



STUDY GUIDE FOR SURGERY

1st YEAR, 2nd YEAR, 3RD YEAR , 4TH YEAR AND FINAL YEAR COURSE



MBBS General Surgery

(1st year, 3rd Year, 4th Year & Final Year)

VISION & MISSION

Vision

The vision of King Edward Medical University is to be a renowned national and world class academia maintaining a leading role in medical education, innovative research and provision of best health care services of international standards.

Mission

King Edward Medical University will prepare health professionals in accordance with highest professional standards to practice evidence-based medicine maintaining international quality of patient-centered care in health care delivery system and will produce research scholars demonstrating excellence in knowledge, skills, and ethical values empowered with community oriented self-directed learning and professional development.

Goals

- To develop and maintain outstanding programs for undergraduate and postgraduate medical students and allied healthcare professionals.
- To provide a conducive learning environment of international standards for education and research.
- To conduct innovative and collaborative research and integrate this knowledge into the practice of medicine & allied health sciences.
- To attract and develop a diverse, talented academic workforce.
- To observe and ensure highest standards of ethics, integrity and compassionate care.

Objectives

- To attain a position among top national universities (listed by Higher Education Commission of Pakistan) and international world university rankings.
- To create a conducive and motivating learning environment for faculty, students and research scholars.
- To acquire research-oriented culture for evidence based professional practices.
- To conduct high quality assessments and evaluations for academic excellence.
- To encourage professional development by self –motivated and self-regulated lifelong learning in pursuit of knowledge and skill.
- To strengthen a dynamic Quality Enhancement Cell inculcating the tradition of internal and external audits among its faculty, students and support staff.

ORGANOGRAM OF GENERAL SURGERY

PROF. ABRAR ASHRAF ALI
Chairman Department of Surgery

SURGERY UNIT I	SURGERY UNIT II	SURGERY UNIT III	SURGERY UNIT IV
PROF. ABRAR ASHRAF ALI Professor of Surgery	PROF. AMEER AFZAL Professor of Surgery	PROF. AHMAD UZAIR QURESHI Professor of Surgery	DR. MUHAMMAD ASADULLAH KHAWAJA Associate Professor
DR. SHAHID FAROOQ Associate Professor	DR. ALI AKBAR Associate Professor	DR. SOMER MASOOD Associate Professor	DR. HARIS JANJUA Assistant Professor
DR. USMAN SIDDIQUE Assistant Professor	DR. BALAKH SHER ZAMAN Assistant Professor	DR. ZEESHAN SHARWAR Associate Professor	
DR. IRFAN SALEEM Assistant Professor	DR. HAFIZ ASIF MAQBOOL Assistant Professor	DR. BAHZAD AKRAM KHAN Assistant Professor	
	DR. NOOR UL AIN MUJAHID Assistant Professor		

TABLE OF CONTENTS

Topic	Page No.
Introduction to study guide Surgery	06
Objectives of the curriculum	07
Structure of the first year module and Time Table	08
Structure of the third year module and time table	16
Structure of the fourth year module and time table	85
Structure of the final year module and time table	182
Learning resources	313

Introduction:

Dear Students of 1ST year, 3rd year, 4th year and Final Year,

Welcome to the surgical curriculum. It will be facilitated by general surgical department comprising of four units, with 400+ study hours.

The purpose of this study guide is to help students have a quick overview of the academic year ahead of them, the main objectives of different sessions, their applications and the bare minimum required from their end.

The general surgical curriculum will comprise of three segments including cognitive sections (lectures), clinical setting learning and assessments. Their details will be in next section of this study guide.

Assessment schedule and format has also been discussed in the study guide.

We hope that students go through this manual for a better understanding of various teaching modalities in the coming academic year.

For any assistance, please do not hesitate to reach out to teaching faculty in Department of General Surgery, North Surgical Ward Mayo Hospital.

We hope that your rotation in our department will be very fruitful and enjoyable and will equip you for future practical life.

With compliments from:

Head of department and members of faculty, Department of General Surgery Mayo Hospital

Objectives:

To enable students to have

- Basic understanding of shock, metabolic response to injury, nutrition.
- Basic understanding of ATLS in trauma and its application in real settings
- Learn Systemic surgery topics (GI, Urological, Ortho, Thoracic)
- How to interact with surgical patient
- History taking and physical examination of surgical patients

- Perform essential required skills.
- Communicate effectively with the patient, the family and the community regarding disease and its relevant issues.
- Understand medical ethics and its application, pertaining to surgery and maintain the confidentiality of the patient.

