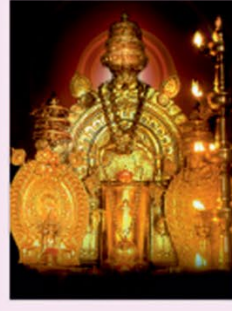




SHRI
DHARMASTHALA
MANJUNATHESHWARA
UNIVERSITY

• **ORDINANCE GOVERNING**
• **MBBS DEGREE COURSE**
• **PHASE - II [PART-B]**
• **CURRICULUM 2024-25**
• **Revised Scheme (RS-1)**

|| Om Shree Manjunathaya Namaha ||



Edition Year : 2024-25

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Shri Dharmasthala Manjunatheshwara University

(A State Private University established under the Shri Dharmasthala Manjunatheshwara University
Act No 19 of 2018 of Government of Karnataka and Notification No. ED 261 URC 2018 dated 19th December 2018)

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SHRI
DHARMASTHALA
MANJUNATHESHWARA
UNIVERSITY

THE LOGO

Poojya Dr D. Veerendra Heggade, Hon'ble Chancellor of the University, while searching for an appropriate Logo for the University, saw a photograph picked from Temple Architecture showing Wings of a Bird, sculpted in Indian style and wanted it to be incorporated in the logo for the University, as the Wings symbolize 'Spreading of Knowledge beyond Boundaries'. Further it was felt that the Central theme of the logo should be 'Rudra' (The Linga) with wings on each side. In this way, the logo of the University was conceptualized.

Hence:

1. The central part represents Rudra who Demolishes Darkness.
2. The Three horizontal lines on The Linga stand for Samyak Darshan (Right Belief), Samyak Gyan (Right Knowledge) and Samyak Charitra (Right Conduct).
3. The Wings symbolize spreading of Knowledge across the boundaries.
4. Base line "Truth Liberates" highlights the Purpose of Education: to liberate oneself unconditionally. It shows that it is not discipline, nor knowledge nor the efforts to freedom that liberate but Truth is what liberates you from all your conditioning and ignorance.

The overall significance of Shri Dharmasthala Manjunatheshwara University's Logo is:

Darkness of ignorance is destroyed by the flow of knowledge to bring Liberty to everyone, by realizing the truth. And, it should spread globally without the boundaries as hindrance.



**SHRI
DHARMASTHALA
MANJUNATHESHWARA
UNIVERSITY**

VISION

Shri Dharmasthala Manjunatheshwara University will set the highest standards of teaching and learning, awakening the intelligence of the students and nurturing the creativity hidden in them by creating an environment where the ancient wisdom blends with modern science, to transform them into whole human beings to face the challenges.

MISSION

- To ensure that the journey of education is inspiring, pleasant and enjoyable.
- Attract the best of teachers and students.
- Achieve high principles of trust, love and spirituality in the students.
- Create a collaborative, diverse and exclusive community.
- Transform the student of today to be a leader of tomorrow and a better human being.
- Produce passionate teachers.
- Evolve innovative teaching techniques.
- Create a peaceful environment.
- Prepare the student to face the social challenges.
- Create a University of which the Nation is proud of.
- Be an effective partner in Nation Building.
- Create an Eco-friendly University.
- Create a University based on the principles of beauty, love and justice.

|| Om Shanti! Om Shanti! Om Shanti ||



SDMU/ACAD/MED/F-90/Notif-392a(A1)/1136/2025

Date: 20-12-2025

NOTIFICATION

Amendment in the Ordinance Governing the Revised Scheme (RSI) of Curriculum for MBBS Phase II

- Ref: 1. Minutes of the 12th Academic Council Meeting held on 24th October 2025
2. NMC Gazette Notification No. D-11011/500/2024-UGMEB dated 12.09.2024.
3. SDMU/ACAD/MED/F-90/Notif-392a/811a/2024 Dated: 07-11-2024

In exercise of the powers conferred under Statutes 1.4 (Powers and functions - Para ix & x) of the Shri Dharmasthala Manjunatheshwara University, the approval of the Academic Council of Shri Dharmasthala Manjunatheshwara University is hereby accorded for the **Amendment to the "Internal Assessment Pattern" in the Ordinance Governing the Revised Scheme (RSI) of Curriculum for MBBS Phase II**, with effect from the date of notification.


REGISTRAR
REGISTRAR

Shri Dharmasthala Manjunatheshwara
University, Dharwad

To: The Principal, SDM College of Medical Sciences & Hospital.

Copy for kind information to:

1. Hon'ble Chancellor, Shri Dharmasthala Manjunatheshwara University, Dharwad
2. Vice-Chancellor, Shri Dharmasthala Manjunatheshwara University, Dharwad
3. Pro Vice Chancellor, Shri Dharmasthala Manjunatheshwara University, Dharwad
4. Controller of Examination, Shri Dharmasthala Manjunatheshwara University, Dharwad
5. Chairperson, Board of Studies - Preclinical (UG & PG)
6. University Records



DISCLAIMER

This curriculum booklet has been framed as per the guidelines issued by the National Medical Council and is subject to modifications as and when the National Medical Council amends the aforesaid guidelines.

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GENERAL GUIDELINES FOR MBBS PHASE II - CLINICAL SUBJECTS

1. TRAINING PERIOD:

Every medical undergraduate student 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**.

- a. Phase-I of 12 months including Foundation Course of two weeks and university exams.** It shall consist of - Anatomy, Physiology, Biochemistry, Introduction to Community Medicine, Humanities, Attitude, Ethics & Communication (AETCOM) module, family adoption programme.
- b. Phase-II of 12 months including university exams.** It will consist of Pathology, Pharmacology, Microbiology, family visit under Community Medicine, General Surgery, General Medicine, Obstetrics & Gynaecology, AETCOM module, Forensic Medicine & Toxicology, alignment & integration and introduction to clinical subjects.
- c. Phase III - 30 months**
 - i. Phase III Part I (12 months, including University exams)** - Forensic Medicine and Toxicology, Community Medicine, Family Adoption Programme, Medicine & allied subjects, Ophthalmology, Otorhinolaryngology (ENT), Surgery & allied subjects, Paediatrics, Obstetrics & Gynaecology, Radiodiagnosis, Anaesthesiology, AETCOM, Pandemic module integration, alignment & integration and Clinical postings.
 - ii. Electives (1 month)** shall be in 2 blocks of 15 days each in Phase III part II. First 15days block starts after annual exam of Phase III MBBS part 1 and 2nd block after the end of 1st elective.
 - iii. Phase III Part II (18 months, including University exam)-** Medicine and allied specialties (General Medicine, Psychiatry, Dermatology, Venereology and Leprosy (DVL), Surgery and allied specialties (General Surgery, Orthopaedics, Anaesthesiology and Radiodiagnosis), Obstetrics and Gynaecology (including Family Welfare), Paediatrics, AETCOM module, Pandemic module integration, alignment & integration and Clinical postings.

2. TEACHING METHODS AND HOURS:

a. For Phase I, II and Phase III Part I:

Time allotted – 12 months.

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

Time available: Approx 39 weeks (39 hours/week) = **39 x 39 hrs = 1521 hrs**
(excluding 13 weeks: Preliminary/ University examinations and results: 9 weeks, vacations: 2 weeks, public holidays: 2 weeks)

b. For Phase III Part II:

Time allotted: 18 months (approx. 78 weeks)

Time available: Approx. 62 weeks (39 hours/ week) = **62 x 39 hrs= 2418 hrs**
(excluding 16 weeks - Prelim / University Exam & Results: 10 weeks; Vacation: 3 weeks; Public Holidays: 3 weeks)

- c. Large group teaching shall not exceed one third of the total allotted hours for a subject.
- d. The learning process shall include clinical experiences, problem- oriented approach, case studies and community health care activities.
- e. Teaching and learning shall be aligned and integrated across specialties both vertically and horizontally for better learner comprehension.
- f. 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.
- g. An exposure to skill lab-based teaching by each subject in each phase shall be there weekly or fortnightly.

MBBS Phase II Teaching hours: (As per CBME 2024 guidelines applicable from 2024 batch of admissions till further changes)

Subjects	Large group teaching	SGT/ Practicals/ Tutorials/ Seminars	Clinical postings*	SDL	Total
Pathology	80	170	-	10	260
Pharmacology	80	170	-	10	260
Microbiology	75	143	-	10	228
Community medicine (including FAP)	25	0	24	10	59
Forensic Medicine and Toxicology	12	25	-	08	45
Clinical Subjects	60	-	540	-	600
AETCOM	-	29	-	08	37
Sports/ Yoga/ Extracurricular activities	-	-	-	32	32
Final Total	332	537	564	88	1521

SGT - Small group teaching; SDL – Self-directed learning

*Clinical postings shall be for 3 hours/day from Monday to Friday. There will be 15 hrs./ week of al clinical postings.

Clinical postings:

Subjects	Period of training in weeks			Total weeks
	Phase 2	Phase 3 Part 1	Phase 3 Part 2	
Electives	0	4	0	4
General Medicine	8	3	13	24
General Surgery	6	5	13	24
Obstetrics and Gynaecology	6	3	13	22
Paediatrics	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 and Leprosy	0	0	6	6
Anaesthesiology	0	0	2	2
Total	36	33	65	134

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.

Learner-doctor method of clinical training (Clinical Clerkship)

The learner shall function as a part of the health care team.

Goal: To provide learners with experience in:

- Longitudinal patient care,
- Being part of the health care team,
- Hands-on care of patients in outpatient and in-patient setting.

The learner shall function as a part of the health care team with the following responsibilities:

- Be a part of the units' out-patient services on admission days,
- Remain with the admission unit until at least 6 PM except during designated class hours,

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

Learner- Doctor programme (Clinical Clerkship)

Year of curriculum	Focus of Learner- Doctor programme
Phase 1	Introduction to hospital environment, Early clinical exposure, Understanding perspective 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 program) and decision making, management and outcomes

- 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. 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.

3. ASSESSMENT

a. ELIGIBILITY TO APPEAR FOR SUMMATIVE UNIVERSITY EXAMINATIONS

The performance in essential components of training is to be assessed, based on following **THREE COMPONENTS-**

i. Attendance

- 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.
- 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.
- 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 resit and Supplementary exam. Students who have attendance 60% or above shall be eligible for such remedial classes.

ii. Internal Assessment (IA):

- 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.
- 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.
- 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.

- 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:

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

Phase III part 2 - 100 marks is divided as

- Medicine - 75 marks
- Psychiatry - 13 marks
- Dermatology- 12 marks

The final cumulative IA for Medicine is out of 200 marks for theory and practical each.

General Surgery:

The IA of 200 marks in surgery shall be divided across phases as

Phase II - 25 marks

Phase III part 1 - 25 marks

Phase III part 2 - 150 marks is divided as

- Surgery - 75 marks
- Orthopaedics - 50 marks
- Anaesthesia - 13 marks.
- Radiodiagnosis – 12 marks

The final cumulative IA for Medicine is out of 200 marks for theory and practical each.

Forensic Medicine and Toxicology

IA is divided as 25 marks in phase II and 75 marks in Phase III part 1. The final cumulative IA is out of 100 for theory and practical each.

Community Medicine

IA is divided as 25 marks in phase I, 25 marks in phase II, and 50 marks in Phase III- part 1. The final cumulative IA for Community Medicine is out of 100 marks for theory and practical each.

Ophthalmology and ENT

IA is divided as 25 marks in phase II and 75 marks in Phase III part 1. The final cumulative IA is out of 100 for theory and practical each for each subject.

iii. Certifiable Competencies Achieved:

- 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.

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.

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.

Remedial measures:

- 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.
- 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.
- Remedial classes can be planned for students missing regular classes on genuine grounds, thus ensuring that all certifiable competencies are achieved.
- 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.

b. SUMMATIVE UNIVERSITY EXAMINATION:

University Examinations shall be held as under:

- i. Phase-I shall be held at the end of Phase I training (in the 12th month of that training), in the subjects of Anatomy, Physiology and Biochemistry.
- ii. Phase-II examination shall be held at the end of Phase II training (12th month of that training), in the subjects of Pathology, Microbiology, and Pharmacology
- iii. Phase III Part 1 examination shall be held at the end of Phase III part 1 of training (12th month of that training) in the subjects of Community Medicine, Forensic Medicine & Toxicology, Ophthalmology and Otorhinolaryngology.
- iv. Phase III Part 2 - (Final Professional) examination shall be at the end of 17th / 18th month of that training, in the subjects of General Medicine and allied subjects, General Surgery including Orthopaedics and allied subjects, Obstetrics & Gynaecology, Paediatrics.

4. CRITERIA FOR PASSING IN A SUBJECT:

- a. 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 that subject. **In subjects that have two papers, the learner must secure a minimum 40% marks in aggregate (both theory papers together).**
- b. There shall be **NO grace marks** to be considered for passing in an examination.

5. RESIT/SUPPLEMENTARY EXAMINATION AND PROGRESSION:

- a. 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.
- b. 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.
- c. 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.
- d. No more than four attempts shall be allowed for a candidate to pass the Phase 1 examination. The total period for successful completion of phase I course

shall not exceed four (4) years. 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).

e. Phase wise progression:

- i. 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.
- ii. 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.
- iii. 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.

6. APPOINTMENT OF EXAMINERS:

- a. University shall appoint atleast of 4 examiners for the conduct of University Practical/Clinical examinations, out of whom not less than 50% must be external examiners.
- b. 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.
- c. 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).
- d. The Examiners for General Surgery and allied subjects shall be shall be 6 (General surgery - 2 Internal examiners and 2 external examiners and Orthopaedics – 1 internal examiner and 1 external examiner).
- e. Ophthalmology and ENT examinations to be held as separate examinations and not combined with other subjects.

FORENSIC MEDICINE AND TOXICOLOGY

1. GOALS

At the end of teaching learning in forensic medicine and toxicology, the student should be able to:

- i. Comprehend Medico-legal responsibilities of a general physician while rendering community service either in a rural primary health center or an urban health center.
- ii. Comprehend basic Medico-legal aspects of hospital and general practice.
- iii. Understand the rational approach to the investigation of crime, based on scientific and legal principles.
- iv. Understand the medico-legal framework of medical practice, codes of conduct, medical ethics, Professional Misconduct and Medical Negligence.
- v. Conduct Medico-legal examination and documentation of various Medico-legal cases. Identify and interpret important post-mortem findings in common unnatural deaths.
- vi. Conduct postmortem examination and Preparation of postmortem reports in unnatural deaths- Suicidal, Homicidal, Accidental.
- vii. Prepare Medical Certificate of Cause of Death (MCCD) and Medico-legal reports of injuries and age estimation.
- viii. Conduct examination and documentation of sexual offences, intoxication cases and preservation of relevant ancillary materials for medico-legal examination.
- ix. Analyse, Diagnose, manage legal aspects of common acute and chronic poisoning cases.
- x. Understand latest Acts and laws related to medical professional including related Court judgements e.g. MTP Act, CPA, THOA- 1994 etc.

2. OBJECTIVES

2.1 KNOWLEDGE

To ensure that at the end of the Course the student acquires required

- i. Understanding of the medico-legal responsibilities of physicians in primary and secondary care settings,
- ii. Understanding of the rational approach to the investigation of crime, based on scientific and legal principles,
- iii. Ability to manage medical and legal issues in cases of poisoning / overdose,
- iv. Understanding of the medico-legal framework of medical practice and medical negligence,
- v. Understanding of codes of conduct and medical ethics.

