passes all subjects of Phase-I examination.
- A candidate who fails in the Phase-II regular/ supplementary university examination, shall be allowed to join the Phase-III Part I training, however he shall not be allowed appear for the university examination.
- A candidate who fails in the Phase III, Part-I regular/supplementary university examination, shall be allowed to join the Phase-III Part II training, however he shall not be allowed appear for the university examination

In the period of 4½ years, the students will start their learning in pediatrics with clinical posting in pediatrics In phase 2 which is of 1 year.

Phase II - The clinical exposure to learners will be in the form of learner-doctor method of clinical training in all phases. The emphasis will be on primary, preventive and comprehensive health care. A part of training during clinical postings shall take place at the primary level of health care. It is desirable to provide learning experiences in secondary health care, wherever possible. This will involve: Experience in recognizing and managing common problems seen in outpatient, inpatient and emergency settings,

- Involvement in patient care as a team member,
- Involvement in patient management and performance of basic procedures

Phase III - 30 months

a. Phase III Part I (12 months) Pediatrics, theory and Clinical postings.

Electives (1 month) shall be in 2 blocks of 15 days each in Phase III part II. First 15 days block starts after annual exam of Phase III MBBS part 1 and 2nd block after the end of 1st elective.

b. Phase 3 Part II (18 months, including University exam)- Pediatrics, AETCOM module, and Clinical postings.

III. Distribution of teaching hours phase wise:

a Phase I, phase II and phase III- part 1 teaching hours: Time allotted 12 months (approximately 52 weeks) out of which time available for teaching- learning: approximately 39 weeks.

(Excluded- 13 weeks: Preliminary/ University examinations and results: 9 weeks, vacations: 2 weeks, public holidays: 2 weeks)

Time distribution in weeks: 39 weeks x 39 hours = 1521 hours for Teaching Learning.

b Phase-III Part-II, teaching hours: Time allotted: 18 months (approx. 78 weeks)

Time available:

Approx. 62 weeks (excluding 16 weeks) (39 hours/ week)

Prelim / University Exam & Results: 10 weeks

Vacation: 3 weeks

Public Holidays: 3 weeks

Time distribution in weeks: 62 x 39 hrs= 2418 hrs available for Teaching Learning

(Clinical Postings: 15 hours/ week Phase II onwards included in academic schedule. These are attached in separate annexure with all relevant tables).

- Academic calendar is given in annexure.
- Distribution of subjects for Professional Phase-wise training is given in annexure
- Minimum teaching hours prescribed in various disciplines phase wise are given in annexures
- Distribution and duration of clinical postings is given in annexure. Time allotted excludes time reserved for internal /University examinations, and vacation.

Phase II clinical postings shall commence before / after declaration of results of the first professional phase examinations, as decided by the institution/ University.

Phase III part I and part II clinical postings shall start no later than two weeks after the completion of the previous professional examination.

Note: A total of approximately 20% of allotted time of a Phase shall be utilized for integrated teaching learning with other subjects. This will be included in the assessment of subjects.

The period of training is minimum suggested. Adjustments where required depending on availability of time may be made by the concerned college/ institution.

This period of training does not include university examination period. Pandemic module teaching hours are added to respective allocated subjects and these subjects will teach as per module.

An exposure to skills lab based teaching by each subject in each phase shall be there weekly or fortnightly.

Mentor-Mentee system

Every college shall arrange for a meeting with parents/ wards of all students and records of the same shall be made available to UGMEB of NMC. Mentor- mentee program shall be carried out judiciously, with the ratio of 1 Mentor to 3 mentees. Mentor may be selected from all disciplines from the level of Professor/ HOD to Assistant Professor. Mentor shall be allotted his mentees during the foundation course itself from Phase 1. The mentee shall stay connected with the Mentor throughout his career till he completes CRMI. Each year when 3 new mentees are added from phase 1 to the mentor, the senior batch students shall support the junior students and create a healthy sibling environment.

3) Electives Objectives: To provide the learner with opportunities:

- For diverse learning experiences.
- It is mandatory for learners to do an elective. The elective time shall not be used to make up for missed clinical postings, shortage of attendance or other purposes.
- Institutions will pre-determine the number and nature of electives, names of the supervisors, and the number of learners in each elective based on the local conditions, available resources and faculty.
- Electives on topics in areas such as Research methodology, Research ethics, Use of Artificial intelligence and computers in Health and Medical Education, Health Management, Health economics, Indian system of medicine, Medical photography /clinical photography, Global health, Evidence based medicine, Art and music, Physiotherapy, Nutrition, ethical use of technology including artificial intelligence etc. in medicine, Literary activities, etc. may be provided by the college/ institution.
- It shall be preferable that elective choices are made available to the learners in the beginning of the academic year.
- The learner must submit a learning log book based on both blocks of the electives.
- 75% attendance in the electives and submission of log book maintained during electives is required for eligibility to appear in the University MBBS examination/ (or NExT whenever it is applicable).

4) Attitude, Ethics and Communication Module (AETCOM)

Objectives of the programme: At the end of the programme, the learner must demonstrate ability to:

- Understand and apply principles of bioethics and law as they apply to medical practice and research, understand and apply the principles of clinical reasoning as they apply to the care of the patients,
- Understand and apply the principles of system-based care as they relate to the care of the patient,
- Understand and apply empathy and other human values to the care of the patient,
- Communicate effectively with patients, families, colleagues and other health care professionals,
- Understand the strengths and limitations of alternative systems of medicine,
- Respond to events and issues in a professional, considerate and humane fashion,
- Translate learning from the humanities in order to further his professional and personal growth.

Learning experiences:

This will be a longitudinal programme spread across the continuum of the MBBS programme including internship.

Learning experiences shall include small group discussions, patient care scenarios, self-directed learning, workshops, seminars, role plays, large/small group teaching etc.

Application based subject oriented cases may be used as additional resources for this training and real-life case studies are the best examples for this AETCOM training. Community based case studies must be used in communication aspects of health education, informed consent and counseling in addition to clinical case studies.

Attitude, Ethics & Communication Module (AETCOM module) developed by the erstwhile Medical Council of India should be used longitudinally for purposes of instruction.

75% attendance in AETCOM Module is mandatory for eligibility to appear for all University examinations of all subjects in each Phase.

(5) Alignment and integration (AIT) teaching

Integration is a learning experience that allows the learner to perceive relationships from blocks of knowledge and develop a unified view of its basis and its application.

Objectives

In the earlier phases, the purpose of vertical integration (across phases) is to emphasize the applicative use of the basic science concept taught. In the later phases, its purpose is to utilise and build on prior knowledge and emphasize the foundations of clinical practice.

Learning experiences

In order to achieve this, the MBBS curriculum will become-

Aligned to the extent possible-meaning that as much as possible topics/systems in different subjects in the same phase will be grouped together in the same weeks/months in timetable for teaching learning. The purpose of horizontal integration (within a phase) is to remove redundancy and provide interconnectedness. Suggested formats for alignment in phase 1 & 2 are given in annexures. Phase 3 part 1 and 2 can be aligned accordingly as needed.

Integrated to a limited extent both vertically and horizontally.

Integration must be horizontal (i.e. across disciplines in a given phase of the course) and vertical (across different phases of the course). Teaching/learning occurs in each phase through study of organ systems or disease blocks in order to integrate the learning process. Clinical linker cases must be used to integrate and link learning across subjects.

The six integrated modules to be used across 4 years $\frac{1}{2}$ are anemia, ischemic heart disease, diabetes mellitus, tuberculosis, hypertension and thyroid. The complete modules are part of documents on NMC website.

Learner-doctor method of clinical training (Clinical Clerkship)

Goal: To provide learners with experience in:

Longitudinal patientcare,

Being part of the healthcare team,

Hands-on care of patients in outpatient and in-patient setting.

b. Structure:

- o The first clinical posting in Phase II shall orient learners to the patient, their roles and the specialty.
- o The learner-doctor programme shall progress as outlined in Table 9.
- o The learner shall function as a part of the health care team with the following responsibilities:
 - o Be a part of the units' out-patient services on admission days,
 - o Remain with the admission unit until at least 6 PM except during designated class hours,

- o Be assigned patients admitted during each admission day for whom he will undertake responsibility, under the supervision of a senior resident or faculty member,
- o Participate in the unit rounds on its admission day and will present the assigned patients to the supervising physician,
- o Follow the patient's progress throughout the hospital stay until discharge,
- o Participate, under supervision, in procedures, surgeries, deliveries etc. of assigned patients,
- o Participate in unit rounds on at least one other day of the week excluding the admission day,
- o Discuss ethical and other humanitarian issues during unit rounds,
- o Attend all scheduled classes and educational activities,
- o Document his observations in a prescribed log book /case record.

No learner will be given independent charge of the patient in the capacity of primary physician of the concerned patient.

The supervising physician shall be responsible for all patient care decisions and guide the learner from time to time as required.

(7) Assessment:

- o A designated faculty member in each unit will coordinate and facilitate the activities of the learner, monitor progress, provide feedback and review the log book/ case record.
- o The log book/ case record must include the written case record prepared by the learner including relevant investigations, treatment and its rationale, hospital course, family and patient discussions, discharge summary etc.
- o The log book shall also include records of outpatients assigned. Submission of the log book/ case record to the department is required for eligibility to appear for the final examination of the subject. An e-logbook is desirable.

Assessment

I. Eligibility to appear for Professional examinations The performance in essential components of training are to be assessed, based on following three components:

(a) Attendance o There shall be a minimum of 75% attendance in theory and 80% attendance in practical /clinical for eligibility to appear for the examinations in that subject. In subjects that are taught in more than one phase - the learner must have 75% attendance in theory and 80% attendance in practical in each phase of instruction in that subject. There shall be a minimum of 75% attendance in AETCOM and minimum of 80% attendance in family visits under Family adoption programme. Each student shall adopt minimum 3 families/ households and preferably five families. The details shall be as per Family Adoption Program guidelines.

o If an examination comprises more than one subject (for e.g., General Surgery and allied branches), the candidate must have a minimum of 75% attendance in each subject including its allied branches, and 80% attendance in each clinical posting. Learners who do not have at least 75% attendance in the electives will not be eligible for the Third Professional - Part II examination/ NExT.

b) Internal Assessment (IA):

Internal assessment shall be based on day-to-day assessment.