1st

YEAR

OFFICE OF THE REGISTRAR
KING EDWARD MEDICAL UNIVERSITY
LAHORE

No: 221/MBBS/KEMU

Date: 12-02-2026


NOTICE

The Clinical Departments Rotations Programme of First Year MBBS Class of this University for the Session 2025-2026 is hereby notified as under:-

Departments	Medical Unit I	Surgical Unit I	Radiology	Orthopedic Unit I	Psychiatry Unit I	Artificial Intelligence	Skills Lab	Accident & Emergency	Pediatrics Medicine Unit I
February 2026	Batch 1	Batch 2	Batch 3	Batch 4	Batch 5	Batch 6	Batch 7	Batch 8	Batch 9
March 2026	Batch 2	Batch 3	Batch 4	Batch 5	Batch 6	Batch 7	Batch 8	Batch 9	Batch 1
April 2026	Batch 3	Batch 4	Batch 5	Batch 6	Batch 7	Batch 8	Batch 9	Batch 1	Batch 2
May 2026	Batch 4	Batch 5	Batch 6	Batch 7	Batch 8	Batch 9	Batch 1	Batch 2	Batch 3
June 2026	Batch 5	Batch 6	Batch 7	Batch 8	Batch 9	Batch 1	Batch 2	Batch 3	Batch 4
July 2026	Batch 6	Batch 7	Batch 8	Batch 9	Batch 1	Batch 2	Batch 3	Batch 4	Batch 5
August 2026	Batch 7	Batch 8	Batch 9	Batch 1	Batch 2	Batch 3	Batch 4	Batch 5	Batch 6
September 2026	Batch 8	Batch 9	Batch 1	Batch 2	Batch 3	Batch 4	Batch 5	Batch 6	Batch 7
October 2026	Batch 9	Batch 1	Batch 2	Batch 3	Batch 4	Batch 5	Batch 6	Batch 7	Batch 8

CC:

1. The Vice Chancellor, KEMU, Lahore
2. The Pro-Vice Chancellor, KEMU, Lahore
3. The Director Medical Education, KEMU, Lahore
4. The Medical Superintendent, Mayo Hospital, Lahore
5. The Assistant Registrar MBBS, KEMU, Lahore
6. The Class Representatives, First Year MBBS, KEMU, Lahore
7. All concerned.


REGISTRAR
King Edward Medical University
Lahore

Proposed Early Clinical Exposure

K - CORE

1st Year MBBS, KEMU

Orientation to Clinical Environment & Professionalism (All Departments)

1. Identify roles/responsibilities of a medical student in clinical areas. (According to student year of Learning)
2. Identify major ward/OPD areas and members of the healthcare team.
3. Demonstrate professional appearance, punctuality, and respectful behavior. (AFFECT)
4. Discuss basic principles of patient dignity, confidentiality, and informed verbal consent.

Infection Prevention & Hand Hygiene (Skill Lab)

1. Discuss why hand hygiene prevents healthcare-associated infections. (Surgery and Allied ward)
2. Demonstrate the WHO 6–7 step hand-washing technique and appropriate use of alcohol hand-rub. (Surgery and Allied ward)
3. State indications for gloves, masks, and basic PPE, (Surgery and Allied)
4. Perform glove donning/doffing safely. (Surgery and allied)
5. Describe safe handling of sharps and steps to take in case of accidental exposure (Surgery and Allied)

Bedside Communication & Basic History Taking (All Departments with their context to Emergency, Trauma and Detailed history Rapport building, biodata and presenting complaints)

1. Introduce self and obtain consent for a focused history. (Rapport building)
2. Take a 3–5 minute presenting complaint history using open and closed questions.
3. Demonstrate active listening, eye contact, and cultural and language diversity.

Vital Signs I: Pulse & Respiratory Rate (All departments with context to their specialty)

1. Measure and record pulse rate (rate, rhythm, volume) accurately.
2. Measure and record respiratory rate correctly and note pattern.
3. Recognize abnormal values and indicate when to escalate to a supervisor.

Vital Signs II: Blood Pressure & Temperature ((All departments with context to their specialty))

1. Demonstrate correct BP measurement (manual sphygmomanometer): cuff selection, placement, Korotkoff sounds.(Skill/ Skill lab /Clinical setting)
2. Measure and interpret oral/axillary temperature. (skill lab/Clinical Setting)
3. Record and report abnormal findings appropriately.

General Physical Examination & Basic Observations ((All departments with context to their specialty))

1. Perform a structured general physical exam (head → toes) on an adult patient or simulated model.
2. Recognize and describe signs: pallor, cyanosis, jaundice, edema, dehydration.
3. Document findings in a concise bedside note.

Respiratory System((All departments with context to their specialty))

1. Inspect, palpate, percuss (basic), and auscultate chest fields correctly.
2. Identify common abnormal sounds (wheeze, crepitus) using simulation/audio. (Skill lab/Clinical setting)
3. Present respiratory findings orally and in writing.