2.2 SKILLS

To ensure acquisition of necessary skills by the student, essential for Medico-legal work.

2.3 ATTITUDE AND COMMUNICATION SKILLS

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

- i. Respect autonomy of the deceased and his survivors.
- ii. Demonstrate empathy towards the relatives of the deceased.
- iii. Respect privacy and maintain confidentiality
- iv. Communicate effectively with the survivors of the deceased
- v. Respect the deceased.

2.4 INTEGRATION

To ensure that the knowledge and skills acquired in Forensic Medicine and Toxicology help the student to understand the importance of medico-legal, ethical and toxicological issues and apply the same during practice of Medicine.

3. TEACHING HOURS AND COURSE CONTENT

Sl. No	Teaching Learning Method	No. of Teaching Hours*
1	Large group teaching	12
2	Small group teaching (SGT) (Small group discussions- SGT/ Practicals/ Tutorials/ Seminars/ AETCOM)	25
3	Self-directed Learning (SDL)	08
TOTAL		45

*** No. of minimum Teaching hours given in the table above is as per the NMC CBME 2024 guidelines. However, any changes in teaching hours shall be adopted as per the recent NMC guidelines.**

COURSE CONTENTS

i) THEORY

Sl. No	TOPIC/ SYSTEM : (WITH COMPETENCY NUMBER) core/ non-core competency
1	General Information: (FM1.1 to 1.9) <u>Non-Core:</u> History of Forensic Medicine (FM1.2) Legal Procedure: Types of Courts & Offences prescribed (FM 1.4, 1.6) <u>Core:</u> Introduction to Forensic Medicine (FM1.1) Legal Procedure: Court procedures and orders related to medico-legal practice; Importance of documentation in medical practice (FM1.3, 1.5, 1.7, 1.8, 1.9)
2	Forensic Pathology: (FM2.3 to 2.22) <u>Non-core:</u> NIL <u>Core:</u> Death- Somatic and Molecular; Modes of death, Sudden Deaths (FM2.3, 2.5, 2.6, 2.7) Concept of whole brain-death, 'cortical death' and brainstem death; Human Organ Transplantation Act (FM2.3, 2.4) Postmortem changes (FM2.8, 2.9, 2.10, 2.11) Medico-legal autopsy (FM2.12 to 2.16, 2.20, 2.21, 2.22) Thermal & Electrical deaths (FM2.17, 2.18) Deaths due to starvation and neglect (FM2.19)
3	Clinical Forensic Medicine: (FM4.1 to 7.2, FM9.2 to 9.4) <u>Non-core:</u> NIL <u>Core:</u> Identification (FM4.1 to 4.5) Mechanical injuries (FM5.1) Medico-legal aspects of injuries (FM5.2 to 5.6) Firearm Injuries (FM6.1 to 6.2) Regional injuries (FM7.1 to 7.2) Torture and Human rights (FM9.2 to 9.4)

Note: Content under NON-CORE category cannot be assessed in Summative assessments. However, the same can be assessed in Formative assessments.

ii) PRACTICALS

Sl. No	Topic of practical : (with competency number)	Suggested teaching learning method	Domain/ level
1	Age estimation (FM14.4)	SGT/Practical/ Demonstration	S/KH
2	Skeletal Remains examination (FM14.9)	SGT/Practical/ Demonstration	S/KH

K-Knowledge, S-Skill, KH-Knows How, SH-Shows How, P-Perform

4. CERTIFICATION OF SKILLS - No Certifiable Skills in PY-II

1. SCHEME OF EXAMINATION:

a. Internal assessment [IA]:

Theory IA:

- A minimum of ONE IA shall be conducted in Professional Year II
- Formative assessment marks shall be calculated based on scoring in written tests/ small group teaching participation/ seminars/ assignments and log book assessment of SDL topics and AETCOM modules.

Sl No	Question type	Marks	No of questions	Total
1	Scenario based MCQs	2	5	10
2	Structured Long essay question (SLEQ)	10	1	10
3	Short notes / AETCOM (recall/comprehension)	5	2	10
4	Short notes (applied aspects/Integration modules)	5	1	5
5	Short answers (reasoning)	3	5	15
Total				50

Marks obtained out of 50 will be converted to 25 in PY-II

Practical IA:

- A minimum of ONE IA shall be conducted in Professional Year II
- Practical exam shall include exercises that shall be Case scenario based, Skill stations, OSPE stations
- Viva/oral examination shall be included in practical IA marks.

Sl No.	IA	Marks
1.	Practical Exercises & Viva	20
2.	Formative Assessment/Record book/Log book assessment	5
	Total	25

The distribution of IA marks shall be as mentioned below:

- IA of Forensic Medicine and Toxicology is divided as 25 marks in phase II and 75 marks in Phase III part 1. The final cumulative IA is out of 100 for theory and practical each

b. University examination/Summative assessment [SA]:

Summative assessment will be held at the end of 3rd professional year part 1.

6. SELF-DIRECTED LEARNING:

The topics for self-directed learning may be framed by the department and the details should be entered in the logbook preferably in the form of concept mapping.

7. INTEGRATED TEACHING: Shall be followed as per latest NMC guidelines

8. RECOMMENDED TEXT BOOKS:

Text books:

1. K.S.Narayan Reddy, Essentials of Forensic Medicine and Toxicology, Jaypee brothers, 36th Edition 2025.
2. Gautam Biswas, Forensic medicine & Toxicology, Jaypee brothers, 6th Edition 2024
3. Rajesh Bardale, Principles of Forensic Medicine & Toxicology, 4th Edition, 2024.
4. PV Guharaj, Sudhir Gupta, Forensic Medicine and Toxicology, University Press, 3rd Edition, 2019.
5. V.V. Pillay, Modern Medical Toxicology, Jaypee brothers, 5th edition, 2023.

Reference books:

1. Modi, Test Book of Forensic Medicine Edited by Justice K Kannan. LexisNexis- 26th Edition 2018.
2. Bernard Knight, Forensic Pathology, Arnold, 4th Edition 2016.
3. Francis camps, Gradwohl's Legal Medicine, Bristol, John wright and sons, 3rd Edition, 1976.
4. Jason Payne, Simpson's Forensic Medicine, CRC Press, 13th Edition, 2014.

COMMUNITY MEDICINE

1. GOALS

Broad goal of teaching undergraduate medical students is to prepare the students to function effectively as Community and Primary Care Physician.

2. OBJECTIVES

2.1 KNOWLEDGE

The student shall be able to:

- i. Enumerate the principles and practice of medicine in hospital and community setting.
- ii. Describe the natural history and role of agent, host and environmental factors in health and disease.
- iii. Describe the concepts of community health and levels of health care with related health interventions.
- iv. Explain the principles of sociology and identify social factors related to health, disease, and disability.
- v. Describe and analyse the role of socio-cultural beliefs in health and disease and their impact on individuals, family, and community.
- vi. Describe the elements of normal psychology and social psychology.
- vii. Describe the various health education and effective communication methods.
- viii. Describe the demographic pattern of the country and its relation to health.
- ix. Describe vital statistics and various methods used to collect the vital statistics in India.
- x. Describe the health care delivery system in India
- xi. Describe the organizations and functions of primary health centre, community health centre and district level health centre.
- xii. Describe uses and interpretation of basic bio-statistical data.
- xiii. Describe the basics of research in medical field.

2.2 SKILLS

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

- i. Practice principles of medicine in hospital and community settings.
- ii. Interpret health and illness behaviour at individual and community level.
- iii. Demonstrate art of communication with patients including history taking and role of socio-cultural aspects of diseases.
- iv. Formulate a research plan to undertake projects funded by ICMR, other universities and funding agencies.
- v. Demonstration of various government agencies involved in delivery of health care services to the community.

2.3 ATTITUDE AND COMMUNICATION SKILLS

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

- i. Demonstrate ability to communicate to patients in a patient, respectful, non-threatening, non-judgmental and empathetic manner.
- ii. Counsel individuals, families, and communities regarding how to stay healthy, what they can individually and collectively do to maintain health and when to seek help.
- iii. Demonstrate an understanding of national and regional health care policies including the National Health Mission (NHM), frameworks, economics and systems that influence health promotion, health care delivery, disease prevention, effectiveness, responsiveness, quality, and patient safety.
- iv. Demonstrate an understanding of role of health care team, functions of members of such a team as well as demonstrate ability to function as a leader at the primary care level.
- v. Demonstrates an understanding of notifiable diseases, international health regulations, prevention, and control of diseases of public health importance.
- vi. Demonstrate ability to provide a continuum of care at the primary and/or secondary level that addresses chronicity, mental and physical disability and appropriately identify and refer patients who may require specialized or advanced tertiary care.

2.4 INTEGRATION

The knowledge acquired in Community Medicine should help the students to understand the impact of environment, society and National Health priorities as they relate to the promotion of health and prevention as well as cure of disease.

2.5 FAMILY ADOPTION PROGRAMME

Targets to be achieved by students.

- i. Inspire active participation of community through families allotted
- ii. Continue active involvement to become the first doctor /reference point of the family by continued active interaction Start compiling the outcome targets achieved

3. TEACHING HOURS AND COURSE CONTENT

Sl. No	Teaching Learning Method	No. of Teaching hours*
1	Large group teaching	25
2	Small group teaching (SGT) (Small group discussions- SGT/ Practicals/ Tutorials/ Seminars/ AETCOM)	-
3	Self-directed Learning (SDL)	10
4	Clinical Postings	60
5	Family Adoption Program	24
6	Pandemic management module	12
TOTAL		131

** No. of minimum Teaching hours given in the table above is as per the NMC CBME 2024 guidelines. However, any changes in teaching hours shall be adopted as per the recent NMC guidelines.*

COURSE CONTENTS

I. THEORY

Sl. No.	Topic and Competency No.	Teaching learning methods
1.	Epidemiology (CM7.1, CM7.2, CM7.3, CM7.4, CM7.5, CM7.6, CM7.7, CM7.8, CM7.9, CM8.4) Core: <ul style="list-style-type: none"> • Aims, Approach, tools, basic measurements & uses of Epidemiology • Epidemiological study designs, Association & causation • Infectious disease epidemiology • Sources of epidemiological data, use of computers in epidemiology 	Lecture / SDL
2.	Epidemiology of Communicable Diseases (CM 3.3, 3.6, 8.1, CM 8.3, CM8.4, CM8.5, CM8.6, CM8.7) Core: Epidemiology, diagnosis & treatment of communicable & non communicable diseases Planning, implementation & evaluation of control measures, Prevention & surveillance Disease specific National Health Programs	Lecture / SDL / IT

	<ul style="list-style-type: none"> • Respiratory infections <ul style="list-style-type: none"> - Diphtheria, pertussis, Measles, Mumps & Rubella - Influenza, SARS, Meningococcal meningitis - Small pox & Chicken pox - ARI - TB • Intestinal infections <ul style="list-style-type: none"> - Poliomyelitis - Viral hepatitis - Acute diarrhoeal diseases, cholera - Typhoid, food poisoning - Amoebiasis, ascariasis, hook worm infestations, Parasitic – tineasis, hydatid disease • Vector borne infections <ul style="list-style-type: none"> - Dengue, JE, chikungunya, Zika virus - Filariasis, Leishmaniasis, NVBDCP • Zoonoses <ul style="list-style-type: none"> - Viral – rabies, yellow fever, Nipah virus, KFD - Bacterial – brucellosis, leptospirosis, Plague, Human salmonellosis • Surface infections <ul style="list-style-type: none"> - Trachoma, Tetanus - Leprosy with NLEP - STD, Yaws - HIV /AIDS with NACP • Emerging and re-emerging infections, Rickettsial infections • Hospital acquired infections 	
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II. CLINICAL / COMMUNITY HEALTH POSTING

Sl. No.	Topic with competency number	Suggested T/L method	Domain / Level	Teaching Hours
1	Visit to TB Centre (CM8.1, 8.3, 8.6, DOAP)	SGD	K / KH	3
2	Visit to Malaria Office (CM8.1, 8.3, 8.6, DOAP)	SGD	K / KH	3
3	Visit to Urban Leprosy Centre (CM8.1, 8.3, 8.6, DOAP)	SGD	K / KH	3
4	Visit to ICTC (CM8.1, 8.3, 8.6, DOAP)	SGD	K / KH	3

5	Visit to Corporation (CM 8.7, 9.2)	SGD	K / KH	3
6	Visit to Blind School (CM 1.5)	SGD	K / KH	3
7	Visit to Akshaya Patra Foundation (CM 5.6, 5.7)	SGD	K / KH	3
8	Visit to milk diary (CM 5.7)	SGD	K / KH	3
9	Disinfection, Visit to OT (CM 8.1, 8.5)	SGD	K / KH	3
10	Visit to Hospital Kitchen (CM 5.7)	SGD	K / KH	3
11	Visit to water treatment plant (CM 3.2)	SGD	K / KH	3
12	Visit to sewage treatment plant (CM 3.4)	SGD	K / KH	3
13	Visit to RHTC / UHTC (CM 17.5)	SGD	K / KH	3
14	Essential Medicine (CM19.1, 19.2, 19.3)	SGD	K / KH	3
15	Immunisation (Specific defences, UIP schedule, open vial policy, AEFI) Visit to immunisation room (CM 7.2, 10.5)	SGD	S / SH	3
16	Introduction to family study, housing & sanitation, culture & attitude, individual health (CM 2.1, 2.2, 2.4, 3.5, 10.3)	SGD	S / SH	3
17	Vulnerable groups – ANC, PNC, Neonate, Infant, Under-five, school children (CM 10.1, 10.2, 10.3)	SGD	S / SH	3
18	Nutritional Assessment (CM5.2, 5.4, DOAP)	SGD	S / SH	3
19	Data collection (CM 2.1, 2.2, 2.4, 3.5, 5.2, 5.4, 9.1, 10.1, 10.2, 10.3)	SGD	S / SH	3
20	Diet calculation (CM5.2, DOAP)	SGD	S / SH	3

(SGD – Small Group discussion, K – Knowledge, S – Skill, KH – Knows How, SH – Shows How)

III. FAMILY ADOPTION PROGRAMME:

Sl. No	Teaching Learning Method	No. of visits and hours
1	Family Adoption Programme	6 and 24

IV. PANDEMIC MANAGEMENT MODULE:

SUGGESTED DISTRIBUTION OF TEACHING HOURS FOR PANDEMIC MANAGEMENT MODULE							
Module	Broad areas	Lecture (2 hrs)	Small group teaching (5 hrs)		SDL (2hrs)	CHP 3hrs)	Total (12hrs)
			SGD (2 hrs)	Practicals (2 hrs)			
2.2	Emerging & Re-emerging infections, early identification, and control of new infections	2	2	-	2	-	6
2.4	Vaccination strategies including vaccine development & implementation	-	-	3	-	3	6

4. **CERTIFICATION OF SKILLS** – No Certifiable Skills in PY-II

5. SCHEME OF EXAMINATION:

a. Internal assessment (IA):

Theory IA:

- **ONE** theory IA shall be conducted in Professional Year II
- Formative assessment marks shall be calculated based on scoring in written tests/ small group teaching participation/ seminars/ assignments and log book assessment of SDL topics and AETCOM modules.

