



STUDY GUIDE 2025

4th Year MBBS

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Introduction to Study Guide

This study guide is designed for medical undergraduates through a collaborative effort of institutional faculty members and students' representatives to provide medical students of CMH Lahore Medical College a resource material for sharing important aspects of the curriculum, as proposed by Pakistan Medical & Dental Council and National University of Medical Sciences. The study guide aims to promote self-regulated and lifelong learning among students by empowering them to have complete information about their educational journey and its significance.

The overarching curricular aspects such as undergraduate competencies, exit outcomes, subject specific learning outcomes, assessment methods, curricular framework, academic calendar, online learning, relevant policies, and names of curriculum coordinators are all included in this guidebook. Horizontal integration across the pre-clinical years has been implemented for better conceptual understanding while vertical integration has been incorporated by early clinical exposure through addition of lectures and integrated seminars.

CMH Lahore Medical College aims to improve health indicators of the community and society at large by training students and doctors in preventive healthcare services, and health education by community outreach programs. The MBBS curriculum at CMH Lahore Medical College also offers learning of medical education, leadership and management via dedicated teaching hours in the academic calendar.

Since curriculum is a living and a dynamic document therefore, the aim is to improve it on yearly basis, using faculty & students' feedback sought after every block examination by program evaluation unit (L-QEC).

School of Health Professions Education

CMH LMC & IOD

Vision of National University of Medical Sciences

To be the best medical university by conducting world-class bio-medical research and creative research activities that develop knowledge and contribute to improve the health care system and social advancement for the people of Pakistan and benefit humanity as a whole with a standard of excellence.

Mission of National University of Medical Sciences

Our mission is to emphasize rigorous research fundamentals while stimulating innovation and providing talented students and faculty with the high standard research facilities in the colleges/institutions of NUMS, necessary to achieve excellence in bio-medical research to contribute toward best care for our individuals and communities, embraces the challenges of health disparities and improve health care system up to international standards.

Vision of CMH Lahore Medical College and Institute of Dentistry

To be a leading institute in medical education that provides an inclusive and conducive environment to foster excellence in teaching, learning, acquisition of clinical skills, research, and innovation to improve future health indicators within our region and beyond.

Mission of CMH Lahore Medical College and Institute of Dentistry

To improve healthcare by:

1. Providing quality medical education that prepares healthcare professionals according to internationally accepted benchmarks for empathy, social accountability, lifelong learning, critical thinking, and sound clinical acumen.
2. Ensuring a conducive and equitable learning environment in research and continuous professional development for students and faculty respectively, enabling their success in national and international licensure examinations and opportunities.
3. Fostering evidence-based and patient-centered care to efficiently address global healthcare challenges, focusing on prevention and community health improvement.

Rationale of Curriculum

This curriculum has been designed by NUMS to address both local and international needs. The curriculum is focused to prepare future doctors to treat local patients efficiently and safely employing best evidence clinical practice. There are many embedded opportunities for students to learn leadership in order to prepare them for their future role as a leader in a healthcare team. There are numerous opportunities for students to learn and practice leadership skills by participating in integrated seminars, CPCs, clinical rotations and co-curricular activities. In order to give medical students requisite evidence-based practices health education, research module, research day and elective in preventive health education are added in the curriculum to ensure their holistic growth.

Curriculum Perspective

Curriculum has been developed in light of behaviorism, cognitivism and constructivism. These curricular flavors provide opportunities to students to have structured learning and practice session along with information orientated feedback, small group learning, critical thinking, decision making and problem-solving opportunities.

Introduction to Curricular Framework

The implemented curriculum is at the 7th level in the integration ladder where basic sciences' facts are correlated with clinical sciences through student led integrated seminars.

1. **PHASE 1 (Year 1 and 2):** Includes basic sciences namely, Anatomy, Physiology, Biochemistry with horizontal integration within the basic sciences and vertical integration through integrated seminars and interactive lectures in Surgery, Medicine and Behavioral Sciences.
2. **PHASE 2 (Year 3, 4 & 5):** Includes paraclinical and clinical sciences namely, Pharmacology, General Pathology, Special Pathology, Community Medicine, Forensic Medicine, Behavioral Sciences, Eye, ENT, Medicine, Psychiatry, Pediatrics, Surgery, and OBGYN, Internal Medicine, Gastroenterology, Rheumatology, Dermatology, Pulmonology, Cardiology, Nephrology, Endocrinology, General Surgery, Orthopedics and Urology. This phase comprises of interactive lectures, small group discussions, tutorials, CPCs and clinical rotations.

Five-year Scheme of Studies / Curricular Framework.

Year	Subjects	Teaching Method	Additional Subjects	Teaching Method	Additional Components
1st Year	Anatomy (including Histology, Embryology & General Anatomy)	Interactive Lectures. SGDs, Tutorials, DH & Practical	Islamiyat	Interactive Lectures	Student led Integrated Seminar
	Physiology	Interactive Lectures. SGDs, Tutorials, & Practical	Quran Kareem		
	Biochemistry		Introduction to Computer		
	Surgery & Allied	Interactive Lectures	Expository English		
	Medicine & Allied		Basics of Radiology		
	Behavioral Sciences		Research Methodology & EBM		
2nd Year	Anatomy (including Histology & Embryology)	Interactive Lectures. SGDs, Tutorials, DH & Practical	Pakistan Studies	Interactive Lectures	Student led Integrated Seminar
	Physiology	Interactive Lectures. SGDs, Tutorials, & Practical	Quran Kareem		
	Biochemistry				
	Surgery & Allied	Interactive Lectures	Basics of Radiology		
	Medicine & Allied				
	Behavioral Sciences				
3rd Year	Pharmacology & Therapeutics	Interactive Lectures. SGDs, Tutorials, & Practical's	Research Methodology & EBM		
	General Pathology				
	Forensic Medicine				
	Behavioral Sciences (includes communication skills, leadership, management, professionalism)	Interactive Lectures. SGDs, & Tutorials.			

Year	Subjects	Teaching Method	Additional Subjects	Teaching Method	Additional Components
	Community Medicine				
	Surgery & Allied	Interactive Lecture, Case Based Learning & Clinical Rotation			
	Medicine & Allied				
	Gynae & Obs				
Pediatric Medicine & Neonatology	Clinical Rotation				
4 th Year	Special Pathology	Interactive Lectures, SGDs, & Tutorials.	Research Methodology & EBM		Seminar/CPC
	Community Medicine	Interactive Lectures, Clerkship & Community Visits			
	ENT	Interactive Lecture, Case Based learning & Clinical Rotation All clinical rotations will include patient safety.			
	Eye				
	Surgery & Allied				
	Medicine & Allied				
	Gynae & Obs				
Pediatric Medicine & Neonatology					
Final Year	Surgery & Allied	Interactive Lecture, Case Based Learning & Clinical Rotation			Seminar/CPC
	Medicine & Allied				
	Gynae & Obs				
	Pediatric Medicine & Neonatology				

Undergraduate Competencies

CMH Lahore Medical College and Institute of Dentistry envisions to produce graduates who are proficient in following competencies:

- Medical Expert
- Communicator
- Collaborator
- Scholar
- Professional
- Evidence based Practitioner Providing Holistic Care
- Empathetic
- Community Service Provider
- Critical Thinker
- Self-regulated Learner

Yearly Outcomes:

By the end of fourth year, students will be able to:

- a. Recognize the etiology, pathophysiology and morphological changes of human diseases in relation with its clinical significance
- b. Gather and analyze relevant health data to identify prevalent health conditions, risk factors, and disparities.
- c. Interpret the data to prioritize health needs and formulate potential interventions.
- d. Collaborate with other healthcare professionals and stakeholders to develop targeted strategies for health promotion, disease prevention, and improvement of community health outcomes.
- e. Demonstrate scientific curiosity, and a positive attitude towards research
- f. Develop a research proposal for a given topic
- g. Take a focused history and perform clinical examination of organ systems to determine provisional diagnosis and plan management
- h. Identify common ophthalmological and ENT diseases specially emergencies, provide primary health care, refer to an appropriate center and do the follow-up of patients of his area.

Subjects in 4th Year MBBS

Core Subjects

Following are the core subjects for 4th year MBBS for which professional examination will be held at the end of the academic year:

1. Special Pathology
2. Community Medicine & Public Health
3. Ophthalmology
4. ENT

Integrated Subjects

Following are the integrated clinical subjects for which regular periodic assessment will be done throughout the academic year and their attendance would be carried forward towards the year of examination of that clinical subject

1. Medicine & Allied
2. Surgery & Allied
3. Gynae & Obs
4. Pediatrics

Contact Hours Distribution Year-IV

Teaching & Learning weeks: 40 weeks		
SUBJECTS	Contact Hours	Self-Directed Learning
Special Pathology	240	20
Community Medicine & Public Health	140	20
Research Methodology & EBM	60	-
Ophthalmology	150	10
ENT	150	10
Medicine & Allied	200	10
Surgery & Allied	200	10
Obstetrics & Gynecology	50	10
Paediatrics & Neonatology	50	10
Patient Safety	25	-
Co-curricular activities/ Sports	40	
GRAND TOTAL	1405 Hours	

Teaching and Learning Methods

The teaching-learning will be through diverse methods and will include

1. Large group interactive sessions (LGIS)
2. Flipped Classroom
3. Small group discussions (SGD) including tutorials and demonstrations
4. Practical sessions/hands on training (Laboratory work)
5. Skill lab
6. Bedside teaching
7. Ambulatory Care teaching
8. Sessions of self-directed learning (SDL). This is the time during which students are expected to revise what they have learnt in the class, clear their confusions by consulting different texts and reference books.

Clinical Rotations in Year IV – Medicine, Surgery, Gynae & Obs, ENT, Ophthalmology, Pediatrics

During the clinical rotation in 4th year, students will be exposed to both inpatients and outpatient clinical practice. Focus is on medical history taking and physical examination with little expectation on diagnosis and management. Students also create lists and develop plans to direct the investigation of patients' medical disorders. Logbooks will be maintained to keep the record of student performance during the rotation. Logbook will be countersigned by the faculty supervising the sessions.

At the end of each clinical rotation, the whole group will have a clinical exam which will contribute towards the internal assessment in the final year (20%). Assessment at the end of clinical rotations will focus on application of knowledge, competence in specific clinical skills, and appropriate professional attitude. Satisfactory performance will be required in each of these areas for progress and promotion.

Failure in assessment requires the student to repeat the end rotation exam. Passing marks are 50% Attendance of 75% and satisfactory performance in the rotation/clerkship in each year is mandatory

Learning Outcomes: At the end of fourth year clinical rotation, students will be able to:

- i. Evaluate common symptoms
- ii. Identify common clinical signs
- iii. Communicate effectively with the patients, seniors and colleagues

Follow the steps of history taking

1. Take a focused history and perform clinical examination of organ systems to determine provisional
2. diagnosis

3. Formulate differential diagnosis of common clinical conditions of relevant department
4. Interpret common investigations and comment whether these are normal or abnormal
5. Develop the plans of initial management in clinics
6. Discuss common drug interactions
7. Enumerate common side effects of drugs
8. Make long-term plan for prevention of disease
9. Perform minor procedures safely
10. Communicate effectively with patient and family regarding disease and its relevant issues.
11. Exhibit ethical principles specially to maintain patient confidentiality



Assessment Plan

The assessment plan comprises 2-3 term tests, 1 send-up, and 1 professional examination. Examination consists of one-best multiple-choice questions and short essay type questions along with OSPE/OSCE. All exams except for University's exam/professional exam contribute towards internal assessment of the respective subjects according to the institutional policy. The assessment schedule is given below

Type of Assessment	Weightage	Frequency and Time	Methods/ Tools for Assessment
Formative	-	Informally during and after the session.	Class tests (MCQs, SEQs), Class presentations, Assignments, Tutorials, Case Based Discussions, Team based learning, Portfolios
Summative	Internal assessment	20%	2-3 term tests (quarterly), Send up (before the professional exam) (80%) Attitude/ behavior/ attendance/ assignments/ achievements (throughout the year) (20%)
	University exam	80%	Once at the end of academic year

Internal Assessment (Theory) – MBBS Year IV

SPECIAL PATHOLOGY/ COMMUNITY MEDICINE & PUBLIC HEALTH			
BLOCKS/ PAPER	Percentage	I / II	III
<ul style="list-style-type: none"> Continuous assessment: (Average score of class tests/ quizzes etc) 	03 %	Marks obtained* 3 / Total Marks	
<ul style="list-style-type: none"> EOB Exam; For each discipline; 	05 %	Marks obtained* 5 / Total Marks	
<ul style="list-style-type: none"> Attendance 	02 %	> 95 % = 02, 90- 94 % = 01	
<ul style="list-style-type: none"> Pre annual Exam : Paper I, II & III 	10 %	Marks obtained*10 /40	Marks obtained*15 /40
<ul style="list-style-type: none"> Final IA 	20%		

BLOCKS	Percentage	I / II	III
• Continuous assessment (03%): (EOB)	03%	Marks obtained * 3/Total Marks	
• Attendance (02 %)	02 %	> 95 % = 02, 90- 94 % = 01	
• Practical books/Logbooks (02%)	02%	Obtained marks * 02 / Total marks	
• Discipline/Attitude, Responsibility and Teamwork		Obtained marks* 03 / Total marks	
• Pre annual papers	20%	Paper I (10 %) Marks obtained* 10 /40	Paper III (10 % + 03%) Marks obtained* 13 /40
• Final IA	20%		

Internal Assessment Theory (ENT, Eye)

Ser	Assessment Tool	Final IA (20%)
1.	Continuous Assessment (Periodical Class Tests)	03%
2.	EOB	05%
3.	Pre Annual Exam	10%
4.	Attendance Criteria: > 95 % = 02, 90- 94 % = 01	02%
	Total	

Internal Assessment Practical (ENT, Eye)

Ser	Assessment Tool	Final IA (20%)
1.	Continuous Assessment	
	a. EOR Exam (Ward Test + OSCE Viva of EOB)	06%
	b. Logbooks / Portfolio, Discipline / Attitude, Responsibility and Teamwork	02%
2.	Pre annual Exam (OSCE/Viva)	10%
3.	Attendance - > 95 % = 02, 90- 94 % = 01	02%

The University will take the fourth professional Examination as per PM&DC guidelines at the end of the academic year. Annual Theory & Practical Examination will be of 300 marks each for Special Pathology and Community Medicine & Public Health, and 200 Marks for Eye and ENT each. The passing score is 50% in theory and practical separately. However, in clinical subjects, student should pass in clinical exams / OSCE (with 50% marks) and unobserved stations (with 50% marks) separately

Evaluation of the Course

The major goals of the evaluation are to monitor quality of teaching and assessment and improve the implemented curricula.

- a. Feedback through CMS will be taken at the end of block from students and faculty members.
- b. LQEC receives recommendation from Evaluation Committee comprising of
 - Head of QEC: Dr. Rizwana Kamran (Associate Professor SHaPE)
 - Officer 1: Dr. Bushra Riaz (Demonstrator SHaPE)
 - Medical Educationist: Dr. Khizar Ansar Malik (Assistant Professor SHaPE)
 - Any one student from each academic year.
 - Representation from each academic year.
- c. LQEC generates reports to be shared with the yearly curriculum and institutional curricular committee for implementation of recommendation from students and faculty members.

Online Learning & Assessment

The COVID-19 pandemic has transformed education, introduced new challenges while fostered innovation catering for the unforeseen situations: Now institutions within Pakistan and across the world are expected to be ready to resume online

learning and assessment in times of emergency. The Learning Management System (LMS) at CMH LMC & IOD ensures that online education is standardized, interactive, and aligned with academic and professional requirements.

Switch over to online learning will be notified a day before or on the same day before the first academic session depending upon the nature of national emergency situation.

The LMS combines **Moodle** and **Zoom**, designed to meet the needs of students. Key features include:

- **Access to Courses:** Students can view recorded lectures, access course materials, and engage with faculty.
- **Attendance Verification:** Attendance is tracked using a dual system:
 1. Moodle login records.
 2. Mandatory quizzes after each lecture (not-graded).
- **Progress Monitoring:** Regular assessments such as quizzes and assignments track students' performance.

Feedback Mechanisms: Integrated evaluation forms enable students and faculty to provide input for continuous improvement.

To ensure privacy and security:

- **Students:** Receive personalized logins to access course materials.
- **Faculty:** Have permissions to upload content, grade assignments, and track student progress.
- **SHaPE & QEC:** Monitor and evaluate LMS activities to monitor quality.
- **IT Support:** Manage user accounts, system updates, and security.

Special access requests are managed through the CE Secretariat in consultation with the IT department.

Assessments are designed to support learning and maintain academic rigor:

- **Formative Assessments:** Quizzes and assignments contribute to assessment for learning but do not count toward final grades.
- **Summative Assessments:** Online term exams and send-ups.
- **Feedback and Quality Assurance:** Student evaluations collected through QEC proformas ensure ongoing improvement of online teaching practices.

System Maintenance & Confidentiality

- **Planned Outages:** The IT department notifies users in advance of any maintenance.
- **Privacy Policies:** All users are accordingly notified to must comply with institutional and PMDC regulations to protect intellectual property and personal information.

- Security: The IT team monitors and manages unauthorized access or inappropriate behaviors.

Roles and Responsibilities

User Role	Permissions
Students	Access lectures, take quizzes, and submit assignments.
Instructors	Upload course content, grade assignments, and track students' performance.
SHaPE & QEC	Review course quality, quizzes, assignments, and suggest modifications accordingly.
IT Department	Manage user accounts, add or remove courses, and deploy updates.