For subjects taught in more than one phase, there shall be IA in every phase in which the subject is taught.

It shall relate to different ways in which learners participate in the learning process including assignments, preparation for seminar, clinical case presentation, preparation of clinical case for discussion, clinical case study/ problem solving exercise, participation in project for health care in the community, Quiz, Certification of competencies, museum study, log books, SDL skills etc.

Internal assessment should have both subjective and objective assessment.

Internal assessment shall not be added to summative assessment.

However, internal assessment marks in absolute marks should be displayed under a separate column in a detailed marks card.

The internal assessment marks for each subject will be out of 100 for theory and out of 100 for practical/clinical (except in General Medicine, General Surgery and Obstetrics & Gynaecology, in which theory and practical assessment will be of 200 marks each).

For subjects that teach in more than one phase, cumulative IA to be used as eligibility criteria.

The final cumulative marks are to be used for eligibility. The details are: I. General medicine: The IA of 200 marks in medicine shall be divided across phases as Phase II - 50 marks, Phase III part 1 - 50 marks

(b) Certifiable Competencies Achieved:

1. 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
2. Regular periodic examinations shall be conducted throughout the course. There shall be no less than two theory and clinical examinations in each subject of Phase III part 1 & 2 and this mandatorily includes an end of posting assessment. Log book (including required skill certifications) to be assessed and marks given from 10-20% in internal assessment.
3. Learners must secure at least 50% of the total marks (combined in theory and practical / clinical; and minimum 40% in theory and practical separately) for internal assessment in a particular subject in order to be eligible for appearing at the final University examination of that subject.
4. The results of internal assessment should be intimated to students at least once in 3 months and as and when a student wants to see the results.

Remedial measures:

A student whose has deficiency(s) in any of the 3 criteria that are required to be eligible to appear in university examination, should be put into remedial process as below:

o **During the course:** If Internal assessment (IA) or attendance is less or/and certifiable competencies not achieved and marked in log book in quarterly/ six monthly monitoring, the students/parents must be intimated about the possibility of being detained much before the final university examination, so that there is sufficient time for remedial measures.

These students should be provided remedial measures as and when needed to improve IA.

Any certifiable competency/ IA marks deficiency should be attended with planned teaching/tests for them.

Student should complete the remedial measures and it should be documented.

In spite of all above measures, if student is still not meeting the criteria to be eligible for regular exam he shall be offered remedial for the same batch supplementary exam.

For attendance, he will be allowed remedial measures ONLY IF attendance is more than 60% for each component.

- o **At the end of phase:** If Internal assessment (IA) or attendance is less or/and certifiable competencies not achieved and marked in log book at the end of regular classes in a phase, the student is detained to appear in regular university examination of that batch.
- o Remedial classes can be planned for students missing regular classes on genuine grounds, thus ensuring that all certifiable competencies are achieved.
- o Students who have less than 75% attendance in theory and 80% attendance in practical cannot appear for University examination, however; they may appear for Supplementary examination provided they attend the remedial classes organised between University Sit and Supplementary exam.

Students who have attendance 60% or above shall be eligible for such remedial classes.

2.University Examinations:

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 to function effectively and appropriately as a physician of the first contact.

Nature of questions in theory examinations shall include different types such as structured essays like Long-Answer Questions (LAQ), Short-Answer Questions (SAQ) and Multiple-Choice Questions (MCQ) shall be accorded minimum 20% weightage of the total marks of each theory paper, Scenario based MCQs shall be accorded more weightage in view of NEXT. Blueprint may be used for theory question papers.

Practical/clinical examinations shall be conducted in the laboratories and /or hospital wards and a blueprint must be used.

The objective will be to assess proficiency and skills to conduct experiments, interpret data and form logical conclusion.

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 as examination 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 and attitudinal, ethical and professional values.

Candidate's skill in interpretation of common investigative data like X-rays, identification of specimens, ECG, etc. is to be also assessed.

Application based questions should be included for newer CBME components like foundation course, ECE, AETCOM, Integrated topics, student-learner methods etc. in all theory, practical and clinical examinations of all internal assessments and university assessments.

University Examinations shall be held as under:

d) Phase III Part 2 / National Exit Test (NExT) as per NExT regulations-

(Final Professional) examination shall be at the end of 17th / 18th month of that training, in the subjects of General Medicine, General Surgery, Obstetrics & Gynecology, Pediatrics, and allied subjects as per NExT Regulations.

Criteria for passing in pediatrics: A candidate shall obtain a cumulative 50% marks in University conducted examination including theory and practical and not less than 40% separately in Theory and in Practical in order to be declared as passed in pediatrics. Pediatrics has only one theory paper.

Appointment of Examiners:

(1) Person appointed as an examiner in the particular subject must have at least three years of total teaching experience as Assistant Professor after obtaining postgraduate degree following MBBS, in the concerned subject in a college affiliated to a recognized medical college (by UGMEB of NMC).

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

(3) A University having more than one college shall have separate sets of examiners for each college, with internal examiners from the concerned college. External examiners may be from outside the college/ university/ state/ union territory.

(4) There shall be a Chairman of the Board of paper-setters who shall be an internal examiner and shall mandatorily moderate the theory question paper(s).

(5) All eligible examiners with requisite qualifications and experience can be appointed internal examiners by rotation in their subjects.

(6) All theory paper assessment should be done as a central assessment program (CAP) of the concerned university.

(7) Internal examiners shall be appointed from the same institution for unitary examination in the same institution. For pooled examinations at one centre, the approved internal examiners from the same university may be appointed.

(8) There shall be NO grace marks to be considered for passing in an examination.

Annexure 1

AETCOM Modules teaching and assessment The tables below show the suggested AETCOM blueprinting for various university papers and for module leader/in-charge for coordinating Module teaching.

Each module leader/in-charge should select a multi-subject team and then the module is taught by various members of the team.

The module teaching learning activities should be planned and conducted by this team.

Assessment: All internal and University exams must have one question/application based question on AETCOM in each theory paper (5%) and it should be assessed in various components of practical/clinical exams.

AETCOM Phase 3, part 2

Pediatrics Single paper Competency 4.9

4.9 A The student should be able to: Identify, discuss and defend medico-legal, socio- cultural, professional and ethical issues pertaining to medical negligence

4.9 B The student should be able to: Identify, discuss and defend medico-legal, socio- cultural, professional and ethical issues pertaining to medical malpractice

Proposed time distribution of MBBS Teaching & Examination Schedule from A.Y.2025-'26

Generic proposed academic calendar from admission batch 2025-2026 onwards												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Admyear									1	2	3	4
Phase1 exam	5	6	7	8	9	10	11	12 Phase 1 exam, result	13 Phase 2 starts	14	15	16
Phase2 exam	17	18	19	20	21	22	23	24 Phase 2 exam, result	25 Phase 3part 1 starts	26	27	28
Phase3 part I exam	29	30	31	32	33	34	35	36 Phase 3Part 1 exam, result	37 Phase 3part 2 starts	38	39	40
	41	42	43	44	45	46	47	48	49	50	51	52
Phase3 part II exam	53	54 Proposed NExT	1 CRMI	2	3	4	5	6	7	8	9	10

		step1										
Internship	11	12 Proposed NExT step2										

Legends:

CRMI-Compulsory rotating medical internship

Annexure 3

Distribution of Pediatrics in each Professional Phase

Phase & year of MBBS training	Subjects & Teaching Elements	Duration (months)	University Examination
Phase-2	<ol style="list-style-type: none"> 1. Pathology, Microbiology, Pharmacology 2. Community Medicine (including FAP) 3. Forensic Medicine and Toxicology 4. Introduction to clinical subjects 5. Clinical postings, Family visits for FAP 6. AETCOM 	12 months	Phase 2
Phase-3, Part-I	<ol style="list-style-type: none"> 1. Community Medicine, Forensic Medicine and Toxicology, Medicine & allied, Surgery & allied, Pediatrics, Obstetrics & Gynecology 2. Family visits for FAP 3. Oto-rhinolaryngology, 4. Ophthalmology 5. Clinical postings 6. AETCOM 	12 months	Phase 3, Part 1
Electives	2 blocks, 15 days each (after the annual exams are over, irrespective of result outcome)	1 month	Phase 3, Part II
Phase-3, Part- II, MBBS	<ol style="list-style-type: none"> 1. General Medicine, Dermatology, Psychiatry, Pediatrics, General Surgery, Orthopedics, Radiodiagnosis, Anesthesiology, Obstetrics & Gynecology 2. Clinical postings 3. AETCOM 	18 months (including electives)	Phase 3, Part II

Distribution of Subject Wise Teaching Hours for Phase-2 MBBS

Pl. note: *Clinical postings shall be for 3 hours per day, Monday to Friday.

There will be 15 hours per week for all clinical postings.

Distribution of Subject Wise Teaching Hours for MBBS Phase-3, part 1

Subject	Large group teaching	SGT/ Practicals/ Tutorials/ Seminars	SDL	Total
Electives	0	156	0	156
Gen. Medicine	20	30	10	60
Gen Surgery	20	30	10	60
Obstetrics & Gynecology	20	30	10	60
Pediatrics	20	30	05	55
Forensic Medicine and Toxicology	35	65	20*	120
Community Med	50	80	20	150
FAP(Visits + logbook submission)	-	26	10	36
Otorhinolaryngology(ENT)	30	50	20	100
Ophthalmology	30	50	20	100
Clinical posting*				593
AETCOM	0	19	12	31
Total	225	566	137	1521

Pl. note: *Clinical postings shall be for 3 hours per day, Monday to Saturday. There will be 18 hours per week for all clinical postings.