Theory IA	
Written exam	70 marks
Continuous assessment	30 marks (class test 25 marks and SDL 5 marks)
Total	100 marks

Theory paper pattern:

Sl No	Question type	Marks	No of questions	Total
1	Scenario based MCQs	2	10	20
2	Structured Long essay question (SLEQ)	10	1	10
3	Short notes / AETCOM (recall/comprehension)	5	4	20
4	Short notes (applied aspects/Integration modules)	5	1	5
5	Short answers (reasoning)	3	5	15
Total				70

Marks obtained out of 100 (70+30) will be reduced to 25 in PY-II

Practical IA:

- **ONE** practical IA shall be conducted in Professional Year II
- Formative assessment practical marks shall be based on practical exam in the form of end posting exam (OSPE/OSCE) and Family Adoption Program assessment.

Distribution of marks for 2nd IA:

Practical	
Practical - End posting exam & Viva Voce	70 marks
Continuous assessment	30 marks (Logbook 10 marks, record book 10 marks, FAP 10 marks)
Total	100 marks

b. University examination/Summative assessment [SA]:

Summative assessment will be held at the end of 3rd professional year part 1.

6. SELF-DIRECTED LEARNING:

The topics for self-directed learning may be framed by the department and the details should be entered in the logbook preferably in the form of concept mapping.

7. INTEGRATED TEACHING: Shall be followed as per latest NMC guidelines

Competency list for integrated teaching			
Sl. No	Competency no.	Competency to be integrated by nesting/ sharing/ aligning	Vertical integration
1	CM 8.1	Describe & discuss the epidemiological & control measures including the use of essential laboratory tests at primary care level for communicable diseases – TB	Pathology Microbiology General Medicine
2	CM 8.1	Describe & discuss the epidemiological & control measures including the use of essential laboratory tests at primary care level for communicable diseases – HAI	Microbiology

8. RECOMMENDED TEXT BOOKS:

Recommended Books (Recent editions)

1. Park JE, Park K, Text Book of Preventive & Social Medicine, M/S Banarsidas Bhanot, Jabalpur, India.
2. Sunder Lal, Adarsh, Pankaj. Textbook of Community Medicine, CBS Publishers, New Delhi, India.
3. CM Dhaar, Rubbani I, Foundation of Community Medicine, Elsevier, India.
4. Suryakantha AH, Community Medicine with Recent Advances, Jaypee Brothers Medical Publishers, New Delhi, India.
5. Mahajan BK, Methods in Biostatistics for Medical Student and Research Workers, Jaypee Brothers Medical Publishers, New Delhi, India.
6. Kishore J, National Health Programmes of India, Century Publications, New Delhi, India.
7. Kadri AM, IAPSM's Textbook of Community Medicine, Jaypee Brothers Medical Publishers, New Delhi, India
8. Mahabalaraju DK, Essentials of Community Medicine Practicals, Jaypee Brothers Medical Publishers, New Delhi, India

Reference books (Recent editions)

1. Wallace RB, Public Health and Preventive Medicine, McGraw-Hill Medical Publishers, USA. Roger D, Robert B, Mary AL, Martin G, Oxford Textbook of Public Health, Oxford University Press, USA
2. Gordis L, Epidemiology, Elsevier Saunders publication, Philadelphia.
3. Sathe PV, Sathe AP, Epidemiology & Management for Health Care for All, Popular Prakashan Pvt. Ltd., Mumbai, India.

Note: A single textbook may not cover the entire curriculum. Referring to more than one book is recommended. Students are recommended to use the recent editions as and when the updated editions are released.

OPHTHALMOLOGY

1. GOALS

The broad goal of undergraduate teaching in ophthalmology is to impart appropriate knowledge, skills, attitudes, values and responsiveness, so that she or he may function appropriately and effectively as a primary care physician of first contact for ocular disorders and also function as a community health leader to assist in the implementation of NPCB and to familiarize the recent advances in ophthalmology.

2. OBJECTIVES

2.1 KNOWLEDGE

At the end of the course, the student should have knowledge of:

- i. Common problems affecting the eye
- ii. Magnitude of blindness in India and its main causes
- iii. Principles of management of major ophthalmic emergencies
- iv. Major systemic diseases affecting the eye
- v. Effect of local and systemic diseases on the patient's vision and the necessary action required to minimise the sequelae of such diseases
- vi. Adverse drug reactions with special reference to ophthalmic manifestations
- vii. National programme for prevention of blindness and its implementation at various level
- viii. Eye care education for prevention of eye problems
- ix. Role of Primary Health Centres
- x. Organisation of primary health care and the functioning of the Ophthalmic assistant
- xi. Integration of the National programme for control of blindness with the other National health programmes
- xii. Eye bank organisation

2.2 SKILLS

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

- i. Elicit a history pertinent to general health and ocular status
- ii. Perform procedures such as visual acuity testing, extraocular movements testing, digital tonometry and instillation of eye drops, eye wash and ocular bandaging.
- iii. Observe basic procedures like Indirect ophthalmoscopy, epilation, conjunctival/corneal foreign body removal, corneal staining, perimetry, etc
- iv. Diagnose and treat common problems affecting the eye
- v. Interpret ophthalmic signs in relation to common systemic disorders
- vi. Provide first aid in major ophthalmic emergencies
- vii. To be part of community surveys for visual health
- viii. To be part of primary eye care services through Primary Health Centres

2.3 ATTITUDE AND COMMUNICATION SKILLS

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

- i. Use effective means of communication with the public and individuals to motivate them for surgery for cataract, glaucoma ,etc and for eye donation
- ii. Establish rapport with his seniors, colleagues and paramedical workers, so as to effectively function as a member of the eye care team

2.4 INTEGRATION

From the integrated teaching of other basic sciences, student should be able to apply this knowledge to diagnose and manage common eye problems and to function effectively as a primary care physician of first contact for ocular disorders.

3. TEACHING HOURS AND COURSE CONTENTS

Sl. No	Teaching Learning Method	No. of Teaching hours *
1	Large group teaching/Lectures	12
2	Small group Learning (SGL) (Small group discussions- SGD/Tutorials/Seminars/Case based learning sessions/Integrated teaching sessions)	Nil
3	Self-directed Learning(SDL)	Nil
4	Clinical posting**	4 weeks

*** No. of minimum Teaching hours given in the table above is as per the NMC CBME 2024 guidelines. However, any changes in teaching hours shall be adopted as per the recent NMC guidelines.**

**** Clinical postings will be for 3 hours / day for 5 days a week**

COURSE CONTENTS:

THEORY (Large and small group teaching)

Sl No	Visual acuity assessment (with competency number)
1	Describe the physiology of vision, optics of eye and anatomy of visual pathway. OP1.1

Conjunctiva	
1	Describe the etiopathogenesis, clinical features and treatment of acute bacterial and viral conjunctivitis. OP3.2
2	Enumerate the causes for chronic conjunctivitis. Describe the aetiology, pathophysiology, ocular features, differential diagnosis, complications and management of trachoma. OP3.3
3	Enumerate the causes for allergic conjunctivitis. Describe the aetiology pathophysiology, ocular features, complications and management of vernal catarrh. OP3.4
4	Describe the aetiology, pathophysiology, ocular features, differential diagnosis, complications and management of pterygium OP3.5

Cornea	
1	Describe the applied anatomy and physiology of cornea and the factors maintaining corneal transparency OP4.1
2	Enumerate various congenital anomalies and inflammations of cornea OP4.2
3	Enumerate the differential diagnosis of corneal ulcer (infective Keratitis) and describe the etiopathogenesis, clinical features and management of each type of infective keratitis. OP4.3
4	Identify corneal opacity and different grades of corneal opacity. Enumerate various management modalities of corneal opacity. OP4.4
5	Describe tear film. Enumerate the causes of dry eyes and describe the clinical features and management of dry eyes. OP4.5
6	Define blindness. Enumerate the causes of corneal blindness. OP4.6
7	Enumerate the types and the indications of Keratoplasty. OP4.7

PRACTICAL

DOAP SESSIONS IN OPHTHALMOLOGY – Phase II

SL. NO.	TOPIC	Competency No	Suggested teaching learning method	Domain / level
1	Demonstrate the steps in performing the visual acuity assessment for distance vision ,near vision, colour vision,the pinhole test and the menace and blink reflexes	1.3	DOAP	SH
2	Demonstrate under supervision, the clinical procedure performed- Bell's phenomenon, Ptosis evaluation,	2.2	DOAP	SH

	Massage technique in Congenital Dacryocystitis, Epilation			
3	Describe the aetiology, clinical presentation, complications and management of Thyroid eye disease	2.3	DOAP	KH
4	Demonstrate history taking in a patient with 'Red eye', Enumerate the causes for red eye.	3.1	DOAP	SH
5	Demonstrate correct technique of removal of foreign body from the eye in a simulated environment Identify corneal foreign body and demonstrate techniques of removal of corneal foreign body in simulated environment.	3.6 4.9	DOAP	SH
6	Demonstrate under supervision the technique of instillation of eye drops and counselling of patients you put on topical ocular medications	3.7	DOAP	SH
7	Demonstrate the technique of direct and indirect ophthalmoscopy. Describe the fundoscopic features of normal retina.	9.1	DOAP	SH

4. CERTIFICATION OF SKILLS: No Certifiable Skills in PY-II

5. SCHEME OF EXAMINATION:

a. Internal assessment [IA]:

Theory IA:

- One Theory IA will be conducted in Professional Year II

SI No	Question type	Marks	No of questions	Total
1	Scenario based MCQ	2	5	10
2	Short Notes (Applied aspect)	5	1	5
3	Short Notes	5	1	5
4	Continuous Assessment	5	-	5
	Total Marks			25

Practical IA:

- A minimum of ONE IA shall be conducted in Professional Year II
- End of posting Clinical exam shall include exercises that shall be Case scenario based / Skill stations / OSCE stations
- Viva/oral examination shall be included in practical IA marks.

SI No	Practical IA	Marks
1	Case Discussion + Viva	15
2	OSCE	05
3	Logbook / Record book	05
	Total	25

b. University examination/Summative assessment [SA]:

Summative assessment will be held at the end of 3rd professional year part 1.

6. SELF DIRECTED LEARNING (SDL)

Not applicable in PY-II

7. INTEGRATION:

As per schedule of the subject of professional year II.

Competency list for integration in large and small group teaching sessions (theory)			
SL	Competency NO.	Competency to be integrated by nesting/ sharing/ aligning	Integration with departments
1	AN30.5	Explain effect of pituitary tumours on visual pathway	Anatomy
2	AN31.3	Describe anatomical basis of Horner's syndrome	Anatomy
3	AN31.5	Explain the anatomical basis of oculomotor, trochlear and abducent nerve palsies along with strabismus	Anatomy
4	AN41.1	Describe & demonstrate parts and layers of eyeball	Anatomy
5	AN41.2	Describe the anatomical aspects of cataract, glaucoma & central retinal artery occlusion	Anatomy
6	AN41.3	Describe the position, nerve supply and actions of intraocular muscles	Anatomy

7	PY11.5	Discuss functional anatomy of eye, visual pathway, light and pupillary reflex and clinical implication of lesions in visual pathway	Physiology
8	PY11.7	Discuss physiology of vision including colour vision and colour blindness	Physiology
9	PA35.1	Describe the etiology, genetics, pathogenesis, pathology, presentation, sequelae and complications of retinoblastoma	Pathology
10	PH 9.7	Describe drugs used in glaucoma and other ocular disorders including topical (ocular) drug delivery systems.	Pharmacology
11	GM25.15	Describe and discuss the aetiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of vision and visual loss in the elderly	General Medicine

8. RECOMMENDED TEXT BOOKS

Text Books

Note: A single textbook may not cover the entire curriculum. Referring to more than one book is recommended.

Recent editions of:

1. Khurana AK. Comprehensive Ophthalmology. 10thed. New Delhi: Jaypee Brothers Medical Publishers (P) Ltd; 2025.
2. Parsons JH. Parsons' Diseases of the Eye. 24th ed. Sihota R, Tandon R, editors. New Delhi: Elsevier India; 2024.
3. Basak SK. Essentials of Ophthalmology. 8th ed. Essentials of Ophthalmology. New Delhi: Jaypee Brothers Medical Publishers (P) Ltd; 2024.

Reference books:

1. Kanski JJ. Kanski's clinical ophthalmology: a systematic approach. 10th ed. Salmon JF, editor. Philadelphia: Elsevier; 2024.
2. Yanoff M, Duker J. Ophthalmology. 6th ed. Philadelphia: Elsevier; 2022.

ENT: OTORHINOLARYNGOLOGY

1. GOALS:

At the end of training in ENT, the learner should be able to:

- 1.1. Demonstrate knowledge of the common Otorhinolaryngological (ENT) emergencies and problems.
- 1.2. Recognize, diagnose and manage common ENT emergencies and problems in primary care setting.
- 1.3. Perform simple ENT procedures as applicable in a primary care setting.
- 1.4. Recognize hearing impairment and refer to the appropriate hearing impairment rehabilitation programme.
- 1.5. Communicate to patients in respectful, non-threatening, non-judgmental, empathetic manner appropriately
- 1.6. Identify, discuss and defend medicolegal socio cultural and ethical issues as they pertain to consent for ENT surgical procedures and address patients queries in patient undergoing a basic ENT surgical procedure in a simulated environment.

2. OBJECTIVES:

- 2.1. Knowledge: Anatomy & diseases of Ear, Nose, Throat, Head & Neck region.
- 2.2. Skill: Clinical examination of ENT and Neck
- 2.3. AETCOM: At the end of the course the student should be able to communicate with the patient in a respectful non- judgmental and empathetic manner. Identify discuss and define socio economical ethical and medico legal issue pertaining to consent for surgical procedure and confidentiality. Identify discuss physician's role and responsibility to society and community that he or she serves.
- 2.4. Integration: Integrated teachings of basic sciences in relate to Ear Nose and Throat and students should be able to comprehend, the functions and regulation and integration of functions of organs in related to Ear, Nose and Throat. Students should be able to interpret the anatomical physiological and pathological basis of disease process.