Academic Calendar – 4th Year MBBS Session (2024-25)

Weeks	Details	Dates	
		From	To
1 – 8	Start of New Class	28 Oct 2024	
	1 st Block (8 Weeks)	28 Oct	20 Dec
9	Winter Vacations	23 Dec	29 Dec
10-13	1 st Block (4 Weeks)	30 Dec	23 Jan
14	1st Block Exam	24 Jan	29 Jan
	Ophthalmology	24 Jan 2025 (Fri)	
	Special Pathology	27 Jan 2025 (Mon)	
	Community Medicine	28 Jan 2025 (Tue)	
	ENT	29 Jan 2025 (Wed)	
15-22	2 nd Block (08 Weeks)	30 Jan	28 Mar
	Kashmir Day	05 Feb	
	Olympiad Day 1	14 Feb	
	Annual Play	18 Feb	
	Annual Sports Day	20 Feb	
23	Spring Vacations & Eid-ul-Fitr (01 Week)	31 Mar	04 April
24-27	2 nd Block (04 Weeks)	07 Apr	30 Apr
	Trifecta	11 Apr	
	Qiraat & Naat Competition	17 Apr	
	Annual Research Day	28 Apr	
	Labour Day	01 May	
	Mushaira & Bait Bazi (Literary Festival)	07 May	
28	2nd Block Exam (01 Weeks)	02 May	07 May
	Special Pathology	02 May 2025 (Fri)	
	Ophthalmology	05 May 2025 (Mon)	
	ENT	06 May 2025 (Tue)	
	Community Medicine	07 May 2025 (Wed)	
29-32	3rd Block (04 Weeks)	08 May	06 June
	General Knowledge Quiz	15 May	
33-36	Eid –ul- Azha	07 June 2025	
	Summer Vacations (04 Weeks)	09 June 2025	06 Jul 2025
	Ashura Tentative	5 – 6 July 2025	

Weeks	Details	Dates	
		From	To
37-44	3rd Block (08 Weeks)	07 Jul	26 Aug
45	Prep Leave for Annual Exam / Sendup Exam	27 Aug	31 Aug
46-47	Annual Exam / Sendup Exam (02 Week)	1 Sep	12 Sep
	Special Pathology	01 Sep 2025 (Mon)	
	Community Medicine	03 Sep 2025 (Wed)	
	Ophthalmology	05 Sep 2025 (Fri)	
	ENT	08 Sep 2025 (Mon)	
	OSPE	09 Sep , 10 Sep , 11 Sep & 12 Sep 2025	
48	Prep Leave for NUMS	13 Sep	21 Sep
	NUMS Annual Exam	22 Sep 2025	

4th Year MBBS Clinical Rotation Plan Session (2024-25)													
WEEKS	Dates	Batch-A	Batch-B	Batch-C	Batch-D	Batch-E	Batch-F	Batch-G	Batch-H	Batch-J	Batch-K	Batch-L	Batch-M
1 - 3	28 Oct 2024 - 15 Nov 2024	ENT	Paeds	Dermatology	Medicine / ICU	ENT	Urology / Radiology	EYE	Gynae/Obs	Family Medicine	EYE	Paeds Surgery	Cardiac Surgery
4 - 6	18 Nov 2024 - 06 Dec 2024	EYE	Gynae/Obs	Family Medicine	EYE	Anaesthesia	Cardiac Surgery	ENT	Paeds	Dermatology	Medicine / ICU	ENT	Urology / Radiology
7 - 8	09 Dec 2024 - 20 Dec 2024	Cardiac Surgery 2/3	ENT 2/3	Paeds 2/3	Dermatology 2/3	Medicine / ICU 2/3	ENT 2/3	Urology / Radiology 2/3	EYE 2/3	Gynae/Obs 2/3	Family Medicine 2/3	EYE 2/3	Anaesthesia 2/3
9	23 Dec 2024 - 29 Dec 2024	Winter Vacations											
10	30 Dec 2024 - 03 Jan 2025	Cardiac Surgery 1/3	ENT 1/3	Paeds 1/3	Dermatology 1/3	Medicine / ICU 1/3	ENT 1/3	Urology / Radiology 1/3	EYE 1/3	Gynae/Obs 1/3	Family Medicine 1/3	EYE 1/3	Anaesthesia 1/3

4th Year MBBS Clinical Rotation Plan Session (2024-25)

WEEKS	Dates	Batch-A	Batch-B	Batch-C	Batch-D	Batch-E	Batch-F	Batch-G	Batch-H	Batch-J	Batch-K	Batch-L	Batch-M
11-13	06 Jan 2025 - 23 Jan 2025	Urology	EYE	Gynae/Ob s	Family Medicine	EYE	Paeds Surgery	Cardiac Surgery	ENT	Paeds	Dermatology	Medicine / ICU	ENT
14	24-Jan 2025 - 29 Jan 2025	1st Block Exam											
15-17	30 Jan 2025 - 19 Feb 2025	Paeds Surgery	Cardiac Surgery	ENT	Paeds	Dermatology	Medicine / ICU	ENT	Urology	EYE	Gynae/Ob s	Family Medicine	EYE
		Kashmir Day											
18-20	20 Feb 2025 - 12 Mar 2025	ENT	Urology	EYE	Gynae/Ob s	Family Medicine	EYE	Anaesthesia (Trauma)	Cardiac Surgery	ENT	Paeds	Dermatology	Medicine / ICU
21-22(2 weeks 2 days)	13 Mar 2025 - 28 Mar 2025	EYE 2/3	Anaesthesia 2/3	Cardiac Surgery 2/3	ENT 2/3	Paeds 2/3	Dermatology 2/3	Medicine / ICU 2/3	ENT 2/3	Urology / Radiology 2/3	EYE 2/3	Gynae/Ob s 2/3	Family Medicine 2/3
23	31 Mar 2025 - 04 Apr 2025	Spring Vacations											
		Eid ul Fiter (Wed-Sat)											
24 (3 days)	07 Apr 2025 - 09 Apr 2025	EYE 1/3	Anaesthesia 1/3	Cardiac Surgery 1/3	ENT 1/3	Paeds 1/3	Dermatology 1/3	Medicine / ICU 1/3	ENT 1/3	Urology / Radiology 1/3	EYE 1/3	Gynae/Ob s 1/3	Family Medicine 1/3
25-27	10 Apr 2025	Medicine / ICU	ENT	Urology	EYE	Gynae/Ob s	Family Medicine	EYE	Paeds Surgery	Cardiac Surgery	ENT	Paeds	Dermatology

4th Year MBBS Clinical Rotation Plan Session (2024-25)

WEEKS	Dates	Batch-A	Batch-B	Batch-C	Batch-D	Batch-E	Batch-F	Batch-G	Batch-H	Batch-J	Batch-K	Batch-L	Batch-M
	5 - 30 Apr 2025												
28	02 May 2025 - 07 May 2025	2nd Block Exam											
29-31	08 May 2025 - 28 May 2025	Family Medicine	EYE	Paeds Surgery	Cardiac Surgery	ENT	Paeds	Dermatolog y	Medicine / ICU	ENT	Urology	EYE	Gynae/Ob s
32-33 (2 weeks 2 days)	29 May 2025 - 13 Jun 2025	Dermatolog y 2/3	Medicine / ICU 2/3	ENT 2/3	Urology / Radiology 2/3	EYE 2/3	Gynae/Ob s 2/3	Family Medicine 2/3	EYE 2/3	Anaesthes ia 2/3	Cardiac Surgery 2/3	ENT 2/3	Paeds 2/3
34-37	16 Jun 2025 - 13 Jul 2025	Summer Vacations (4 weeks)											
38 (3 days)	14 Jul 2025 - 16 Jul 2025	Dermatolog y 1/3	Medicine / ICU 1/3	ENT 1/3	Urology / Radiology 1/3	EYE 1/3	Gynae/Ob s 1/3	Family Medicine 1/3	EYE 1/3	Anaesthes ia 1/3	Cardiac Surgery 1/3	ENT 1/3	Paeds 1/3
39-41	17 Jul 2025 - 06 Aug 2025	Gynae/Ob s	Family Medicine	EYE	Paeds Surgery	Cardiac Surgery	ENT	Paeds	Dermatolog y	Medicine / ICU	ENT	Urology	EYE
42 - 44	07 Aug 2025 - 26 Aug 2025	Paeds	Dermatolog y	Medicine / ICU	ENT	Urology	EYE	Gynae/Obs	Family Medicine	EYE	Paeds Surgery	Cardiac Surgery	ENT

4th Year MBBS Clinical Rotation Plan Session (2024-25)

WEEKS	DATES	Batch-A	Batch-B	Batch-C	Batch-D	Batch-E	Batch-F	Batch-G	Batch-H	Batch-J	Batch-K	Batch-L	Batch-M
45	27 Aug 2025 - 31 Aug 2025	Prep Leave for Pre-Annual / Send Up Exams											
46-47	01 Sep 2025 - 12 Sep 2025	Pre-Annual / Send Up Exams											
48	13 Sep 2025 - 21 Sep 2025	Prep Leave for Annual Exam											
	22-Sep-25	NUMS Annual Exam											



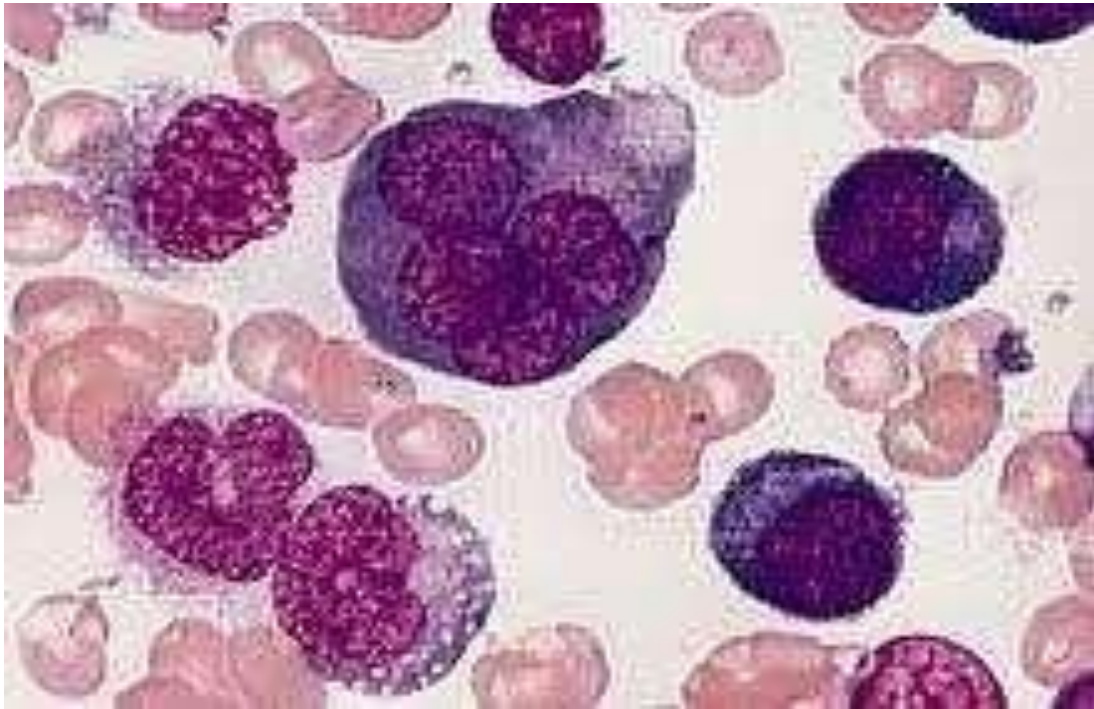
Yearly Curriculum Committee 4th Year MBBS 2024-25

Name	Department	Extension no	Designation
Prof. Dr. Ayub Ahmad	ENT	420	Convener 4 th year MBBS & Professor
Prof. Dr. Ashraf Chaudary	Community Medicine	455	Professor
Prof. Dr. Abdus Sattar	Pathology	480	Professor
Prof. Dr. Muhammad Siddque	Medicine	471	Professor
Prof. Dr. Imran Hameed Daula	General Surgery	450	Professor
Prof. Dr. Junaid Afsar	Eye	403	HOD & Associate Professor
Dr. Shazia Tufail	Gynae & Obs	365	Associate Professor
Dr. Spenta Kakalia	Pediatrics	360	Associate Professor
Dr. Khizar Ansar Malik	SHaPE	436	Assistant Professor
Student representation			CR, GR & MCR

CMH Lahore Medical College - Policies

- Attendance and disciplinary policy <https://cmhlahore.edu.pk/wp-content/uploads/2024/10/std-policy.pdf>
- Policy for Steering Committee for the Selection of Class Representatives (BR and GR) Based on Student Feedback <https://cmhlahore.edu.pk/wp-content/uploads/2025/01/Steering-committee.pdf>
- Social Media Policy for Faculty, Staff, and Students <https://cmhlahore.edu.pk/wp-content/uploads/2024/02/Social-Media-Policy-for-students-02-08-2023.pdf>
- Code of Conduct <https://cmhlahore.edu.pk/wp-content/uploads/2024/02/SOP-Code-of-Conduct-27-02-24.pdf>
- Internet Usage Policy <https://www.cmhlahore.edu.pk/wp-content/uploads/2023/09/CMH-Internet-Usage-Policy-02-08-2023.pdf>
- Healthcare Facility <https://www.cmhlahore.edu.pk/wp-content/uploads/2023/09/Health-Care-Facility.pdf>
- Complaint Cell <https://www.cmhlahore.edu.pk/wp-content/uploads/2023/09/Complaint-Cell-CMH-LMC-IOD.pdf>
- Retake Policy (For Internal Assessment Only) <https://www.cmhlahore.edu.pk/wp-content/uploads/2023/05/ion-Updated-Retake-Policy-2.pdf>
- Drug and tobacco abuse/smoking <https://www.cmhlahore.edu.pk/wp-content/uploads/2022/11/SOP-Drug-and-Tobacco.pdf>
- Sexual harassment <https://www.cmhlahore.edu.pk/wp-content/uploads/2022/11/Sexual-Hars-policy.pdf>
- Disciplinary Committee Policy <https://www.cmhlahore.edu.pk/wp-content/uploads/2022/11/Disciplinary-Committe-Policy.pdf>
- Co-curricular Activities <https://www.cmhlahore.edu.pk/wp-content/uploads/2022/11/Co-curricular-privacy-policy.pdf>
- Electives Policy <https://www.cmhlahore.edu.pk/wp-content/uploads/2022/11/electives-policy.pdf>
- CMH LMC Formative Assessment and Feedback Policy <https://www.cmhlahore.edu.pk/wp-content/uploads/2022/11/CMH-LMC-Formative-Assessment-and-Feedback-Policy.pdf>

SECTION-I
Special pathology



SPECIAL PATHOLOGY - BLOCK I

DURATION: 12 WEEKS

Theme	Learning Outcomes by the end of Block I, the students will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tools
Cardiovascular system	Correlate the morphology & pathogenesis of cardiac and blood vessel diseases with their etiology & complications Justify the importance of various biochemical markers in diagnosis of cardiovascular disorders	<ul style="list-style-type: none"> • Atherosclerosis • Hypertensive Vascular Disease • Aneurysm • Vasculitides • Ischemic Heart Disease • Cardiac Failure • Hypertensive Heart Disease • Rheumatic Fever and Rheumatic Heart Disease • Congenital Heart Disease • Cardiomyopathies • Pericardial Diseases • Tumors of CVS • Types of hypertension • Difference between atherosclerosis • Monckeberg's medial calcific sclerosis and Arteriosclerosis. • Tetralogy of fallot and Coarctation of aorta. • Mitral valve prolapse • Cardiac markers/enzymes • Lipid & Lipoproteins 	35%	LGIS, SGD, PBL	MCQs/SEQs / VIVA/ OSPE

SPECIAL PATHOLOGY - BLOCK I

DURATION: 12 WEEKS

Theme	Learning Outcomes by the end of Block I, the students will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tools
Respiratory System	Correlate the morphology & pathogenesis of respiratory disorders with their etiology & complications	<ul style="list-style-type: none"> • ARDS • COPD • Asthma & Bronchiectasis • Interstitial Lung Diseases • Pulmonary Vascular Disorders • Pneumonias • Granulomatous Diseases • Lung Cancer • Pleura • Pleural Effusion & Pneumothorax • Hydrothorax, Chylothorax, Haemothorax and Pleuritis. • Pulmonary eosinophilia • Good pasture syndrome and Pulmonary infarction 	30%	LGIS, SGD, PBL	MCQs/SEQs / VIVA/OSPE
	Justify the importance of various biochemical markers in diagnosis of metabolic and endocrine disorders	<ul style="list-style-type: none"> • Acid base disorders 			
Oral cavity and Gastrointestinal tract	Analyze the Non neoplastic and neoplastic lesions of salivary glands & oral cavity based on their etiology and pathogenesis, morphology & complications	<ul style="list-style-type: none"> • Inflammatory, neoplastic and non- neoplastic lesions of salivary glands • Tumor and Precancerous conditions of Oral cavity 	35%	LGIS, SGD, PBL	MCQs/SEQs / VIVA/OSPE