Distribution of Subject wise Teaching Hours for Phase 3 part-2 MBBS

Subjects	Lectures	SGL	SDL	Total
General Medicine	110	185	40	335
General Surgery	90	153	30	273
Obstetrics and Gynecology	80	150	30	260
Pediatrics	20	35	10	65
Orthopedics	30	50	20	100
AETCOM	30	0	22	52
Dermatology, Venereology Leprosy	13	17	10	40
Psychiatry	13	17	10	40
Radiodiagnosis	8	10	8	26
Anesthesiology	8	10	8	26
Clinical postings*				1201
TOTAL	402	627	188	2418

Pl. note: *Clinical postings shall be for 3 hours per day, Monday to Saturday. There will be 18 hours per week for all clinical postings.

Extra hours may be used for preparation of NExT or SDL.

Annexure 6

Clinical Posting Schedules in weeks phase wise

Subjects	Period of training in weeks			Total Weeks
	Phase 2	Phase3, Part1	Phase 3, Part2	
Electives	0	4	0	4
General Medicine	8	3	13	24
General Surgery	6	5	13	24
Obstetrics & Gynaecology	6	3	13	22
Pediatrics	4	2	6	12
Community Medicine	4	4	0	8
Orthopaedics	0	2	6	8
Otorhinolaryngology	4	4	0	8
Ophthalmology	4	4	0	8
Psychiatry	0	2	4	6
Radio-diagnosis	0	0	2	2
Dermatology, Venereology Leprosy	0	0	6	6
Anaesthesiology	0	0	2	2
Total	36	33	65	134

Annexure 7: Learner-Doctor programme (Clinical Clerkship)

Year of Curriculum	Focus of Learner-Doctor programme
Phase-1	Introduction to hospital environment, early clinical exposure, understanding perspectives of illness, family adoption program
Phase-2	History taking, physical examination, assessment of change in clinical status, communication and patient education, family adoption program
Phase-3, Part-1	All of the above and choice of investigations, basic procedures and continuity of care
Phase-3, Part -2	All of the above (except Family adoption programme) and decision making, management and outcomes

Annexure 8

Marks distribution for various subjects for University Annual Examinations

Phase of Course	Theory	Practicals	Passing criteria
Phase-I MBBS			
Anatomy-2papers	Paper1-100	100	Mandatory to get40%marks separately in theory And in practicals totally 50%for theory plus practicals.
	Paper2-100		
Physiology-2papers	Paper1-100	100	
	Paper2-100		
Biochemistry-2papers	Paper1-100	100	
	Paper2-100		
Phase-II MBBS			
Pathology-2papers	Paper1-100	100	
	Paper2-100		
Microbiology-2papers	Paper1-100	100	
	Paper2-100		
Pharmacology-2papers	Paper1-100	100	
	Paper2-100		
Phase-III MBBS part1			
Forensic Medicine and Toxicology-1paper	Paper1-100	100	
Community Med-2papers	Paper1-100	100	
	Paper2-100		
Otorhinolaryngology	Paper-1100	100	
Ophthalmology	Paper-1100	100	
Phase-III MBBS part2			
Medicine & allied	Paper1-100	100	
	Paper2-100		
Surgery & allied	Paper1-100	100	
	Paper2-100		
Obstetrics and Gynecology	Paper1-100	100	
	Paper2-100		
Pediatrics	Paper-1100	100	

Any further updates as per NEXT regulations.

Annexure 9

Format for a Theory paper – Unique question paper blueprint designed as per the principles given in the format given by NMC 2024//			
Duration-3 hours			Total marks - 100 marks
	Type of question/ Number of questions	Marks per question	
Q No 1	Scenario based MCQ/ 20	1	20
Q No 2	Long essay question/ ONE	10	10
Q No 3	Reasoning Questions/ FIVE	3	15
Q No 4	Short notes (applied aspects)/ FOUR All four subparts related to six integrated topics if subject is part of integrated modules. However, if a subject has less competencies in integrated module than at least 2 sub-parts from integrated modules.	5	20
Q No 5	Short notes / THREE	5	15
Q No 6	Short notes / FOUR (one subpart of 5 marks from AETCOM)	5	20

Pediatric topics and competencies

Annexure -63 of AC-51/2025

Deriving learning objectives from competencies

K	Knows	A knowledge attribute – Usually enumerates or describes
KH	Knows how	A higher level of knowledge – is able to discuss or analyse
S	Shows	A skill attribute: is able to identify or demonstrate the steps
SH	Shows how	A skill attribute: is able to interpret / demonstrate a complex procedure requiring thought, knowledge and behaviour
P	Performs (under supervision or independently)	Mastery for the level of competence - When done independently under supervision a pre-specified number of times - certification or capacity to perform independently results

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
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LO 1	At the end of the session the phase II student must be able to enumerate the most common causes of meningitis correctly	<u>Audience</u> - who will do the behavior
LO 2	At the end of the session the phase II student must be able to enumerate the components of CSF analysis correctly	<u>Behavior</u> - What should the learner be able to do?
LO 3	At the end of the session the phase II student must be able to describe the CSF features for a given etiology of meningitis accurately	<u>Condition</u> - Under what conditions should the learner be able to do it?
LO 4	At the end of the session the phase II student must be able to identify the aetiology of meningitis correctly from a given set of CSF parameters	<u>Degree</u> - How well must it be done

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

*Numbers given are for illustrative purposes only and should not be compared with the same in curriculum documents

Deriving learning methods from competencies

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

PA34.3*	Identify the etiology of meningitis based on given CSF parameters	K, S	SH	Y
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Objective: Statement of what a learner should be able to do at the end of a specific learning experience

LO 1	At the end of the session the Phase II student must be able to enumerate the most common causes of meningitis correctly	Large or small group teaching	
LO 2	At the end of the session the Phase II student must be able to enumerate the components of a CSF analysis correctly		
LO 3	At the end of the session the Phase II student must be able to describe the CSF features for a given etiologic of meningitis accurately		Small group teaching, practical session
LO 4	At the end of the session the Phase II student must be able to identify the aetiology of meningitis correctly from a given set of CSF parameters		

*Numbers given are for illustrative purposes only and should not be compared with the same in curriculum documents

Deriving assessment methods from competencies

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

PA34.3*	Identify the etiology of meningitis based on given CSF parameters	K, S	SH	Y
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Objective: Statement of what a learner should be able to do at the end of a specific learning experience

LO 1	At the end of the session the Phase II student must be able to enumerate the most common causes of meningitis correctly	Written/SAQ: Enumerate 5 causes of meningitis based on their prevalence in India
LO 2	At the end of the session the Phase II 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
LO 3	At the end of the session the Phase II student must be able to describe the CSF features for a given aetiology of meningitis accurately	Short note or part of structured essay: Describe the CSF findings that are characteristic of tuberculous meningitis
LO 4	At the end of the session the Phase II student must be able to identify the aetiology of meningitis correctly from a given set of CSF parameters	Short note / part of the structured essay/ Direct observation/OSPE/ Viva voce Review the CSF findings in the following patient and identify (write or vocalize) the most likely etiology

* Numbers given are for illustrative purposes only and should not be compared with numbers in the curriculum document

Definitions used in the Manual

- 1. Goal:** A projected state of affairs that a person or system plans to achieve.

In other words: Where do you want to go? Or What do you want to become?

- 2. Competency:** The habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and Reflection in daily practice for the benefit of the individual and community being served.

In other words: What should you have? Or What should have changed?

- 3. Objective:** Statement of what a learner should be able to do at the end of a specific learning experience. In other words: What the Indian Medical Graduate should know, do, or behave.

Action Verbs used in this manual

Knowledge	Skill	Attitude/communicate
Enumerate	Identify	Counsel
List	Demonstrate	Inform
Describe	Perform under supervision	Demonstrate understanding of
Discuss	Perform independently	Communicate
Differentiate	Document	
Define	Present	
Classify	Record	
Choose	Elicit	
Interpret		
Report		

Note:

1. Specified essential competencies only will be required to be performed independently at the end of the final year MBBS.
2. The word 'perform' or 'do' is used ONLY if the task has to be done on patients or in laboratory practical in the first/ second phases.
3. Most tasks that require performance during undergraduate years will be performed under supervision.
4. If a certification to perform independently has been done, then the number of times the task has to be performed under supervision will be indicated in the last column.

Explanation of terms used in this manual

LGT (LGT)	Any instructional large group method including interactive lecture
SGT (SGT)	Any instructional method involving small groups of students in an appropriate learning context
DOAP (Demonstration-Observation-Assistance-Performance)	A practical session that allows the student to observe a demonstration, assist the performer, perform in a simulated environment, perform under supervision or perform independently
Skill assessment/ Direct observation	A session that assesses the skill of the student including those in the practical laboratory, skills- lab, skills- station that uses mannequins /paper case/ simulated patients/ real patients as the context demands
DOPS (Directly observed procedural skills)	DOPS is a method of assessment for assessing competency of the students in which the examiner directly observes the student performing procedure
Core	A competency that is necessary in order to complete the requirements of the subject (traditional - must know)
Non-Core	A competency that is optional in order to complete the requirements of the subject (traditional- nice (good) to know/ desirable to know)
National Guidelines	Health programs as relevant to the competency that are part of the National Health Program

Domains of learning

K	Knowledge
S	Skill
A	Attitude
C	Communication

Levels of competency

K	Knows	A knowledge attribute-Usually enumerates or describes
KH	Knows how	A higher level of knowledge-is able to discuss or analyze
SH	Shows how	A skill attribute: is able to interpret/ demonstrate a complex procedure requiring thought, knowledge and behavior
P	Performs (under supervision or independently)	Mastery for the level of competence - When done independently under supervision a pre-specified number of times - certification or capacity to perform independently results

Note:

In the table of competency - the highest level of competency acquired is specified and implies that the lower levels have been acquired already. Therefore, when a student is able to SH - Show how- an informed consent is obtained - it is presumed that the preceding steps - the knowledge, the analytical skills, the skill of communicating have all been obtained.