3. TEACHING HOURS AND COURSE CONTENTS

Sl. No	Teaching Learning Method	No. of Teaching hours *
1	Large group teaching/Lectures	12
2	Small group Learning (SGL) (Small group discussions- SGD/Tutorials/Seminars/Case based learning sessions/Integrated teaching sessions)	Nil
3	Self-directed Learning(SDL)	Nil
4	Clinical posting**	4 weeks

*** No. of minimum Teaching hours given in the table above is as per the NMC CBME 2024 guidelines. However, any changes in teaching hours shall be adopted as per the recent NMC guidelines.**

** Clinical postings will be for 3 hours / day for 5 days a week

Course Contents:

THEORY – LARGE GROUP TEACHING

Sl. No	TOPICS (WITH COMPETENCY NUMBER)
1	Introduction to ENT & Anatomy of Nose & PNS (EN 1.1)
2	Physiology of Olfaction (EN 1.1)
3	Anatomy of External And Middle Ear (En 1.1)
4	Anatomy of Inner Ear (EN 1.1)
5	Physiology of Hearing (EN 1.1)
6	Evaluation of Hearing Loss (EN 4.14)
7	Physiology of Balance (EN 1.1)
8	Vertigo - Causes & Management Including Assessment of Vestibular Functions (EN 4.17)
9	Eustachian Tube Disorders (EN 4.15)
10	Anatomy of Oral Cavity & Oropharynx (EN 1.1)
11	Anatomy of Esophagus & Physiology Of Swallowing (EN 1.1)
12	Anatomy of Larynx & Physiology Of Phonation (EN 1.1)

CLINICAL POSTINGS

Sl. No	TOPICS OF CLINICAL POSTING: (WITH COMPETENCY NUMBER)	Predominant Domain K/S/A/C	Level K/KH/S/ H/P	Core (Y/N)
1	Describe the Anatomy & physiology of ear, nose, throat, head & neck (EN1.1)	K	KH	Y
2	Describe the pathophysiology of common diseases in ENT (EN1.2)	K	KH	Y
3	Elicit document and present an appropriate history in a patient presenting with an ENT complaint (EN2.1)	K/S/A/ C	SH	Y
4	Demonstrate the correct use of conventional methods including head lamp in the examination of ear, nose and throat, the correct technique of examination of the nose & paranasal sinuses including the use of nasal speculum, examination of the throat including the use of a tongue depressor, examination of neck including elicitation of laryngeal crepitus (EN2.2)	S	SH	Y
5	Demonstrate the correct technique of examination of the ear including Otoscopy and demonstrate the correct technique of performance and interpretation of tuning fork tests (EN2.3)	K/S/A	SH	Y
6	Describe the correct technique to perform and interpret pure tone audiogram & impedance audiogram (EN2.4)	K/S	SH	Y
7	Observe and describe the indications for and steps involved in the performance of Oto-microscopic examination (EN3.1)	S	KH	Y
8	Observe and describe the indications for and steps involved in the performance of Diagnostic Nasal Endoscopy (EN3.2)	S	KH	Y
9	Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of diseases of the Otalgia (EN4.1)	K/S	SH	Y

10	Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of external Ear (EN4.2)	K/S	SH	Y
11	Elicit document and present a correct history, describe the clinical features, choose the correct investigations and describe the principles of management of ASOM (EN4.3)	K/S	SH	Y
12	Elicit document and present a correct history, describe the clinical features, choose the correct investigations and describe the principles of management of OME (EN4.4)	K/S	SH	Y
13	Elicit document and present a correct history, describe the clinical features, choose the correct investigations and describe the principles of management of ear discharge (EN4.5)	K/S	SH	Y
14	Elicit document and present a correct history demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of mucosal type of CSOM (EN4.6)	K/S	SH	Y
15	Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of squamosal type of CSOM (EN4.7)	K/S	SH	Y
16	Describe the clinical features, choose the correct investigations and describe the principles of management of complications of CSOM (EN4.8)	K/S	SH	Y
17	Demonstrate the correct technique for wax removal from the ear in a simulated environment (EN4.9)	S	SH	Y
18	Observe and describe the indications for and steps involved in myringotomy and tympanoplasty (EN4.10)	S	KH	Y
19	Describe the clinical features, investigations and principles of management of Conductive Hearing Loss and Sensorineural hearing loss including sudden Sensorineural Hearing Loss and Noise Induced Hearing Loss (EN4.14)	K	KH	Y

20	Elicit document and present a correct history demonstrate and describe the causes, choose the correct investigations and describe the principles of management of Nasal Obstruction (EN4.21)	K/S	SH	Y
21	Describe the clinical features, investigations and management of DNS and observe and discuss the indications for the steps in septoplasty (EN4.22)	K/S	KH	Y
22	Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of Adenoids (EN4.23)	K/S	KH	Y
23	Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of Allergic Rhinitis (EN4.24)	K/S	SH	Y
24	Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of Acute & Chronic Rhinitis (EN4.26)	K/S	SH	Y
25	Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of Nasal Polyps (EN4.27)	K/S	SH	Y
26	Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of Epistaxis (EN4.28)	K/S	SH	Y
27	Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of Acute & Chronic Rhinitis and its complications (EN4.32)	K/S	SH	Y
28	Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of Acute & Chronic Tonsillitis (EN4.38)	K/S	SH	Y

29	Observe and describe the indications for and steps involved in a tonsillectomy / adenoidectomy and its complications (EN4.39)	S	KH	Y
30	Describe the clinical features, investigations and principles of management of Stridor (EN4.43)	K	KH	Y

4. Certification of skills – Number of competencies requiring certification - 6

5. SCHEME OF EXAMINATION:

a. Internal assessment [IA]:

Theory IA:

- One Theory IA will be conducted in Professional Year II

SI No	Question type	Marks	No. of questions	Total
1	Scenario based MCQ	2	5	10
2	Short Notes (Applied aspect)	5	1	05
3	Short Notes	5	1	05
4	Continuous Assessment	5	-	05
	Total Marks			25

Practical IA:

- A minimum of ONE IA shall be conducted in Professional Year II
- End of posting Clinical exam shall include exercises that shall be Case scenario based / Skill stations / OSCE stations
- Viva/oral examination shall be included in practical IA marks.

SI No	Practical IA	Marks
1	Case Discussion + Viva	15
2	OSCE	05
3	Logbook / Record book	05
	Total	25

b. University Examination/Summative assessment (SA)

Summative Assessment will be held at the end of 3rd Professional year Part-I.

6. SELF DIRECTED LEARNING (SDL)

Not applicable in PY-II

7. INTEGRATED TEACHING: Shall be followed as per latest NMC guidelines

8. RECOMMENDED TEXT BOOKS:

A. Text Books:

1. Logan Turner's Diseases of the Nose, Throat and Ear, Head and Neck Surgery
2. Edited By S Musheer Hussain, Edition 12th Edition, Imprint CRC Press.
3. Mohan Bansal- Essential of Ear Nose & Throat – 3rd edition, Publishers- Jaypee Brothers Medical Publications.
4. Prof. K K Ramalingam – A short Practice of Otorhinolaryngology – 5th edition, All India publishers and distributors
5. P.L Dhingra- Diseases of Ear, Nose, Throat, Head & Neck Surgery 8th Edition Published by Elsevier, a Division of Reed Elsevier India Private Ltd.
6. K B Bhargava – A Short book of ENT Diseases – 11th edition, Publishers: Usha Publication
7. Md. Maqbool Text book of Ear Nose and Throat diseases- 12th edition, Publishers: Jaypee Brothers Medical Publications
8. Hazarika P – Text book of Ear, Nose Throat and Head & Neck surgery clinical 5th edition, Publisher: C B S Publishers
9. Text book of Otorhinolaryngology – Head and Neck surgery 1st edition, Author name Suresh Pillai published on 2023

B. Reference Books:

1. John c Watkinson Scott – Brown's: Otorhinolaryngology & Head and Neck Surgery 8th edition CRP Press, 3 Volume set
2. Flint, Cummings, Otorhinolaryngology & Head and Neck Surgery 7th Edition, 3 Volume set Elsevier Publication
4. Ballenger's Otorhinolaryngology & Head and Neck Surgery, 17th edition, CBS publishers
5. Paparella's Otorhinolaryngology & Head and Neck Surgery, 1st edition, Jaypee Brothers Medical publishers

C. Journals:

1. Indian journal of Otolaryngology and Head & Neck Surgery.
2. Journal of Laryngology & Otology
3. Laryngoscope

D. Atlas:

1. Color Atlas On Temporal Bone Dissection 1st Edition by HONNURAPPA, Jaypee Brothers Medical Publishers
2. Color Atlas of Ear Disease 2nd Edition by Richard A Chole, James W. Forsen

GENERAL MEDICINE

1. GOALS

Our goal is to train the learner to perform as a clinician who is capable of providing preventive, promotive, curative, palliative and holistic care with compassion to patients having common ailments, who can lead and function in a health care team efficiently, who is capable of communicating with patients and their families appropriately, who is committed to continuous self-improvement in skills and knowledge and who is a professional committed, ethical, responsive and accountable to patients, community and profession.

2. OBJECTIVES:

2.1 KNOWLEDGE

The Indian Medical Graduate after his/her training in the department of General Medicine at SDMCMS&H should be able to demonstrate understanding of the patho-physiologic basis, epidemiological profile, signs and symptoms of diseases and their investigation and management.

2.2 SKILLS: At the end of the course the student should be able to:

- i. Competently interview and examine an adult patient and make a clinical diagnosis,
- ii. Appropriately order and interpret laboratory tests,
- iii. Initiate appropriate cost-effective treatment based on an understanding of the rational drug prescriptions, medical interventions required and preventive measures,
- iv. Independently perform common medical procedures safely
- v. Document his/her observations accurately,
- vi. Follow up patients with medical problems and refer whenever required,
- vii. Communicate effectively, educate and counsel the patient and family,
- viii. Manage common medical emergencies and refer when required,

2.3 ATTITUDE AND COMMUNICATION SKILLS:

At the end of the course, the learner shall be able to

- i. Respect patient's autonomy
- ii. Do no harm
- iii. Understand and follow the principle of beneficence
- iv. Think and act in a just manner

- v. Demonstrate empathy
- vi. Respect privacy
- vii. Maintain confidentiality
- viii. Communicate effectively,
- ix. Educate and counsel the patient and family,
- x. Maintain punctuality
- xi. Work in a team of peers, seniors and interdepartmental personnel.

2.4 INTEGRATION

At the end of the course, the learner shall be able to form concepts through aligned and integrated learning experiences in order to provide sound biologic basis incorporating the principles of general medicine into a holistic and comprehensive approach to the care of the patient.

3. TEACHING HOURS AND COURSE CONTENTS

Sl. No	Teaching Learning Method	No. of Teaching Hours *
1	Large group teaching	12
2	Small group teaching (SGT) (Small group discussions- SGT/ Practical/ Tutorials/ Seminars/ AETCOM)	Nil
3	Self-directed Learning (SDL)	Nil
4	Clinical posting**	8 weeks

*** No. of minimum Teaching hours given in the table above is as per the NMC CBME 2024 guidelines. However, any changes in teaching hours shall be adopted as per the recent NMC guidelines.**

** Clinical postings will be for 3 hours / day for 5 days a week

Course Contents:

THEORY:

SL. NO.	TOPIC/ SYSTEM (WITH COMPETENCY NUMBER) :
1	NUTRITION AND VITAMIN DEFICIENCIES (GM 24) CORE
	GM 24.1 Discuss and describe the methods of nutritional assessment in an adult and calculation of caloric requirements during illnesses
	GM 24.2 Discuss and describe the causes and consequences of protein caloric malnutrition in the hospital

	GM 24.3 Discuss and describe the etiology, causes, clinical manifestations, complications, diagnosis and management of common vitamin deficiencies
	GM 24.4 Enumerate the indications for enteral and parenteral nutrition in critically ill patients
2	OBESITY (GM 14) CORE
	GM14.1 Define and measure obesity as it relates to the Indian population
	GM 14.2 Describe and discuss the aetiology of obesity including modifiable and non-modifiable risk factors and secondary causes
	GM 14.3 Describe and discuss the monogenic forms of obesity
	GM 14.4 Describe and discuss the impact of environmental factors including eating habits, food, work, environment and physical activity on the incidence of obesity
	GM14.5 Describe and discuss the natural history of obesity and its complications
	GM14.13 Describe and enumerate the indications, pharmacology, and side effects of pharmacotherapy for obesity and describe and enumerate indications and side effects bariatric surgery
	GM14.14 Describe and enumerate and educate patients, health care workers and the public on measures to prevent obesity and promote a healthy lifestyle
3	ANEMIA (GM 9) CORE
	GM 9.1 Define, describe and classify anemia based on red blood cell size and reticulocyte count
	GM 9.2 Describe and discuss the morphological characteristics, aetiology and prevalence of each of the causes of anemia
	GM 9.7 Describe and discuss the meaning and utility of components of the hemogram, various tests for iron deficiency, red cell indices, reticulocyte count, iron studies, peripheral smear, B12 and folate levels
	GM 9.8 Describe the indications and interpret the results of a bone marrow aspirations and biopsy
	GM 9.9 Describe, develop a diagnostic plan to determine the etiology of anemia
	GM 9.11 Describe the national programs for anemia prevention
	GM 9.14 Describe the indications for blood transfusion and the appropriate use of blood components
	GM9.15 Describe the precautions required necessary when performing a blood transfusion
	GM9.17 Determine the need for specialist consultation
4	LIVER DISEASE (GM 5) CORE
	GM5.1 Describe and discuss the physiologic and biochemical basis of hyperbilirubinemia

	GM5.2 Describe and discuss the etiology and pathophysiology of various types of liver diseases
	GM5.3 Describe and discuss the epidemiology, microbiology, immunology and clinical evolution of infective (Viral) hepatitis
	GM5.4 Describe and discuss the pathophysiology and clinical evolution of alcoholic liver disease
	GM5.5 Describe and discuss the pathophysiology, clinical evolution and complications of cirrhosis of liver and portal hypertension including ascites, spontaneous bacterial peritonitis, hepato-renal syndrome, hepatic encephalopathy, acute GI bleed and hepatocellular carcinoma
	GM5.6 Enumerate and describe the causes and pathophysiology drug induced liver injury
	GM5.7 Describe and discuss the pathophysiology, clinical evolution and complications cholelithiasis and cholecystitis
	GM5.13 Outline a diagnostic approach to liver disease based on hyperbilirubinemia, liver function changes and hepatitis serology
	GM5.15 Describe and discuss the management of hepatitis, cirrhosis, portal hypertension, ascites spontaneous, bacterial peritonitis, acute GI bleed, hepatic encephalopathy and hepatocellular carcinoma.
	GM5.16 Enumerate the indications, precautions and counsel patients on vaccination for hepatitis
	GM5.17 Enumerate the indications for hepatic transplantation
5	PEPTIC ULCER DISEASE & GI BLEEDING (GM 15) CORE
	GM15.1 Enumerate, describe and discuss the etiology of upper and lower GI bleeding
	GM15.2 Enumerate, describe and discuss the evaluation and steps involved in stabilizing a patient who presents acute volume loss and GI bleed
	GM15.3 Describe and discuss the Patho-physiological effects of acute blood and volume loss
	GM15.6 Distinguish between upper and lower gastrointestinal bleeding based on the clinical features
	GM15.8 Generate a differential diagnosis based on the presenting symptoms and clinical features and prioritize based on the most likely diagnosis
	GM15.11 Develop, document and present a treatment plan that includes fluid resuscitation, blood and blood component transfusion, and specific therapy for arresting blood loss
	GM15.12 Enumerate the indications for whole blood, component and platelet transfusion and describe the clinical features and management of a mismatched transfusion
	GM15.14 Describe and enumerate the indications, pharmacology and side effects of pharmacotherapy of vasopressors used in the treatment of upper

	GI bleed
	GM15.15 Describe and enumerate the indications, pharmacology and side effects of pharmacotherapy of acid peptic disease including Helicobacter pylori
	GM15.16 Enumerate the indications for endoscopic interventions and surgery in patient with GI bleeding
	GM15.17 Determine appropriate levels of specialist consultation as per clinical, hemodynamic status of the patient with GI bleed
6	DIARRHEAL DISORDER (GM 16) CORE
	GM16.1 Describe and discuss the etiology of acute and chronic diarrhea including infectious and non- infectious causes
	GM16.2 Describe and discuss the acute systemic consequences of diarrhea including its impact on fluid balance
	GM16.3 Describe and discuss the chronic effects of diarrhea including malabsorption
	GM 16.11 Enumerate the indications for stool cultures and blood cultures in patients with acute diarrhea
	GM16.12 Enumerate and discuss the indications for further investigations including antibodies, colonoscopy, diagnostic imaging and biopsy in the diagnosis of chronic diarrhea
	GM16.13 Describe and enumerate the indications, pharmacology and side effects of pharmacotherapy for parasitic causes of diarrhea
	GM16.14 Describe and enumerate the indications, pharmacology and side effects of pharmacotherapy for bacterial and viral diarrhea
	GM16.15 Distinguish based on the clinical presentations Crohn's disease from Ulcerative Colitis
	GM16.16 Describe and enumerate the indications, pharmacology and side effects of pharmacotherapy including Immunotherapy in a patient with chronic diarrhea
	GM16.17 Describe and enumerate the indications for surgery in inflammatory bowel disease
Total	Core/noncore:- all core competencies