SPECIAL PATHOLOGY - BLOCK I

DURATION: 12 WEEKS

Theme	Learning Outcomes by the end of Block I, the students will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tools
	<p>Correlate the morphology (Microscopic and macroscopic) of gastrointestinal disorders* to their etiology and pathogenesis</p> <p>*Esophagus, Stomach, Small intestine and large intestine</p>	<ul style="list-style-type: none"> • Motor disorders of esophagus, varices, esophagitis & Barrett's esophagus • Tumors of Esophagus • Gastritis & Peptic ulcer Disease • Tumors of Stomach • Malabsorption & celiac disease • Inflammatory Bowel Disease • Enter colitis • Acute appendicitis • Malignant lesions of small & large intestine 		LGIS, SGD, PBL	MCQs/SEQs / VIVA/OSPE
Hepatobiliary system and Pancreas	<p>Correlate the morphology (Microscopic and macroscopic) of Hepatobiliary and pancreatic disorders to their etiology and pathogenesis</p>	<ul style="list-style-type: none"> • Hepatobiliary tract • Cirrhosis • Acute & Chronic hepatitis • Drug induced & toxic Liver Injury • Metabolic Liver disease • Liver abscess • Neonatal Hepatitis • Cholestatic diseases • Tumors of Liver • Gall bladder diseases 		LGIS, SGD, PBL	MCQs/SEQs / VIVA/OSPE
		<p>Pancreas</p> <ul style="list-style-type: none"> • Congenital anomalies • Pancreatitis • Neoplastic disorders of exocrine function of pancreas 			
	<p>Justify the importance of various biochemical markers in diagnosis of hepatic and pancreatic disorders</p>	<ul style="list-style-type: none"> • Liver function tests • Diagnosis of acute and chronic Hepatitis • Diagnosis of Acute Pancreatitis 			
Total			100		

PATHOLOGY - BLOCK I

CODE: Y4-B1

DURATION: 12 WEEKS

LEARNING OUTCOMES	List of Practical's
Establish diagnosis by correlating findings of given slides with given scenarios	Atherosclerosis
	Rheumatic carditis and Myocardial infarction
	Pulmonary tuberculosis and Bronchiectasis
	Lobar Pneumonia and Broncho Pneumonia
	Chronic Bronchitis and Bronchogenic carcinoma
	Chronic gastritis, Peptic ulcer
	Carcinoma stomach, Ulcerative colitis, Crohn's disease, TB intestines
	Cirrhosis, CA liver, Chronic Viral Hepatitis, Ch. Cholecystitis
	Rectal Polyps and Colorectal carcinoma
	Acute appendicitis, Typhoid, Malabsorption

PATHOLOGY - BLOCK II

DURATION: 12 WEEKS

Theme	Learning Outcomes By the end of Block II, the students will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tools
Urinary System	Correlate the morphology (Microscopic and macroscopic) of urinary disorders to their etiology and pathogenesis	<ul style="list-style-type: none"> • Glomerular Diseases • Tubulo Interstitial Diseases • Vascular disorders • Congenital & developmental anomalies • Cystic diseases of kidney • Obstructive Uropathy • Neoplasms of kidney • Congenital anomalies of ureter and urinary bladder • Neoplastic disorders of ureters and urinary bladder • Hydronephrosis • Acute and Chronic Tubular necrosis • Wilms tumor 	25%	LGIS, SGD, PBL	MCQs/SEQs/ VIVA/ OSPE
	Justify the importance of various biochemical markers in diagnosis of renal disorders	<ul style="list-style-type: none"> • Fluid and electrolyte disorders • Renal Function tests • Proteinuria and nephrotic/ nephritic syndrome 			
Male genital system	Correlate the morphology (Microscopic and macroscopic) of male genital disorders to their etiology and pathogenesis	<ul style="list-style-type: none"> • Congenital anomalies of penis • Congenital anomalies of testis • Testicular tumors • Prostatic hyperplasia and carcinoma • Inflammatory disorders • Cystitis • Urethritis, Gonococcal and non-gonococcal infections • Sexually transmitted disease(STD) 	15 %	LGIS, SGD, PBL	MCQs/ SEQs/VIVA/ OSPE
	Justify the importance of biochemical markers in diagnosis of prostatic cancer	<ul style="list-style-type: none"> • PSA 			

PATHOLOGY - BLOCK II

DURATION: 12 WEEKS

Theme	Learning Outcomes By the end of Block II, the students will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tools
Female genital system	Correlate the morphology (Microscopic and macroscopic) of female genital tract disorders to their etiology and pathogenesis	<ul style="list-style-type: none"> • Vulva • Vagina • Cervix • Endometrium & Myometrium • Fallopian tubes • Ovaries • Gestational and placental disorders • Infertility 	25%	LGIS, SGD, PBL	MCQs/ SEQs/VIVA/ OSPE
Diseases of Breast	Correlate the morphology (Microscopic and macroscopic) of Breast pathology to their etiology and pathogenesis	<ul style="list-style-type: none"> • Benign epithelial lesions • Carcinoma breast • Stromal Tumors 	10%	LGIS, SGD, PBL	MCQs/ SEQs/VIVA/ OSPE
	Justify the importance of biochemical markers in diagnosis of breast cancer	<ul style="list-style-type: none"> • Breast tumor markers 			
The Skin	Correlate the morphology (Microscopic and macroscopic) of epidermal and dermal disorders to their etiology and pathogenesis	<ul style="list-style-type: none"> • Disorders of Pigmentation & Melanocytes • Benign Epithelial tumors • Pre malignant & malignant epidermal tumors • Tumors of the dermis • Chronic inflammatory dermatosis • Blistering diseases • Disorders of Epidermal appendages • Dermatitis 	10%	LGIS, SGD, PBL	MCQs/ SEQs/VIVA/ OSPE
Bones, Joints and Soft Tissue	Correlate the morphology (Microscopic and macroscopic) of bone, joints and soft tissue disorders to their etiology and pathogenesis	<ul style="list-style-type: none"> • Defects in metabolic pathways of Bone development • Acquired disorders of bone & cartilage • Fractures of Bone • Osteomyelitis • Bone tumors & tumor like lesions • Joints 	15%	LGIS, SGD, PBL	MCQs/ SEQs/VIVA/ OSPE

PATHOLOGY - BLOCK II

DURATION: 12 WEEKS

Theme	Learning Outcomes By the end of Block II, the students will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tools
		<ul style="list-style-type: none"> • Osteoporosis • Immune mediated arthritis • Crystal deposition disease • Soft Tissues • Tumors of Adipose tissue • Fibrous tumors • Skeletal muscle tumors • Smooth muscle tumors • Tumors of uncertain origin 			
	Justify the importance of biochemical markers in diagnosis of certain metabolic disorders	<ul style="list-style-type: none"> • Uric acid and Gout 			

PATHOLOGY - BLOCK II (Practicals)

Establish diagnosis by correlating findings of given slides with given scenarios	<ul style="list-style-type: none"> • Chronic pyelonephritis, renal stones, Wilm's tumor • Renal cell carcinoma • Transitional cell carcinoma- Bladder • Benign prostatic hyperplasia • Prostate carcinoma • Seminoma Testis • Leiomyoma • Cystadenoma (Serous and Mucinous) • CA Cervix, Endometrial Carcinoma • Mature Cystic Teratoma, Ovarian Tumors, Endometriosis • Fibroadenoma • Invasive ductal carcinoma breast • Fibrocystic disease
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PATHOLOGY - BLOCK III

DURATION: 12 WEEKS

Theme	Learning Outcomes by the end of Block III, the students will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tools
The Endocrine System	Correlate the microscopic structure and physiology of endocrine gland disorders with their etiology and pathogenesis Justify the importance of various biochemical markers in diagnosis of different endocrine disorders	<ul style="list-style-type: none"> • Pituitary Gland • Thyroid gland • Parathyroid gland • Pancreas (endocrine part) • Adrenal gland • Adrenal cortex • Adrenal medulla • Diabetes Mellitus • Pituitary Function test • Thyroid function test • Adrenal function test • Parathyroid gland disorders • Biochemical diagnosis of infertility 	25%	LGIS, SGD, PBL	MCQs/SEQs/VI VA/ OSPE
Central Nervous & Peripheral nervous system (Neuromuscular junction, skeletal muscle disorders and special sense of vision)	Correlate the morphology (Microscopic and macroscopic) of central and peripheral nervous system disorders* to their etiology and pathogenesis * Neuromuscular junction, skeletal muscle disorders and special sense of vision	<ul style="list-style-type: none"> • Disease of Neuromuscular junction • Diseases of Skeletal muscle • Peripheral nerve sheath tumors • Malformations and developmental disorders • Traumatic injury • Cerebro vascular disease • Infections • Prion diseases • Demyelinating Diseases • Neuro degenerative diseases • CNS tumors • Retinal neoplasms • Guillain Barre syndrome and 	20%	LGIS, SGD, PBL	MCQs/SEQs/VI VA/ OSPE
		Inflammatory myopathies <ul style="list-style-type: none"> • Metastatic tumors 			

PATHOLOGY - BLOCK III

DURATION: 12 WEEKS

Theme	Learning Outcomes by the end of Block III, the students will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tools
Haematology					
Diseases of Lymph nodes, Spleen & thymus	<ul style="list-style-type: none"> Differentiate between Hodgkin's and non-Hodgkin's lymphoma on the basis of etiology, morphology & pathogenesis Compare various types of thymomas on the basis of their morphology Justify the importance of biochemical markers in diagnosis of various hematological disorders 	<ul style="list-style-type: none"> Hodgkin's lymphoma Non-Hodgkin's lymphoma Diseases of Thymus Multiple Myeloma Plasma Proteins 	10%	LGIS, SGD, PBL LGIS, SGD, PBL	MCQs/SEQs/VI VA/ OSPE
Red blood cells and bleeding disorders	<ul style="list-style-type: none"> Interpret the lab reports of patient with Red cell & coagulation disorders based on pathophysiology of disease Analyze the hazards of blood transfusion Appraise the rejection reactions associated with bone marrow transplantation 	<ul style="list-style-type: none"> Anemias Autoimmune, hemolytic anemia Hemolytic anemia (HS, G6PD, SCD) Thalassemia syndromes Coagulation disorders (hemophilia, VWD) Blood transfusion, RH incompatibility Bone marrow transplantation Transplantation rejection 	15%	LGIS, SGD, PBL	MCQs/SEQs/VI VA/ OSPE

PATHOLOGY - BLOCK III

DURATION: 12 WEEKS

Theme	Learning Outcomes by the end of Block III, the students will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tools
Diseases of White blood cells	<ul style="list-style-type: none"> Interpret the lab reports of patient with white cell disorders based on pathophysiology of disease 	<ul style="list-style-type: none"> Non-neoplastic white cells disorders (infections, inflammation) Overview and classification of neoplastic proliferation of WBCs Differentiation between Infective and Malignant causes of leukocytosis with special reference to Infectious mononucleosis Acute and chronic non-specific lymphadenitis. 	15%	LGIS, SGD, PBL	MCQs/SEQs/VI VA/ OSPE
Diseases of Platelets	<ul style="list-style-type: none"> Interpret the lab reports of patient with platelets disorders based on pathophysiology of disease 	<ul style="list-style-type: none"> Bleeding diathesis platelet disorders DIC, Thrombotic Thrombocytopenic purpura, HUS Myeloproliferative disorders Myelodysplastic syndrome 	15%	LGIS, SGD, PBL	MCQs/SEQs/VI VA/ OSPE

PATHOLOGY - BLOCK III (Practicals)

Learning Outcomes	List of Practical's
Establish diagnosis by correlating findings of given slides with given scenarios	<ul style="list-style-type: none"> Multinodular goiter Follicular Adenoma Papillary Carcinoma thyroid Spectrophotometer Pleomorphic adenoma Salivary Gland Giant cell tumor, Osteosarcoma Leishman Stain Reticulocyte count RBCs disorders WBCs disorders Blood grouping Multiple Myeloma Hodgkin's lymphoma and Non-Hodgkin's lymphoma Tuberculous lymphadenitis

SECTION - II
Community medicine & public health



BLOCK-I (12 weeks)
Epidemiological perspective of Health and Disease

Theme	Learning Outcomes	Course Content	% Weightage	Instructional Strategies	Assessment Tools
Medical Ethics	<ul style="list-style-type: none"> At the end of contact session, learner should be able to: Relate ethical issues and dilemmas with medical teaching and service delivery in a given scenario Maintain confidentiality Practice non- maleficence Maintain Doctor- patient relationship/autonomy 	<ul style="list-style-type: none"> Importance of Medical Ethics Principles of Medical Ethics Violations to Medical Ethics in Pakistan How to overcome these violations 	3%	<ul style="list-style-type: none"> Lectures CBL 	<ul style="list-style-type: none"> MCQ SAQ/SEQ Structured viva
General epidemiology	<ul style="list-style-type: none"> Describe different research designs used to collect, analyze and interpret results from epidemiological studies Apply concepts & aims of Epidemiology to clinical medicine Calculate and interpret epidemiological rates ratios and proportions for morbidity/mortality 	<ul style="list-style-type: none"> Aims of Epidemiology and their application to clinical medicine Predicting disease patterns according to concepts of epidemiological transition and polarization Calculation and interpretation of epidemiological rates and ratios for morbidity/mortality, fertility and migration statistics Epidemiological methods (descriptive, analytical and experimental) Classification of different study designs in epidemiology. Calculating, analyzing and interpreting their results. Merits & demerits of studies and differentiate them Types of Bias and the techniques for its Community Diagnosis minimization in different study designs Epidemiological Transition; Association and causation 	25%	<ul style="list-style-type: none"> Lectures CBL 	<ul style="list-style-type: none"> MCQ SAQ/SEQ Structured viva

BLOCK-I (12 weeks)
Epidemiological perspective of Health and Disease

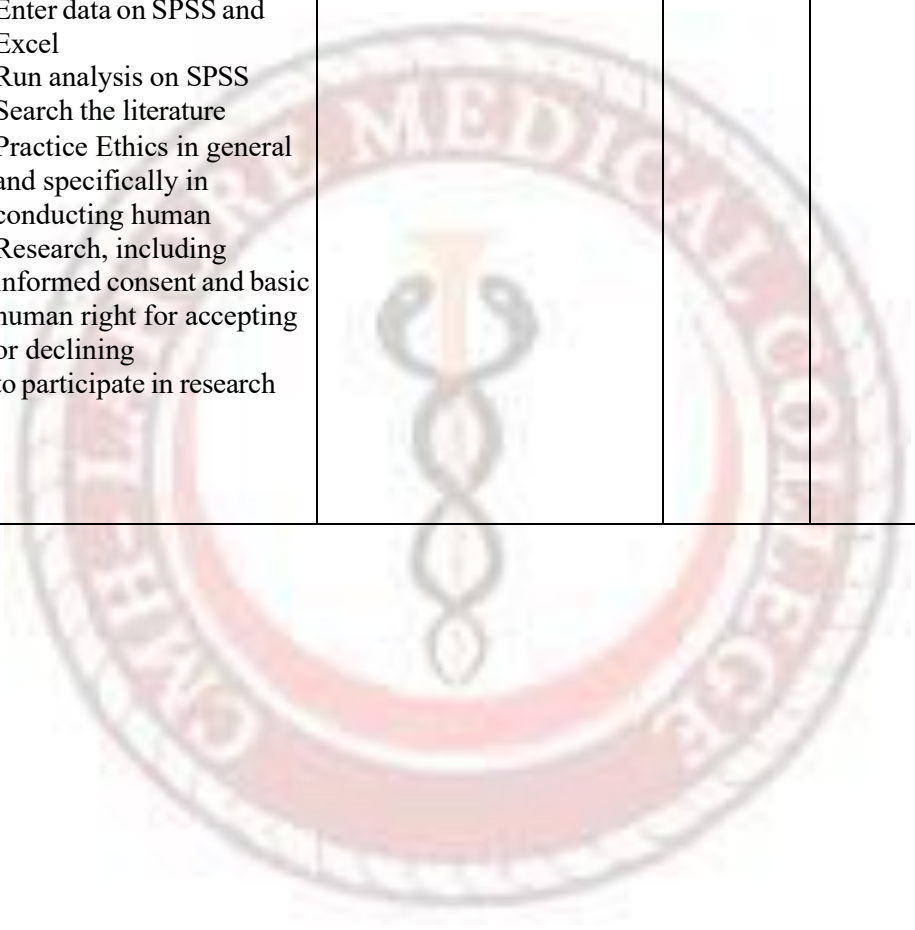
Theme	Learning Outcomes	Course Content	% Weightage	Instructional Strategies	Assessment Tools
<ul style="list-style-type: none"> • Biostatistics 	<ul style="list-style-type: none"> • Identify various types of data, concept and uses. • Differentiate measures of central tendency (Mean, Median, and Mode) and dispersion (Range, Standard deviation, and Standard error). • Interpret the normal distribution curve, skewed distribution, bi and poly-modal distribution & Standard Normal Curve • Classify and explain various sampling techniques • Differentiate between null and alternate hypothesis, recall steps of its testing and indicate probable errors • Interpret p-value • Plan & present a research project • Use relevant statistical program and computer for data entry and analysis • Conduct health situation survey/house-hold survey • Demonstrate the sampling technique 	<ul style="list-style-type: none"> • Data, its various types and its classification, presentation (table, graphs and diagrams), analysis and interpretation • Interpretation of data (t-test, Chi-square Test) • Methods of data presentation (table, graphs, and diagrams) • Central tendency and dispersion of data set • Various distributions of data • Sampling and its various techniques • Normal distribution curve, skewed distribution, Standard Normal Curve • Statistical analysis (concept and application) • Null and alternate hypothesis, and recalling steps of its testing and indicate probable errors • Sample size • p-value 	<p>25%</p>	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva

BLOCK-I (12 weeks)
Epidemiological perspective of Health and Disease

Theme	Learning Outcomes	Course Content	% Weightage	Instructional Strategies	Assessment Tools
Concept of Health and Disease	<ul style="list-style-type: none"> • Summarize health's determinants and indicators. • Choose the most sensitive indicators by citing different examples • Illustrate and describe theories of disease causation • Relate the concept of natural history of disease and iceberg phenomena and relate it with • Differentiate between disease control, elimination & eradication • Interpret levels of prevention and intervention measures, with applied examples. 	<ul style="list-style-type: none"> • Definition of health, • Dimensions and determinants of health • Spectrum of health. • Indicators of Health. • Responsibility for health. • Concept disease causation (all theories including ecological triad, (agent, host & environmental factors). • Spectrum of disease. • Iceberg phenomenon. • Natural history of disease. • Levels of prevention. 	7%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva
Research methodology	<ul style="list-style-type: none"> • Apply basic biostatistics and epidemiological techniques to research community health projects • Draw conclusions from data • Prepare and present research report • Develop tool for data collection • Estimating the sample size • Apply ethical principles to resolve issues of service delivery in a given research • Formulate the research hypothesis/ research 	<ul style="list-style-type: none"> • Introduction to Quantitative and Qualitative Research Methodology • Selection of research question according to WHO criteria. • How to write Title and Introduction, conduct literature review, compose study objective and select appropriate research methods including study variables and analysis plan. • Data entry and analysis using SPSS package. • Drafting a research 	5%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva

BLOCK-I (12 weeks)
Epidemiological perspective of Health and Disease

Theme	Learning Outcomes	Course Content	% Weightage	Instructional Strategies	Assessment Tools
	<ul style="list-style-type: none"> • Question/ research objectives • Write references according to Vancouver style • Formulate a research hypothesis • Collect Sample from field • Enter data on SPSS and Excel • Run analysis on SPSS • Search the literature • Practice Ethics in general and specifically in conducting human Research, including informed consent and basic human right for accepting or declining • to participate in research 	<ul style="list-style-type: none"> • article according to standardized scientific method. • Ethics in research 			



BLOCK-I (12 weeks)
Epidemiological perspective of Health and Disease

Theme	Learning Outcomes	Course Content	% Weightage	Instructional Strategies	Assessment Tools
Infectious disease epidemiology (General)	<ul style="list-style-type: none"> • Interpret various terms used to describe infectious diseases and relate levels of prevention and intervention measures, with applied examples. • Identify and interpret various types of epidemics from the focus of disease spread and control • Illustrate graphically and relate the natural history and progression of an epidemic type to stages of prevention • Comprehend the objectives & logic in steps of investigating an epidemic • Assess the level of care at primary, secondary and tertiary level as 	<ul style="list-style-type: none"> • Infection, Contamination, Infestation, Pollution, • Infectious disease, Contagious disease, Communicable disease, Host, Immune and Susceptible persons, • Sporadic, Endemic, Epidemic, Pandemic, Exotic, Epizootic, Enzootic, • Zoonosis, Nosocomial infection, opportunistic infection, Iatrogenic (physician-induced) infections, • isolation, quarantine, disinfections • Surveillance, Eradication, Elimination • Dynamics of infections; disease transmission • Interruption of disease transmission • Reservoir and source of infection, escape of organism, modes of 	13%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva

BLOCK-I (12 weeks)
Epidemiological perspective of Health and Disease

Theme	Learning Outcomes	Course Content	% Weightage	Instructional Strategies	Assessment Tools
	<ul style="list-style-type: none"> • Applied in real-life setting. • Recommend disease control measures • Communicate effectively regarding preventive measures • Identify and suggest various methods of sterilization and disinfection in given situations. 	<ul style="list-style-type: none"> • transmission, entry into the body, susceptible host. • Controlling the reservoir notification, early diagnosis and treatment • Carrier state and its types (Incubatory, convalescent, healthy) • Incubation period, latent period and generation time. • Epidemic and its types, investigation of an outbreak or an epidemic • Sterilization & disinfection Sterilization and disinfection methods and recommendations on identifying gaps • National case management guidelines 			
General Immunology	<ul style="list-style-type: none"> • Define and explain immunology & its components • Describe pre-requisites of vaccination including cold chain, hazards, contra-indications & precautions • Justify the use of different types of vaccines in different scenarios 	<ul style="list-style-type: none"> • Immunizing agents • The susceptible host; (active and passive immunization, chemoprophylaxis) • EPI schedule • Herd immunity • Cold chain • Adverse effects following immunization and its investigation 	5%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva

BLOCK-I (12 weeks)
Epidemiological perspective of Health and Disease

Theme	Learning Outcomes	Course Content	% Weightage	Instructional Strategies	Assessment Tools
	<ul style="list-style-type: none"> • Define EPI and explain its component vaccines • Plan a vaccination schedule according to given scenario applying current protocols/evidence-based • Follow the protocol for cold chain • maintenance for different vaccines • Keep records for vaccination protocol • Administer polio vaccine • Check BCG scar • Advise mothers for vaccination in different situations 				
Screening for disease	<ul style="list-style-type: none"> • Comprehend Concept and importance of screening • Describe qualities of a good screening test • Apply knowledge for making smart choices • Discover relationship between screening and prevalence of disease • Comprehend effects of changing sensitivity and specificity on usefulness of screening • Understand and calculate accuracy of a screening test • Identify and correlate favorable characteristics of a disease that make screening useful and relevant for the disease • Identify different misinterpretations/ errors in the screening programs • Comprehend ethical concerns in carrying out screening programs 	<ul style="list-style-type: none"> • Concept and importance of screening • Qualities of a good screening test • Relationship between screening and prevalence of disease • Effects of changing sensitivity and specificity on usefulness of screening • Accuracy of a screening test • Favorable characteristics of a disease that make screening useful and relevant for the disease • Different misinterpretations/ errors in the screening programs • Comprehend ethical concerns in carrying out screening programs 	7%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva

BLOCK-I (12 weeks)
Epidemiological perspective of Health and Disease

Theme	Learning Outcomes	Course Content	% Weightage	Instructional Strategies	Assessment Tools
Primary Health Care, Leadership, SDGs International health (partners in health),	<ul style="list-style-type: none"> • Comprehend the changing concept of health • Categorize health problems based on criteria of susceptibility to control • Explain the concept of 'Health for All,' Principles of Primary Health care and relate its components/elements • Describe the Sustainable Development Goals (SDGs) and relate to national programs and developmental outcomes • Describe the concept of leadership and motivation and identify the role of leadership in PHC • Differentiate between comprehensive and selective PHC • Describe current comprehensive and selective primary healthcare programs and apply principles of leadership to identify gaps and recommend reforms • Identify and describe gaps in implementation of PHC • Assess the adequacy of level of healthcare at a given facility 	<ul style="list-style-type: none"> • Development of Public Health in Pakistan. • "Health for All", background, concepts and progress • "Primary Health Care": Concepts and progress. • Leadership in health • Sustainable Development Goals (SDGs 2030) • Rural and Urban Health 	13%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva

BLOCK-I (12 weeks)
Epidemiological perspective of Health and Disease

Theme	Learning Outcomes	Course Content	% Weightage	Instructional Strategies	Assessment Tools
HMIS	<ul style="list-style-type: none"> • Identify existing sources of health related statistics in Pakistan, Census and its types • Collection and Registration of vital events in Pakistan. • Sources of health- related statistics • Comprehend different stages of planning such as: situational analysis, establishment of objectives and goals, assessment of resources, fixing priorities, outlining, programming and implementation, monitoring and evaluation • Interpret questionnaire for service assessment/ health benefits • Comprehend the rationale of devolution of power and the problems of health care system in Pakistan 	<ul style="list-style-type: none"> • Characteristics elements, components, and uses of HMIS • Reason for failure of HMIS in Pakistan • Suggestions to improve HMIS in Pakistan 	2%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva

BLOCK-I (12 weeks)
Epidemiological perspective of Health and Disease

Theme	Learning Outcomes	Course Content	% Weightage	Instructional Strategies	Assessment Tools
	<ul style="list-style-type: none"> • Identify current gaps post 18th Amendment and role of tertiary-care facilities in delivering healthcare at all levels • Collect relevant data • Learn to manage data as part of • health information system (HMIS) • Evaluate adequacy of Health System (THQ) using checklist • Communicate effectively the themes of various international days to individuals in hospitals and communities • Prepare and disseminate health information related to specific recognized dates of public health importance • Plan a • seminar/symposium, invite interdisciplinary guest-speakers for specific days of public health importance 				
End Block Assessment to be taken by concerned institute itself Assessment tools: MCQs & SAQs/SEQs			100		

COMMUNITY MEDICINE - BLOCK II
(Communicable Diseases Prevention and Behavioral Modification)

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	%	Instructional Strategies	Assessment tool
Emerging & re-emerging infections/Hospital acquired infections Hospital waste management	<ul style="list-style-type: none"> • Differentiate between emerging and re-emerging disease • Identify the causes and control of this emergence • Acquaintance with nosocomial infections, factors causing it and control measures • Comprehend the role of Hospital waste management in infectious disease control and select appropriate method. • Communicate effectively regarding preventive measures 		10%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva
Personal hygiene, Unsafe injections	<ul style="list-style-type: none"> • Comprehend the concept of personal hygiene. • Define unsafe injections practices and suggest relevant control measures • Educate community regarding unsafe injections practices and related hazards 		5%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva
Travel medicine	<ul style="list-style-type: none"> • Interpret the common health problems of travelers • Advice the travelers to prevent the travel related problems 		1%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva

COMMUNITY MEDICINE - BLOCK II
(Communicable Diseases Prevention and Behavioral Modification)

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	%	Instructional Strategies	Assessment tool
Communicable diseases Prevention and Control	<ul style="list-style-type: none"> • Comprehend modes of disease transmission, • interaction of agent host and environment in the pre & pathogenesis phases • Relate the natural history of disease in regards to incubation period, lab diagnosis and preventive measures • Suggest strategies for disease control and prevention for every specific disease and in different situations • Compare and contrast the clinical 	<ul style="list-style-type: none"> • Common endemic communicable diseases (diagnosis and management); Dengue, Malaria, Tuberculosis, Typhoid (Droplet, Gastrointestinal, Zoonotic, Arthropod borne, Zoonotic, Contact infections) • Reproductive tract infections, guideline for management of STIs. • Parasitology Entomology 	45 %	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva
	<ul style="list-style-type: none"> • Presentations of specific diseases • Relate occupations with various diseases • Manage cases and determine need to refer • Classify arthropods of medical importance and relate their role in disease transmission • Recommend control measures for arthropods • Relate environment with specific vector breeding • Differentiate between terms used in medical Parasitology • Explain mode of transmission and recommend prevention and control 				

COMMUNITY MEDICINE - BLOCK II
(Communicable Diseases Prevention and Behavioral Modification)

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	%	Instructional Strategies	Assessment tool
	<p>measures for parasites of medical importance</p> <ul style="list-style-type: none"> • Motivate people at risk for adopting primary preventive measures • Advise about preventive measures to control spread of infections • Practice personal protective measures when at risk • Prepare, administer and transfer the skills for homemade/prepared ORS according to protocol • Evaluate degree of dehydration on the basis of history and clinical examination using algorithm/standards • Motivate people at risk for adopting primary preventive measures • Advise about preventive measures to control spread of infections • Practice personal protective measures when at risk • Prepare, administer and transfer the skills for homemade/prepared ORS according to protocol • Evaluate degree of dehydration on the basis of history and clinical examination using algorithm/standards 				

COMMUNITY MEDICINE - BLOCK II
(Communicable Diseases Prevention and Behavioral Modification)

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	%	Instructional Strategies	Assessment tool
Medical Sociology and Prevention of Mental and psychological illnesses	<ul style="list-style-type: none"> • Relate sociology, social sciences, epidemiology and clinical sciences • Relate the social evils of the society such as prostitution, delinquency, religious differences and food adulteration with individual and public health • Relate the social structure of a hospital with doctor-patient & doctor-nurse relationship • Recommend solutions based on the application of bio-psycho-social model and theories of social behavior to prevent/decrease social deviances and evils • Conduct interview in any setting, using the correct technique. • Practice ethical communication methods 	<ul style="list-style-type: none"> • Definition & concepts in Sociology • Scope of Psychology (behavior, emotions, attitudes, learning, habits, personality, intelligence) • Social psychology (family, community, hospital sociology, social organization) • Social problems (prostitution, delinquency, dowry system, drug addiction) • Community services • Economics • Juvenile delinquency. 	12%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva

COMMUNITY MEDICINE - BLOCK II
(Communicable Diseases Prevention and Behavioral Modification)

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	%	Instructional Strategies	Assessment tool
	<ul style="list-style-type: none"> • Define and categorize mental health • Recognize characteristics of a mentally healthy person and warning signals of poor mental health • Identify common mental health problems (as pertains to symptomatic psycho-social aspects) of public health importance in Pakistan and relate their risk factors/causes • Recommend preventive measures against mental health problems according to given scenario • Enlist WHO criteria and recommendations to improve mental health in countries • Communicate effectively and ethically with individuals regarding mental health issues • Identify clinically the warning signs and symptoms of mental health ; refer at appropriate time to 	<ul style="list-style-type: none"> • Concept of mental health • Characteristics of mentally healthy persons. • Warning signals of poor mental health. • Common mental health problems, their causes, prevention and control. 	1%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva
	<ul style="list-style-type: none"> • relevant health professional(s) 				

	<ul style="list-style-type: none"> • Define and comprehend magnitude of drug abuse in Pakistan • Relate factors and populations associated with high risk for drug abuse • Differentiate the symptoms of different drug-related addictions • Describe first-aid measures for different drug-related emergency health situations in a given scenario • Apply three levels of prevention to decrease drug abuse in the country • Comprehend magnitude of tobacco smoking globally as well as in Pakistan • Describe hazards associated with tobacco smoking • Recommend measures to control tobacco smoking in the country at all levels • Formulate behavior modification plan for patient(s) to quit smoking in hospital settings • Communicate effectively with individuals having addictions • Educate and motivate individuals at-risk how to avoid and modify risk behaviors and seek professional help 	<ul style="list-style-type: none"> • Concept regarding attitudes, health and illness behavior. • Drug abuse, addiction, dependence and their signs/symptoms, effects of toxicity • Smoking: causes, risk factors, health impact • Control of drug use and smoking according to three levels of prevention 	6%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva
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COMMUNITY MEDICINE - BLOCK II
(Communicable Diseases Prevention and Behavioral Modification)

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	%	Instructional Strategies	Assessment tool
	<ul style="list-style-type: none"> ● Educate parents on the sign and symptoms of drug abuse/addiction and when to seek professional help ● Educate and motivate individuals at risk to avoid and modify risk behaviors and seek professional help to quit smoking ● Educate parents on signs and symptoms of smoking addiction and when to seek professional help 				



COMMUNITY MEDICINE - BLOCK II
(Communicable Diseases Prevention and Behavioral Modification)

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	%	Instructional Strategies	Assessment tool
Health Education	<ul style="list-style-type: none"> • Define health education and describe its phases • Choose suitable method of health education for certain audiences • Recognize scope, stages approaches, principles and functions of health education • Identify and overcome barriers of health education and outline an ideal communication process for a given situation • Compose a health education message in given situation • Prepare a plan for health education intervention programs for different types of audience in a given scenario <ul style="list-style-type: none"> ○ Educate various groups effectively ○ Use Role play as an educational and interventional tool 	<ul style="list-style-type: none"> • Concept, aims and objectives of health education • Approaches used in public health. • Contents, principles and stages of health education. • Communication methods, barriers, skills and channel of communication in health education. • Planning, organizing and evaluating a health education programs. 	20%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva
	<ul style="list-style-type: none"> • Advise paramedics and other auxiliary healthcare staff about infection control • To participate in health awareness campaigns pertaining to nationally and internationally recognized days for global public health and population issues 				

COMMUNITY MEDICINE - BLOCK II (Communicable Diseases Prevention and Behavioral Modification)					
Duration: 12 weeks					
Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	%	Instructional Strategies	Assessment tool
End Block Assessment to be taken by concerned institute itself Assessment tools: MCQs & SAQs/SEQs			100		

COMMUNITY MEDICINE - BLOCK III Environment and Health Planning					
Duration: 12 weeks					
Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tool
<ul style="list-style-type: none"> Demography, Family Planning 	<ul style="list-style-type: none"> Relate fertility and population growth to epidemiological and demographic principles Interpret pyramids of different countries, correlate demographic structure with population change and predict demographic trends Relate population forces to the delivery of different services Select Family planning methods according to the situations Extrapolate the need for population control Interpret/distinguish Demographic, fertility and epidemiological transition Explain Demographic trap Calculate demographic equation and indicators Outline strategies in health & social sectors applying multi- disciplinary approach and demographic principles Motivate women & men 	<ul style="list-style-type: none"> Demographic principles and demographic processes. Basic demographic equation, arithmetic and geometric progression methods Population dynamics (mortality, fertility, migrations) Sex ratio, dependency ratio. Determinants of fertility, fertility related statistics, fertility trends. Population pyramid and its interpretation. Demographic transition, demographic trap and its public health importance. Demographic and social implications of high population growth. 	10%	<ul style="list-style-type: none"> Lectures CBL 	<ul style="list-style-type: none"> MCQ SAQ/SEQ Structured viva

COMMUNITY MEDICINE - BLOCK III

Environment and Health Planning

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tool
	(inclusive approach) regarding family	<ul style="list-style-type: none"> • Census definition, methodology and its types • Social mobilization. • Urbanization. • Family planning 			
	<ul style="list-style-type: none"> • planning approach and methods • Communicate effectively • Counsel patients on various contraceptive tools and methods 				
MCH (Reproductive Health, Preventive Pediatrics, Geriatrics)	<ul style="list-style-type: none"> • Define and comprehend the rationale of Reproductive health. • Infer the logic behind application of different preventive measures in various phases of life to improve the Maternal Health • Appreciate the relationship between the Maternal Health status and the outcome of pregnancy • Determine the factors that contribute to increase MMR • Develop interventions to control MMR • Define infant mortality • Determine the factors which predispose to high infant mortality • Formulate interventions to prevent infant mortality in different situations 	<ul style="list-style-type: none"> • Safe motherhood and its pillars, antenatal, intra-natal care, post-natal care, family planning and emergency obstetric care. • MCH problems, delivering MCH services, indicators of MCH care • Maternal mortality causes and prevention. • Infant care, neonatal examination of infants at risk, growth and development (growth chart), feeding of infant (breast and artificial). • Common causes of morbidity and mortality, their prevention and 	18%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva

COMMUNITY MEDICINE - BLOCK III

Environment and Health Planning

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tool
	<ul style="list-style-type: none"> • Recognize and compute different indicators which can be used for maternal and child health care and services • Describe the advantages and disadvantages of different types of feeding practices • Determine the conditions of concern prevailing in the mother during breast feeding • Define geriatrics, describe problems and diseases of the old age • Identify risk behavior in old age people • Suggest preventive measures at different levels of prevention and in different scenarios • Formulate and suggest preventive measures for cancers of reproductive tract in individuals and populations at-risk • Create awareness among women regarding antenatal visits and postnatal follow-up • Perform antenatal checkups of women. • Educate the mothers about technique of breast feeding and to advice to Tuberculous mother about lactation • Educate mothers about the 	<p>control.</p> <ul style="list-style-type: none"> • Child care and under five clinics, Health promotion strategies. • Common ailments, home accidents, child mortality and prevention. • Strategic approaches of integrated management of childhood illness (IMCI) • Adolescent health. • Reproductive tract cancers of men & women. Adolescent health. 			