Cardiovascular System((All departments with context to their specialty))

1. Locate and palpate central and peripheral pulses and measure capillary refill. **Clinical setting)**
2. Perform basic precordial inspection, palpation and auscultation (identify S1/S2). (Clinical setting)

Safe Patient Handling, Mobility & Basic Bed Care ((All departments with context to their specialty and specifically Emergency Department))

1. Demonstrate safe patient transfer techniques (bed and chair) in simulation. **(Skill lab/ Clinical setting emergency Department)**
2. Perform a respectful assisted dressing while preserving patient dignity. **(Skill lab/ Clinical setting)**
3. Explain pressure ulcer prevention basics and mobility advice. **(Skill lab/ Clinical setting)**

Basic Patient Interaction: communication skills (Psychiatry Department)

1. Demonstrate respectful verbal and non-verbal communication with patients and attendants under supervision. (Skill lab/ Clinical setting)

Biomedical Waste Awareness (General Surgery and Medicine Department)

1. Identify color-coded waste disposal containers
2. Discuss the importance of proper biomedical waste management.

Imaging Anatomy (Radiology)

1. Describe the basic principles of X-ray, CT scan and MRI imaging
2. Recognize normal planes of imaging (axial, coronal, sagittal) on CT and MRI.
3. Identify normal anatomical structures on standard Xray vies including Chest, Abdomen and limbs.
4. Demonstrate X ray reading step wise approach for chest xray(ABCDE)
5. Explain basic ultrasound concepts including echogenicity and probe orientation
6. Identify major organs, liver, gall bladder, kidneys and spleen
7. Identify major organs and structures on normal CT scan and MRI
8. Brain, Head, Thorax and abdomen
9. Correlate radiological images with cadaveric and prosection anatomy

Orthopaedic

1. Identify Normal Bony Anatomy Relevant to Fractures and use of different muscles involved in movement of limbs
2. Recognize and Classify Common Fracture Types
3. Differentiate and classify fractures (simple, compound, transverse, oblique, spiral, comminuted, greenstick, epiphyseal) using anatomical principles and basic X-ray images. Explain Anatomical Basis of Fracture Patterns
4. Correlate Neurovascular Anatomy with Fracture Complications

5. Identify major neurovascular structures related to common fracture sites (e.g., surgical neck of humerus, supracondylar humerus, neck of femur) and predict possible complications based on anatomical relationships.
6. Outline the stages of fracture healing (hematoma formation, inflammatory phase, soft callus, hard callus, remodeling) and relate each stage to underlying histological and vascular anatomy.
7. Interpret Basic Radiological Features of Fractures
8. Recognize normal and abnormal radiographic anatomy of bones and identify key features of fractures such as fracture line, displacement, angulation, and callus formation.
9. Integrate Structure with Clinical Function

Implementation:

Each session = 90 minutes (short briefing → demo → small-group practice → structured feedback → reflection).

May use simulation and supervised ward exposure. Progress will be entered in logbooks. Assessments, including DOPS/checklists and a mini-OSCE, may be included at the end of the term.

These activities contribute to competency development in professionalism, communication, patient safety, and basic clinical skills as per MBBS Modular Integrated Curriculum.

KEMU Curricular Map: A Competency-Based Framework

1st YEAR MBBS Modular Integrated Framework

Period	Block	Primary Modules	Horizontal Integration	Skill component	Vertical Integration	Spiral threads	
Feb – May	Block 1	Foundation module (5 weeks) End-of-module test	General Anatomy, Histology, Embryology; Cell Bio Biochem; Nerve/Muscle Physiology. Interactive Lecture SDL VENUE: Anatomy LT Physiology LT Biochemistry LT	<ul style="list-style-type: none"> • Practicals • Cadaveric dissection • Clinical Rotation • Skill lab • Laboratories • Dissection hall • Clinical ward 	Medicine, Surgery, Radiology, orthopedics, paed Interactive Lecture SDL VENUE: Anatomy LT Physiology LT Biochemistry LT	K-CORE: Ward orientation, hand hygiene, vitals. Ward rotations Sat 09- 10:30 K-PRISM: Learning strategies, Ethics. 2 hr/week lecture Anatomy LT	
		Musculoskeletal Module (6 weeks) End-of-module test					
BLOCK ASSESSMENT – Written Component (SEQ +MCQ) and OSPE							
May – Sept	Block 2	Cardiovascular (6 weeks) End-of-module test	Heart/Lung Embryology; Thorax Anatomy; Cardiac markers & Lipid metabolism. Interactive Lecture SDL VENUE: Anatomy LT Physiology LT Biochemistry LT	<ul style="list-style-type: none"> • Practicals • Cadaveric dissection • Clinical rotation • Skill lab • Laboratories • Dissection hall • Clinical ward 	Medicine, Surgery, Radiology, orthopedics, paed Interactive Lecture SDL VENUE: Anatomy LT Physiology LT Biochemistry LT	K-CORE: History-taking, precordium & respiratory exams. Ward rotation Sat 09- 10:30 K-PRISM: Communication skills, Behavioral Sciences. 2 hr/week lecture Anatomy LT	
		Respiratory (5 weeks) End-of-module test					
BLOCK ASSESSMENT - Written Component (SEQ + MCQ) and OSPE							
Sept – Nov	Block 3	Blood & Immunity (6 weeks) End-of-module test	Lymphoid system; Heme metabolism; Nervous system	<ul style="list-style-type: none"> • Practicals • Cadaveric 	Medicine, Surgery, Radiology, orthopedics, paed	K-CORE: Phlebotomy, Imaging/Radiology,	