Clinical rotations: Duration applicable as per NMC guidelines

SL.NO.	TOPIC OF PRACTICAL: (WITH COMPETENCY NUMBER) Suggested teaching learning method Domain / level -core / non-core
1.	History taking overview GM 29.1 Describe and discuss the role of non-maleficence as a guiding principle in patient care

	<p>GM 29.2 Describe and discuss the role of autonomy and shared responsibility as a guiding principle in patient care</p> <p>GM 29.13 Demonstrate ability to maintain required documentation in health care (including correct use of medical records)</p> <p>GM 29.15 Demonstrate adequate knowledge and use of information technology that permits appropriate patient care and continued learning</p>
2	<p>Case Sheet Writing</p> <p>GM 29.13 Demonstrate ability to maintain required documentation in health care (including correct use of medical records)</p>
3	<p>General physical examination overview</p> <p>GM 29.9 Demonstrate respect to patient privacy</p> <p>GM 29.10 Demonstrate ability to maintain confidentiality in patient care</p> <p>GM 29.13 Demonstrate ability to maintain required documentation in health care (including correct use of medical records)</p>
4	<p>Vital signs</p> <p>GM 1.9 Perform and demonstrate a systematic examination based on the history that will help establish the diagnosis and estimate its severity including: measurement of pulse, blood pressure and respiratory rate, jugular venous pulses, peripheral pulses, conjunctiva and fundus, lung, cardiac examination including palpation and auscultation with identification of heart sounds and murmurs, abdominal distension and splenic palpation</p> <p>GM 1.10 Demonstrate peripheral pulse, volume, character, quality and variation in various causes of heart failure</p> <p>GM 1.11 Measure the blood pressure accurately, recognize and discuss alterations in blood pressure in valvular heart disease and other causes of heart failure and cardiac tamponade</p>
5	<p>JVP</p> <p>GM 1.9 Perform and demonstrate a systematic examination based on the history that will help establish the diagnosis and estimate its severity including: measurement of pulse, blood pressure and respiratory rate, jugular venous pulses, peripheral pulses, conjunctiva and fundus, lung, cardiac examination including palpation and auscultation with identification of heart sounds and murmurs, abdominal distension and splenic palpation</p> <p>GM 1.12 Demonstrate and measure jugular venous distension</p>

6	<p>Proforma Per abdomen examination</p> <p>GM 9.3 Elicit document and present a medical history that includes symptoms, risk factors including GI bleeding, prior history, medications, menstrual history, and family history</p> <p>GM 9.4 Perform a systematic examination that includes: general examination for pallor, oral examination, DOAP of Hyperdynamic circulation, lymph node and splenic examination</p>
7	<p>Proforma Respiratory system examination</p> <p>GM 3.5 Perform, document and demonstrate a physical examination including general examination and appropriate examination of the lungs that establishes the diagnosis, complications and severity of Disease</p> <p>GM 3.6 Generate document and present a differential diagnosis based on the clinical features, and prioritize the diagnosis based on the Presentation</p>
8	<p>Proforma Cardiovascular system examination</p> <p>GM 1.9 Perform and demonstrate a systematic examination based on the history that will help establish the diagnosis and estimate its severity including: measurement of pulse, blood pressure and respiratory rate, jugular venous pulses, peripheral pulses, conjunctiva and fundus, lung, cardiac examination including palpation and auscultation with identification of heart sounds and murmurs, abdominal distension and splenic palpation</p>
9	<p>Proforma Central nervous system examination</p> <p>GM 18.3 Elicit and document and present an appropriate history in a cerebrovascular patient including onset, progression, precipitating and aggravating relieving factors, associated symptoms that help identify the cause of the cerebrovascular accidents</p> <p>GM 18.4 Perform, demonstrate & document physical examination that includes general and a detailed neurologic examination as appropriate, based on the history in a stroke patient</p>
10	<p>History taking in CVS</p> <p>GM 1.9 Perform and demonstrate a systematic examination based on the history that will help establish the diagnosis and estimate its severity including: measurement of pulse, blood pressure and respiratory rate, jugular venous pulses, peripheral pulses, conjunctiva and fundus, lung, cardiac examination including palpation and auscultation with identification of heart sounds and murmurs, abdominal distension and splenic palpation</p>

	<p>GM 1.10 Demonstrate peripheral pulse, volume, character, quality and variation in various causes of heart failure</p> <p>GM 1.11 Measure the blood pressure accurately, recognize and discuss alterations in blood pressure in valvular heart disease and other causes of heart failure and cardiac tamponade</p> <p>GM 1.12 Demonstrate and measure jugular venous distension</p> <p>GM 1.13 Identify and describe the Timing, pitch quality conduction and significance of precordial murmurs, their variations, use of dynamic auscultation</p> <p>GM 1.14 Generate a differential diagnosis based on the clinical presentation of various heart diseases and priorities it based on the most likely diagnosis</p> <p>GM 1.18 Discuss the severity of valvular heart disease based on the clinical and laboratory and Imaging features and describe the level of intervention required including surgery</p> <p>GM 1.19 Describe and discuss and identify the clinical features of acute and sub-acute endocarditis, echocardiographic findings, blood culture and sensitivity and therapy</p> <p>GM 1.24 Develop document and present a management plan for patients with heart failure based on type of failure, underlying etiology</p> <p>GM 1.25 Enumerate the causes of adult presentations of congenital heart disease and describe the distinguishing features between cyanotic and a cyanotic heart disease</p> <p>GM 1.26 Elicit document and present an appropriate history, demonstrate correctly general examination, relevant clinical findings and formulate document and present a management plan for an adult patient presenting with a common form of congenital heart disease</p>
11	<p>CVS examination (Palpation & auscultation)</p> <p>GM 1.9 Perform and demonstrate a systematic examination based on the history that will help establish the diagnosis and estimate its severity including: measurement of pulse, blood pressure and respiratory rate, jugular venous pulses, peripheral pulses, conjunctiva and fundus, lung, cardiac examination including palpation and auscultation with identification of heart sounds and murmurs, abdominal distension and splenic palpation</p> <p>GM 1.10 Demonstrate peripheral pulse, volume, character, quality and variation in various causes of heart failure</p>

	<p>GM 1.11 Measure the blood pressure accurately, recognize and discuss alterations in blood pressure in valvular heart disease and other causes of heart failure and cardiac tamponade</p> <p>GM 1.12 Demonstrate and measure jugular venous distension</p> <p>GM 1.13 Identify and describe the Timing, pitch quality conduction and significance of precordial murmurs, their variations, use of dynamic auscultation</p> <p>GM 1.14 Generate a differential diagnosis based on the clinical presentation of various heart diseases and prioritize it based on the most likely diagnosis</p>
12	<p>History taking in RS</p> <p>GM 3.4 Elicit document and present an appropriate history including the evolution, risk factors including Immune status and occupational Risk</p> <p>GM 3.6 Generate document and present a differential diagnosis based on the clinical features, and prioritize the diagnosis based on the Presentation</p> <p>GM 27.2 Describe and discuss the microbiology of tubercle bacillus, mode of transmission, pathogenesis, clinical evolution and natural history of pulmonary and extra pulmonary forms (including lymph node, bone and CNS)</p> <p>GM 27.5 Elicit, document and present an appropriate medical history that includes risk factor, contacts, symptoms including cough, fever, anorexia, weight loss, hemoptysis and symptoms of extra- pulmonary manifestations</p> <p>GM 27.8 Generate a differential diagnosis based on the clinical history and evolution of the disease that prioritizes the most likely diagnosis in patient with history/ examination findings suggestive of Tuberculosis</p> <p>GM 28.8 Elicit document and present a medical history that will differentiate the etiologies of obstructive airway disease, severity and precipitants</p>
13	<p>RS examination</p> <p>GM 27.6 Demonstrate and perform a systematic examination that establishes the diagnosis based on the clinical presentation that includes a) general examination, b) examination of the chest and lung including loss of volume, mediastinal shift, percussion and auscultation of lung sounds and added sounds c) examination of the lymphatic system and d) relevant CNS examination</p>

	<p>GM 28.9 Perform a systematic examination that establishes the diagnosis and severity that includes measurement of respiratory rate, level of respiratory distress, effort tolerance, breath sounds, added sounds, identification of signs of consolidation, pleural effusion and pneumothorax</p> <p>GM 28.10 Generate a differential diagnosis and prioritize based on clinical features that suggest a specific etiology</p>
14	<p>History taking in PA</p> <p>GM 9.3 Elicit document and present a medical history that includes symptoms, risk factors including GI bleeding, prior history, medications, menstrual history, and family history</p> <p>GM 9.5 Generate a differential diagnosis and prioritize based on Clinical features that suggest a specific etiology</p> <p>GM 5.8 Elicit document and present a medical history that helps delineate the etiology of the current presentation and includes clinical presentation, risk factors, drug use, sexual history, vaccination history and family history in patients with liver disease</p> <p>GM 5.9 Perform a systematic examination that establishes the diagnosis and severity that includes nutritional status, mental status, jaundice, abdominal distension ascites, features of Porto-systemic hypertension and hepatic encephalopathy</p> <p>GM 15.8 Generate a differential diagnosis based on the presenting symptoms and clinical features and prioritize based on the most likely diagnosis</p> <p>GM 15.18 Counsel the family and patient with GI Bleeding on the diagnosis and therapeutic options in an empathetic non-judgmental manner</p> <p>GM 16.4 Elicit and document and present an appropriate history that includes the natural history, dietary history, travel, sexual history and other concomitant illnesses in a patient with Diarrhea</p> <p>GM 16.6 Distinguish between diarrhea and dysentery based on clinical features</p> <p>GM 16.7 Generate a differential diagnosis based on the presenting symptoms and clinical features and prioritize based on the most likely diagnosis</p>

15	<p>PA Examination</p> <p>GM 9.4 Perform a systematic examination that includes: general examination for pallor, oral examination, DOAP of Hyperdynamic circulation, lymph node and splenic examination</p> <p>GM 9.5 Generate a differential diagnosis and prioritize based on Clinical features that suggest a specific etiology</p> <p>GM 5.9 Elicit document and present a medical history that helps delineate the etiology of the current presentation and includes clinical presentation, risk factors, drug use, sexual history, vaccination history and family history in patients with liver disease</p> <p>GM 5.10 Generate a differential diagnosis and prioritize based on clinical features that suggest a specific etiology for the presenting symptom in patient with liver disease</p> <p>GM 5.11 Choose and interpret appropriate diagnostic tests including: CBC, bilirubin, liver function tests, Hepatitis serology and ascitic fluid examination in patient with liver diseases</p> <p>GM 5.12 Enumerate the indications for ultrasound and other Imaging studies including MRCP and ERCP and describe the findings in liver disease</p> <p>GM 5.13 Outline a diagnostic approach to liver disease based on hyperbilirubinemia, liver function changes and hepatitis serology</p> <p>GM 5.14 Assist in the performance and interpret the findings of an ascitic fluid analysis</p> <p>GM 15.5 Perform, demonstrate and document a physical examination based on the history that includes general examination, volume assessment and appropriate abdominal examination</p>
16	<p>History taking in CNS</p> <p>GM 18.3 Elicit and document and present an appropriate history in a cerebrovascular patient including onset, progression, precipitating and aggravating relieving factors, associated symptoms that help identify the cause of the cerebrovascular accidents</p> <p>GM 18.4 Perform, demonstrate & document physical examination that includes general and a detailed neurologic examination as appropriate, based on the history in a stroke patient</p>

	<p>GM 17.2 Elicit and document and present an appropriate history including aura, precipitating aggravating and relieving factors, associated symptoms that help identify the cause of headaches</p> <p>GM 19.3 Elicit and document and present an appropriate history including onset, progression precipitating, aggravating and relieving factors, associated symptoms that help identify the cause of the movement disorder</p>
17	<p>HMF and speech, cranial nerve, motor system, Sensory system, cerebellum</p> <p>GM 18.3 Elicit and document and present an appropriate history in a cerebrovascular patient including onset, progression, precipitating and aggravating relieving factors, associated symptoms that help identify the cause of the cerebrovascular accidents</p> <p>GM 18.4 Perform, demonstrate & document physical examination that includes general and a detailed neurologic examination as appropriate, based on the history in a stroke patient</p> <p>GM 18.6 Elicit, document and present clinical examination of a stroke patient with speech disorder. Enumerate and describe the points for distinguishing the various disorders of speech based on site of lesion.</p>
18	<p>Balance diet counselling</p> <p>GM 24.5 Counsel and communicate to patients in a simulated environment on an appropriate balanced diet</p>
19	<p>Nutritional status- malnutrition and obesity</p> <p>GM 24.3 Discuss and describe the etiology, causes, clinical manifestations, complications, diagnosis and management of common vitamin deficiencies</p> <p>GM 14.6 Elicit and document and present an appropriate history that includes the natural history, dietary history, modifiable risk factors, family history clues for secondary causes and motivation to lose weight</p> <p>GM 14.7 Perform, document and demonstrate a physical examination based on the history that includes general examination, measurement of abdominal obesity, signs of secondary causes and comorbidities</p> <p>GM 14.8 Generate a differential diagnosis based on the presenting symptoms and clinical features and prioritize based on the most likely diagnosis</p> <p>GM 14.9 Order and interpret diagnostic tests based on the clinical diagnosis including blood glucose, lipids, thyroid function tests etc.</p>

	<p>GM 14.10 Describe the indications and interpret the results of tests for secondary causes of obesity</p> <p>GM 14.11 Communicate and counsel patient on behavioural, dietary and lifestyle modifications</p> <p>GM 14.12 Demonstrate an understanding of patient's inability to adhere to lifestyle instructions and counsel them in a non - judgemental way</p>
20	<p>Examination of a case of anemia</p> <p>GM 9.3 Elicit document and present a medical history that includes symptoms, risk factors including GI bleeding, prior history, medications, menstrual history, and family history</p> <p>GM 9.4 Perform a systematic examination that includes: general examination for pallor, oral examination, DOAP of Hyperdynamic circulation, lymph node and splenic examination</p> <p>GM 9.5 Generate a differential diagnosis and prioritize based on Clinical features that suggest a specific etiology</p> <p>GM 9.6 Describe the appropriate diagnostic work up based on the presumed etiology</p> <p>GM 9.10 Prescribe replacement therapy with iron, B12, folate</p> <p>GM 9.12 Communicate the diagnosis and treatment appropriately to patient</p>

Clinical Clerkship		
1	Approach to a patient with gastrointestinal bleeding	
2	Approach to a patient with complications of cirrhosis of liver	
3	Approach to a patient with diarrhea	
4	Approach to a patient with shock	
5	Writing case sheet	
6	Writing discharge notes	
Skills lab sessions		
1	IM injection, IV, S/C, ID	
2	Ryles tube insertion	
3	Bone marrow biopsy	
4	paracentesis	
5	Observing Blood transfusions	
Common communication skills		
1	Breaking bad news	
2	Counselling the relatives of patient for blood donation	
3	Counselling patients for lifestyle modification in obesity	

4	Counselling patients for moderation of alcohol	
5	Writing reference letter to a specialist	
6	Dietary counselling for malnutrition	
7	Dietary counselling for obesity	
8	Dietary counselling for anemia	

4. CERTIFICATION OF SKILLS

Certifiable Skills		No of times
1	GM 11.12 Perform and interpret a capillary blood glucose test	2
2	GM1.12 Demonstrate and measure Jugular venous distension	3
3	GM 4.11 Perform a systemic examination that establishes the diagnosis and severity of presentation that includes: General skin mucosal and lymph node examination, chest and abdominal examination (including examination of the liver and spleen)	2
4	GM 5.14 Assist in the performance and interpret the findings of an ascitic fluid analysis	2
5	GM 15.13 Observe crossmatching and blood / blood component transfusion	2

5. SCHEME OF EXAMINATION

a. Internal assessment [IA]:

Theory IA:

- One Theory IA will be conducted in Professional Year II

SI No	Question type	Marks	No of questions	Total
1	Scenario based MCQs	2	5	10
2	Structured Long essay question (SLEQ)	10	1	10
3	Short notes (recall/comprehension)	5	1	5
4	Short notes (applied aspects/Integration modules)	5	1	5
5	Short answers (reasoning)	3	5	15
6	Formative Assessment	5		5
			Total	50

Practical IA:

- A minimum of ONE IA shall be conducted in Professional Year II
- End of posting Clinical exam shall include exercises that shall be Case scenario based / Skill stations / OSCE stations
- Viva/oral examination shall be included in practical IA marks.