COMMUNITY MEDICINE - BLOCK III

Environment and Health Planning

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tool
	<p>steps of weaning</p> <ul style="list-style-type: none"> • Educate mothers regarding EPI • Prepare home-made ORS • Advise pregnant women on Nutritional and immunization needs • Counsel women who give bottle feeding to their children • Weigh the baby and measure the height of children • Assess degree of dehydration • Motivate women to vaccinate their babies on national immunization days • Plot and interpret growth chart • Educate Traditional Birth Attendant for clean and safe delivery at First Level Care Facility • Educate the individuals how to cope with different problems and diseases of old age 				

COMMUNITY MEDICINE - BLOCK III

Environment and Health Planning

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tool
School and Dental Health Service	<ul style="list-style-type: none"> • Define School health Services and recall objectives of school health • Identify the duties of school medical officer, functions of SHS and role of teacher • Identify and interrelate the common health problems of school children • Identify the deficient health services and physical environment in schools using standardized checklist • Interpret the components of school health 	<ul style="list-style-type: none"> • Common health problems of school children including physically challenged • Role of teachers and role of doctors in maintenance of health. • Procedures for determining health status of school age children. • Handicapped children. • Healthful school environment and hostels. 	3%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva

COMMUNITY MEDICINE - BLOCK III

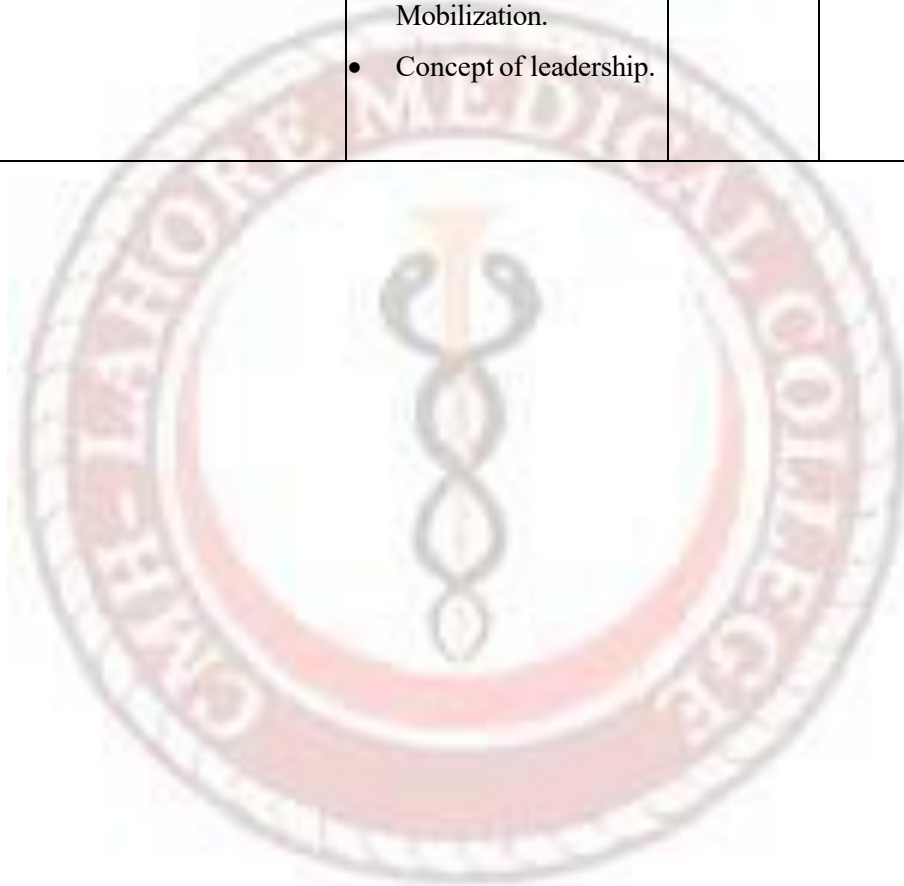
Environment and Health Planning

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tool
Current Health Programs in Pakistan:	Interpret the concepts of international days celebrations	<ul style="list-style-type: none"> • Expanded Programs on immunization (EPI). • Prime Minister Programs for Prevention and Control of Hepatitis • Rollback- Malaria Programs • National Programs for Family Planning and Primary Health Care. “The lady workers Programs” • Enhanced HIV/AIDS Control Programs. • National Tuberculosis Control Programs • Improvement of Nutrition through Primary Health Care and nutritional education and public awareness. • National Programs for prevention and control of Avian and Pandemic influenza. • Maternal Neonatal and Child Health care Programs (MNCH). • National Programs for Prevention and Control of Blindness 	3%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva

COMMUNITY MEDICINE - BLOCK III**Environment and Health Planning****Duration: 12 weeks**

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tool
Partners in Health	List various health agencies and describe composition and relate functions of different International Health agencies WHO, USAID, UNICEF, UNFPA to national and international care	<ul style="list-style-type: none">• The public and private sector• Non-governmental Organizations and International agencies.• Community Mobilization.• Concept of leadership.	2%	<ul style="list-style-type: none">• Lectures• CBL	<ul style="list-style-type: none">• MCQ• SAQ/SEQ• Structured viva



COMMUNITY MEDICINE - BLOCK III

Environment and Health Planning

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tool
Health System in Pakistan, Health planning and management	<ul style="list-style-type: none"> • Health policy and planning in Pakistan • The National disease control programs; policies, strategies and operations • Health System in Pakistan; the role of federal and provincial Governments in health care • Health planning; planning cycle • Planning-programming-budgeting system • Management and administration • Management methods and techniques • Physician as a manager; functions of manager, management of material, human and financial resources • Define health care and health care system • Distinguish various levels of health care • Identify deficiencies in different health-care facilities 	<ul style="list-style-type: none"> • Various levels of health care • National health vision • The District Health System, in the context of devolution. 	<p align="center">3%</p>	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva

COMMUNITY MEDICINE - BLOCK III**Environment and Health Planning****Duration: 12 weeks**

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tool
	<ul style="list-style-type: none">• Differentiate different sectors of health system and functioning• Describe and relate the referral mechanism to various levels of health care facility• Describe medical team• Identify the causes of failure of adequate health-care delivery in Pakistan and give recommendations for improvement based on scenario				



COMMUNITY MEDICINE - BLOCK III

Environment and Health Planning

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tool
Environmental Health	<ul style="list-style-type: none"> • Relate the bio-psycho- social model with different types of environment • Relate the current environmental indicators to legislative guidelines and apply them for sustainable protection of environment in national, regional and global perspectives. • Outline modifications for specific environments to prevent and control diseases • Relate role of environment to hospital infections • Relate physical hazards to various occupations or climatic conditions • Identify personal protective measures for individuals and groups facing specific environmental hazards • Identify and employ protective measures against the high-risk physical environment in the healthcare profession • Educate individuals/communities on preventive environmental measures to maintain good 	<ul style="list-style-type: none"> • Air: composition of air and causes of air pollution, methods for air purification, diseases caused by impurities in air and their prevention. • Water: sources of water, daily water requirement. Water pollution its causes and prevention, purification of water. • Water quality standards, diseases due to polluted water. • Waste disposal: contents, hazards and safety measures for solid and liquid; domestic, industrial and hospital waste. • Climate: climate and weather, global environmental concerns. • Green-house effect, depletion of ozone layer, acid rains. • Effects of extremes of temperature, humidity 	15%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva

COMMUNITY MEDICINE - BLOCK III

Environment and Health Planning

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tool
	<p>health</p> <ul style="list-style-type: none"> • Calculate the amount of chlorine required to disinfect water • Calculate the amount of disinfectants for different reservoirs • Collect water samples from different sources • Practice through role play on how to prevent or reduce undue harmful environmental exposure to themselves, patients and their attendants in given situation 	<ul style="list-style-type: none"> • and atmospheric pressure on human health and their prevention. • Radiation: sources, types, effects, hazards and prevention. • Healthful housing. Urban and rural slums. • Noise: definition, acceptance level, causes of noise pollution, hazards to human health and their control. 			

COMMUNITY MEDICINE - BLOCK III

Environment and Health Planning

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tool
Occupational Health	<ul style="list-style-type: none"> • Relate occupational health, occupational hygiene, ergonomics, occupational diseases & Injuries. • Relate occupational disease agents and factors (physical, chemical, biological, psychological, mental) with health • Identify factors or patterns in a patient's history that may indicate a work related contribution to ill health • Identify occupational hazards and suggest relevant control • Interpret Standardized Mortality Rate (SMR) with respect to particular trade • Motivate a worker to take preventive measures at work place • e.g. regular use of personal protective equipment • Counsel health workers regarding safe practices and hygiene • Observe and assess the standards being implemented for safety • Diagnose clinically common work-related symptoms and disorders; refer to relevant specialist 	<ul style="list-style-type: none"> • Occupational Hazards • Ergonomics • Pneumoconiosis • Occupational poisoning e.g. lead, arsenic, dust etc. • Sickness absenteeism • Hazards of industrialization • Preventive and control measures • Legislative measures • Social security services in Pakistan 	10%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva

COMMUNITY MEDICINE - BLOCK III

Environment and Health Planning

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tool
Nutrition	<ul style="list-style-type: none"> • Define the terminologies used in relation to food & nutrition • Classify and comprehend the importance of different foods, minerals and vitamins • Describe a balanced diet chart • Relate the states which alter energy requirement of individuals • Identify the major nutritional problems of public health importance • Differentiate types of PEM and recommend preventive and corrective measures • Plan and assess the nutritional status of a community • Relate the epidemiological aspects of nutrition • Classify water-borne, meat-borne and milk-borne diseases • Identify & outline preventive measures for water borne, milk borne, meat-borne diseases. • Calculate the energy requirement and basal metabolic rate in a given scenario • Recognize/explain nutritional hazards to which populations are exposed in emergency situations • Classify biological and social epidemiology of obesity • Correlate Immediate and 	<ul style="list-style-type: none"> • Concepts (nutrition, nutrient, food, diet). • Food groups, their functions and deficiency diseases. • Role of fiber in diet. • Balance diet, dietary goals (prudent diet). • Malnutrition at all stages of life, its types, causes and prevention. • Common nutritional problems of public health importance, their prevention and control. • Dietary requirements of normal human being at different stages of life. • Food hygiene, pasteurization, fortification, additives, adulteration and preservation. • Food borne diseases/ Food poisoning. • Assessment of nutritional status of a community. 	17%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva

COMMUNITY MEDICINE - BLOCK III

Environment and Health Planning

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tool
	<p>delayed adverse effects of nutritional deficits with health status</p> <ul style="list-style-type: none"> • Calculate and interpret obesity among adults on the basis of BMI • Plan individual and community-based methods of prevention and control of obesity. • Diagnose clinically the nutritional problems including iodine deficiency, anemia, fluoride deficiency, Marasmus & Kwashiorkor with their prevention on the basis of signs and symptoms according to relevant algorithm/ standard • Assess anemia clinically • Assess nutritional status in a community by anthropometry • Inspect slaughter house, and observe characteristics of fresh meat, fish, eggs etc. • Advise on restructuring or modifying the energy requirements (through diet) in relation to physiological states • Communicate effectively, especially regarding behavior and life-style modification • Motivate and inform the individuals and community for prevention of obesity • Revise/restructure and communicate diet plan, nutritional and lifestyle modification 				

COMMUNITY MEDICINE - BLOCK III

Environment and Health Planning

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tool
Non-communicable diseases	<ul style="list-style-type: none"> • Classify biological and social epidemiology of different chronic non-communicable diseases and determine their risk factors • Formulate and suggest preventive measures for these diseases in individuals and populations at-risk • Relate different risk factors to particular patients and general population • Estimate the extent of damage to individuals and community in terms of morbidity and mortality burden • Revise/restructure and communicate diet plan, nutritional and lifestyle modification 	<ul style="list-style-type: none"> • Common endemic non-communicable diseases (diagnosis and management); Asthma, HTN, DM, ischemic heart diseases, nutritional deficiency anemia, pneumonia, thalassemia • Hypertension / Stroke • ii) Coronary heart disease • Cancers • Diabetes mellitus • Rheumatic fever and heart disease • Asthma • Thalassemia • Blindness • Genetically transmitted disease 	12%		
Snake bite	<ul style="list-style-type: none"> • Differentiate between signs and symptoms of different snake-bites • Recommend preventive measures against snake bites in particular situations. • Educate regarding snake-bite prevention 	<ul style="list-style-type: none"> • Snakebite Epidemiology, Personal protection and management • Types of snakes according to toxin production: hemolytic toxins, Musculo-toxins and neurotoxin 	1%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva

COMMUNITY MEDICINE - BLOCK III

Environment and Health Planning

Duration: 12 weeks

Theme	Learning Outcomes At the end of this block, student will be able to:	Course Content	% Weightage	Instructional Strategies	Assessment tool
Injuries and accidents	<ul style="list-style-type: none"> • Categorize different types of accidents • Define and explain epidemiology and control of different types of accidents • Relate risk factors with types of accident • Formulate a health education program for local school/ community/ hospital/ workplace on prevention of accidents and promotion of safety measures • Impart health education and knowledge for prevention of accidents • and treatment of victims 	<ul style="list-style-type: none"> • Types, etiology, specific environments and at-risk populations • Preventive and safety measures 	2%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva
Disaster management	<ul style="list-style-type: none"> • Define, classify and differentiate between different disasters • List duties of a disaster & emergency- management health team and relate the role of medical officer in disaster setting • Advise on Re- habilitation and re- construction • Manage disaster utilizing knowledge of disaster management (POSDCORB), disaster impact and response, mitigation • Relate the application of National Disaster Management and Preparedness guidelines according to given scenario 	<ul style="list-style-type: none"> • Definition, classification of disasters: Natural disasters like earthquake and floods; Manmade disasters and thermo nuclear warfare • Magnitude and effects of disasters and public health consequences • Disaster preparedness and management 	4%	<ul style="list-style-type: none"> • Lectures • CBL 	<ul style="list-style-type: none"> • MCQ • SAQ/SEQ • Structured viva
End Block Assessment to be taken by concerned institute itself			100		
Assessment tools: MCQs & SAQs/SEQs					

Compiled Clerkship Module

Topic/ Theme	Learning outcome At the end of this block, students will be able to:	Course content	Instructional Strategies	Assessment Tool
Primary Health Care	<ol style="list-style-type: none"> 1. Relate the Sustainable Development Goals (SDGs) to developmental outcomes of National programs 2. Identify gaps in the implementation of PHC 	<ul style="list-style-type: none"> • "Primary Health Care": Concepts and progress. • Sustainable Development Goals SDGs 2030 • Rural and Urban Health 	<ul style="list-style-type: none"> • Field visit to BHU/RHC • Community outreach/ Civic engagement activity • SGD (TBL/ CBL) 	<ul style="list-style-type: none"> • MCQs • OSCEs/ OSPEs • Structured VIVA • Field Visit Reports • Reflective writings • Assignment
Healthcare System in Pakistan	<ol style="list-style-type: none"> 1. Relate the referral mechanism to various levels of healthcare facility 2. Discuss the National disease control programs; policies, strategies and operations 3. Develop health promotion program by utilizing health promotion models 	<ul style="list-style-type: none"> • Various levels of health care • National health vision • The District Health System, in the context of devolution. 	<ul style="list-style-type: none"> • SGD (TBL/ CBL) • Field visits to healthcare setup (BHUs, RHC) • DSL 	<ul style="list-style-type: none"> • MCQs • OSCEs/ OSPEs • Structured VIVA • Field Visit Reports.
Health Education and Communication	<ol style="list-style-type: none"> 1. Choose suitable method of health education for certain audiences 2. Identify barriers of HE and methods to overcome 	<ul style="list-style-type: none"> • Concept, aims and objectives of health education models • Communication methods, barriers, skills and channel of communication 	<ul style="list-style-type: none"> • SGD (TBL/ CBL) • Field visits • Workshops/ brochure/pamphlet making, • Health Awareness campaign 	<ul style="list-style-type: none"> • MCQs • OSCEs/ OSPEs • Structured VIVA • Field Visit Reports.
Epidemiology and Biostatistics	<ol style="list-style-type: none"> 1. Interpret Epidemiological rates in any source of data. 2. Relate various biases in data interpretation. 	<ul style="list-style-type: none"> • Measures of Mortality and Morbidity • Epidemiological Biases 	<ul style="list-style-type: none"> • Assignment • Field visits • CBL 	<ul style="list-style-type: none"> • OSPE • Report writing • Assignment