It may also be noted that attainment of the highest level of competency may be obtained through steps spread over several subjects or phases and not necessarily in the subject or the phase in which the competency has been identified.

PEDIATRICS (CODE: PE)

Topic No.	Name	No. of competencies	No. of certifiable competencies
1	Normal Growth and Development	3	2
2	Common problems related to Growth	3	
3	Common problems related to Development-1	4	1
4	Common problems related to Development-2 (Autism, ADHD)	2	
5	Common problems related to behavior	4	
6	Adolescent Health & common problems related to Adolescent Health	12	
7	To promote and support optimal Breast feeding for Infants	8	1
8	Complementary Feeding	5	
9	Normal nutrition, assessment and monitoring	7	
10	Provide nutritional support, assessment and monitoring for common nutritional problems	6	
11	Obesity in children	4	1
12	Micronutrients in Health and disease-1 (Vitamins ADEK, B Complex and C)	8	
13	Micronutrients in Health and disease -2: Iron, Iodine, Calcium, Magnesium	4	
14	Poisoning	3	
15	Fluid and electrolyte balance	4	
16	Integrated Management of Neonatal and Childhood Illnesses (IMNCI) Guideline	6	
17	The National Health programs, NHM	1	

18	National Programs, RCH - Universal Immunizations program	14	1
19	Care of the Normal New born, and High risk New born	17	
20	Genito-Urinary system	9	
21	Approach to and recognition of a child with possible Rheumatologic problem	5	
22	Cardiovascular system- Heart Diseases	11	
23	GIT and Hepatobiliary system	21	2
24	Pediatric Emergencies – Common Pediatric Emergencies	23	10
25	Respiratory system	6	
26	Anemia and other Hemato-oncologic disorders in children	17	
27	Systemic Pediatrics-Central Nervous system	14	
28	Allergic Rhinitis, Atopic Dermatitis, Bronchial Asthma	5	
29	Chromosomal Abnormalities	5	
30	Endocrinology	7	1
31	Vaccine preventable Diseases – Tuberculosis	14	
32	The role of the physician in the community	1	
	Total	253	18

List of certifiable competencies with the number to be certified-

1. PE. 1.2 Perform Anthropometric measurements, document in growth- charts and interpret. -2
2. PE. 1.3 Perform developmental assessment and interpret -1
3. PE 7.4 Observe the correct technique of breastfeeding and distinguish right from wrong techniques - 3
4. PE 11.4 Examination including calculation of BMI, measurement of waist-hip ratio, identifying external markers like acanthosis, striae, pseudogynaecomastia etc -3
5. PE 18.6 Assess patient for fitness for immunization and prescribe an age- appropriate immunization schedule - 5
6. PE 23.9 Perform NG tube insertion in a manikin - 2
7. PE 23.11 Perform IO cannulation in a model -2
8. PE 24.8 Assess airway and breathing: recognise signs of severe respiratory distress. Check for cyanosis, severe chest in drawing, Grunting -3
9. PE 24.9 Assess airway and breathing. Demonstrate the method of positioning of an infant & child to open airway in a Simulated environment- 3
10. PE 24.10 Assess airway and breathing: administer oxygen using correct technique and appropriate flow rate -3
11. PE 24.11 Assess airway and breathing perform assisted ventilation by Bag and mask in a simulated environment -3
12. PE 24.12 Check for signs of shock i.e. pulse, Blood pressure, CRT -3
13. PE 24.13 Secure an IV access in a simulated environment -3
14. PE24.14 Choose the type of fluid and calculate the fluid requirement in shock- 3
15. PE 24.15 Assess level of consciousness & provide emergency treatment to a child with convulsions/coma position an unconscious child. Position a child with suspected trauma. Administer IV/per rectal Diazepam for a convulsing child in a simulated environment. -3
16. PE 24.16 Assess for signs of severe dehydration - 3
17. PE 24.21 Provide BLS for children in manikin -3
18. PE 30.4 Recognize clinical features DKA, Perform and interpret Urine Dip Stick for Sugar & Ketone bodies & refer -3

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
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PEDIATRICS (Topics:32, Competencies: 253)

Topic 1: Normal Growth and Development		Number of competencies: (03)		Number of competencies that require certification: (2)			
PE1.1	Define the terminologies Growth and development and describe the factors affecting normal growth.	K	KH	Y	LGT,SGT	Written/Viva-voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE1.2	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 and Perform Anthropometric measurements, document in growth- charts and interpret.	K	KH	Y	LGT,SGT	Written/Viva-voce	2
PE1.3	Define development and Describe the normal developmental milestones with respect to motor, behaviour, social, adaptive and language. Discuss the factors affecting development and describe the assessment methods of development.	K	KH	Y	LGT,SGT	Written/Viva-voce	1

Topic2: Common problems related to Growth		Number of competencies:(03)		Number of competencies that require certification: (NIL)			
PE2.1	Discuss the etio-pathogenesis, clinical features, assessment and management of a child who fails to thrive	K	KH	Y	LGT, SGT	Written/Viva-voce	
PE2.2	Counselling the parent of a child with failure to thrive.	A/C	SH	Y	OSPE	Document in Logbook	

PE2.3	Discuss the etio-pathogenesis, clinical features and management of a child with short stature. Assessment of a child with short stature.	K	KH	Y	LGT,SGT	Written/Viva-voce	
Topic 3: Common problems related to Development-1 (Developmental delay, Cerebral palsy) Number of competencies:(04) Number of competencies that require certification:(NIL)							
PE3.1	Define developmental delay. Describe the causes of developmental delay and disability including intellectual disability in children	K	K	Y	LGT,SGT	Written/Viva-voce	
PE3.2	Explain the approach to a child with developmental delay	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	
PE3.3	Counsel a parent of a child with developmental delay	S+C	SH	Y	DOAP	Document in Logbook	
PE3.4	Visit a Child Developmental Unit and observe its functioning	S	KH	Y	LGT, SGT	Logbook Entry	
Topic 4: Common problems related to Development-2 (Autism, ADHD) Number of competencies: (02) Number of competencies that require certification: (NIL)							
PE4.1	Describe the etiology, clinical features, diagnosis and management of a child with Attention Deficit Hyperactivity Disorder (ADHD)	K	K	N	LGT,SGT	Written	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE4.2	Describe the etiology, clinical features, diagnosis and management of a child with Autism	K	K	N	LGT,SGT	Written	
Topic 5: Common problems related to behavior Number of competencies: (04) Number of competencies that require certification: (NIL)							
PE5.1	Describe the clinical features, diagnosis and management of Feeding problems	K	K	N	LGT,SGT	Written	
PE5.2	Describe the clinical features, diagnosis and management of Breath Holding spells	K	K	N	LGT,SGT	Written/Viva-voce	
PE5.3	Describe the clinical features, diagnosis and management of temper tantrums and Pica	K	K	N	LGT,SGT	Written/Viva-voce	
PE5.4	Explain the etiology, clinical features and management of Enuresis	K	K	N	LGT,SGT	Written/Viva-voce	
Topic 6: Adolescent Health & common problems related to Adolescent Health Number of competencies: (12) Number of competencies that require certification: (NIL)							
PE6.1	Define Adolescence and Describe the stages of adolescence	K	K	Y	LGT,SGT	Written/Viva-voce	

PE6.2	Describe the physical, physiological and psychological changes during adolescence (Puberty)	K	KH	Y	LGT,SGT	Written/Viva-voce	
PE6.3	Describe the general health problems during adolescence	K	KH	Y	LGT,SGT	Written/Viva-voce	
PE6.4	Describe adolescent sexuality, diversity in sexual orientation and gender identity”	K	KH	N	LGT,SGT	Written/ Viva-voce	
PE6.5	Describe the common Adolescent eating disorders (Anorexia Nervosa, Bulimia)	K	KH	N	LGT,SGT	Written/Viva-voce	
PE6.6	Describe the common mental health problems during adolescence	K	KH	Y	LGT,SGT	Written/Viva-voce	
PE6.7	Respecting patient privacy and maintaining confidentiality while dealing with adolescence	A	SH	Y	Bedside clinics	Document in log book	
PE6.8	Perform routine Adolescent Health check up including eliciting history, performing examination including SMR (Sex Maturity Rating),growth assessments(using Growth charts) and systemic exam including thyroid and Breast exam and the HEADSS screening	S	SH	Y	Bedside clinics	Skills station	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE6.9	Explain the objectives and functions of AFHS (Adolescent Friendly Health Services) and the referral criteria	K	K	N	LGT,SGT	Written/Viva voce	
PE6.10	Visit to the Adolescent Clinic	S	KH	Y	DOAP	Document in Log Book	
PE6.11	Enumerate the importance of obesity and other NCD in adolescents	K	K	Y	LGT,SGT	Written/Viva voce	
PE6.12	Enumerate the prevalence and importance of recognition of sexual abuse and drug abuse in adolescents and children	K	K	N	LGT,SGT	Written/Viva voce	
Topic 7: To promote and support optimal Breast feeding for Infants		Number of competencies: (08)		Number of competencies that require certification: (01)			

PE7.1	Awareness on the cultural beliefs and practices of breastfeeding and explain physiology of lactation	K	K	N	LGT,SGT	Viva	
PE7.2	Describe the composition and types of breast milk and discuss the differences between cow's milk and Human milk	K	KH	Y	LGT, debate	Written/Viva-voce	
PE7.3	Describe the advantages of breast milk	K	KH	Y	LGT,SGT	Written/Viva-voce	

PE7.4	Observe the correct technique of breastfeeding and distinguish right from wrong techniques	S	P	Y	Bedside clinics, Skills lab	Skill assessment	3
PE7.5	Enumerate the baby friendly hospital initiatives	K	KH	Y	LGT,SGT	Written/Viva-voce	
PE7.6	Describe the principles of IYCF (Infant and Young Child Feeding)	K	KH	N	SGT	Viva voce	
PE7.7	Participate in World Breastfeeding Week (WBW) celebration at your institute	K,S,C	SH,P	N	Outreach activities		
PE7.8	Describe the structure and functioning of human milk bank and visit the nearest human Milk bank	K,C	KH	N	SGT	Viva voce	