		Core Concepts (5 weeks) End-of-module test	organization; Skin/Limbs development. Interactive Lecture SDL VENUE: Anatomy LT Physiology LT Biochemistry LT	dissection • Clinical rotation • Skill lab • Laboratories • Dissection hall • Clinical ward	Interactive Lecture SDL VENUE: Anatomy LT Physiology LT Biochemistry LT	Orthopedics. Ward rotations Sat 09- 10:30 K-PRISM: Research literacy, AI in Medicine, Leadership. 2 hr/week lecture Anatomy LT	
BLOCK ASSESSMENT - Written Component (SEQ + MCQ) and OSPE							
December	Prep Leave 4 Weeks						
January	SUMMATIVE ASSESSMENT - Written component + Structured Viva						
Programme evaluation							

3rd

YEAR



OFFICE OF THE CHAIRPERSON
DEPARTMENT OF PATHOLOGY
KING EDWARD MEDICAL UNIVERSITY,
LAHORE
Office No. 99212068

MODULAR ORDER WITH DATES OF 3RD YEAR MBBS 2025

<u>Modules/Intermodules</u>	<u>Days</u>	<u>Starting Date</u>	<u>End Date</u>	<u>Credit Hours</u>
Generalized Module	10	02-01-2025	13-01-2025	2.7
1 st Intermodule	15	14-01-2025	30-01-2025	04
Inflammation	12	01-02-2025	15-02-2025	2.6
2 nd Intermodule	15	17-02-2025	25-03-2025	02
Special Microbiology	58	06-03-2025	21-05-2025	11.9
Immunity	07	29-05-2025	05-06-2025	1.8
Hemodynamics	13	10-07-2025	24-07-2025	1.8
3 rd Intermodule	12	25-07-2025	13-08-2025	02
4 th Intermodule	23	15-08-2025	10-09-2025	04
Neoplasia	09	11-09-2025	20-09-2025	02

STRUCTURE OF THIRD YEAR:

THIRD YEAR

- The structure of modules taught by Surgery department will be:

- **Lectures** – Scheduled according to roster.
- Lectures are scheduled on week days (monday-saturday)

Every lecture is of 45 minutes duration.

- At the end of every Lecture feedback from the students would be collected for quality assurance and evaluation

Timings: 45 min duration (according to roster)

Venue: Forensic medicine Lecture Theatre.

Lecturer: Assistant Professor

Topics taught during the course of a year will be

- Introduction to surgical patients
- Shock
- Metabolic response to injury
- Tissue diagnosis
- Sterilization
- Blood transfusion

- Infections in relation to immunocompromised patients
- Nosocomial infections
- Transplant surgery
- Cellulitis, boil, Folliculitis, Impetigo, Erythema
- Bacteremia, Pyaemia, Sepsis
- Abscess, Septic Shock
- Lymphangitis, Fascitis, Folliculitis
- Actinomycosis, Anthrax, Gonorrhoea
- Gas gangrene & Synergistic gangrene
- Surgical aspects of tetanus
- Surgery in tropics- tuberculosis
- Chest infections
- Surgical wounds
- Surgical site infections
- Skin closure techniques
- DVT, Thrombophlebitis
- Mesenteric Ischemia
- Causes and screening of Neoplasia
- Surgical aspect of treatment of Neoplasia

THE STRUCTURE OF CLINICAL ROTATIONS OF 3RD YEAR IN SURGICAL WARD WILL BE AS FOLLOWS

Venue: East, South, North, West Surgical Ward

Dates: Specified according to roster

Duration: 4 weeks with 4 days a week (Mon to Thu) for each batch.

A TOTAL OF 4 BATCHES ACCORDING TO ROSTER WILL ROTATE IN ALL WARDS

Timings: 10.30 Am-12.00pm (Ward, OPD), 4.00pm to 6.00pm (ER)

Lecture: Assistant Professor (Ward , OPD), On Call Senior Registrar (ER)

Topics to be Taught During Ward Clinical Rotation:

- History taking
- General physical examination
- Thyroid swelling
- Inguinal hernia
- Paraumbilical hernia
- Breast swelling
- Acute cholecystitis
- Acute pancreatitis
- Intestinal obstruction
- Varicose veins
- DVT
- Other short cases

Skills to be learnt in Emergency

- History and physical examination of emergency cases
- Preoperative preparation
- Post operative management
- Stitching of minor wounds
- Nasogastric tube insertion and Foley's Catheterization

WARD TEST IS CONDUCTED AT THE END OF CLINICAL ROTATION OF EACH BATCH. IT INCLUDES SHORT CASE EXAMINATION AND VIVA VOCE

ASSESSMENT

Formative Assessment

Third year

Sr.#	Assessment	Tools	Frequency
1.	Class Tests	30 MCQs	1 test at the end of schedule
2.	Ward Tests	Short Case Viva Voce	1 ward test at the end of each batch rotation



EAST SURGICAL WARD
PROF. DR. S. ASGHAR NAQI

FCPS, FRCS (Ed), MCPS-HPE
PROFESSOR OF SURGERY
CHAIRMAN DEPARTMENT OF SURGERY
DEAN, FACULTY OF ALLIED HEALTH SCIENCES
DIRECTOR, ALLIED HEALTH SCIENCES
KING EDWARD MEDICAL UNIVERSITY /
MAYO HOSPITAL, LAHORE



No. 36 ESW/23

Dated 20/01

/2023.