Topic/ Theme	Learning outcome At the end of this block, students will be able to:	Course content	Instructional Strategies	Assessment Tool
	Analyze provided or collected data using SPSS	<ul style="list-style-type: none"> Measures of central tendency, measures of dispersion Test of significance Data presentation using tables and charts like pie chart bar chart, histogram etc. 	<ul style="list-style-type: none"> Hands on training/ Practical 	
	Apply software for referencing	<ul style="list-style-type: none"> Referencing the research writing 	<ul style="list-style-type: none"> Hands on training/ workshop 	
	Perform assigned commands on Microsoft word	<ul style="list-style-type: none"> Knowledge of basic computing skills 	<ul style="list-style-type: none"> Hands on training/ workshop 	
	<ol style="list-style-type: none"> Assess critically the prevailing health risk to which the workers are exposed during field visits. Formulate comprehensive suggestions to minimize health risks. 	<ul style="list-style-type: none"> HMIS of a hospital Reporting 	<ul style="list-style-type: none"> Field visit Report writing 	
	Demonstrate the basic steps of an outbreak investigation in a simulated situation.	<ul style="list-style-type: none"> Investigation of an epidemic 	<ul style="list-style-type: none"> Mock exercise/work shop 	
Maternal, Newborn & Child Health (MNCH),	<p>(Maternal & Child Health)</p> <ol style="list-style-type: none"> Apply preventive measures in various phases of life to improve the maternal health. <p>(Antenatal Care)</p> <ol style="list-style-type: none"> Design public health 	<ul style="list-style-type: none"> Safe motherhood & its pillars Antenatal, intra-natal care, postnatal care, family planning & emergency obstetric care, MCH problems, 	<ul style="list-style-type: none"> Case based Learning Small Group discussions Well baby clinic visits Family Planning clinic visits 	<ul style="list-style-type: none"> MCQ/ SAQ Assignments Presentations, OSPE/ OSCE Report writing

Topic/ Theme	Learning outcome At the end of this block, students will be able to:	Course content	Instructional Strategies	Assessment Tool
	<p>message to create awareness among women regarding antenatal visits & follow-up</p> <p>2. Perform antenatal check-up of women</p> <p>(Intra-natal Care)</p> <p>1. Appraise the relationship between the maternal health status & the outcome of pregnancy.</p> <p>(Postnatal care)</p> <p>1. Design public health message to create awareness among women regarding postnatal visits & follow-up.</p> <p>2. Perform postnatal check-up of women</p> <p>(Child Care)</p> <p>1. Educate mothers about weaning, EPI, preparing home-made ORS</p> <ul style="list-style-type: none"> • Advise pregnant women on nutritional & immunization needs • Counsel women who give bottle feeding • (Neonatal Care) • Formulate interventions to prevent infant mortality in different situations • Plot & interpret growth chart 	<p>delivering MCH services,</p> <ul style="list-style-type: none"> • Infant care, neonatal examination of infants at risk, growth & development • Feeding of infant (breast & artificial); advantages & disadvantages • Strategic approaches of integrated management of neonate and childhood illness (IMNCI) • Growth & development through growth chart 	<ul style="list-style-type: none"> • Seminar/workshops on contraceptive devices • Workshop on growth chart (plotting and interpretation) 	

Topic/ Theme	Learning outcome At the end of this block, students will be able to:	Course content	Instructional Strategies	Assessment Tool
Family Planning	<ul style="list-style-type: none"> • (Family Planning) • Communicate effectively to motivate women & men (inclusive approach) regarding family planning • Counsel patients on various contraceptive tools & methods 	<ul style="list-style-type: none"> • Family Planning approaches, methods, techniques, advantages & disadvantages of different contraceptive methods 		
Demography	<ul style="list-style-type: none"> • (Demography) • Evaluate role of demographic study in health and other services planning. • Analyse the significance of demographic trap and its implications. • Illustrate and interpret population pyramids of different countries. 	<ul style="list-style-type: none"> • Population pyramid and its interpretation • Demographic transition, Demographic trap and its public health importance • Population control and its relationship to demography of a given country 	<ul style="list-style-type: none"> • Case-based Learning • Small Group discussions • Workshop (Demographic principles/ Population Pyramids) • DSL 	
Communicable Disease Epidemiology	<ul style="list-style-type: none"> • Comprehend modes of disease transmission, interaction of agent host and environment in the pre & pathogenesis phases • Suggest strategies for disease control and prevention • Evaluate degree of dehydration on the basis of history and clinical examination using algorithm/ standards • Compare and contrast the 	<ul style="list-style-type: none"> • Respiratory infections; • Smallpox, Diphtheria, Influenza, Chickenpox, Whooping cough, Measles, Meningococcal meningitis, Rubella, Acute respiratory infections, Mumps, SARS. Tuberculosis. • Intestinal infections; 	<ul style="list-style-type: none"> • Field visits • CBL/SGD • Case presentations 	<ul style="list-style-type: none"> • MCQ/ SAQ • Viva • OSPE • Case presentation • Assignment • OSPE • Report writing

Topic/ Theme	Learning outcome At the end of this block, students will be able to:	Course content	Instructional Strategies	Assessment Tool
	<p>clinical presentations of specific diseases</p> <ul style="list-style-type: none"> • Motivate people to adopt preventive measures to control spread of infections. • Counsel health care workers to adopt personal protective measures 	<ul style="list-style-type: none"> • Poliomyelitis, Food poisoning, Viral hepatitis, Acute diarrhoeal diseases Cholera, Typhoid fever • Parasitology/ Parasitic infections; • Amoebiasis, Ascariasis, Hookworm, Dracunculiasis, Taeniasis, Hydatid disease, Leishmaniasis • Entomology/ Arthropod-borne Infections; • Dengue syndrome, Lymphatic Filariasis Malaria • Zoonosis; VIRAL: • Rabies, Yellow fever, Japanese encephalitis, • KFD, Chikungunya fever; Bacterial: Brucellosis, Leptospirosis, Plague Human salmonellosis; • Rickettsial diseases: Rickettsial zoo noses, Scrub typhus, Murine typhus, Tick typhus, Q Fever • Surface Infections; • Trachoma, STD. Tetanus, Yaws, Leprosy, AIDS 		

Topic/ Theme	Learning outcome At the end of this block, students will be able to:	Course content	Instructional Strategies	Assessment Tool
Emerging & re-emerging Infections, Hospital acquired infections	<ul style="list-style-type: none"> Analyze factors causing emerging and re-emerging diseases, nosocomial infections and measures to control 	<ul style="list-style-type: none"> Emerging & re-emerging Infections, Hospital acquired infections 	<ul style="list-style-type: none"> CBL, SGD Visit to Central Sterile Services Department (CSSD) of Hospital 	<ul style="list-style-type: none"> MCQ/ SAQs Viva, / OSPE Case presentations Assignments
Hospital waste management	<ul style="list-style-type: none"> Correlate the role of Hospital waste management in infectious disease control 	Hospital waste management	<ul style="list-style-type: none"> Visit to Hospital for waste management / incinerator 	
Non-Communicable Diseases Epidemiology	<ul style="list-style-type: none"> Assess risk factors for different chronic non-communicable diseases Recommend preventive measures in individuals and populations at-risk Estimate the extent of damage to individuals and community in terms of morbidity and mortality 	<ul style="list-style-type: none"> Endemic non-communicable diseases (diagnosis and prevention HTN/ stroke, Diabetes Mellitus, Coronary heart diseases (CHD), Cancer, Nutritional deficiency anaemia, Rheumatic fever, Asthma, Thalassemia, 	<ul style="list-style-type: none"> CBL, SGD SDL Community visits 	<ul style="list-style-type: none"> MCQ/ SAQs Viva, / OSPE Assignment Report writing
	<ul style="list-style-type: none"> Restructure and communicate diet plan, nutritional and lifestyle modification 	<ul style="list-style-type: none"> Blindness, Genetically transmitted Diseases 		

Topic/ Theme	Learning outcome At the end of this block, students will be able to:	Course content	Instructional Strategies	Assessment Tool
Nutrition	<ul style="list-style-type: none"> • Evaluate the importance of balanced diet and its role in nutritional problems of public health importance • Relate the states which alter the energy requirement of individuals and advise as per modified energy requirements • Recommend preventive and corrective measures for PEM, nutritional problems including iodine deficiency, anaemia, fluoride deficiency on the basis of sign & symptoms • Assess the nutritional status of different age groups in a community • Identify preventive measures for water-borne, meat-borne & milk-borne diseases • Categorize and interpret obesity among adults on the basis of BMI • Plan individual & community- based methods to communicate effectively for prevention & control of obesity with emphasis on behaviour & lifestyle modification • Inspect slaughter house and observe characteristics of fresh meat, fish, eggs etc 	<ul style="list-style-type: none"> • Balanced diet and food pyramid • Nutritional problems of public health importance • Protein energy malnutrition (PEM) • Water-borne, meat-borne & milk-borne diseases • BMI 	<ul style="list-style-type: none"> • CBL • SGD • SDL • Community visits 	

Topic/ Theme	Learning outcome At the end of this block, students will be able to:	Course content	Instructional Strategies	Assessment Tool
Environment	<ol style="list-style-type: none"> 1. Relate the bio-psycho-socio model with different types of environment 2. Evaluate the current environmental indicators according to legislative guidelines for sustainable protection of environment in national, regional and global perspectives 3. Relate role of environment to hospital infections and prevention 4. Identify personal protective measures for individuals or groups facing specific environmental hazards 5. Educate individuals/ communities regarding effect of harmful environmental exposure and its prevention 6. Calculate the amount of chlorine required to disinfect water 7. Collect water samples from different sources 	<ul style="list-style-type: none"> ● Diseases caused by impurities in air and their prevention ● Water pollution, and its prevention ● Water quality standards ● Surveillance of drinking water quality ● Noise: acceptance level, causes, impact on human health and their control ● Radiation: sources, acceptance level, hazards to human health and their control 	<ul style="list-style-type: none"> ● CBL, ● SGD ● SDL ● Field visit ● Role play 	

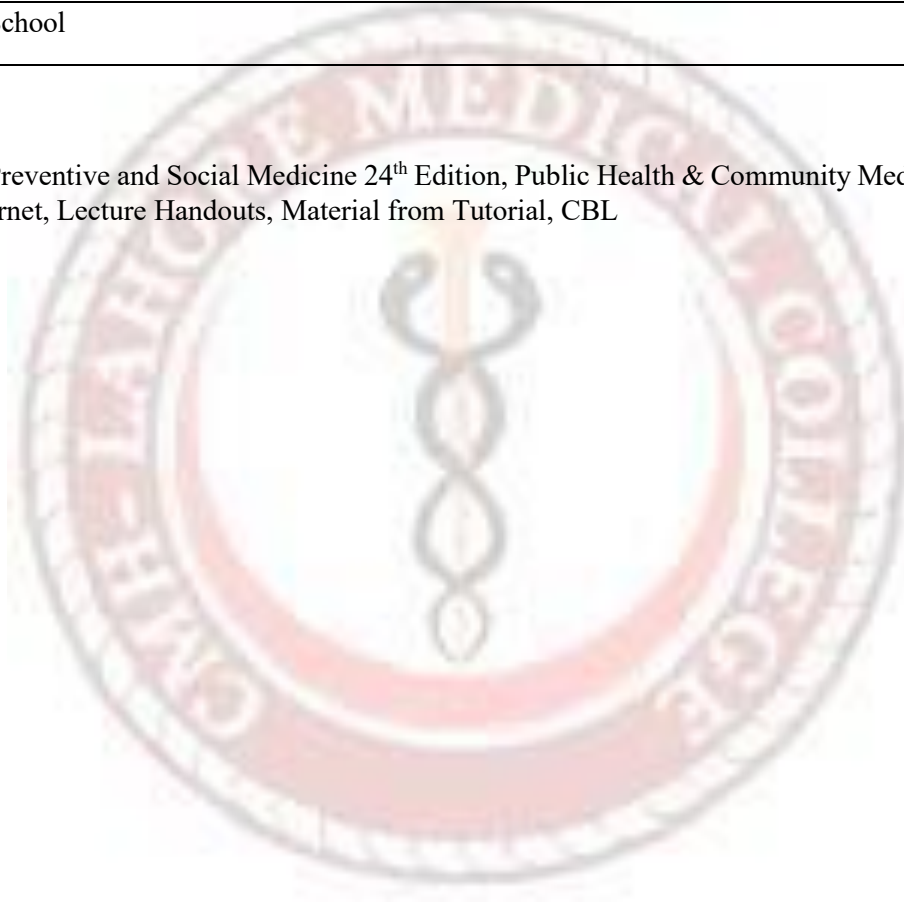
Topic/ Theme	Learning outcome At the end of this block, students will be able to:	Course content	Instructional Strategies	Assessment Tool
Disasters Management	<ul style="list-style-type: none"> • Integrate the steps of disaster management cycle in different natural and man- made disaster • Review the duties of disaster management health team and the role of Medical Officer in disaster setting. • Differentiate between emergency triage & triage during disaster • Analyse practical problems during response phase (staffing, volunteer rmanagement, food, shelter etc) • Relate the application of National Disaster management and preparedness guidelines according to given scenario 	<ul style="list-style-type: none"> • Classification of disaster: Natural disasters like earthquake and floods: manmade disasters and chemical biological radiological and nuclear (CBRN) warfare • Magnitude and effects of disasters and public health consequences • Disaster preparedness and management 	<ul style="list-style-type: none"> • Assignment • Field visit • CBL, • Flipped • Classroom 	<ul style="list-style-type: none"> • MCQ/ SAQs • Viva / • OSPE • Assignme nt • Report writing
Occupational Health	<ul style="list-style-type: none"> • Interpret appropriate indicators to describe occupational risk • Identify risk factors of clinically common occupational disorders • Evaluate the preventive & control measures for health protection of workers including legislative measures • Counselling and motivation of personnel to take preventive measures at workplace. 	<ul style="list-style-type: none"> • Occupational hazards (pneumoconiosis, cancers, dermatitis, occupational poisoning example lead arsenic, dust etc. accidents at work place. • Ergonomics • Sickness absenteeism • Standardized mortality rate (SMR) • Legislative measures • Social security services in Pakistan 	<ul style="list-style-type: none"> • CBLs • Role Play • Field visits 	

Visits

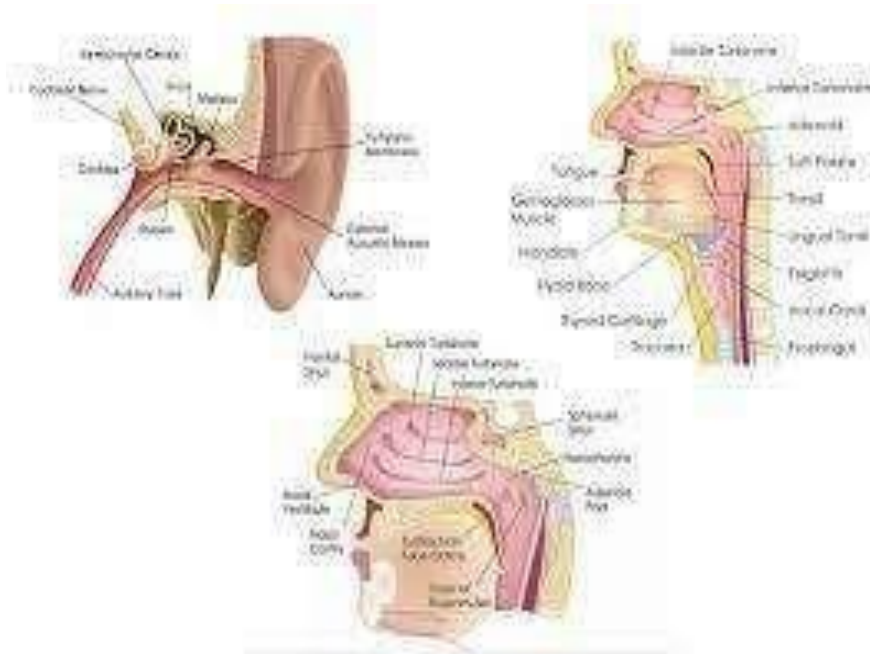
• Visit to Basic health unit
• Visit to rehabilitation Center
• Visit to a factory
• Visit to Waste Management center
• Visit to NGO
• Visit to family planning center
• Visit to School

Learning Resources:

Park's Text Book of Preventive and Social Medicine 24th Edition, Public Health & Community Medicine by Muhammad Iliyas 8th Edition, Internet, Lecture Handouts, Material from Tutorial, CBL



SECTION – III ENT



EAR – BLOCK I

Theme/ Topic	Learning out comes At the end of this block, student will be able to:	Course content	%	Instructional Strategies	Assessment Tool
Basic of hearing and balance	<ul style="list-style-type: none"> Revisit the applied anatomy and physiology of hearing and balance as well as Eustachian tube and its role in hearing Recall the pathophysiology of vertigo 	<ul style="list-style-type: none"> Anatomy and physiology of hearing and balance Effects of Eustachian tube malfunction Pathophysiology of vertigo 	05	Interactive lectures/SGDs/ PBLs/ Bedside teachings/ CPC's and seminars	MCQs/ SAQs/ SEQs/ OSCE/ Viva
Discharge & Deafness	<ul style="list-style-type: none"> Suggest a management plan for a patient with ear discharge after interpreting relevant investigations if needed Differentiate between various types of deafness on the basis of history and examination Interpret appropriate investigations to reach the final diagnosis Suggest appropriate plan for treatment and rehabilitation Retell medico legal and social aspects of deafness 	<p><u>Discharge Ear</u></p> <p>DD of Discharging Ear</p> <p>Overview and Classification of Otitis Media</p> <p><u>Diseases*</u></p> <ul style="list-style-type: none"> Acute Suppurative Otitis Media Chronic Suppurative Otitis Media CSF Otorrhoea Bleeding from Ear [Trauma Base of Skull <p><u>Deafness</u></p> <p>Overview of Deafness</p> <ul style="list-style-type: none"> Causes [Unilateral/Bilateral/Sudden/Children] DD Social/Medico legal Aspects 	40		

EAR – BLOCK I

Theme/ Topic	Learning out comes At the end of this block, student will be able to:	Course content	%	Instructional Strategies	Assessment Tool
		<p><u>Diseases Causing Conductive deafness</u></p> <ul style="list-style-type: none"> • Wax • FB • Fluid in Middle Ear [• Sec OM] • Trauma to ear [Traumatic Perforation of TM Haemotympanum/Ossicular disruption • Otosclerosis <p><u>Diseases Causing Senso Neural Deafness</u></p> <ul style="list-style-type: none"> • Presbycusis • Drug Induced Deafness • Noise Induced Deafness and Acoustic Trauma • Psychogenic Deafness • Deaf-Mutism in Children • Rehabilitation of the Deaf • Hearing Aid • Cochlear implant 			

EAR – BLOCK I

Theme/ Topic	Learning out comes At the end of this block, student will be able to:	Course content	%	Instructional Strategies	Assessment Tool
Otalgia	<ul style="list-style-type: none"> Differentiate between referred otalgia and that arising from local conditions of ear Suggest appropriate treatment after the interpretation of relevant investigations if needed 	<p>Causes and Differential Diagnosis of Otalgia</p> <p>Eiology/ Pathogenesis, Signs Symptoms, Investigations, treatment Complications Follow-up</p> <ul style="list-style-type: none"> Boil Otitis Externa Ac Otitis media Herpes Simplex Perichondritis 	20		
		<ul style="list-style-type: none"> Traumatic conditions of external and middle ears Referred otalgia Barotrauma Complications of CSOM Ca- Middle Ear?? 			
Vertigo & Tinnitus	<ul style="list-style-type: none"> Differentiate between various types of vertigo in relation to its pathophysiology Suggest appropriate treatment including rehabilitation after the interpretation of investigations if needed <ul style="list-style-type: none"> Diagnose a case presenting with tinnitus on the basis of signs, symptoms and appropriate investigations Suggest thorough management plan 	<p>Overview of Vertigo</p> <ul style="list-style-type: none"> Differentiation between True rotator vertigo, Dizziness and Unsteadiness Causes of vertigo <p><u>Diseases Causing Vertigo</u></p> <p>(BPPV, Vestibular Neuritis, Meniere, S Disease)</p> <p><u>Overview of Tinnitus</u></p> <ul style="list-style-type: none"> Causes of Tinnitus How to investigate and manage a case of Tinnitus Acoustic Neuroma 	25		

EAR – BLOCK I

Theme/ Topic	Learning out comes At the end of this block, student will be able to:	Course content	%	Instructional Strategies	Assessment Tool
Facial disfigurement	<ul style="list-style-type: none"> • Identify the lesions of facial nerve relating to its etiology • Recognize the salient features of common tumors of Ear 	<ul style="list-style-type: none"> • Anatomy of Facial Nerve • Electrophysiological Test for Facial Nerve • Differentiation between upper and lower motor Neuron lesion • Causes and work-up in a case of Facial Paralysis • Treatment/ Complications and Follow-up • facial nerve palsy (secondary to ear surgery, trauma, bell's • palsy and Attic disease), Unsafe chronic otitis media, Fracture Temporal bone • Presentation, features and diagnosis of Basal cell carcinoma of pinna, Squamous cell carcinoma of external and middle ear, Glomus tumor and • Acoustic neuroma 	10		

NOSE – BLOCK II

Theme/Topic	Learning outcome At the end of this block, student will be able to:	Course Content	%	Instructional Strategies	Assessment Tool
Basic of Nose and Para nasal Sinuses	Revisit the applied anatomy and physiology of nose and Paranasal sinuses	Anatomy of Nose & Para- Nasal Sinuses <ul style="list-style-type: none"> • Basic concepts in clinical anatomy of nose & Para- nasal sinuses • Anatomical routes of extensions of disease of nose and PNS into oral cavity, nose, orbit and skull base. Physiology of Nose & Para-Nasal Sinuses <ul style="list-style-type: none"> • Basic concepts in clinical physiology of nose & Para-nasal sinuses • Patho-physiology and extensions of diseases of nose and PNS into oral cavity, nose orbit and skull base 	10	Interactive lectures/ SGDs/ PBLs/ Bedside teachings/ CPC's and seminars	MCQs/SAQs/ SEQs/ OSCE/ Viva
Nasal obstructions	<ul style="list-style-type: none"> • Enlist different causes of unilateral and bilateral obstruction • Suggest appropriate plan of investigations and management 	Overview of Nasal Obstruction [unilateral/Bilateral/Adults/Children/Neonate] Diseases causing Obstruction <ul style="list-style-type: none"> • DNS • Nasal Polypi [in Children, adults, Elderly] • FB Nose • Septal Haematoma/Abscess • ADENOIDS • Obstructive Sleep Apnoea • Congenital abnormalities as Choanal Atresia/Menigocele/Encephalocele 	40		
		<ul style="list-style-type: none"> • Tumors of Nose [Classification + special Emphasis on Angofibroma, Ca-Maxilla and Ca-Nasopharynx] 			

NOSE – BLOCK II

Theme/Topic	Learning outcome At the end of this block, student will be able to:	Course Content	%	Instructional Strategies	Assessment Tool
Discharge and Epistaxis	<ul style="list-style-type: none"> • Differentiate between various types of Rhinitis on the basis of signs and symptoms • Interpret necessary investigations • Suggest symptomatic and curative treatment 	<p>Overview of Rhinitis</p> <p>Rhinitis*</p> <ul style="list-style-type: none"> • Allergic rhinitis • Vasomotor Rhinitis • Infective rhinitis [Viral, Bacterial] • Rhinitis Medica Mentosa • Atrophic Rhinitis • Wegners Granuloma and list of other <p>Granulomatous diseases</p> <ul style="list-style-type: none"> • Etiology of Nasal Allergy • Symptoms and signs of Allergic Rhinitis. • Examination of patients of Allergic Rhinitis. • Investigation of Allergic Rhinitis • Symptomatic and curative treatment options 	30		
Headache and facial pains	<ul style="list-style-type: none"> • Suggest thorough management plan in case of Epistaxis • Suggests measures to control refractory epistaxis 	<ul style="list-style-type: none"> • Blood Supply of Nose • Epistaxis • Angiofibroma 	20		

NOSE – BLOCK II

Theme/Topic	Learning outcome At the end of this block, student will be able to:	Course Content	%	Instructional Strategies	Assessment Tool
	<ul style="list-style-type: none"> • Suggest appropriate treatment plan 	<ul style="list-style-type: none"> • Medical & Surgical treatment of sinus infection • Basics of FESS its indication /procedure/ complications • Complications of Sinusitis • Common orbital, nasal, oral, dental and intra- cranial complication of Sinus pathology and its management. • Fungal Sinusitis and its management. • Atypical facial pains • Granulomatous diseases and Tumors • Sinus barotrauma 			



THROAT & LARYNX – BLOCK III

Theme/Topic	Learning Outcomes At the end of this block, student will be able to:	Course Contents	%	Instructional Strategies	Assessment Tool
Sore throat and pain	<ul style="list-style-type: none"> • Manage acute and chronic tonsillitis • Identify need of tonsillectomy in a case of chronic tonsillitis • Revisit the applied anatomy and physiology of pharynx • Manage acute and chronic Pharyngitis • Manage the common disorders of oral cavity • Suspect a tumor of oropharynx on the basis of signs and symptoms 	<p>Acute & Chronic Tonsillitis</p> <ul style="list-style-type: none"> • symptoms and signs of Acute and Chronic Tonsillitis • important investigations • medical and surgical treatment options • Indications and technique of tonsillectomy <p>Acute & Chronic Pharyngitis</p> <ul style="list-style-type: none"> • Basic anatomy and physiology of pharynx and oesophagus and its clinical importance • symptoms, signs, investigations and management of sore throat and recurrent throat infections <p>Common disorders of oral cavity.</p> <ul style="list-style-type: none"> • Basic understanding of the common disorders of oral cavity <p>Tumors of Oro-pharynx</p> <ul style="list-style-type: none"> • Common sites of tumor of oro-pharynx • Symptoms, signs, investigations and management of these tumors 	40	Interactive lectures/ SGDs/ PBLs/ Bedside teachings/ CPC's and seminars	MCQs/ SAQs/ SEQs/ OSCE/ Viva

THROAT & LARYNX – BLOCK III

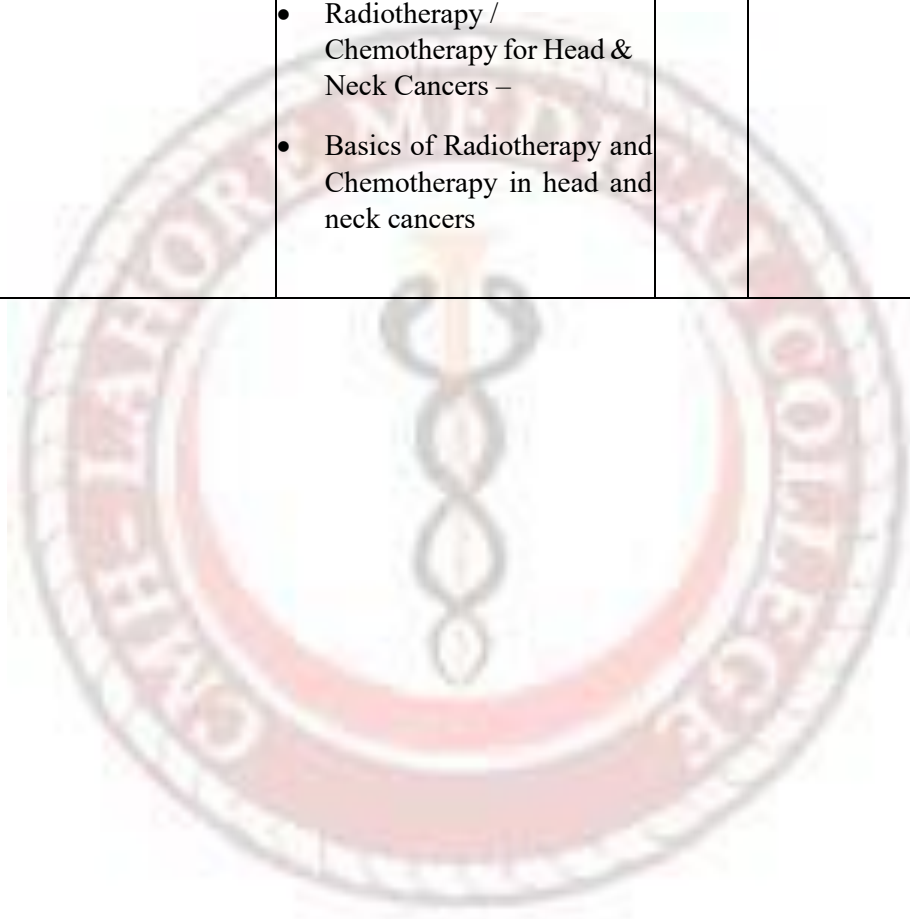
Theme/Topic	Learning Outcomes At the end of this block, student will be able to:	Course Contents	%	Instructional Strategies	Assessment Tool
Dysphagia and Odynophagia	<ul style="list-style-type: none"> • Differentiate between various types of dysphagia basing on its etiology and patho physiology • Suspect abscesses around the pharynx on the basis of symptoms and signs • Suggest treatment for these abscesses • Recognize mass arising from lateral margin of tongue • Suggest different treatment modalities on the basis of biopsy 	<p>Dysphagia & Disorders of Oesophagus –</p> <ul style="list-style-type: none"> • Normal swallowing mechanism • Types of dysphagia • Causes and patho-physiology of each cause <p>Abscesses around Pharynx (Retro-Pharyngeal Abscess & Peri-Tonsillar Abscess)</p> <ul style="list-style-type: none"> • Symptoms of Acute Retero-pharyngeal abscess, and possible complications if this condition is not recognized in time • Emergency investigations and management of this condition <p>Oropharyngeal tumors</p> <ul style="list-style-type: none"> • Carcinoma Tongue & Oral Cavity CBL – • symptoms, signs and examination of CA. Tongue emergency investigations and management of this condition 	30		
Hoarseness and stridor	<ul style="list-style-type: none"> • Differentiate between different causes of hoarseness and stridor on the basis of signs and symptoms • Outline relevant investigations 	<ul style="list-style-type: none"> • Congenital Lesions of Larynx & Stridor – • Basic differences between anatomy and physiology of larynx of a child as compared to the adult • Pathophysiology of congenital lesions of larynx 	20		

THROAT & LARYNX – BLOCK III

Theme/Topic	Learning Outcomes At the end of this block, student will be able to:	Course Contents	%	Instructional Strategies	Assessment Tool
	<ul style="list-style-type: none"> • Suggest treatment modalities for hoarseness and stridor 	<ul style="list-style-type: none"> • Acute & Chronic Laryngitis CBL: • Symptoms, signs and examination of Acute Laryngitis • Emergency investigations and management of this condition • Laryngeal Paralysis, Voice & Speech Disorders – • Patho-physiology of Laryngeal paralysis • Patho-physiology of Voice and speech disorders • Carcinoma of Larynx – • symptoms, signs and examination of a patient suspected to have CA. Larynx • emergency investigations and different management plan of this condition 			
Neck masses	<ul style="list-style-type: none"> • Differentiate between different types of neck masses on the basis of signs and symptoms • Advise relevant Investigations and management plan 	<ul style="list-style-type: none"> • Distribution and drainage area of Neck Lymph Nodes • DD of Lateral Neck Masses • DD of Lymph Node enlargement in Neck • Work-up for a suspected Metastatic Lymph Node • Thyroid gland- 			
Advances in ENT/Neck surgeries	<ul style="list-style-type: none"> • Reproduce the basic concept about recent trends in different ENT treatment modalities 	<ul style="list-style-type: none"> • Laser Surgery, Cryosurgery, HIV Infection/ AIDS & ENT Managements – 	10		

THROAT & LARYNX – BLOCK III

Theme/Topic	Learning Outcomes At the end of this block, student will be able to:	Course Contents	%	Instructional Strategies	Assessment Tool
		<ul style="list-style-type: none"> • Physics and physiology of LASER surgery and Cryosurgery • Basics of HIV and AIDS infection • Radiotherapy / Chemotherapy for Head & Neck Cancers – • Basics of Radiotherapy and Chemotherapy in head and neck cancers 			



SCHEDULE OF CLINICAL TRAINING

S. No	LEARNING OUTCOMES	ACTIVITY
	By the end of the rotation in the Department of ENT, the student should be able to:	
<u>Ear</u>		
1	<p><u>Special Skills</u></p> <ul style="list-style-type: none"> ➤ Take history of a patient with Ear pathology ➤ Demonstrate the use of Otoscope to aid in examination of the external auditory canal and the tympanic membrane and learn (Use of Seigle’s speculum). ➤ Demonstrate the use of tuning forks and interpret the findings. ➤ Demonstrate Syringing of ear. ➤ Reproduce steps of recording tympanogram and hearing levels on audiogram ➤ Interpret audiogram and tympanogram ➤ Identify all common Ear instruments used in OPD 	<p><u>OPD / Ward</u></p> <ul style="list-style-type: none"> ➤ Video clip of examination of ear. ➤ Demonstration of clinical examination of ear. ➤ Practical session of examination of ear ➤ Examination of ear on patients ➤ Assessment of Hearing ➤ Audiogram / Tympanogram, practical demonstration & discussion <p><u>Instruments</u></p> <p>Students must be shown ear instruments used in OPD</p>
2	<ul style="list-style-type: none"> ➤ Perform OT scrub for surgery according to the protocol ➤ Reproduce the procedure of the operations, mentioned in column III, including their indications and post-operative care ➤ Identify all common Ear instruments used in OT ➤ 	<p><u>OT</u></p> <ul style="list-style-type: none"> ➤ How to enter the operation theatre. ➤ How to behave in OT ➤ Steps of washing and preparation for operation ➤ Students should observe the following operations <ul style="list-style-type: none"> ● Myringotomy ● I/D of hematoma ear ● Removal of Foreign body ear ● Removal of wax ● Myringoplasty and Mastoidectomy ● Abscess incision drainage/Hematoma ear <p><u>Instruments</u></p>
		<ul style="list-style-type: none"> ➤ Students must be shown ear instruments used in above mentioned surgeries