Topic8: Complementary Feeding

Number of competencies : (05)

Number of competencies that require certification: (NIL)

PE8.1	Define the term Complementary Feeding	K	K	Y	LGT,SGT	Written/Viva-voce	
PE8.2	Explain the principles, the initiation, attributes, frequency, techniques and hygiene related to Complementary Feeding.	K	KH	Y	LGT,SGT	Written/Viva-voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE8.3	Enumerate the common complementary foods	K	K	Y	LGT,SGT	Written/Viva-voce	
PE8.4	Elicit history on the Complementary Feeding habits	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	
PE8.5	Counsel and educate mothers on the best practices in Complementary Feeding	A/C	SH	Y	DOAP	Document in Logbook	
Topic9: Normal nutrition, assessment and monitoring		Number of competencies : (07)			Number of competencies that require certification: (NIL)		

PE9.1	Describe age-related nutritional needs of infants, children and adolescents including micronutrients and vitamins	K	KH	Y	LGT,SGT	Written/Viva-voce	
PE9.2	Describe the tools and methods for assessment and classification of nutritional status of infants, children and adolescents	K	KH	Y	LGT,SGT	Written/Viva-voce	
PE9.3	Explain the Calorific value of common Indian foods	K	K	Y	LGT,SGT	Written/Viva-voce	
PE9.4	Elicit document and present an appropriate nutritional history and perform a dietary recall	S	SH	Y	Bedside clinic, Skills lab	Skill assessment	

PE9.5	Calculate the age-related calorie requirement in Health and Disease, and identify gap	S	SH	Y	Bedside clinics, SGT	Skill assessment	
PE9.6	Assess and classify the nutrition status of infants, children and adolescents and recognize deviations	S	SH	Y	Bedside clinic, SGT	Skill assessment	
PE9.7	Plan an appropriate diet in health and disease	S	SH	N	Bedside clinic, SGT	Document in logbook	

Topic 10: Provide nutritional support, assessment and monitoring for common nutritional problems

Number of competencies: (06)

Number of competencies that require certification: (NIL)

PE10.1	Define and describe the etio-pathogenesis, classify including WHO classification, clinical features, complication and management of Severe Acute Malnutrition (SAM) and Moderate Acute Malnutrition (MAM)	K	KH	Y	LGT,SGT	Written/Viva-voce	
PE10.2	Outline the clinical approach to a child with SAM and MAM	K	KH	Y	LGT,SGT	Written/Viva-voce	
PE10.3	Assessment of a patient with SAM and MAM, diagnosis, classification and planning management including hospital and community based intervention, rehabilitation and prevention	S	SH	Y	Bedside clinics, Skills lab	Skill station	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE10.4	Counsel parents of children with SAM and MAM	S	SH	Y	Bedside clinic, Skills Station	Document in Logbook	
PE10.5	Enumerate the role of locally prepared therapeutic diets and ready to use therapeutic diets	K	K	N	LGT,SGT	Written/Viva-voce	

PE10.6	Explain the Adolescent Nutrition and common nutritional problems	K	KH	Y	LGT, SGT	Written/ Viva-voce	
Topic 11: Obesity in children		Number of competencies: (04)			Number of competencies that require certification: (01)		
PE11.1	Describe the etiology, clinical features and management of obesity in children	K	KH	Y	LGT,SGT	Written/Viva-voce	
PE11.2	Describe the risk approach for obesity and discuss the prevention strategies	K	KH	Y	LGT,SGT	Written/Viva-voce	
PE11.3	Assessment of a child with obesity with regard to eliciting history including physical activity, charting and dietary recall	S	SH	Y	Bedside clinics, Standardized patients	Document in log book	

PE11.4	Examination including calculation of BMI, measurement of waist-hip ratio, identifying external markers like acanthosis, striae, pseudogynaecomastia etc.	S	SH	Y	Bedside clinics, Standardized patients, Videos	Skills Station	
Topic 12: Micronutrients in Health and disease-1 (Vitamins ADEK, B Complex and C)		Number of competencies: (08)			Number of competencies that require certification: (NIL)		
PE12.1	Describe the RDA, dietary sources of Vitamin A, its metabolism.	K	K	Y	LGT,SGT	Written/Viva-voce	
PE12.2	Describe the causes, clinical features, classification, diagnosis and management of Deficiency/excess of Vitamin A	K	KH	Y	LGT,SGT	Written/Viva-voce	
PE12.3	Describe the causes, clinical features, diagnosis and management of Deficiency/excess of Vitamin D (Rickets and Hypervitaminosis D)	K	KH	Y	LGT,SGT	Written/Viva-voce	
PE12.4	Describe the causes, clinical features, diagnosis and management of deficiency of Vitamin E	K	KH	N	LGT,SGT	Written/Viva-voce	
PE12.5	Describe the RDA, dietary sources of Vitamin K and their role in health and disease	K	K	N	LGT,SGT	Written/Viva-voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE12.6	Describe the causes, clinical features, diagnosis, management and prevention of deficiency of Vitamin K	K	KH	N	LGT,SGT	Written/Viva voce	

PE12.7	Describe the causes, clinical features, diagnosis and management of deficiency of B complex Vitamins	K	KH	Y	LGT,SGT	Written/Viva voce	
PE12.8	Describe the RDA, dietary sources of Vitamin C and their role in Health and disease, clinical features of deficiency and management	K	KH	N	LGT,SGT	Written/Viva voce	
Topic 13: Micronutrients in Health and disease -2: Iron, Iodine, Calcium, Magnesium		Number of competencies: (04)		Number of competencies that require certification: (NIL)			
PE13.1	Describe the RDA, dietary sources of Iron and their role in health and disease, clinical features of iron deficiency, and management	K	K	Y	LGT,SGT	Written/Viva voce	
PE13.2	Describe the National anaemia control program and its recommendations	K	K	Y	LGT,SGT	Written/Viva voce	

PE13.3	Describe the RDA, dietary sources of Iodine and their role in Health and disease, deficiency, and Goiter control program	K	K	Y	LGT,SGT	Written/Viva voce	
PE13.4	Describe the RDA, dietary sources of Calcium and Magnesium and their role in health and disease, clinical features and management of deficiency states.	K	K	Y	LGT,SGT	Written/Viva voce	

Topic 14: Poisoning		Number of competencies: (03)		Number of competencies that require certification (NIL)			
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PE14.1	Explain the risk factors, clinical features, diagnosis and management of Kerosene ingestion	K	KH	N	LGT,SGT	Written/Viva voce	
PE14.2	Explain the risk factors, clinical features, diagnosis and management of Organophosphorus poisoning	K	KH	N	LGT,SGT	Written/Viva voce	
PE14.3	Describe the risk factors, clinical features, diagnosis and management of paracetamol poisoning	K	KH	N	LGT,SGT	Written/Viva-voce	

Topic 15: Fluid and electrolyte balance		Number of competencies: (04)		Number of competencies that require certification: (NIL)			
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PE15.1	Describe the fluid and electrolyte requirement in health and disease	K	KH	Y	LGT,SGT	Written/Viva voce	
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Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
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PE15.2	Interpret electrolyte report and describe the management of sodium and potassium imbalance	S	SH	Y	Bedside clinics, SGT	Skill assessment	
PE15.3	Demonstrate the steps of inserting an IV cannula in a model	S	SH	Y	Skills Lab	mannequin	
PE15.4	Demonstrate the steps of inserting an interosseous line in a mannequin	S	SH	Y	Skills Lab	mannequin	
Topic 16: Integrated Management of Neonatal and Childhood Illnesses (IMNCI) Guideline		Number of competencies:(06)		Number of competencies that require certification: (NIL)			
PE16.1	Explain the components of Integrated Management of Neonatal and Childhood Illnesses (IMNCI) guidelines and method of Risk stratification	K	KH	Y	LGT,SGT	Written/Viva-voce	
PE16.2	Assess children <2 months using IMNCI Guidelines	S	SH	Y	DOAP	Document in log Book	
PE16.3	Assess children 2 months to 5 years using IMNCI guidelines and Stratify Risk	S	SH	Y	DOAP	Document in log Book	

PE16.4	Identify children with undernutrition as per IMNCI criteria and plan referral	S	SH	Y	DOAP	Document in log book	
PE16.5	Identify and stratify risk in a sick neonate using IMNCI guidelines	S	SH	Y	DOAP	Document in Log Book	
PE16.6	Apply the IMNCI guidelines in risk stratification of children with diarrheal dehydration and refer	S	SH	Y	Bedside clinics, Skills lab	Document in Log book	

Topic 17: The National Health programs, NHM		Number of competencies:(01)		Number of competencies that require certification: (NIL)			
PE17.1	Describe the vision and outline the goals, strategies and plan of action of NHM and other important national programs pertaining to maternal and child health including RCH, RMNCH A+, RBSK, RKSK, JSSK mission Indradhanush and ICDS	K	KH	Y	LGT,SGT	Written/Viva voce	

Topic 18: National Programs, RCH- Universal Immunizations program		Number of competencies: (14)		Number of competencies that require certification: (01)			
PE18.1	Explain the components of the Universal Immunization Program and the National Immunization Program	K	KH	Y	LGT,SGT	Written/Viva-voce	
PE18.2	Explain the epidemiology of Vaccine preventable diseases	K	KH	Y	LGT,SGT	Written/Viva-voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE18.3	Describe Vaccine with regards to classification of vaccines, strain used, dose, route, schedule, risks, benefits and side effects, indications and Contraindications	K	KH	Y	LGT,SGT	Written/Viva voce	
PE18.4	Define cold-chain and discuss the methods of safe storage and handling of vaccines	K	KH	Y	LGT,SGT	Written/Viva voce	
PE18.5	Describe immunization in special situations – HIV positive children, immunodeficiency, pre-term, organ transplants, those who received blood and blood products, splenectomised children, adolescents, travelers	K	KH	Y	LGT,SGT	Written/Viva voce	
PE18.6	Assess patient for fitness for immunization and prescribe an age- appropriate immunization schedule	S	P	Y	Out Patient clinics Skills lab	Skill assessment	5

