

Subject-Specific Recommendations: 2024 Admission Batch and Onwards

Subject: Pediatrics

Phase: Phase-2, 3 (III/I), 4 (III/II)

Preamble

The guidelines are based on the NMC revised CBME guidelines for 2024 (Notification No. D-11011/500/2024 Academic Cell e-8284443 dated 12 September 2024) and incorporate the essential elements of the internal assessment (Number of IA, Format, Eligibility criteria for university examination, etc) stated in the said document.

- The 2024 guidelines (NMC Notification D-11011/500/2024) emphasize learner-centered, outcomebased, integrated and inclusive medical education.
- Pediatric training is aligned with the revised Competency-Based Medical Education (CBME 2024) focusing on gender sensitivity, disability-inclusive care, mental health integration, post-COVID preparedness, and digital health.
- Increased Self-Directed Learning (SDL), skills lab teaching, AI/simulation-based methods, Family Adoption Program, and longitudinal AETCOM modules are integrated.

- Bilingual teaching and competency mapping ensure clarity and accessibility.

- NExT-based summative structure continues for this batch.

MBBS BATCH 2024**					
Teaching Hours - Pediatrics – Phase 2, 3 and 4					
Phase/ year	SGT	LGT	SDL	Total	Posting(wks)
2 - II	-	-	-	-	4
3 - III/I	30	20	05	55	2
4 - III/II	35	20	10	65	6
TOTAL	65	40	15	120	12

Components and Marks distribution Formative assessment - Theory: Total 300 Marks (To be converted to 100 marks as per NMC)

PCT-I (100 MARKS)-In MBBS III/I with PCT 2 of Third minor MBBS after completion of all lectures

PCT-II (100 MARKS)-In MBBS III/II

Prelims (100 MARKS) In MBBS III/II

Components and Marks distribution Formative assessment- Practicals Total 300 Marks (To be converted to 100 marks as per NMC)

PCT-I (100 MARKS)-In MBBS III/I End of posting of Third Minor MBBS

PCT-II (100 MARKS)-In MBBS III/II End of posting of Third Major MBBS

Prelims (100 MARKS) In MBBS III/II

	1st PCT (Phase III/I)	2nd PCT (Phase III/II)	Prelims (Before MUHS exams)	Total marks
Theory	100	100	100	300
Practical	100(posting end) Can be divided as 50 marks each at mid posting and end of posting	100 (posting ending)	100	300

Note:

- The first theory PCT will be conducted with the 2nd Internal assessment of Phase III.
- The second theory PCT will be during Year III Part II
- The questions in 1st and 2nd PCT should cover the topics / competencies covered till the scheduled date of respective examination.
- The third theory PCT will be the preliminary examination theory.

Format/Skeleton of Theory Paper as per NMC Revision 2024 -

Format for a Theory paper for 2024 Batch and onwards as per 2024 NMC Regulations for all the Subjects.			
Duration-3 hours			100
marks			
	Type of question / Number of questions	Marks/ question	Total
Q No 1	Scenario based MCQ (at least 50 %) – 20 (All compulsory)	1	20

Q No 2	Long essay question – Case based – 1 (No option)	10	10
Q No 3	Reasoning Questions – Case based - 5 (Any 5 out of 6)	3	15
Q No 4	Short notes (applied aspects) – Case based - 4 2 sub-parts from integrated modules (Any 4 out of 5)	5	20
Q No 5	Short notes – 3 (any 3 out of 4)	5	15
Q No 6	Short notes (one subpart of 5 marks from AETCOM Preferably scenario based) – 4 (All compulsory)	5	20

- **AETCOM Inclusion:** 4.9 a and 4.9 b as per NMC

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

- **Topics:**
 - Counsel Regarding Breast feeding, Complementary Feeding, Nutrition, Vitamins deficiency, Macro & Micronutrient deficiency, Worm Infestation (3rd MBBS Part 1 (Phase 3))
 - Describe the components of safe vaccine practice – Patient education/ counselling; adverse events following immunization, safe injection practices, documentation and medico-legal implications (3rd MBBS Part 1 (Phase 3))

- Demonstrate empathy while dealing with children with cardiac diseases in every patient encounter {(3rd MBBS Part 2 (Phase 4)}
- Counsel a patient with Chronic illness {(3rd MBBS Part 2 (Phase 4)}
- Counsel / educate a patient for referral appropriately {(3rd MBBS Part 2 (Phase 4)}

Practical Marks Structure for PCT, Prelims and University Summative Exams

- **Components:**

Component	Details	Marks
Long Case	1 Case	30
Short Case	1 Case (including communication skills)	20
OSCE	4 Stations × 10 marks each	40
Viva Voce	Oral Examination	10
Total		100

Passing Criteria: 50% combined, 40% separately.

Continuous internal assessment:

In addition to above formative assessments for theory and practical, colleges are encouraged to conduct continuous internal assessment (CIA) by home assignments, class tests, seminars, museum study, library assignments, clinical case presentations, problem solving exercises, participation in project

for health care in the community, Quiz, Certification of competencies, log book evaluation, SDL skills etc. Such assessment shall be the ongoing process, without any quantification of assessment outcome. Qualitative feedback and guidance, aimed at obtaining the certifiable skills and achievements of the competencies, should be provided to the students. **The results of this CIA shall not be a part of the marks of formal internal assessments, and hence shall not be used to determine the eligibility to appear for the MUHS examination.**

Eligibility to appear for MUHS final examination

1. Eligibility based on Internal Assessment

A student 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. Following are the details.