Sl No	Practical IA	Maximum Marks
1	End of posting Clinical exam (OSCE) including AETCOM	45
2	Formative assessment and Logbook	5
	Total	50

b. University examination/Summative assessment [SA]:

Summative assessment will be held at the end of 3rd professional year part 2.

6. SELF DIRECTED LEARNING (SDL)

Not applicable in PY-II

7. INTEGRATED TEACHING: Shall be followed as per latest NMC guidelines

8. RECOMMENDED TEXT BOOKS:**Recommended Text Books: (Recent editions)**

1. Y P Munjal, API Textbook of medicine
2. Nicki R.C., Brain R.W. Stuart Davidson's Principles & Practice of Medicine
3. Praveen Kumar Michal Clark, Clinical Medicine,
4. Maxine A P Current medical diagnosis and treatment Washington manual of medical therapeutics
2. Michael Glyms, Hutchison's clinical methods
3. Graham D, Macleod's clinical examination
4. K R Sethuraman, Objective structured clinical examination

Reference books: (Recent editions)

1. Harrison's principles of medicine
2. David A Warrell Oxford Textbook of Medicine Goldman and Cecil, Medicine
3. Wolters Kluwer, interpretation of diagnostic tests

Journals

1. Journal of Association of Physicians of India
2. Evidence based medicine source: UP TO DATE

Note: A single textbook may not cover the entire curriculum. Referring to more than one book is recommended.

PAEDIATRICS

1. GOALS

The aim of teaching the undergraduate student is to impart such knowledge, skills and attitude that may enable him/her to diagnose, treat and prevent common childhood illness including neonatal disorders, implement national programs and refer when needed to specialist.

2. OBJECTIVES

2.1 KNOWLEDGE

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

1. Explain the principles of optimal growth, development and nutrition of child, and adolescents and identify deviation from normal
2. Enumerate the principle of optimal neonatal care
3. Describe and analyse the emergency and routine ambulatory and first level referral unit care for neonate, infants, children and adolescents
4. Enumerate the principles of health promotion and prevention of disease in children
2. Describe the various causes, types and management of children with special needs
3. Describe the national programs related to child health including integrated management of neonatal & childhood illness IMNCI

2.2 SKILLS

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

1. Practice principles of paediatrics medicine in hospital and community setting.
2. Interpret the optimal growth, development and nutrition of neonates, children and adolescent and identify deviations from normal
2. Perform procedure as indicated for children of all ages in the primary care settings
3. Provide optimal neonatal care at community settings
4. Demonstrate art of communication in regards to child hood illness

2.3 ATTITUDE AND COMMUNICATION SKILLS

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

1. Respect patient's autonomy
2. Do no harm
3. Understand and follow the principle of beneficence
5. Think and act in a just manner
6. Demonstrate empathy
7. Respect privacy
8. Maintain confidentiality

9. Communicate effectively to the child and his/her caretakers
10. Educate and counsel the patient and family
11. Maintain punctuality
12. Work in a team of peers, seniors and interdepartmental personnel
13. Evaluate the ethics, scientific procedures, social and legal implications involved in the management of childhood illness

3. TEACHING HOURS AND COURSE CONTENTS

Sl. No	Teaching Learning Method	No. of Teaching Hours*
1	Large group teaching	Nil
2	Small group teaching (SGT) (Small group discussions- SGT/ Practicals/ Tutorials/ Seminars/ AETCOM)	Nil
3	Self-directed Learning (SDL)	Nil
4	Clinical posting **	4 weeks

*** No. of minimum Teaching hours given in the table above is as per the NMC CBME 2024 guidelines. However, any changes in teaching hours shall be adopted as per the recent NMC guidelines.**

**** Clinical postings will be for 3 hours / day for 5 days a week**

Course Contents:

THEORY: NIL

PRACTICAL:

Comp No PE	Topic/ system
	Introduction to paediatrics stress upon which books medical kits, maintenance of logbooks/record books
	History taking, Developmental History, Immunization history
PE9.4	Elicit document and present an appropriate nutritional history and perform a dietary recall
PE9.5	Calculate the age-related calorie requirement in Health and Disease, and identify gap
PE9.6	Assess and classify the nutrition status of infants, children and adolescents and recognize deviations
PE9.7	Plan an appropriate diet in health and Disease

	General physical examination Anthropometry
PE11.3	Assessment of a child with obesity with regard to eliciting history including physical activity, charting and dietary recall
PE11.4	Examination including calculation of BMI, measurement of waist-hip ratio, identifying external markers like acanthosis, striae, pseudogynaecomastia etc
PE25.6	Describe the etio-pathogenesis, diagnosis, clinical features, management and prevention of lower respiratory infections including bronchiolitis, wheeze associated LRTI Pneumonia and empyema
PE3.2	Explain the approach to a child with developmental delay
PE7.4	Observe the correct technique of breastfeeding and distinguish right from wrong techniques
PE8.4	Elicit history on the Complementary Feeding habits
PE8.5	Counsel and educate mothers on the best practices in Complementary Feeding
PE10.3	Assessment of a patient with SAM and MAM, diagnosis, classification and planning management including hospital and community based intervention, rehabilitation and prevention
PE10.4	Counsel parents of children with SAM and MAM
PE16.2	Assess children <2 months using IMNCI Guidelines
PE16.3	Assess children 2 months to 5 years using IMNCI guidelines and Stratify Risk
PE16.4	Identify children with undernutrition as per IMNCI criteria and plan referral
PE16.5	Identify and stratify risk in a sick neonate using IMNCI guidelines
PE16.6	Apply the IMNCI guidelines in risk stratification of children with diarrheal dehydration and refer
PE 18.6	Assess patient for fitness for immunization and prescribe an age-appropriate immunization schedule
PE18.7	Educate and counsel apparent for immunization
PE18.9	Observe the handling and storing of vaccines
PE18.11	Observe the administration of UIP vaccines
PE18.12	Demonstrate the correct administration of different vaccines in a mannequin
PE7.4	Observe the correct technique of breastfeeding and distinguish right from wrong techniques
PE20.8	Perform and interpret the common analytes in a Urine examination
PE20.9	Interpret report of Plain Xray of KUB
PE22.7	Record pulse, blood pressure, temperature and respiratory rate and interpret as per the age
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
PE22.9	Interpret a chest X-ray and recognize cardiomegaly
PE22.10	Interpret Pediatric ECG
PE23.7	Elicit history pertaining to diarrheal diseases. Assess for signs & symptoms of dehydration, shock, prerenal AKI, electrolyte disturbances, document and present.
PE23.17	Elicit, document and present the history related to diseases of Gastrointestinal system
PE23.19	Perform examination of the abdomen, demonstrate organomegaly, ascites etc.

4. CERTIFICATION OF SKILLS:

Sl no.	Competency number	Competency	No. of times to be certified
1	PE 7.4	Observe the correct technique of breast feeding and distinguish right from wrong techniques	3
2	PE 11.4	Examination including calculation of BMI, measurement of waist-hip ratio, identifying external markers like acanthosis, striae, pseudogynaecomastia etc	1
3	PE 18.6	Assess patient for fitness for immunization and prescribe an age-appropriate immunization schedule	5
4	PE23.7	Elicit history pertaining to diarrheal diseases. Assess for signs & symptoms of dehydration, shock, prerenal AKI, electrolyte disturbances, document and present.	1
5	PE24.13	Secure an IV access in a simulated environment	3

5. SCHEME OF EXAMINATION:

a. Internal assessment [IA]:

Theory IA: There will be NO Theory IA in Professional Year II

Practical IA:

- A minimum of ONE IA shall be conducted in Professional Year II
- End of posting Clinical exam shall include exercises that shall be Case scenario based / Skill stations / OSCE stations
- Viva/oral examination shall be included in practical IA marks.

Sl No	Practical IA	Maximum Marks
1	End of posting Clinical exam (OSCE)	20
2	Logbook	05
	Total	25

b. University examination/Summative assessment [SA]:

Summative assessment will be held at the end of 3rd professional year part 2.

6. SELF DIRECTED LEARNING (SDL)

Not applicable in PY-II

7. INTEGRATED TEACHING: Shall be followed as per latest NMC guidelines**8. RECOMMENDED TEXT BOOKS:****Text Books (Recent editions)**

1. Ghai Essential Paediatrics CBS publications and distributes PVT Ltd
2. IAP textbook of Paediatrics Jaypee brothers Medical Publishers
Related Authors – A Parthasarathy and PSN Menon and MKC Nair
3. Paediatric Clinical methods Meharban Singh, CBS publications and distribution
PVT
4. Nelson's Textbook of paediatrics

Journals

1. Paediatrics – American Academy of Paediatrics
2. Archives of Disease of childhood – Royal college of Paediatricians
3. Indian Paediatrics - Indian Academy of Paediatrics
4. Indian Journal of Paediatrics – AIIMS Delhi Paediatrics Department

GENERAL SURGERY

1. GOALS :

- i. To groom a professional doctor who is ethically guided, clinically sound, skillful, empathetic, oriented towards the needs of the community, an inspiring leader and a good communicator.
- ii. To stimulate the interest of the learner towards surgical diseases and to make him/her understand the concepts as well as be able to apply them in clinical setting.
- iii. To hone the skills of the learner so as to gradually upgrade the knowledge of science into the fine art of surgery

2. OBJECTIVES :

- i. Demonstrate understanding of the structural and functional basis, principles of diagnosis and management of common surgical problems in adults and children
- ii. Choose, calculate and administer appropriately intravenous fluids, electrolytes, blood and blood products based on the clinical condition.
- iii. Apply the principles of asepsis, sterilization, disinfection, rational use of prophylaxis, therapeutic utilities of antibiotics and universal precautions in surgical practice.
- iv. Demonstrate knowledge about common malignancies in India and their prevention, early detection and therapy.
- v. Perform common diagnostic and surgical procedures at the primary care level.
- vi. Demonstrate knowledge about organ retrieval from deceased donor and living donor.
- vii. Administer informed consent and counsel patient prior to surgical procedures.
- viii. Describe etiology, pathophysiology, principles of diagnosis and management of common surgical problems including emergencies in adult and children.
- ix. Describe common malignancies in the country and their management including prevention.
- x. Enumerate different types of anaesthetic agents, their indications, contraindications, mode of administration, and side effects.
- xi. Plan various laboratory tests for surgical conditions and interpret the results.
- xii. Identify and manage patients of hemorrhagic, septicemia and other types of shock.
- xiii. Recognize, resuscitate, stabilize and provide Basic Life Support to patients following trauma.

- xiv. Monitor patient of head, chest, spinal and abdominal injuries, both in adults and children.
- xv. Provide primary care for a patient of burns.
- xvi. Acquire principles of operative surgery including preoperative, operative and postoperative care and monitoring.
- xvii. Treat open wound including preventive measures against tetanus and gas gangrene.

Integration: To deliver teaching that is aligned and integrated horizontally and vertically in order to provide a sound biologic basis and a holistic approach to the care of the surgical patient

3. TEACHING HOURS AND COURSE CONTENT

Sl. No	Teaching Learning Method	No. of Teaching Hours*
1	Large group teaching	12
2	Small group teaching (SGT) (Small group discussions- SGT/ Practicals/ Tutorials/ Seminars/ AETCOM)	Nil
3	Self-directed Learning (SDL)	Nil
4	Clinical posting	8 weeks

*** No. of minimum Teaching hours given in the table above is as per the NMC CBME 2024 guidelines. However, any changes in teaching hours shall be adopted as per the recent NMC guidelines.**

**** Clinical postings will be for 3 hours / day for 5 days a week**

TEACHING METHODS:

THEORY	Teaching-Learning Method
A	Large Group Teaching (LGT)
PRACTICAL	Teaching-Learning Method
A	Bedside Clinics
B	DOAP
OTHERS	Teaching-Learning Method
A	AETCOM
B	Skill Lab

Course Contents:

THEORY

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)
1. Topic: Metabolic response to injury		Number of competencies: (03)		
SU1.1	Describe Basic concepts of homeostasis, enumerate the metabolic changes in injury and their mediators.	K	KH	Y
SU1.2	Describe the factors that affect the metabolic response to injury.	K	KH	Y
SU1.3	Describe basic concepts of perioperative care.	K	KH	Y
2.Topic: Shock		Number of competencies: (03)		
SU2.1	Describe Pathophysiology of shock, types of shock & principles of resuscitation including fluid replacement and monitoring.	K	KH	Y
SU2.2	Describe the clinical features of shock and its appropriate treatment.	K	KH	Y
3.Topic: Blood and blood components		Number of competencies: (01)		
SU3.1	Describe the Indications and appropriate use of blood and blood products and complications of blood transfusion.	K	KH	Y
4.Topic: Burns		Number of competencies: (03)		
SU4.1	Elicit document and present history in a case of Burns and perform physical examination. Describe Pathophysiology of Burns.	K	KH	Y
SU4.2	Describe Clinical features, Diagnose type and extent of burns and plan appropriate treatment.	K	KH	Y
SU4.3	Discuss the Medico legal aspects in burn injuries.	K	KH	Y