PE18.7	Educate and counsel apparent for immunization	A/C	SH	Y	DOAP	Document in Log Book	
PE18.8	Describe the components of safe vaccine practice – Patient education/ counselling; adverse events following immunization, safe injection practices, documentation and Medico-legal implications	K	KH	Y	LGT,SGT	Written/Viva-voce	
PE18.9	Observe the handling and storing of vaccines	S	SH	Y	DOAP	Written/Viva-voce	
PE18.10	Document Immunization in an immunization record	S	SH	Y	Out Patient clinics, Skills lab	Skill assessment	
PE18.11	Observe the administration of UIP vaccines	S	SH	Y	DOAP	Document in Log Book	
PE18.12	Demonstrate the correct administration of different vaccines in a mannequin	S	SH	Y	DOAP	Document in Log Book	
PE18.13	Explain the term implied consent in Immunization services	K	K	Y	SGT	Written/Viva voce	
PE18.14	Enumerate available newer vaccines and their indications including pentavalent pneumococcal, rotavirus, JE, Hepatitis A, Influenza, COVID, typhoid, IPV & HPV	K	K	N	LGT, SGT	Written/Viva voce	

Topic 19: Care of the Normal New born, and High risk New born	Number of competencies: (17)	Number of competencies that require certification: (NIL)
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Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE19.1	Define the common neonatal nomenclatures including the classification new born and describe the characteristics of a Normal Term Neonate and High-Risk Neonates, Explain the care of a normal neonate	K	KH	Y	LGT,SGT	Written/Viva voce	
PE19.2	Perform Neonatal resuscitation on a manikin	S	SH	Y	DOAP	Log book entry of Performance	
PE19.3	Assessment of a normal neonate. Explain the follow up care for neonates including Breast Feeding, Temperature maintenance, immunization, importance of growth monitoring and red flags	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	
PE19.4	Describe the etiology, clinical features and management of Birth asphyxia	K	KH	Y	LGT,SGT	Written/Viva voce	

PE19.5	Describe the etiology, clinical features and management of Respiratory distress in New-born including meconium aspiration and transient tachypnoea of newborn	K	KH	Y	LGT,SGT	Written/Viva voce	
PE19.6	Explain the etiology, clinical features and management of Birth injuries	K	KH	Y	LGT,SGT	Written/Viva voce	
PE19.7	Explain the etiology, clinical features and management of Hemorrhagic disease of Newborn	K	KH	Y	LGT,SGT	Written/Viva voce	
PE19.8	Describe the clinical characteristics, complications and management of Low birth weight (preterm and Small for gestation)	K	KH	Y	LGT,SGT	Written/Viva-voce	
PE19.9	Describe the temperature regulation in neonates, clinical features and management of Neonatal Hypothermia	K	KH	Y	LGT,SGT	Written/Viva voce	
PE19.10	Describe the temperature regulation in neonates, clinical features and management of Neonatal Hypoglycemia	K	KH	Y	LGT,SGT	Written/Viva voce	
PE19.11	Explain the etiology, clinical features and management of Neonatal hypocalcemia	K	KH	Y	LGT,SGT	Written/Viva voce	

PE19.12	Describe the etiology, clinical features and management of Neonatal seizures	K	KH	Y	LGT,SGT	Written/Viva voce	
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Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE19.13	Explain the etiology, clinical features and management of Neonatal Sepsis	K	KH	Y	LGT,SGT	Written/Viva voce	
PE19.14	Describe the etiology, clinical features and management of Perinatal infections	K	KH	Y	LGT,SGT	Written/Viva voce	
PE19.15	Describe the etiology, clinical features and management of Neonatal hyperbilirubinemia	K	KH	Y	LGT,SGT	Written/Viva voce	
PE19.16	Identify clinical presentations of common surgical conditions in the newborn including TEF, esophageal atresia, anal atresia, cleft lip and palate, congenital diaphragmatic hernia and causes of acute abdomen	K	KH	Y	LGT,SGT	Written/Viva voce	

PE19.17	Describe the risk factors, clinical features, diagnosis and management of Oxygen toxicity	K	KH	N	LGT, SGT	Written/ Viva voce	
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Topic 20: Genito-Urinary system		Number of competencies (09)			Number of competencies that require certification: (NIL)		
PE20.1	Enumerate the etio-pathogenesis, clinical features, complications and management of Urinary Tract infection in children	K	KH	Y	LGT,SGT	Written/Viva voce	
PE20.2	Enumerate the etio-pathogenesis, clinical features, complications and management of Acute Post-Streptococcal Glomerulonephritis in Children	K	KH	Y	LGT,SGT	Written/Viva voce	
PE20.3	Describe the approach and referral criteria to a child with Proteinuria	K	KH	Y	LGT,SGT	Written/Viva voce	
PE20.4	Describe the approach and referral criteria to a child with Hematuria	K	KH	Y	LGT,SGT	Written/Viva voce	
PE20.5	Enumerate the etio-pathogenesis, clinical features, complications and management of Acute Renal Failure in children	K	KH	Y	LGT,SGT	Written/Viva voce	

PE20.6	Enumerate the etio-pathogenesis, clinical features, complications and management of Chronic Renal Failure in Children	K	KH	Y	LGT,SGT	Written/Viva voce	
PE20.7	Enumerate the etio-pathogenesis, clinical features, complications and management of Wilms Tumor	K	KH	Y	LGT,SGT	Written/Viva voce	
PE20.8	Perform and interpret the common analytes in a Urine examination	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE20.9	Interpret report of Plain Xray of KUB	S	SH	Y	Bedside clinics, Skills lab	Log book	
Topic 21: Approach to and recognition of a child with possible Rheumatologic problem		Number of competencies: (05)		Number of competencies that require certification:(NIL)			
PE21.1	Enumerate the common Rheumatological problems in children. Discuss the clinical approach to recognition and referral of a child with Rheumatological problem	K	KH	Y	LGT,SGT	Written/Viva voce	
PE21.2	Describe the etiopathogenesis, diagnosis and management of Henoch Schoenlein Purpura.	K	K	N	LGT,SGT	Written/Viva voce	

PE21.3	Describe the etiopathogenesis, diagnosis and management of Kawasaki Disease	K	K	N	LGT,SGT	Written/Viva voce	
PE21.4	Describe the etiopathogenesis, diagnosis and management of SLE	K	K	N	LGT,SGT	Written/Viva voce	
PE21.5	Describe the etiopathogenesis, diagnosis and management of JIA	K	K	N	LGT,SGT	Written/Viva voce	
Topic 22: Cardiovascular system- Heart Diseases		Number of competencies: (11)		Number of competencies that require certification:(NIL)			
PE22.1	Describe the Hemodynamic changes, clinical presentation, complications and management of Acyanotic Heart Diseases	K	KH	Y	LGT,SGT	Written/Viva voce	
PE22.2	Describe the Hemodynamic changes, clinical presentation, complications and management of Cyanotic Heart Diseases	K	KH	Y	LGT,SGT	Written/Viva voce	
PE22.3	Explain the etio-pathogenesis, clinical presentation and management of cardiac failure in infant and children	K	KH	Y	LGT,SGT	Written/Viva voce	

PE22.4	Explain the etio-pathogenesis, clinical presentation and management of Acute Rheumatic Fever in children	K	KH	Y	LGT,SGT	Written/Viva voce	
PE22.5	Describe the etio-pathogenesis, clinical features and management of Infective endocarditis in children	K	KH	Y	LGT,SGT	Written/Viva voce	
PE22.6	Describe the etiopathogenesis, grading, clinical features and management of hypertension in children	K	KH	Y	LGT,SGT	Short notes	
PE22.7	Record pulse, blood pressure, temperature and respiratory rate and interpret as per the age	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE22.8	Perform independently examination of the cardiovascular system– look for precordial bulge, pulsations in the precordium, JVP and its significance in children and infants, relevance of percussion in Pediatric examination, Auscultation and other system examination and document	S	SH	Y	Bedside clinics, Skills lab	Skill station	
PE22.9	Interpret a chest X-ray and recognize cardiomegaly	S	SH	Y	Bedside clinics, Skills lab	Log book entry	
PE22.10	Interpret Pediatric ECG	S	SH	Y	Bedside clinics, Skills lab	Log book entry	

PE22.11	Demonstrate empathy while dealing with children with cardiac diseases in every patient encounter	A	SH	Y	SGT	Document in Log Book	
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Topic23: GIT and Hepatobiliary system		Number of competencies: (21)			Number of competencies that require certification:(02)		
PE 23.1	Define vomiting, discuss causes, evaluation & management of vomiting in children	K	KH	y	LGT, SGT	Written/ Viva voce	
PE23.2	Define constipation discuss causes, evaluation & management of constipation in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE23.3	Discuss the causes, evaluation and management of abdominal pain in children	K	KH	Y	LGT, SGT	Written/ Viva voce	

PE23.4	Define diarrhea (acute diarrhea, chronic diarrhea, persistent diarrhea). Discuss etiology, risk factors, clinical features, complications, investigations and treatment (according to WHO guidelines) of acute gastroenteritis.	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE23.5	Discuss the causes, clinical presentation and management of dysentery in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE23.6	Discuss the physiological basis of ORT, types of ORS and the composition of various types of ORS. Discuss composition of fluids used in management of diarrhea. Discuss the role of antibiotics, antispasmodics, anti-secretory drugs, probiotics, anti-emetics in acute diarrheal diseases	K	KH	Y	LGT, SGT	Written/ Viva voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE23.7	Elicit history pertaining to diarrheal diseases. Assess for signs & symptoms of dehydration, shock, prerenal AKI, electrolyte disturbances, document and present.	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	
PE23.8	Perform and interpret stool examination including Hanging Drop, Interpret RFT and electrolyte report In the context of diarrhea	S	SH	N	Bedside clinics, Skills	lab Log book	
PE23.9	Perform NG tube insertion in a manikin	S	P	Y	DOAP	Document in Log book	1