To,

THE HEAD OF EAST SURGICAL WARD
THE HEAD OF SOUTH SURGICAL WARD
THE HEAD OF NORTH SURGICAL WARD
THE HEAD OF WEST SURGICAL WARD

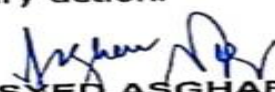
SUBJECT: CLASS LECTURES DISTRIBUTION OF 3RD YEAR MBBS 2022.

Dear Colleagues,

It is to inform you that according to the decision of Board of Studies in Surgery meeting which was held on 27-10-2018. You are requested to teach and arrange the class according to below mentioned schedule.

Module Name	Unit Name
Generalized Module (12 Days)	East Surgical Ward (Unit-I)
1 st Inter module (15)	
Immunity (11)	
Inflammation (12)	West Surgical Ward (Unit-IV)
2 nd Inter module (11)	
4 th Inter module (15days)	South Surgical Ward (Unit-II)
Special microbiology (48)	
3 rd Inter module (11)	North Surgical Ward (Unit-III)
Hemodynamics (8)	
Neoplasia (9)	

This is for your kind information and further necessary action.


PROF. DR. SYED ASGHAR NAQI
Professor of Surgery,
Dean Faculty of Allied Health Sciences
Director of Program ST B.Sc. (Hons)
King Edward Medical University,
Lahore.

MODULES

LEARNING OBJECTIVES
GENERALIZED MODULE & 1ST INTERMODULE
3RD YEAR MBBS 2026

Title	General Surgery	Student Notes
Target Students	3 rd year	
Duration	Lectures: 06	
Outcomes	To understand fundamental aspects of surgery	
Assessments	MCQs, Case presentation	

INTRODUCTION TO SURGICAL PATIENTS

- To understand the importance of surgical field
- To learn the classification of surgical procedures
- To learn the principles of perioperative, intraoperative and postoperative care
- To learn new advances in surgical field

SHOCK

- To learn the classification of shock
- To learn the clinical features of shock
- To learn the resuscitation in shock
- To learn the end points of resuscitation in shock

METABOLIC RESPONSE TO INJURY

- To learn the basic concepts of homeostasis
- To understand the graded nature of the injury response
- The ebb and flow model for the metabolic response to surgery and trauma
- To learn the changes in body composition following injury
- To know the avoidable factors that compound the response to injury

TISSUE DIAGNOSIS

- To find what are the reasons for tissue analysis
- To know the common types of tissue sample
- To learn the sequence of events during histologic processing
- To learn the advantages and disadvantages of frozen section
- To know the microscopic features of malignancy and inflammation
- Usage of special stains and usage of immunohistochemistry

STERILIZATION

- To understand the definition of sterilization
- To learn different types of sterilization
- To learn the importance of sterilization in surgical field
- To learn the monitoring of sterilization

BLOOD TRANSFUSION

- To understand blood grouping and cross matching

- To learn the indications of blood transfusion
- To learn the blood transfusion protocol [screening, monitoring, documentation]
- To learn the complications of blood transfusion
- To understand massive transfusion protocol for trauma

1ST INTERMODULE

DURATION 15 DAYS (14-01-2025 to 30-01-2025)

CONTACT HOURS Lectures =44 hours + Practical's= 44.50 Hours + Hospital stay = 20.5 HOURS

CREDIT HOURS 4

DAY 1 14-01-2025 (TUESDAY)						
8.00 -8.45am	1.	Human Genome	he students should learn about the histone organization, Non coding DNA and RNA and their types	Robbins Pathology	Pathology	45 min
8.45-9.30am	2.	Symptoms of Respiratory system	CASE SCENARIOS: Dyspnoe Cough + Hemoptysis Pleural effusion Pneumonia		Medicine	45 min
9.30-10.15am	3.	Shock			Surgery	45 min
Hospital work 10:30am - 12.00pm						
12.10-02.00pm		PRACTICAL	Batch A :Small group discussions Batch B: Pharmacology Batch C : Medico legal/ autopsy/analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	
DAY 2 15-01-2025 (WEDNESDAY)						
8.00-8.45am	4.	Pharmacodynamics , receptor antagonism, dose response curve		Basic and clinical pharmacology	Pharmacology	45 min
8.45-9.30am	5.	Cellular housekeeping	The students should know about different cellular constituents and their functions	Robbins pathology	Pathology	45 min
9.30-10.15am	6.	Law courts & courts procedure, medical man as an expert witness			Forensic Medicine	45 min
Hospital work 10:30am - 12.00pm						