	Total marks	Converted to	Conversion formula	Eligibility criteria (based on converted marks)	
				Individual	Total
Theory (Including 1 st , 2 nd PCT and Prelims)	300	100	Total marks obtained / 4	25	50 (Theory + Practical)
Practical (Including Phase	300	100	Total marks obtained / 4	25	

III/I posting ending, Phase III/II posting ending and Prelims)					
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During the course:

If Internal assessment (IA) marks are less for any of the theory / practical IA examinations, the students/parents must be intimated about the possibility of being detained, much before the final university examination, so that there is sufficient time to improve.

No extra IA examination shall be conducted for such students, to improve their score, rather such students are mentored and guided, so that they improve in subsequent IA examinations. However, only one extra examination can be conducted after preliminary examinations, only for those students who have missed any of IA examinations due to genuine reasons (see below for details).

Extra examination for students who have missed IA examination due to genuine reasons

If a student has missed any of the IA examinations due to genuine reasons, then such students must apply to academic committee for permission to appear for one extra examination which is to be conducted after prelim examination. Academic committee, after verifying the genuineness for absence, may permit such students to appear for one extra examination (one theory and one practical).

Even if a student has missed two or more theory / two or more practical examinations, then such student can appear for ONLY one extra examination. In such situations, eligibility should be considered after totaling the marks of the appeared examinations, without changing the denominator.

At the end of Phase:

If a student fails to secure 40% marks and theory and practical individually and 50% combined marks in practical, such students shall be detained to appear in regular university examination of that batch.

Remedial measures for detained students

- i. In spite of above measures, if student is still not meeting the IA criteria to be eligible for regular MUHS exam he/she shall be detained to appear in regular university examination.
- ii. Remedial IA examination is to be conducted before the supplementary examination. The examination shall be conducted as per the final MUHS examination theory and practical pattern.
- iii. The student is eligible to appear for MUHS supplementary examination, if he/she secures minimum 40% marks in theory and practical (80/200 and 40/100, respectively) AND minimum 50% combined marks (150/300).

2. Eligibility based on attendance

To be eligible to appear for final MUHS examination, students must have at least 75% attendance in theory and at least 80% attendance in practical.

During the course:

If attendance is less during any quarterly/ six monthly/ periodic 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 improving their attendance.

Such students may be offered any of the locally possible remedial measures such as attending classes with previous batches (without affecting other subjects' attendance) or extra classes. However, scheduling of such remedial measures are optional for a college, and no such student can claim eligibility to appear for MUHS examination on the basis of non-scheduling of such remedial measures. The decision of scheduling of such remedial measures will be taken as per the absolute discretion of head of the department, considering the available resources.

At the end of phase:

If attendance is less at the end of regular classes for the subject, the student is detained to appear in regular university examination of that batch (for that subject).

Remedial measures for detained students

- iv. In spite of above measures, if student is still not meeting the criteria to be eligible for regular MUHS exam, he/she shall be detained to appear in regular university examination.
- v. If his/her attendance is $> 60\%$ in theory and practical, then remedial measures can be offered to such detained students, (after regular MUHS examination), so that they can complete the attendance criteria to be eligible to appear for supplementary examination. Detained students may be offered any of the locally possible remedial measures such as attending classes with previous batches (without affecting other subjects' attendance) or extra classes.
- vi. If the attendance is $< 60\%$, such students are neither eligible for remedial measures nor eligible for supplementary examination. Such students must appear for MUHS examination with next batch.

Changes in Course Contents as per CBME Curriculum Revision

Key Changes: Enhanced Integration (25%), gender sensitivity, disability competencies, increased SDL, expanded clinical postings, digital and AI integration, pandemic preparedness, and inclusion of nutrition, child rights, adolescent and mental health.

Subject-Specific Updates: Revised certifiable skills list (IMNCI, NALS, IV insertion, immunization, developmental screening, counseling). Added competencies in child abuse recognition, disability management, chronic care, and adolescent health.

Integrated Topics: Horizontal – Medicine, OBGY, Community Medicine. Vertical – Physiology, Pathology, Pharmacology, Anatomy.

Paper-Wise Distribution of Topics for Prelims and University Summative Examinations

- **Blueprinting Approach:** 50–60% core, 20–30% applied, 10–20% ethics/recent advances
- **Paper Pediatrics only 1:** Growth & Development, Nutrition, Neonatology, Immunization, Infections, Fluids, Genetics. Systemic Pediatrics (CNS, CVS, RS, GIT, Endocrine, Hematology), Adolescent, Behavioral, Child Abuse, National Programs.
- **Allied Subjects Integration:** [If applicable, e.g., Dermatology and Psychiatry in Medicine, Ortho, Radio and Anesthesia in Surgery]

Examiners: [4 per subject, 50%

external] **6. Recommended Books and**

Reference Books

Textbooks: Textbooks:

1. Ghai Essential Pediatrics
2. IAP Textbook of Pediatrics
3. UG Textbook of Pediatrics by Dr Piyush Gupta
4. Textbook Of Pediatrics by Dr Mukesh Agrawal
5. Nelson Textbook of Pediatrics (Can be Reference Book)

Reference Books:

- 1. Avery's Diseases of the Newborn
- 2. Cloherty's Manual of Neonatal Care
- 3. OP Ghai Review in Pediatrics

Additional Resources: IAP/WHO e-modules, NMC e-learning platform, ICMR e-library.