Nose

<p>3</p>	<p><u>Special Skills</u></p> <ul style="list-style-type: none"> ➤ Take history of a patient with nasal pathology ➤ Perform basic examination of nose and paranasal sinuses in a stepwise fashion ➤ Diagnose a case of Nasal Polypi on the basis of glistening appearance of nasal polypi in anterior rhinoscopy ➤ Interpret a simple X-Ray / CT Scan for Sinus, Paranasal Sinus, Nasopharynx and other simple ENT pathologies ➤ Identify all common Nasal instruments used in OPD 	<p><u>OPD / Ward</u></p> <ul style="list-style-type: none"> ➤ Examination of nose and para nasal sinuses. The steps and logic behind it ➤ Video clip of examination of nose and para nasal sinuses. ➤ Demonstration of nose and para nasal sinuses ➤ Practical session of examination of nose and para nasal sinuses in patients ➤ Nasal Polypi – demonstration on patient ➤ Simple X-Ray / CT Scan for Sinus, Paranasal Sinus, Nasopharynx and other simple ENT pathologies
<p>4</p>	<ul style="list-style-type: none"> ➤ Reproduce the procedure of the operations, mentioned in column III, including their indications and post-operative care ➤ Identify all common Nasal instruments used in OT 	<p><u>OT</u></p> <ul style="list-style-type: none"> ➤ Students should observe the following operations ➤ Tonsillectomy ➤ Adenoidectomy ➤ Septoplasty ➤ How to carry out anterior nasal packing ➤ Sinus lavage, electrocautery ➤ SMR, procedure, indications and post-operative care ➤ Observation of SMR procedure ➤ FESS, indications, procedure and post-operative care ➤ Observation of FESS procedure ➤ Epistaxis and its management <p><u>Instruments</u></p>
		<p>Students must be shown instruments used in above mentioned surgeries</p>

Throat & Larynx

3	<p><u>Special Skills</u></p> <ul style="list-style-type: none"> ➤ Take history of a patient with throat and laryngeal pathology ➤ Perform examination of throat ➤ Perform basic examination of larynx in a clinical setting ➤ Identify all common instruments used in OPD 	<p><u>OPD / Ward</u></p> <ul style="list-style-type: none"> ➤ Clinical examination of throat, the steps and logic behind it ➤ Video clip of throat examination. ➤ Demonstration of examination of throat ➤ Practical session of examination of throat on patients ➤ Laryngeal Disorders – Ward demonstration
4	<ul style="list-style-type: none"> ➤ Reproduce the procedure of the operations, mentioned in column III, including their indications and post-operative care ➤ Perform tracheostomy in emergency situations ➤ Identify all common instruments used in OT 	<p><u>OT</u></p> <ul style="list-style-type: none"> ➤ Students should observe the following operations <ul style="list-style-type: none"> ● Tracheostomy, procedure, indications and post-operative care <p><u>Instruments</u></p> <p>Students must be shown instruments used in above mentioned surgeries</p>
<p>WARD TEST</p>		

SECTION-IV
Ophthalmology



OPHTHALMOLOGY – BLOCK I

Theme	Learning Outcomes By the end of Block-1, the Student will be able to:	Contents	Weightage %	Instructional Strategies	Assessment Tool
Eye Lid & adnexa	<ul style="list-style-type: none"> Identify conditions like ptosis, lid Tumors and benign lesions, Entropion, Ectropion, dry eyes etc based on their clinical assessment and make a referral to ophthalmologist. 	Ptosis, Blephritis, lid tumors & benign lesions, Entropion, Ectropion, diseases of lacrimal system, evaluation of dry eye, KCS, Bitot's spots and Vit A deficiency.	30	Interactive lectures/ SGDs/ PBLs/ Bedside teachings/ CPC's and seminars	MCQs/ SAQs/ SEQs/ OSCE/ Viva
Conjunctiva, Episclera & sclera	<ul style="list-style-type: none"> Recognize conditions like Pterygium, Pingecula, conjunctivitis episcleritis and scleritis and their systemic association when presents. Identify red eye causing common conditions for their initial management. 	Bacterial, Viral Allergic, and other types of conjunctivitis, Pterygium, Pingecula, Ophthalmia neonatorum, Episcleritis, Scleritis. Misc systemic diseases affecting sclera, episclera	30		
Orbit	<ul style="list-style-type: none"> Recognize proptosis and its common causes like thyroid eye disease, orbital inflammatory disease and orbital tumors. Advise common investigations required for its evaluation. Summarize various medical and surgical management options. 	Proptosis and its common causes, Thyroid eye disease. Orbital tumors, Cellulitis	20		
Uveitis	<ul style="list-style-type: none"> Identify uveitis as a cause of decreased vision. Recognize signs and symptoms of acute and chronic uveitis for giving its initial treatment 	Anterior and Posterior uveitis and their major causes. Various systemic associations and broad outline of immunosuppressive treatments.	20		

OPHTHALMOLOGY - BLOCK II

Theme	Learning Outcomes By the end of Block-2 , the Student will be able to :	Contents	Weightage %	Instructional Strategies	Assessment Tool
Corneal Diseases	<ul style="list-style-type: none"> Identify corneal ulcers for giving initial treatment. Summarize principles of corneal disease management. 	Bacterial, Fungal, Viral, Corneal Ulcers and use of antibiotics/ cycloplegics Keratoconus, dysplasias and degenerations.	20	Interactive lectures/ SGDs/ PBLs/ Bedside teachings/ CPC's and seminars	MCQs/ SAQs/ SEQs/ OSCE/ Viva
Lens	<ul style="list-style-type: none"> Identify different types of cataract and recognise type of visual deterioration in each type of cataract. Justify different types of surgical options of cataract including phacoemulsification Indicate possible complications of cataract surgery 	Types of cataracts & their evaluation, Congenital, Age related, ICCE/ECCE/ Phaco emulsification, Complications of cataract surgery. Ectopia lentis	30		
Refractive errors & Refractive Surgery	<ul style="list-style-type: none"> Identify common refractive conditions of the eye like myopia, hypermetropia and astigmatism Summarize various treatment options. 	Glasses, Contact lens, excimer, LASIK, DAELEK, PKP & other refractive surgical options	20		
Glaucoma and ocular therapeutics	<ul style="list-style-type: none"> Differentiate between various types of Glaucoma, its clinical signs, investigations, common VF defects and various anti Glaucoma medications. Enlist other options of Glaucoma management including laser filtration surgery, cyclo-destructive procedures and implants. Identify shallow anterior chamber for avoiding mydriatic eye drops to prevent acute congestive glaucoma. Suggest emergency treatment of acute angle closure glaucoma. 	Types of glaucoma & Evaluation, Classification, POAG, PACG, Surgery, Drugs, Lasers to treat glaucoma	30		

OPHTHALMOLOGY – BLOCK- III

Topics	Learning Outcomes By the end of Block-3 , the Students will be able to :	Contents	Weightage %	Instructional Strategies	Assessment Tool
Retinal vascular diseases, Retinal Detachment, Common Fundus Pathologies,	<ul style="list-style-type: none"> • Correlate symptoms with signs of retinal vascular diseases, ocular tumors and fundus pathologies • Identify retinal disorder as a cause of reduce vision. • Suggest common treatment option of retinal diseases. • Discuss broad outline of management of RD, diabetic retinopathy & AMD and use of lasers in ophthalmology 	Conditions affecting retinal vasculature and their Evaluation, Hypertensive Retinopathy, Diabetic Retinopathy, CRVO, BRVO, CRAO, BRAO, AMD, RP,ARMMD , Diabetic retinopathy. ROP, Types of retinal detachment, clinical exam, investigations and surgical options Vitrectomy and its indications .use of lasers	40	Interactive lectures/ SGDs/ PBLs/ Bedside teachings/ CPC's and seminars	MCQs/ SAQs/ SEQs/ OSCE/ Viva
Strabismus & Neuro Ophthalmology	<ul style="list-style-type: none"> • Differentiate between comitant and non-comitant strabismus • Perform cover & uncover test. • Enlist surgical and non-surgical treatment of strabismus. • Reproduce Cranial nerve pathway and nerve supply of extra ocular muscles • Enlist relevant laboratory investigations and imaging & surgical and non-surgical treatment options. 	Types of squint and its Management, Cranial nerves palsies, tumors, papilledema, visual field in various optic pathway lesions	30		
Ocular trauma	<ul style="list-style-type: none"> • Differentiate between penetrating and non-penetrating ocular injuries. • Discuss different types of chemicals damaging eye (Acid/alkali/Alcohol/elfy) and its symptoms and signs. • Mange chemical injuries of the eye and to removes conjunctival foreign body. 	Types of ocular injuries and their Evaluation and initial Management, Ophthalmic emergency and their primary eye care.	30		

Clinical Trg / List of Competencies

Learning Outcomes	List of <u>Competencies</u>
By the end of the rotation in the Department of Ophthalmology, the student will be able to:	
Establish rapport with the patient	How to greet and counsel Patients?
Assess level of vision	Visual Acuity (Children, Adults), color vision, Amsler Grid
Examine visual field by confrontation	Visual Fields
Identify the type of refractive error	Refractive Errors
Diagnose vision loss due to cataract	Cataract Examination
See and differentiate normal optic disc and macula from abnormal.	Ophthalmoscopy (Fundoscopy)
Examine interior segments	Torch/Slit lamp examination
Prescribe common eye drops keeping in mind contraindications of dilating drops	Ocular Pharmacology
Enlist common ophthalmic instruments Like cataract surgery instruments, DCR surgery instruments etc	Ophthalmic Instruments
Enumerate laser use in ophthalmology	Introduction to Lasers
Enlist helpful investigation	Ocular Investigations an overview
Classify various squint	Ocular movements and squint assessment
Perform retinoscopy	Retinoscopy and Prescription writing
Examine the pupils	Pupillary Reactions
Examine the lid	Lid examination
Identify retinal disease as a cause of loss of vision	Common retinal diseases
Examine proptosis	Examination of Proptosis
Measure IOP	Tonometry
Observe common Ophthalmic surgical procedures/ Instruments including cataract, glaucoma, oculoplastics, retinal detachment and other common procedures and instruments.	common Ophthalmic surgical procedures/ Instruments

Patient safety

Total contact hours: 25 hours in 4th year

Preamble: Patient safety is the prevention of errors and adverse effects to patients associated with health care”. Patient safety is about being mindful of an expectation that mistakes can happen and consistently looking to prevent them

This document provides guidelines for MBBS/BDS students so that they can understand the importance of patient safety and apply their knowledge to reduce the incidence of medical errors and adverse events in clinical settings

Topics	Learning Outcomes	Course Content
Introduction to Patient Safety	Recognize adverse events occurring in clinical settings and ensure patients’ safety	<ul style="list-style-type: none"> • Understanding Adverse Events and Patient Safety • Your Role in a Culture of Safety • Your Role in Building Safer, More Reliable Systems
From Error to Harm	Prevent the occurrence of errors to avoid patients’ harm	<ul style="list-style-type: none"> • The Swiss Cheese Model • Understanding Unsafe Acts • A Closer Look at Harm
Human Factors and Safety	Design Principles to reduce Human Error and ensure safety	<ul style="list-style-type: none"> • Understanding the Science of Human Factors • Principles to Reduce Human Error • The Risks and Rewards of Technology
Teamwork and Communication	Practice team work and effective communication	<ul style="list-style-type: none"> • Fundamentals of Teamwork and Communication • Tools and Techniques for Effective Communication • Safety During Transitions Across the Continuum of Care
Responding to Adverse Events	Effectively respond to an adverse event through effective communication	<ul style="list-style-type: none"> • Responding to an Adverse Event: A Step-by-Step Approach • Communication, Apology, and Resolution
Root Cause Analyses and Actions	Analyze the adverse event and act accordingly	<ul style="list-style-type: none"> • Preparing for Root Cause Analyses and Actions • Conducting Root Cause Analyses
		<ul style="list-style-type: none"> • Actions to Build Safer Systems

Achieving Total Systems Safety	Accomplish total system safety	<ul style="list-style-type: none"> • Eight Recommendations for Total Systems Safety • Supporting the Health Care Workforce with Patients and Families
Pursuing Professional Accountability and a Just Culture	Improve organizational culture	<ul style="list-style-type: none"> • A Just Culture Case Study • Building a Culture of Safety • Understanding and Improving Organizational Culture

Responsibility: Because safety of the patient and infection control is a joint responsibility, students should be taught by experts from various relevant disciplines.

Proposed Teaching Strategies: Some of the suggested methods of teaching are:

1. Bedside / chair-side teaching
2. Demonstrations and discussions in laboratories, wards, clinics, emergency rooms, operation theatres etc.
3. Independent, guided learning
4. Lectures
5. Practice in Skills Lab (for example as role plays/ simulation)
6. Small group discussions (as case-based learning or reflective writing sessions)
7. Team-based learning
8. Tutorials
9. Workshops (e.g. aseptic techniques)

Proposed Assessment:

Formative assessment: Skill lab, end of rotation tests Summative assessment:

Practical with clinical subjects OSCE = 1 x station in Medicine

1 x station in Surgery

Clinical Skills in Medicine & Allied

(NUMS MBBS Curriculum 2025)

Levels of Student Engagement in Clinical Procedures:

- Observer status (O)
- Assistant status (A)
- Perform under supervision (PS)
- Perform independently (PI)

Sr #	Clinical Skills	Level 4 th Year MBBS
1.	Course Title: CARDIOLOGY	
	CVS examination Systemic & relevant general physical	PS
	ECG	O
	How to apply cardiac monitor	PS
2.	Course Title: Endocrinology & Metabolic Disorders	
	Systemic & relevant general physical Examination	PI
	BP recording	PI
	Glucometer Use	PS
	Insulin Injection Technique	PS
3.	Course Title Pulmonology	
	Respiratory system examination	PI

	Systemic & relevant General physical	
	Inhaler Technique & Peak Flow Meter	PS
	Nebulization	O
	Use of pulse oximeter	PS
4.	Course Title Nephrology	
	Relevant Systemic & General Physical examination	PI
5.	Course Title: GASTROENTROLOGY	
	GIT Systemic & Relevant General Physical Examination	PI
	Nasogastric tube placement	O
6.	Course Title: NEUROLOGY	
	CNS Examination Systemic	PI
	Relevant General Physical	PS
7.	Course Title: RHEUMATOLOGY	
	Locomotor system examination & Relevant General Physical Examination	PI
8.	Course Title: INFECTIOUS DISEASES	
	Relevant General & Systemic Physical Examination	PI

	Injection I/V, I/M, S/C, intradermal	PS
	Urinary catheterization . collection of samples	O
	Collection of blood samples/ blood film preparation	O
	Branula	PS
9.	Course Title: HAEMATOLOGY	
	Systemic & relevant general physical Examination	PI
	Injection I/V, I/M, S/C, intradermal	PS
	Collection of samples of blood/blood film preparation	O
	Placing I/V lines/fluids/blood/blood products, direct branula	PS
10.	Course Title: DERMATOLOGY	
	Systemic & relevant general physical	PI
	Examination to identify specific skin lesions	PS
11.	Course Title: PSYCHIATRY	
	Systemic & relevant general physical	PI
	Examination to identify mental state	PS

Clinical Procedures / Skills in Surgery & Allied

(NUMS MBBS Curriculum 2025)

4th Year MBBS

Levels of Student Engagement in Clinical Procedures:

- Observer status (O)
- Assistant status (A)
- Perform under supervision (PS)
- Perform independently (PI)

Sr#	Skill / Procedure	Level of student engagement	Notes / Remarks
1.	Wound Dressing	A	Supervised in minor OT
2	Suturing Techniques	O	In skill lab/OT
3.	Incision & Drainage	O	On surgical wards
4.	DRE / Proctoscopy	O	Supervised in minor OT
5.	Urinary catheterization	A	Skill lab
6.	Passing NG Tube	A	Skill lab
7	Placement of IV Canula, Intramuscular & Subcutaneous Injection	PS	Skill lab
8	Endotracheal Intubation	O	Skill lab
9	Lumbar Puncture	O	Skill lab

Pediatrics bed side skills for 4th Year MBBS

S/No	Clinical Learning Activity	Level			
		O	A	PS	PI
1	Patient Safety			✓	
2	Subcutaneous Injection		✓		
3	Intra-muscular Injection		✓		
4	Blood Sampling		✓		
5	Use of Glucometer		✓		
6	Use of Inhalers Nebulizer		✓		
7	How to apply cardiac monitor		✓		
8	How to perform ECG		✓		

Levels

O-Observer Status

A-Assistant Status

P-S Performed Under Supervision

P-I Performed Independently

Procedural skills to be acquired in Gynae & Obs clinical training:

Level of Competency	Procedure
Assist	Female Urinary catheterization
Assist	Surgical Dressing
Assist	Preparation of iron sucrose solution
Assist	Removal of sutures
Performs under direct supervision	Intra Muscular Injection
Performs under direct supervision	Subcutaneous Injection
Performs under direct supervision	Obstetrical examination