12.10-2.00pm		PRACTICAL	Batch B: Small group discussions Batch C: Pharmacology Batch A: Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	
DAY 3 16-01-2025 (THURSDAY)						
8.00-8.45am	7	Drug interactions		Basic and clinical pharmacology 12 th edition katzung	Pharmacology	45 min
8.45-9.30am	8	Gram negative bacteria	E.COLI Pseudomonas klebsiella		ENT	45 min
9.30-10.15am	9	Cell signaling pathways and activation	Signaling pathways, their activation, cell-matrix interactions		Pathology	45 min
Hospital work 10:30am - 12.00pm						
12.10 - 02.00pm		PRACTICAL	Batch C: Small group discussions Batch A: Pharmacology Batch B: Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	
DAY 4 17-01-2025(FRIDAY)						
8.00-8.45 am	10.	Medical certification & reporting certification of death, birth, illness, fitness			Forensic medicine	45 min
8.45-9.30am	11.	Factors affecting doses & action of drugs			Pharmacology	45 min
9.30-10.15am	12.	Cellular responses to injury & Adaptations of cellular growth and differentiation	Students should know the difference between Hypertrophy, Hyperplasia,	Robbins Pathology	Pathology	45 min
10.30-12.00pm		Practical	Batch A: Small group discussions Batch B: Pharmacology Batch C: Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	
DAY 5 18-01-2025 (SATURDAY)						

8.00-8.45am	13.	Tissue diagnosis			Surgery	45 min
8.45-9.30am	14.	Common infections in ear, nose & throat	MTB Corneybacteriumdiphtheriae		ENT	45 min
9.30-10.15am	15.	Symptoms of CVS	CASE SCENARIOS: Chest pain (angina, MI) Cardiac failure DVT + atherosclerosis		Medicine	45 min
10:15-11:00am	16.		Forensic Medicine			45 min
11:00-11:45am	17.		Pathology			45 min
11:45-12:30am	18.		Pharmacology			45 min
12.45—2.30pm		Practical	Batch B: Small group discussions Batch C: Pharmacology Batch A : Medicolegal/autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	
DAY 6 20-01-2025 (MONDAY)						
8.00-8.45am	19.	Symptoms of Gastroenterology	CASE SCENARIOS: Pain abdomen Diarrhea (acute, chronic) Upper GI bleed		Medicine	
8.45-9.30am	20.				Orthopedics	45 min
9.30-10.15am	21.	Cell injury & cell disease	Necrosis, mechanism of cells injuries and clinic-pathological		Pathology	45 min
Hospital work 10:30am - 12.00pm						
12.10-2.00pm		Practical	Batch C : Small group discussions Batch A : Pharmacology Batch B : Medicolegal/autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	
DAY 7 21-01-2025 (TUESDAY)						
8.00-8.45am	22.	Adaptations of cellular growth and differentiation	Atrophy and Metaplasia		Pathology	45 min
8.45-9.30am	23.	Drug dependence		Basic and clinical pharmacology 12 th edition katzung	Pharmacology	45 min

9:30-10:15am	24.	Cell injury and Cell death	Necrosis, Mechanisms of cell injury and clinic pathological correlation		Pathology	45 min
Hospital work 10:30am - 12.00pm						
12.10-02.00pm		PRACTICAL	BATCH A: Small group discussions Pathology Batch B: Pharmacology Batch C: Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	
DAY 8 22-01-2025 (WEDNESDAY)						
8.00-8.45am	25.	Adverse drug affects and drug allergies		Basic and clinical pharmacology 12 th edition katzung	Pharmacology	45 min
8.45-9.30am	26.	Importance of dying declaration and its recording			Forensic medicine	45 min
9.30-10.15am	27.	Cell injury	Reversible and irreversible injury and mechanisms	Robbins Pathology	Pathology	45 min
Hospital work 10:30am - 12.00pm						
12.10-2.00pm		PRACTICAL	Batch B : Small group discussions Batch C : Pharmacology Batch A : Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	
DAY 9 23-01-2025 (THURSDAY)						
8.00-8.45am	28.	Medicolegal systems			Forensic medicine	45 min
8.45-9.30am	29.	Pharmacogenetics & Bioassay		Basic and clinical pharmacology	Pharmacology	45 min
9.30-10.15am	30.	Morphological alterations in cell injury	CASEOUS, FIBRINOID, COAGULATIVE necrosis, Liquefactive necrosis, gangrene		Pathology	45 min
Hospital work 10:30am - 12.00pm						

12.10-2.00pm		PRACTICAL	Batch C : Small group discussions Pathology Batch A: Pharmacology Batch B : Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	
DAY 10 24-01-2025 (FRIDAY)						
8.00-8.45am	31.	Law in relation to mental health			Forensic medicine	45 min
8.45-9.30am	32.	Introduction to ANS		Basic and clinical pharmacology 12 th edition katzung	Pharmacology	45min
9.30-10.15am	33.	APOPTOSIS	MECHANISM		Pathology	45 min
10.30-12.00pm		PRACTICAL	Batch A: Small group discussions Batch B: Pharmacology Batch C: Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	
DAY 11 25-01-2025 (SATURDAY)						
8.00-8.45am	34.	Sterilization			Surgery	45 min
8.45-9.30am	35.	Intracellular accumulations	CALCIFICATION, PIGMENTATION	Robbins Pathology	Pathology	45 min
9.30-10.15am	36.	Cholinergic receptors		Basic and clinical pharmacology 12 th edition katzung	Pharmacology	45 min
10:15-11:00am	37.				Pharmacology	45 min
11:00-11:45am	38				Forensic Medicine	45 min
11:45-12:30pm	39.				EYE	45 min
12.45-2.30pm		Practical	Batch B: Small group discussions Batch C: Pharmacology practical Batch A: Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	