PE23.10	Perform IV cannulation in a model	S	P	Y	DOAP	Document in Log book	2
PE23.11	Perform Interosseous insertion model	S	P	Y	DOAP	Document in Log book	2
PE23.12	Discuss the etio-pathogenesis, clinical presentation and management of Malabsorption in Children and its causes including celiac disease	K	KH	N	LGT, SGT	Written/ Viva voce	
PE23.13	Discuss the etio-pathogenesis, clinical features and management of acute hepatitis in children	K	KH	Y	LGT,SGT activity	Written/Viva voce	

PE23.14	Discuss the etio-pathogenesis, clinical features and management of Fulminant Hepatic Failure in children	K	KH	Y	LGT,SGT activity	Written/Viva voce	
PE23.15	Discuss the etio-pathogenesis, clinical features and management of chronic liver diseases in children	K	KH	Y	LGT,SGT activity	Written/Viva voce	
PE23.16	Discuss the etio-pathogenesis, clinical features and management of Portal Hypertension in children	K	KH	Y	LGT,SGT activity	Written/Viva voce	
PE23.17	Elicit, document and present the history related to diseases of Gastrointestinal system	S	SH	Y	Bedside clinics, Skills lab	Skills Station	
PE23.18	Identify external markers for GI and Liver disorders e.g. Jaundice, Pallor, Gynecomastia, Spider angioma, Palmar erythema, Ichthyosis, Caput medusa, Clubbing, failing to thrive, Vitamin A and D deficiency	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE23.19	Perform examination of the abdomen, demonstrate organomegaly, ascites etc.	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	
PE23.20	Interpret Liver Function Tests, viral markers, ultra-sonogram report	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	
PE23.21	Enumerate the indications for Upper GI endoscopy	K	K	N	SGT	Viva voce	
Topic: 24 Pediatric Emergencies – Common Pediatric Emergencies		Number of competencies: (23)			Number of competencies that require certification:(10)		
PE24.1	Describe the etio-pathogenesis, clinical approach and management of cardio-respiratory arrest in children	K	KH	Y	LGT, SGT	Written/ Viva voce	

PE24.2	Describe the etio-pathogenesis and management of respiratory distress in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE24.3	Describe the etio-pathogenesis, clinical approach and management of Shock in children	K	KH	Y	LGT, SGT	Written/ Viva voce	

PE24.4	Describe the etio-pathogenesis, clinical approach and management of Status epilepticus	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE24.5	Describe the etio-pathogenesis, clinical approach and management of an unconscious child	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE24.6	Explain oxygen therapy, in Pediatric emergencies and modes of administration	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE24.7	Observe the various methods of administering Oxygen	S	KH	Y	Demonstration	Document in log book	
PE24.8	Assess airway and breathing: recognize signs of severe respiratory distress. Check for cyanosis, severe chest in drawing, Grunting	S	P	Y	DOAP, Skills lab	Skills Assessment	3
PE24.9	Assess airway and breathing. Demonstrate the method of positioning of an infant & child to open airway in a Simulated environment	S	P	Y	DOAP, Skills Lab	Skills Assessment	3
PE24.10	Assess airway and breathing: administer oxygen using correct technique and appropriate flow rate	S	P	Y	DOAP, Skills Lab	Skills Assessment	3

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE24.11	Assess airway and breathing perform assisted ventilation by Bag and mask in a simulated environment	S	P	Y	DOAP, Skills lab	Skills Assessment	3
PE24.12	Check for signs of shock i.e. pulse, Blood pressure, CRT	S	P	Y	DOAP, Skills Lab	Skills Assessment	3
PE24.13	Secure an IV access in a simulated environment	S	P	Y	DOAP, Skills Lab	Skills Assessment	3

PE24.14	Choose the type of fluid and calculate the fluid requirement in shock	S	P	Y	DOAP, SGT activity	Skills Assessment	3
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PE24.15	Assess level of consciousness & provide emergency treatment to a child with convulsions/coma position an unconscious child. Position a child with suspected trauma. Administer IV/per rectal Diazepam for a convulsing child in a simulated environment.	S	P	Y	DOAP, Skills Lab	Skills Assessment	3
PE24.16	Assess for signs of severe dehydration	S	P	Y	Bedside clinics, Skills lab	Skill station	3
PE24.17	Monitoring and maintaining temperature: define hypothermia. Describe the clinical features, complications and management of Hypothermia	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE24.18	Describe the advantages and correct method of keeping an infant warm by skin- to- skin contact	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE24.19	Describe the environmental measures to maintain temperature	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE24.20	Assess for hypothermia and maintain temperature	S	SH	Y	Skills lab	Skills Assessment	
PE24.21	Provide BLS for children in manikin	S	P	Y	Skills Lab	Skills Assessment	3
PE24.22	Counsel parents of dangerously ill/ terminally ill child to break a bad news	S	SH	Y	DOAP	Document in Log book	
PE24.23	Obtain Informed Consent	S	SH	Y	DOAP	Document in Log book	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
Topic 25: Respiratory system		Number of competencies: (06)		Number of competencies that require certification: (NIL)			
PE25.1	Describe the etio-pathogenesis, clinical features and management of Acute Otitis Media (AOM)	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE25.2	Describe the etio-pathogenesis, clinical features and management of Epiglottitis	K	KH	Y	LGT, SGT	Written/ Viva voce	

PE25.3	Explain the etio-pathogenesis, clinical features and management of Acute laryngo- tracheo-bronchitis	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE25.4	Describe the etiology, clinical features and management of Stridor in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE25.5	Describe the types, clinical presentation, and management of foreign body aspiration in infants and children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE25.6	Describe the etio-pathogenesis, diagnosis, clinical features, management and prevention of lower respiratory infections including bronchiolitis, wheeze associated LRTI Pneumonia and empyema	S	SH	Y	Bedside clinics, SGT,LGT	Skill assessment /Written /Viva voce	
Topic 26: Anemia and other Hemato-oncologic disorders in children		Number of competencies: (17).			Number of competencies that require certification: (NIL)		
PE26.1	Explain the etio-pathogenesis, clinical features, classification and approach to a child with anaemia	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE26.2	Describe the etio-pathogenesis, clinical features and management of Iron Deficiency anaemia	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE26.3	Describe the etiopathogenesis, clinical features and management of VITB12, Folate deficiency anaemia	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE26.4	Explain the etio-pathogenesis, clinical features and management of Hemolytic anemia, Thalassemia Major, Sickle cell anaemia, Hereditary spherocytosis, Auto-immune hemolytic	K	KH	Y	LGT, SGT	Written/ Viva voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH / SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
	anaemia and hemolytic uremic syndrome						
PE26.5	Describe the National Anaemia Control Program	K	KH	Y	LGT, SGT	Written/ Viva voce	

PE26.6	Describe the cause of thrombocytopenia in children: describe the clinical features and management of Idiopathic Thrombocytopenic Purpura(ITP)	K	KH	N	LGT, SGT	Written/ Viva voce	
PE26.7	Explain the etiology, classification, pathogenesis and clinical features of Hemophilia in children	K	KH	N	LGT, SGT	Written/ Viva voce	
PE26.8	Explain the etiology, clinical presentation and management of Acute Lymphoblastic Leukemia in children	K	KH	N	LGT, SGT	Written/ Viva voce	
PE26.9	Explain the etiology, clinical presentation and management of lymphoma in children	K	KH	N	LGT, SGT	Written/ Vivavoce	
PE26.10	Perform examination of the abdomen, demonstrate organomegaly	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	
PE26.11	Interpret CBC, LFT	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	
PE26.12	Perform and interpret peripheral smear	S	SH	Y	DOAP	Document in log book	
PE26.13	Explain the indications for Hemoglobin electrophoresis and interpret report	K	K	N	SGT	Viva voce	
PE26.14	Demonstrate, performance of bone marrow aspiration in manikin	S	SH	Y	Skills lab	Document in log Book	
PE26.15	Enumerate the referral criteria for Hematological conditions	S	SH	Y	Bedside clinics, SGT	Viva voce	
PE26.16	Counsel and educate patients about prevention and treatment of anemia	A/C	SH	Y	Bedside clinics, Skills lab	Document in log book	
PE26.17	Enumerate the indications for splenectomy and precautions	K	K	N	SGT Activity	Viva voce	
Topic 27: Systemic Pediatrics-Central Nervous system		Number of competencies: (14)			Number of competencies that require certification:(NIL)		

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE27.1	Explain the etio-pathogenesis, clinical features, complications, management, and prevention of acute bacterial Meningitis in children	K	KH	Y	LGT, SGT	Written/ Viva voce	

PE27.2	Describe the etio-pathogenesis, clinical features, complications, management and prevention of tuberculous meningitis	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.3	Distinguish bacterial, viral and tuberculous meningitis	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.4	Explain the etio-pathogenesis, classification, clinical features, complication and management of Hydrocephalus in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.5	Explain the etio-pathogenesis, clinical features, and management of Infantile hemiplegia	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.6	Explain the etio-pathogenesis, clinical features, complications and management of Febrile seizures in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.7	Define epilepsy. Discuss the pathogenesis, clinical types, presentation and management of Epilepsy in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.8	Define status Epilepticus. Discuss the clinical presentation and management	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.9	Describe the etio-pathogenesis, clinical features and management of Mental retardation in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.10	Describe the etio-pathogenesis, clinical features and management of children with cerebral palsy	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.11	Enumerate the causes of floppiness in an infant and discuss the clinical features, differential diagnosis and management	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE27.12	Explain the etio-pathogenesis, clinical features and management of Duchene muscular dystrophy	K	KH	Y	LGT, SGT	Written/ Viva voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE27.13	Interpret and explain the findings in a CSF analysis	S	SH	Y	SGT	Logbook	