5.Topic: Wound healing and wound care		Number of competencies: (04)		
SU5.1	Describe normal wound healing and factors affecting healing.	K	KH	Y
SU5.3	Differentiate the various types of wounds, plan and observe management of wounds.	K	KH	Y
SU5.4	Discuss medico legal aspects of wounds	K	KH	Y
6.Topic: Surgical infections		Number of competencies: (03)		
SU6.1	Define and describe the aetiology and pathogenesis of surgical Infections	K	KH	Y
SU6.2	Enumerate Prophylactic and therapeutic antibiotics. Plan appropriate management	K	KH	Y
SU6.2	Gas Gangrene: Enumerate Prophylactic and therapeutic antibiotics. Plan appropriate management	K	KH	Y
7. Topic: Surgical Audit and Research		Number of competencies: (02)		
SU7.1	Describe the Planning and conduct of Surgical audit	K	KH	Y
SU7.2	Describe the principles and steps of clinical research in General Surgery	K	KH	Y
8. Topic: Ethics		Number of competencies: (02)		
SU8.1	Describe the principles of Ethics as it pertains to General Surgery	K	KH	Y
SU8.3	Discuss Medico-legal issues in surgical practice	A/C	KH	Y
9. Topic: Investigation of surgical patient		Number of competencies (02)		
SU9.1	Choose appropriate biochemical, microbiological, pathological, imaging investigations and interpret the investigative data in a surgical patient	C	KH	Y

SU9.2	Biological basis for early detection of cancer and multidisciplinary approach in management of cancer	C	KH	Y
10.Topic: Pre, intra and post- operative management.		Number of competencies: (03)		
SU10.1	Describe the principles of perioperative management of common surgical procedures	K	KH	Y
11.Topic: Anaesthesia and pain management		Number of competencies: (05)		
SU11.1	Describe principles of Preoperative assessment.	K	KH	Y
SU11.2	Enumerate the principles of general, regional, and local Anaesthesia.	K	KH	Y
SU11.4	Enumerate the indications and principles of day care General Surgery	K	KH	Y
SU11.5	Describe principles of providing post-operative pain relief and management of chronic pain.	K	KH	Y
SU11.6	Describe Principles of safe General Surgery	K	KH	Y
12.Topic: Nutrition and fluid therapy		Number of competencies: (03)		
SU12.1	Enumerate the causes and consequences of malnutrition in the surgical patient	K	KH	Y
SU12.2	Describe and discuss the methods of estimation and replacement of the fluid and electrolyte requirements in the surgical patient	K	KH	Y
SU12.3	Discuss the nutritional requirements of surgical patients, the methods of providing nutritional support and their complications	K	KH	Y

13. Topic: Transplantation		Number of competencies: (03)		
SU13.1	Describe the immunological basis of organ transplantation	K	KH	Y
SU13.2	Discuss the Principles of immunosuppressive therapy. Enumerate Indications, describe surgical principles, management of organ transplantation	K	KH	Y
SU13.3	Discuss the legal and ethical issues concerning organ donation	K	KH	Y
14. Topic: Basic Surgical Skills		Number of competencies: (03)		
SU14.1	Describe Aseptic techniques, sterilization and disinfection.	K	KH	Y
SU14.2	Describe Surgical approaches, incisions and the use of appropriate instruments in Surgery in general.	K	KH	Y
SU14.3	Describe the materials and methods used for surgical wound closure and anastomosis (sutures, knots and needles)	K	KH	Y
15. Topic: Biohazard disposal		Number of competencies: (01)		
SU15.1	Describe classification of hospital waste and appropriate methods of disposal.	K	KH	Y

- **BED SIDE CLINICS / PRACTICAL**

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	
SU5.2	Elicit, document and present a history in a patient presenting with wounds.	C	SH	Y	To validate in Log Book in Phase-II
SU18.3	Describe and demonstrate the clinical examination of surgical patient including swelling and order relevant investigation for diagnosis. Describe and discuss appropriate treatment plan.	S	SH	Y	To validate in Log Book in Phase-II

SU27.2	Demonstrate the correct examination of the vascular system and enumerate and describe the investigation of vascular disease	S	SH	Y	
SU27.8	Demonstrate the correct examination of the lymphatic system	S	SH	Y	
SU28.2	Demonstrate the correct technique to examine the patient with hernia and identify different types of hernias.	S	SH	Y	

BED SIDE CLINICS/ Ward Observation/ DOAP

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)
SU3.2	Observe blood transfusions.	S	SH	Y
SU3.3	Counsel patients and family/ friends for blood transfusion and blood donation.	A/C	SH	Y
SU4.4	Communicate and counsel patients and families on the outcome and rehabilitation demonstrating empathy and care.	A /C	SH	Y
SU10.2	Describe the steps and obtain informed consent in a simulated environment	S/A/C	SH	Y

- **AETCOM**

Number	COMPETENCY The student should be able to	Domain K/S/A/ C	Level K/KH/ SH/P	Core (Y/N)	Suggested Teaching Learning method
SU2.3	Communicate and counsel patients and families about the treatment and prognosis of shock demonstrating empathy and care	A/C	SH	Y	DOAP session/Small group Discussion
SU13.4	Counsel patients and relatives on organ donation in a simulated environment	S	SH	Y	DOAP session/Small Group Discussion

- **SKILL LAB DEMONSTRATION**

Number	COMPETENCY The student should be able to	Domain K/S/A/C	Level K/KH/ SH/P	Core (Y/N)	
SU11.3	Demonstrate maintenance of an airway in a mannequin or equivalent	S	SH	Y	Conducted & Co-ordinated by Anaesthesiology Department
SU17.2	Demonstrate the steps in Basic Life support. Transport of injured patient in a simulated environment	S	SH	Y	Conducted & Co-ordinated by Anaesthesiology Department

4. CERTIFICATION OF SKILLS: No Certifiable Skills in PY-II

5. SCHEME OF EXAMINATION

a. Internal assessment [IA]:

Theory IA:

- One Theory IA will be conducted in Professional Year II

Sl No	Question type	Marks	No of questions	Total
1	Scenario based MCQs	2	5	10
2	Structured Long essay question (SLEQ)	10	1	10
3	Short notes (recall/comprehension)	5	1	5
4	Short notes (applied aspects/Integration modules)	5	1	5
5	Short answers (reasoning)	3	5	15
6	Formative Assessment	5		5
Total				50

Total marks obtained for 50 marks will be converted to 25 marks as per NMC guidelines

Practical IA:

- A minimum of ONE IA shall be conducted in Professional Year II
- End of posting Clinical exam shall include exercises that shall be Case scenario based / Skill stations / OSCE stations
- Viva/oral examination shall be included in practical IA marks.

Sl No	Practical IA	Maximum Marks
1	End of posting Clinical case discussion and Viva	25
2	OSCE	15
3	AETCOM	05
4	Formative assessment/Record Book and Logbook	05
	Total	50

Total marks obtained for 50 marks will be converted to 25 marks as per NMC guidelines

b. University examination/Summative assessment [SA]:

Summative assessment will be held at the end of 3rd professional year part 2.

6. SELF DIRECTED LEARNING (SDL)

Not applicable in PY-II

7. INTEGRATED TEACHING: Shall be followed as per latest NMC guidelines

8. RECOMMENDED TEXT BOOKS:

THEORY (Recent editions)

1. Bailey & Love's Short Practice of Surgery Authors :P Ronan O'Connell, Andrew .W.McCaskia. Robert.D.Sayers
2. Manipal Manual of Surgery Author : Dr. K. RajgopalShenoy, Anitha Shenoy
3. SRB's Manual of Surgery Author : Dr. Sriram Bhat
4. Sabiston Textbook Of Surgery, The Biological Basis Of Surgical Practice : Authors: Douglas Scott Tyler
5. Schwartz's Principles of Surgery Authors : F. Charles Brunicaudi, Dana K. Andersen, Timothy R. Billiar, David L. Dunn
6. S Das - A Textbook On Surgical Short & Long Cases in Surgery Author: Nilaymandal

PRACTICAL (Recent editions)

1. A Manual On Clinical Surgery Author : S Das
2. Hamilton Bailey s Demonstrations of Physical Signs in Clinical Surgery Author: John S.P.Lumley
3. Browse's Introduction to the Symptoms & Signs of Surgical Disease Authors: James A. Gossage, Mathew F. Bultitude Steven A.Corbett
4. Manipal Manual of Clinical Methods in Surgery: Differential Diagnosis and Clinical Discussion Author : Dr. AnithaShenoy and Dr. K. Rajgopal Shenoy
5. SRB's Clinical Methods in Surgery Author : Dr.Sriram Bhat
6. Bedside Clinics in Surgery Makhan Lal Saha
7. Netter's Surgical Anatomy & Approaches Author: Conor P. Delaney
8. Zollinger`s Atlas of Surgical Operations Author : E. Christopher Ellison, Robert M Zollinger

Note: A single text book may not cover the entire curriculum. Referring to more than one book is recommended.

OBSTETRICS & GYNAECOLOGY

2. GOALS :

At the end of training in Obstetrics and gynecology, the learner should be able to:

- Provide preconception counselling and antenatal care.
- Identify high-risk pregnancies and refer appropriately.
- Conduct normal deliveries, using safe delivery practices in the primary and secondary care settings.
- Prescribe drugs safely and appropriately in pregnancy and lactation.
- Diagnose complications of labor, institute primary care and refer in timely manner.
- Perform early neonatal resuscitation.
- Provide postnatal care, including education in breast-feeding.
- Counsel and support couples in correct choice of contraception.
- Interpret test results of laboratory and radiological investigations as they apply to the care of the obstetric patient.
- Apply medico-legal principles as they apply to tubectomy, Medical Termination of Pregnancy (MTP), Pre-conception and Prenatal Diagnostic Techniques (PC PNDT Act) and other related Acts.
- Elicit gynaecologic history, perform appropriate physical and pelvic examinations and PAP smear in the primary care setting.
- Recognize, diagnose and manage common reproductive tract infections in the primary care setting.
- Recognize and diagnose common genital cancers and refer them appropriately.

2. OBJECTIVES

a. Knowledge:

- Understanding of the physiology of pregnancy, principles of diagnosis and management of Obstetric complications.
- Ability to choose, calculate and administer appropriately intravenous fluids, common drugs in pregnancy and labour, blood and blood products based on the clinical condition.
- Ability to apply the principles of asepsis, sterilization, disinfection, rational use of prophylaxis, therapeutic utilities of antibiotics and universal precautions in surgical practice,

- Ability to recognize, resuscitate, stabilize and provide Basic & Advanced Life Support to women during pregnancy and child birth.
- Ability to administer informed consent and counsel patient prior to surgical procedures in Obstetrics and Gynaecology, and to patients in Obstetric shock.
- Commitment to advancement of quality and patient safety in surgical practice.

b. Skill:

- Ability to obtain a thorough history from the patient,
- To perform a complete general physical examination of the patient,
- To perform Obstetric examination in a pregnant woman and gynaecological examination in a non-pregnant women.
- Ability to write a detailed and accurate case sheet (Case record).

c. Integration:

- To deliver teaching that is aligned and integrated horizontally and vertically in order to provide a sound biologic basis and a holistic approach to the care of the pregnant and non-pregnant women.

3. TEACHING HOURS AND COURSE CONTENTS

Sl. No	Teaching Learning Method	No. of Teaching Hours*
1	Large group teaching	12
2	Small group teaching (SGT) (Small group discussions- SGT/ Practicals/ Tutorials/ Seminars/ AETCOM)	Nil
3	Self-directed Learning (SDL)	Nil
4	Clinical posting**	6 weeks

*** No. of minimum Teaching hours (minimum 12 hours) given in the table above is as per the NMC CBME 2024 guidelines. However, any changes in teaching hours shall be adopted as per the recent NMC guidelines.**

** Clinical postings will be for 3 hours / day for 5 days a week

Course Contents:

THEORY

SL. NO.	Topic (WITH COMPETENCY NUMBER)	Large group teaching	Domain	Level
1	OG 1.1 DEMOGRAPHIC AND VITAL STATISTICS Define and discuss birth rate maternal mortality and morbidity	Lecture	K	KH
	OG 1.2 Define and discuss perinatal mortality and morbidity including perinatal and neonatal mortality and morbidity audit	Lecture,	K	KH
	OG 1.3 Define and discuss still birth and abortion	Lecture,	K	KH
2	OG 2.1 ANATOMY OF THE FEMALE REPRODUCTIVE TRACT Describe and discuss the development and anatomy of the female reproductive tract, relationship to other pelvic organs, applied anatomy as related to Obstetrics and Gynaecology.	Lecture,	K	KH
3	OG 3.1 PHYSIOLOGY OF CONCEPTION Describe the physiology of ovulation, menstruation, fertilization, implantation and gametogenesis.	Lecture	K	KH
4	OG 4.1 DEVELOPMENT OF THE FETUS AND THE PLACENTA Describe and discuss the basic embryology of fetus, factors influencing fetal growth and development, anatomy and physiology of placenta, and teratogenesis	Lecture	K	KH
5	OG 6.1 DIAGNOSIS OF PREGNANCY Describe, discuss and demonstrate the clinical features of pregnancy, derive and discuss its differential diagnosis, elaborate the principles underlying and interpret pregnancy tests.	Lecture	K	KH
6	OG 7.1 MATERNAL CHANGES IN PREGNANCY Describe and discuss the changes in the genital tract, cardiovascular system, respiratory, haematology, renal and gastrointestinal system in pregnancy	Lecture	K	KH

7	OG 8.1 ANTENATAL CARE Enumerate, describe and discuss the objectives of antenatal care, assessment of period of gestation; screening for high-risk factors.	Lecture	K	KH
8	OG 8.2 Elicit document and present an obstetric history including menstrual history, last menstrual period, previous obstetric history, comorbid conditions, past medical history and surgical history	Lecture	K	KH
9	OG 8.7 Enumerate the indications for and types of vaccination in pregnancy	Lecture	K	KH
10	OG 8.8 Enumerate the indications and describe the investigations including the use of ultrasound in the initial assessment and monitoring in pregnancy	Lecture	K	KH

	Topic - GYNAECOLOGY	Large group teaching	Domain	Level
1	OG 24.1 ABNORMAL UTERINE BLEEDING Define, classify and discuss abnormal uterine bleeding, its aetiology, clinical features, investigations, diagnosis and management	Lecture	K	KH
2	OG 25-1 AMENORRHOEA Describe and discuss the causes of primary and secondary amenorrhea, its investigation and the principles of management.	Lecture,	K	KH
3	OG 22.1 VAGINAL DISCHARGE Describe the clinical characteristics of physiological vaginal discharge.	Lecture	K	KH
4	OG 22.2 Describe and discuss the etiology (with special emphasis on Candida, T. vaginalis, bacterial vaginosis), characteristics, clinical diagnosis, investigations, genital hygiene, management of common causes and the syndromic management	Lecture,	K	KH
5	OG 28.1 INFERTILITY Describe and discuss the common causes, pathogenesis, clinical features, differential diagnosis; investigations; principles of management of infertility – methods of tubal patency, ovulation induction, assisted reproductive techniques	Lecture,	K	KH