DAY 12 27-01-2025 (MONDAY)							
8.00-8.45am	40.	PMDC;R IGHTS & Obligations				Forensic medicine	45 min
8.45-9.30am	41.	Genes and human diseases				Pathology	45 min
9.30-10.15am	42.	Blood transfusion				surgery	45 min
Hospital work				10:30am - 12.00pm			
12.10—2.00pm		PRACTICAL	Batch C: Small group discussions Batch A : Pharmacology practical Batch B : Medico legal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches		Respective departments	
DAY 13 28-01-2025 (TUESDAY)							
8.00-8.45aM	43.	Professional misconduct, professional confidentiality and exceptions				Forensic Medicine	45 min
8.45-9.30am	44.	Skeletal muscle relaxants				Pharmacology	45 min
9.30-10.15am	45.	Mendelian disorders & Chromosomal disorders				Pathology	45 min
Hospital work				10:30am - 12.00pm			
12.10- 2.00pm		PRACTICAL	Batch A: Small group discussions Batch B: Pharmacology practical Batch C: Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches		Respective departments	
DAY 14 29-01-2024 (WEDNESDAY)							
8.00-8.45am	46.	Adrenoreceptors agonists			Basic and clinical pharmacology 12 th edition katzung	Pharmacology	45 min
8.45-9.30am	47.	Single gene disorders & Multigenic disorders				PATHOLOGY	45 min
9.30-10.15am	48.	Medical negligence				Forensic medicine	45 min

Hospital work		10:30am - 12.00pm				
12.10-2.00pm		PRACTICAL	Batch B: Small group discussions Batch C: Pharmacology practical Batch A: Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	
DAY 15		30-01-2025 (THURSDAY)				
8.00-8.45am	49.	Diagnostic methods for genetic diseases	PCR, DNA sequencing	Robbins pathology	Pathology	
8.45-9.30am	50.	Adrenoreceptors antagonists & ergot alkaloids		Basic and clinical pharmacology 12 th edition katzung	Pharmacology	
9.30-10.15am	51.	Consent; importance in major n minor procedures			Forensic medicine	
Hospital work		10:30am - 12.00pm				
12.10-2.00pm		PRACTICAL	Batch C: Small group discussions Batch A: Pharmacology practical Batch B : Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	

DR. MARYAM ZAHID,
 Class Incharge 3rd Year MBBS,
 APWMO,
 Department of Pathology,
 KEMU, Lahore.

PROF. DR. AMBAREEN HAMID,
 Chairperson
 Department of Pathology,
 KEMU, Lahore.

IMMUNITY MODULE 3RD YEAR MBBS 2026

Title	General Surgery	Student Notes
Target Students	3 rd year	
Duration	Lectures: 03	
Outcomes	To understand role of surgery in immunocompromised patients, nosocomial infections, transplant surgery	
Assessments	MCQs, Case presentation	

INFECTIONS IN IMMUNOCOMPROMISED PATIENTS

- To understand the types of infections encountered in immune deficient patients
- To learn the specific considerations related to specific infections (bacterial, viral, fungal)
- To learn the clinical features and diagnosis of specific infections
- To learn the management of infections in immunocompromised patients

NOSOCOMIAL INFECTIONS

- To learn the definition of nosocomial infections
- To learn the common nosocomial infections
- To learn the cause and effect of nosocomial infection
- To learn the clinical findings and modes of transmission
- To learn the prevention and management of nosocomial infections

TRANSPLANT SURGERY

- To learn the introduction of transplant surgery
- To know various types of graft
- To understand the graft rejections and its causes
- To learn the principles of immunosuppression
- To learn the important points related to liver and kidney transplant

MODULE**IMMUNITY**

DURATION 07 DAYS (29-05-2025 to 05-06-2025)

CONTACT HOURS Lectures 27 = 20.25 hours + Practicals = 22.5 Hours + Hospital stay = 10.5 hours

CREDIT HOURS 1.8

TEACHING METHODOLOGIES Lectures/Practicals/ small group discussion/clinics

LEARNING OBJECTIVES: This module is designed for 3rd year M.B:B.S students. It is intended to impart them core knowledge about the pathologies involved in immunity along with different pharmacological agents used to combat the clinical conditions. Students will also be introduced to clinical conditions which are encountered due to disturbances in immunity.

By the end of the module the students should be able to:

1. Apply the knowledge of the biochemical and cellular physiology to discuss the pathogenic mechanisms resulting in alterations in immunity
2. Describe the clinical manifestations associated with these pathologic changes.
3. Discuss the role of different pharmacological agents used in clinical conditions which arise due to disturbance in immunity.