PE27.14	Perform in a mannequin lumbar puncture. Discuss the indications, contraindication of the procedure	S	SH	Y	Bedside clinics, Skills lab	Skill assessment	
Topic 28: Allergic Rhinitis, Atopic Dermatitis, Bronchial Asthma		Number of competencies: (05)		Number of competencies that require certification: (NIL)			
PE28.1	Describe the etio-pathogenesis, clinical signs, management and prevention of Allergic Rhinitis in Children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE28.2	Explain the etio-pathogenesis, clinical types, presentations, management and prevention of childhood Asthma	K	KH	Y		Written/ Viva voce	
PE28.3	Develop a treatment plan for Asthma appropriate to clinical presentation & severity	S	SH	Y		Skill assessment	
PE28.4	Enumerate the indications for PFT	K	K	N		Viva voce	
PE28.5	Observe administration of Nebulization	S	SH	Y		Document in log book	
Topic 29: Chromosomal Abnormalities		Number of competencies: (05)		Number of competencies that require certification: (NIL)			
PE29.1	Describe the genetic basis, risk factors, clinical features, complications, prenatal diagnosis, management and genetic counselling in Down Syndrome.	K	KH	Y		Written/ Viva voce	
PE29.2	Interpret normal Karyotype and recognize Trisomy 21	S	SH	Y	Bedside clinics, Skills lab	Log book	
PE29.3	Counsel parents regarding -1.Present child, 2.Risk in the next pregnancy	A/C	SH	N	Bedside clinics, Skills lab	Log book	
PE29.4	Describe the genetic basis, risk factors, clinical features, complications, prenatal diagnosis, management and genetic counselling in Turner's Syndrome	K	KH	N	LGT, SGT	Written/ Viva voce	
PE29.5	Describe the genetic basis, risk factors, clinical features, complications, prenatal diagnosis, management and genetic counselling in Klinefelter Syndrome	K	KH	Y	LGT, SGT	Written/ Viva voce	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
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Topic 30: Endocrinology		Number of competencies: (07)			Number of competencies that require certification: (01)		
PE30.1	Describe the etiology (congenital & acquired), clinical features, management of Hypothyroidism in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE30.2	Interpret and explain neonatal thyroid screening report	S	SH	Y	Bedside clinics, SGT	Skill assessment	
PE30.3	Describe the etiology, clinical types, clinical features, diagnostic criteria, complications and management of Diabetes mellitus in children	K	KH	Y	LGT, SGTs	Written/ Viva voce	
PE30.4	Recognize clinical features DKA, Perform and interpret Urine Dip Stick for Sugar & Ketone bodies & refer	S	P	Y	DOAP	Skill assessment	3
PE30.5	Perform genital examination and recognize Ambiguous Genitalia, counsel and refer	S	SH	Y	Bedside clinic Skills lab	Skill assessment	
PE30.6	Define precocious and delayed Puberty, Perform Sexual Maturity Rating (SMR), Recognize precocious and delayed Puberty and refer	K, S	KH	Y	LGT, SGT	Written/ Viva voce	
PE30.7	Identify deviations in growth and plan appropriate referral	S	P	Y	Bedside clinics, Skills Lab	Skill assessment	
Topic 31:Vaccine preventable Diseases – Tuberculosis		Number of competencies: (14)			Number of competencies that require certification: (NIL)		
PE31.1	Describe the epidemiology, clinical features, clinical types, complications of Tuberculosis in Children and Adolescents	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE31.2	Describe the various diagnostic tools for childhood tuberculosis	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE31.3	Describe the various regimens for management of Tuberculosis as per National Guidelines	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE31.4	Describe the preventive strategies adopted and the objectives and outcome of the National Tuberculosis Control Program	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE31.5	Elicit, document and present history of contact with tuberculosis in every patient encounter, Identify BCG scar and interpret a Mantoux test.	S	SH	Y	Bedside clinics, Skill lab	Skill assessment	
PE31.6	Interpret blood tests in the context of laboratory evidence for tuberculosis	S	SH	N	Bedside clinics, SGT	Log book	

Number	COMPETENCY The student should be able to	Predominant Domain K/S/A/C	Level K/KH/SH/P	Core Y/N	Suggested Teaching Learning methods	Suggested Assessment methods	Number required to certify P
PE31.7	Describe the various samples for demonstrating the organism e.g. Gastric Aspirate, Sputum, CSF, FNAC	K	KH	Y	Bedside clinics, SGT	Written/ Viva voce	
PE31.8	Enumerate the indications, discuss the limitations of methods of culturing M. Tuberculosis and the newer diagnostic tools for Tuberculosis including BACTEC CBNAAT and their indications	K	KH	Y	SGT	Written/ Viva voce	
PE31.9	Enumerate the common causes of fever and describe the etiopathogenesis, clinical features, complications and management of fever in children	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE31.10	Enumerate the common causes of fever and describe the etiopathogenesis, clinical features, complications and management of child with exanthematous illnesses like Measles, Mumps, Rubella & Chicken pox	K	KH	Y	LGT, SGT	Written/ Viva voce	
PE31.11	Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Diphtheria, Pertussis, Tetanus.	K	KH	Y	LGT, SGT	Written/ Viva-voce	
PE31.12	Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Typhoid	K	KH	Y	LGT, SGT	Written/ Viva-voce	
PE31.13	Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Dengue, Chikungunya and other vector borne diseases	K	KH	Y	LGT, SGT	Written/ Viva-voce	
PE31.14	Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of children with Common Parasitic infections, malaria, leishmaniasis, filariasis, helminthic infestations, amebiasis, giardiasis	K	KH	Y	LGT, SGT	Written/ Viva-voce	
Topic 32: The role of the physician in the community		Number of competencies: (01)		Number of competencies that require certification : (NIL)			
PE32.1	Identify, Describe and Defend medicolegal, socio-cultural and Ethical issues as they pertain to health care in children (including Parental rights and right to refuse treatment)	K	KH	Y	SGT	Written/ Viva voce	

Resolution No. 4.43 of Academic Council (AC-51/2025): Resolved to keep the same internal assessment pattern as admission batch 2023 and reducing both theory and practical to 100 marks each in the programme MBBS UG in the Pediatrics - course for theory/ Practical with effect from the batch admitted in 2024 [ANNEXURE-65].

Annexure-65 of AC-51/2025

Internal assessment for admission batch 2024

Formative assessment theory			Continuous internal assessment theory						Total
1 st PCT theory	2 nd PCT theory	Prelims theory	Home assignment	Continuous class test (LMS)	Seminar	Museum study	Library assignments	Attendance theory	
					Self-directed learning				
100	100	100	10	25	10	10	10	10	375
									375/3.75 - Reduced to 100

Formative assessment practical			Continuous internal assessment practical						Total
1 st PCT Practical/ First ward leaving examination	2 nd PCT practical / Second ward leaving examination	Prelim Practical	Log book (150)				Journal (Record book/ Portfolio)	Attendance practical	
			Certifiable skill based competencies through OSCE/ OSPE/ Spots/ Exercises / Other	AETCO M Competencies	SVL Lab activity	Research			
100	100	100	60	30	40	20	40	10	500
Phase 2 (50 marks)	Phase 3 part 1 (50)	Phase 3 part 2 (100 marks)							500/5 Reduced to 100

ks)	mar ks)									
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SVL – Simulation and virtual learning

i. Resolved to make 100 marks theory question paper in 3 sections. Section A MCQ, Section B & C of 40 marks each for UG CBME with effect from admission batch 2021 (Joined in Feb 22) till admission batch 2023 [ANNEXURE-66A].

ii. Resolved to make 100 marks theory question paper in 3 sections. Section A MCQ, Section B & C of 40 marks each for UG CBME with effect from admission batch 2024 [ANNEXURE-66B].

Annexure-66B of AC-51/2025

Proposed Draft University Question Paper Format for Paediatrics

Paper: **Marks: 100** **Time: 03 Hours (20 Min for
MCQ)**

Section A

Multiple Choice Questions (20 MCQ) (01 MCQ = 1 Mark) 20 Marks
(Scenario based MCQ/s 4 marks)

Section B

B1 Short Answer Questions (06 out of 07) 30 Marks
(Note: 01 Short Note Question from AETCOM & 04 Short Notes from integrated topics)

B2 Long Answer Questions (01 Out of 02) 10 Marks

Section C

C1 Short Answer Questions (06 out of 07) 30 Marks
(Note: 03 short notes will be on reasoning)

C2 Long Answer Questions (01 Out of 02) 10 Marks

(Integrated modules – One short note each on anemia and tuberculosis mandatory. Can also include short notes on hypothyroidism, diabetes mellitus and hypertension.

AETCOM module 4.9 A & B – Identify, discuss and defend medico-legal, socio- cultural, professional and ethical issues pertaining to medical malpractice and medical negligence)

Resolution No. 4.45 of Academic Council (AC-51/2025): Resolved to continue the existing University Practical examination pattern in the UG programme MBBS in the course Pediatrics for Practical with effect from the batch admitted in 2024 [ANNEXURE-67].

Annexure-67 of AC-51/2025

University practical exam pattern – same as previous approved in resolution 4.29 of AC 49/24

CLINICAL / PRACTICAL AND VIVA -VOCE EXAMINATION				
THIRD MBBS - PART - II (CBME)				
SUBJECT: PAEDIATRICS				
Long Case (1)	Short Case (1)	OSCE 2 stations Procedure & communication skills (10 marks each)	Table Viva (4 Components) (Nutrition, Vaccines, Drugs + Emergencies, Instruments- Procedure, X-rays	Total Marks
40 Marks	20 Marks	20 Marks	20 Marks	100



MGM INSTITUTE OF HEALTH SCIENCES

(Deemed to be University u/s 3 of UGC Act, 1956)

Grade 'A' Accredited by NAAC

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