6	OG 26.1 GENITAL INJURIES AND FISTULAE Describe and discuss the etiopathogenesis, clinical features; investigation and implications on health and fertility and management of endometriosis and adenomyosis	Lecture	K	KH
7	OG26.2 Describe the causes, prevention, clinical features, principles of management of genital injuries and fistulae	Lecture	K	KH
8	OG 27.1 GENITAL INFECTIONS Describe and discuss the etiology, pathology, clinical features, differential diagnosis, investigations, management and long term implications of sexually transmitted infections	Lecture,	K	KH
9	OG 27.2 Describe and discuss the etiology, pathology, clinical features, differential diagnosis, investigations, management and long term implications of genital tuberculosis	Lecture,	K	KH
10	OG27.3 Describe and discuss the etiology, pathology, clinical features, differential diagnosis, investigations, management and long term implications of HIV	Lecture,	K	KH
11	OG31.1 UTERINE PROLAPSE Describe and discuss the etiology, classification, clinical features, diagnosis, investigations, principles of management and preventive aspects of prolapse of uterus	Lecture	K	KH
12	OG 29.1 UTERINE FIBROIDS Describe and discuss the etiology; pathology; clinical features; differential diagnosis; investigations; principles of management, complications of fibroid uterus	Lecture,	K	KH
13	OG 33.2 BENIGN,PREMALIGNANT,MALIGNANT LESIONS OF THE CERVIX Describe the principles of management including surgery and radiotherapy of Benign, Pre-malignant (CIN) and Malignant Lesions of the Cervix	Lecture	K	KH
14	OG 33.4 Enumerate the methods to prevent cancer of cervix including visual inspection with acetic acid (VIA), visual inspection of cervix with Lugol's iodine (VILI), pap smear and colposcopy	Lecture	K	KH

15	OG 33.1 Classify, describe and discuss the etiology, pathology, clinical features, differential diagnosis, investigations and staging of cervical cancer	Lecture	K	KH
16	OG 34.1 BENIGN AND MALIGNANT LESIONS OF THE UTERUS AND OVARIES Describe and discuss aetiology, pathology, staging clinical features, differential diagnosis, investigations, staging laparotomy and principles of management of endometrial cancer	Lecture	K	KH
17	OG 34.2 Describe and discuss the aetiology, pathology, classification, staging of ovarian cancer, clinical features, differential diagnosis, investigations, principal of management including staging laparotomy	Lecture	K	KH

b. Practical

SL. NO.	TOPIC OF PRACTICAL : (WITH COMPETENCY NUMBER)	Suggested teaching learning method	Domain	Level
1	OG5.1 PRECONCEPTION COUNSELLING Describe, discuss and identify pre-existing medical disorders and discuss their management; discuss evidence-based intrapartum care	Bedside Clinics	K	KH
2.	OG5.2 Determine maternal high risk factors and verify immunization status	Bedside Clinics	K	KH
3	OG8.3 ANTENATAL CARE Describe, demonstrate, document and perform an obstetrical examination including a general and abdominal examination and clinical monitoring of maternal and fetal well-being;	Bedside Clinics	K	KH
4	OG8.4 Describe and demonstrate clinical monitoring of maternal and fetal well-being	Bedside Clinics	K	KH
5	OG8.6 Assess and counsel a patient in a simulated environment regarding appropriate nutrition in pregnancy	Bedside Clinics	K/S	KH

6	OG10.1 ANTEPARTUM HAEMORRHAGE Define, classify and describe the aetiology, pathogenesis, clinical features, ultrasonography, differential diagnosis and management of antepartum hemorrhage in pregnancy	Bedside Clinics	K	KH
7	OG11.1 MULTIPLE PREGNANCIES Describe the etiopathology, clinical features; diagnosis and investigations, complications, principles of management of multiple pregnancies	Bedside Clinics	K	KH
8	OG12.1 MEDICAL DISORDERS IN PREGNANCY Define, classify and describe the etiology and pathophysiology, Early detection, investigations; principles of management of hypertensive disorders of pregnancy and eclampsia, complications of eclampsia.	Bedside Clinics	K	KH
9	OG12.2 Define, classify and describe the etiology, pathophysiology, diagnosis, investigations, adverse effects on the mother and foetus and the management during pregnancy and labor, and complications of anemia in pregnancy	Bedside Clinics	K	KH
10	OG12.3 Define, classify and describe the etiology, pathophysiology, diagnosis, investigations, criteria, adverse effects on the mother and foetus and the management during pregnancy and labor, and complications of diabetes in pregnancy	Bedside Clinics	K	KH
11	OG12.4 Define, classify and describe the etiology, pathophysiology, diagnosis, investigations, criteria, adverse effects on the mother and foetus and the management during pregnancy and labor, and complications of heart diseases in pregnancy	Bedside Clinics	K	KH
12	OG12.8 Describe the mechanism, prophylaxis, fetal complications, diagnosis and management of isoimmunization in pregnancy	Bedside Clinics	K	KH
13	OG13.2 LABOUR Define, describe the causes, pathophysiology, diagnosis, investigations and management of preterm labor, PROM and postdated pregnancy	Bedside Clinics	K	KH
14	OG14.1 MATERNAL PELVIS Enumerate and discuss the diameters of maternal pelvis and types	Bedside Clinics, DOAP session, Small group discussion	K	KH

15	OG16.3 IUGR Describe and discuss causes, clinical features, diagnosis, investigations; monitoring of fetal well-being, including ultrasound and fetal Doppler; principles of management; prevention and counselling in intrauterine growth retardation	Bedside Clinics	K	KH
16	OG19.1 NORMAL AND ABNORMAL PUERPERIUM Describe and discuss the physiology of puerperium, its complications, diagnosis and management; counselling for contraception, puerperal sterilization	Bedside Clinics	K	KH
17	OG21.1 CONTRACEPTION Describe and discuss the temporary and permanent methods of contraception, indications, technique and complications; selection of patients, side effects and failure rate including OCPs, male contraception, emergency contraception and IUCD	Bedside Clinics	K	KH
18	OG22.2 VAGINAL DISCHARGE Describe and discuss the aetiology (with special emphasis on Candida, T. vaginalis, bacterial vaginosis), characteristics, clinical diagnosis, investigations, genital hygiene, management of common causes and the syndromic management	Bedside Clinics	K	KH
19	OG24.1 ABNORMAL BLEEDING Define, classify and discuss abnormal uterine bleeding, its aetiology, clinical features, investigations, diagnosis and management	Bedside Clinics	K	KH
20	OG29.1 UTERINE FIBROIDS Describe and discuss the aetiology; pathology; clinical features; differential diagnosis; investigations; principles of management, complications of fibroid uterus	Bedside Clinics	K	KH
21	OG31.1 UTERINE PROLAPSE Describe and discuss the aetiology, classification, clinical features, diagnosis, investigations, principles of management and preventive aspects of prolapse of uterus	Bedside Clinics	K	KH
22	OG32.2 MENOPAUSE Enumerate the causes of postmenopausal bleeding and describe its management	Bedside Clinics	K	KH

23	OG33.1 BENIGN, PREMALIGNANT, MALIGNANT LESIONS OF THE CERVIX Classify, describe and discuss the aetiology, pathology, clinical features, differential diagnosis, investigations and staging of cervical cancer	Bedside Clinics	K	KH
24	OG33.2 Describe the principles of management including surgery and radiotherapy of Benign, Pre-malignant (CIN) and Malignant Lesions of the Cervix	Bedside Clinics	K	KH
25	OG34.1 BENIGN & MALIGNANT LESIONS OF THE UTERUS AND OVARIES Describe and discuss aetiology, pathology, staging clinical features, differential diagnosis, investigations, staging laparotomy and principles of management of endometrial cancer	Bedside Clinics	K	KH
26	OG9.3 Discuss the aetiology, clinical features, differential diagnosis of acute abdomen in early pregnancy (with a focus on ectopic pregnancy) and enumerate the principles of medical and surgical management	Bedside Clinics, Intraoperative	K	KH
27	OG28.1 Describe and discuss the common causes, pathogenesis, clinical features, differential diagnosis; investigations; principles of management of infertility – methods of tubal patency, ovulation induction, assisted reproductive techniques	Bedside Clinics	K	KH
28	OG28.2 Enumerate the assessment and restoration of tubal patency	Bedside Clinics	K	KH
29	OG28.3 Describe the principles of ovulation induction	Bedside Clinics	K	KH
30	OG28.4 Enumerate the various Assisted Reproduction Techniques	Bedside Clinics	K	KH
31	OG35.1 OBSTETRICS AND GYNECOLOGICAL SKILLS & WARD OBSERVATIONS Obtain a logical sequence of history, and perform a humane and thorough clinical examination, excluding internal examinations (per rectal and per-vaginal)	Bedside Clinics	K	KH
32	OG35.2 Arrive at a logical provisional diagnosis after examination.	Bedside Clinics	K	KH
33	OG35.3 Recognize situations, which call for urgent or early treatment at secondary and tertiary centres and make a prompt referral of such patients after giving first aid or emergency treatment	Bedside Clinics	K	KH

34	OG35.6 Demonstrate ethical behaviour in all aspects of medical practice	Bedside Clinics	K	KH
	OT		K	KH
35	OG9.2 COMPLICATIONS IN EARLY PREGNANCY Describe the steps and observe/ assist in the performance of an MTP evacuation	Bedside Clinics, Intraoperative	K	KH
36	OG15.1 OPERATIVE OBSTETRICS Enumerate and describe the indications and steps of common obstetric procedures, technique and complications: Episiotomy, vacuum extraction; low forceps; Caesarean section, assisted breech delivery; external cephalic version; cervical cerclage	Bedside Clinics, Intraoperative	K	KH
37	OG34.4 OPERATIVE GYNAECOLOGY : Understand and describe the technique and complications: Dilatation & Curettage (D&C); EA-ECC; cervical biopsy; abdominal hysterectomy; myomectomy; surgery for ovarian tumours; staging laparotomy; vaginal hysterectomy including pelvic floor repair; Fothergill's operation, Laparoscopy; hysteroscopy; management of postoperative complications	Bedside Clinics, Intraoperative	K	KH
38	OG19.2 PUERPERIUM Counsel in a simulated environment, contraception and puerperal sterilisation	Bedside Clinics	A/C	KH
39	OG19.3 Observe/ assist in the performance of tubal ligation	Bedside Clinics, Intraoperative, DOAP session	K/S	KH
40	OG35.11 OBG SKILLS Demonstrate the correct use of appropriate universal precautions for self-protection against HIV and hepatitis and counsel patients	Bedside Clinics, Intraoperative	K/S/A/C	KH
41	OG35.5 Determine gestational age, EDD and obstetric formula	Bedside Clinics	K/S	KH
42	OG35.7 Obtain informed consent for any examination / procedure	Bedside Clinics	S	KH
43	OG35.8 Write a complete case record with all necessary details	Bedside Clinics	S	KH

44	OG35.9 Write a proper discharge summary with all relevant information	Bedside Clinics	S	KH
45.	OG35.10 Write a proper referral note to secondary or tertiary centres or to other physicians with all necessary details.	Bedside Clinics	S	KH

Outpatient Department				
1.	OG35.12 SKILLS Obtain a PAP smear in a stimulated environment	DOAP session		K/S
2.	OG33.4 Enumerate the methods to prevent cancer of cervix, perform assist including visual inspection with acetic acid (VIA), visual inspection of cervix with Lugol's iodine (VILI), pap smear and colposcopy	DOAP SESSION		K
3.	OG35.15 SKILLS Demonstrate the correct technique to insert and remove an IUD in a simulated/ supervised environment	Bedside Clinics, DOAP session		K/S
4	OG20.3 MEDICAL TERMINATION OF PREGNANCY Discuss Pre-conception and Pre Natal Diagnostic Techniques (PC&PNDT) Act 1994 & its amendments	Bedside Clinics		K
5	OG22.2 VAGINAL DISCHARGE Describe and discuss the etiology (with special emphasis on Candida, T. vaginalis, bacterial vaginosis), characteristics, clinical diagnosis, investigations, genital hygiene, management of common causes and the syndromic management	Bedside Clinics		K
6	OG8.5 ANTENATAL CARE Describe and demonstrate pelvic assessment in a model	DAOP session		K/S
7	OG13.4 Demonstrate the stages of normal labor in a simulated environment / mannequin and counsel on methods of safe abortion.	Bedside Clinics, DOAP session		K/S

LABOUR ROOM			
1.	OG13.1 LABOUR Enumerate and discuss the physiology of normal labor, mechanism of labor in occipito-anterior presentation; monitoring of labor including partogram; conduct of labor, pain relief; principles of induction and acceleration of labor; management of third stage of labor	Bedside Clinics, Small group discussion	K
2.	OG13.3 Observe/ assist in the performance of an artificial rupture of Membranes	DOAP Session	K
3.	OG13.5 Observe and assist the conduct of a normal vaginal delivery	Bedside Clinics, DOAP session	K/S
4.	OG18.2 CARE OF THE NEWBORN Demonstrate the steps of neonatal resuscitation in a simulated environment	DOAP session	K
5	OG20.2 MEDICAL TERMINATION OF PREGNANCY In a simulated environment administer informed consent to a person wishing to undergo Medical Termination of Pregnancy	Bedside Clinics	K/S/A/ C
6.	OG35.14 Demonstrate the correct technique to perform and suture episiotomies in a simulated/ supervised environment	Bedside Clinics	K

4. CERTIFICATION OF SKILLS: No Certifiable Skills in PY-II

5. SCHEME OF EXAMINATION

a. Internal assessment [IA]:

Theory IA:

- One Theory IA will be conducted in Professional Year II

Sl No	Question type	Marks	No of questions	Total
1	Scenario based MCQs	2	5	10
2	Structured Long essay question (SLEQ)	10	1	10
3	Short notes (recall/comprehension)	5	1	5
4	Short notes (applied aspects/Integration modules)	5	1	5
5	Short answers (reasoning)	3	5	15
6	Formative Assessment	5		5
Total				50

Practical IA:

- A minimum of ONE IA shall be conducted in Professional Year II
- End of posting Clinical exam shall include exercises that shall be Case scenario based / Skill stations / OSCE stations
- Viva/oral examination shall be included in practical IA marks.

SI No	Practical IA	Maximum Marks
1	End of posting Clinical case discussion and Viva	25
2	OSCE	15
3	AETCOM	05
4	Formative assessment/Record Book and Logbook	05
	Total	50

b. University examination/Summative assessment [SA]:

Summative assessment will be held at the end of 3rd professional year part 2.

6. SELF DIRECTED LEARNING (SDL)

Not applicable in PY-II

7. INTEGRATED TEACHING: Shall be followed as per latest NMC guidelines

8. RECOMMENDED TEXT BOOKS:**Obstetrics recent editions:**

1. Mudaliar & Menon, Clinical Obstetrics, Sarala Gopalan, Vanita Jain, University Press 13th edition.
2. Dutta D.C., Text book of Obstetrics, Jaypee Publication 11th edition.
3. Holland and Brews, Textbook of Obstetrics, B. I. Publication, New Delhi 4th edition
4. Williams Obstetrics – Cunningham, Bloom, Sponge, et al, Mc Craw Hill education Publication 26th edition.
5. Fernando Arias Amarnath Bhide, savaratanum Arulkumaran et al, Elsevier publication 6th edition.
6. Munro Kerr's operative obstetrics, Thomas F, Baskett Andrew, Savratanum Arulkumaran, Bailliere Tindall, London 13th edition.

Gynaecology recent editions:

1. Shaw's A Text book of Gynaecology, Padubidri VG, Shirish N Daftary, Elsevier publication 18th edition
2. Dutta DC, Text book of Gynaecology 9th edition
3. Jeffcoate's Principles of Gynaecology, Pratap kumar, Narendra malhotra, Jaypee publication 9th edition.
4. Williams Gynaecology Hoffman, John, Joseph et al, Mc Craw Hill education Publication 4th edition
5. Shaw's operative Gynaecology, Christopher Hudson, Marcus Setchell, Elsevier publication 7th edition