				Batch B : Medicolegal/ autopsy/ analytical/serology/ radiological lab			
DAY 2 30-05-2025 (Friday)							
8.00-8.45	4	Immunological reactions to drugs, drug allergy and its treatment		Students should be able to enumerate various and understand their routes of administration absorption, distribution, metabolism and excretion.	Basic and clinical pharmacology 12th edition Katzung	Pharmacology	45 mins
8.45-9.30	5	Monoclonal/Polyclonal Antibodies, TOL and NOD Receptors, Hypersensitivity reactions (Type 1 and 2)		To be able to define and describe hypersensitivity reactions		Pathology	45 mins
9.30-10.15	6	Infections in relation to immune deficient patients				Surgery	45 mins
10.30—12.00		PRACTICAL		Batch A : Practical aspects of Prevention through immunity enhancement : a) Active and passive immunization b) Nutrition as immune enhancers (amino acids and fatty acids) c) EPI - community medicine Batch B : Pharmacology practical Batch C : Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	
DAY 3 31-05-2025 (Saturday)							
8.00-8.45	7	Allergic and vasomotor rhinitis		To be able to define and describe hypersensitivity reactions		ENT	45 mins
8.45-9.30	8	Overview of drugs for various immune deficiency states				Pharmacology	45 min

9.30-10.15	9	Hypersensitivity reactions (Type 3 and 4)				Pathology	45 min
10.15-11.00						Forensic Medicine	45 min
11.00-11.45						Medicine	45 min
11.45-12.30						Pharmacology	45 min
12.45—02.30		PRACTICAL		<p>Batch B: Practical aspects of Prevention through immunity enhancement :</p> <p>a) Active and passive immunization</p> <p>b) Nutrition as immune enhancers (amino acids and fatty acids)</p> <p>c) EPI - community medicine</p> <p>Batch C: Pharmacology practical</p> <p>Batch A: Medicolegal/ autopsy/ analytical/serology/ radiological lab</p>	Class divisible in three batches	Respective departments	
DAY 4 02-06-2025 (Monday)							
8.00-8.45	10.	Overview of scleroderma and other systemic autoimmune disease				Pathology	45 min
8.45-9.30	11.					Surgery	45 mins
9.30-10.15	12					Pharmacology	45 mins
Hospital work 10.30-12.00							
12.10-02.00		PRACTICAL		<p>Batch C: clinical approach of systemic inflammatory response syndrome, haemophagocytic syndrome</p> <p>Batch A: Practical aspects of Transplant immunology: HLA</p>	Class divisible in three batches	Respective departments	

				typing, cross matching, Techniques in immunology. Panel reactive antibodies Batch B : Medicolegal/ autopsy/ analytical/serology/ radiological lab			
DAY 5							
03-06-2025 (Tuesday)							
8.00-8.45	13.	Transplant Surgery (Liver, kidney and bone marrow), Role of immunosuppressants				Surgery	45 min
8.45-9.30	14.	Rejection of tissue transplants		Students should be able to describe the mechanism involved in allograft rejection and steps that can be taken to combat the rejection		Pathology	45 min
9.30-10.15	15	Forensic aspects of immunity; a) Mixed up babies in maternity homes/disputed babies: role of blood group, identification b) Application of immunological techniques e.g: Gel diffusion, percipitin test and immunoelectrophoresis				Forensic Medicine	45 min
Hospital work							
10.30-12.00							
12.10-02.00pm		PRACTICAL		Batch A : Clinical approach of systemic inflammatory response syndrome, haemophagocytic syndrome Batch B : Practical aspects of Transplant immunology : HLA typing, cross matching , Techniques in immunology. Panel reactive antibodies	Class divisible in three batches	Respective departments	

INFLAMMATION MODULE & 2nd INTERMODULE

3RD YEAR MBBS 2026

Title	General Surgery	Student Notes
Target Students	3 rd year	
Duration	Lectures: 04	
Outcomes	To understand different types of infections & inflammation and its management	
Assessments	MCQs, Case presentation	

INFLAMMATION:

- To define inflammation and its role in the body's immune response
- To explain various types of inflammatory responses, including acute and chronic inflammation
- To describe the key cellular and molecular components involved in inflammation, such as cytokines, white blood cells, and inflammatory mediators.

- To understand the causes and triggers of inflammation, including infection, injury, and autoimmune disorders
- To Identify the signs and symptoms of inflammation, both localized and systemic.
- To explore the benefits and drawbacks of inflammation in the context of tissue repair and disease progression
- To learn about anti-inflammatory strategies and treatments, including non-steroidal anti-inflammatory drugs (NSAIDs) and corticosteroids
- To recognize the importance of balancing the inflammatory response for overall health.

MODULE**INFLAMMATION**

DURATION 12 DAYS (01-02-2025 to 15-02-2025)

CONTACT HOURS Lectures 39 =31.50 hours + Practicals = 30 Hours + Hospital stay = 12 Hours

CREDIT HOURS 2.6

TEACHING METHODOLOGIES Lectures/Practicals/ small group discussion/clinics

OBJECTIVES

The course is designed primarily for 3rd year M.B.B.S students and will cover the fundamental aspects of inflammation, and pharmacology of anti-inflammatory drugs with interrelated clinical aspects of medicine, surgery, orthopaedic surgery, eye, nose and throat. By the end of the module the students should be able to:

1. Describe :

The cells and types of inflammation, cellular and vascular events of inflammation.

Process of phagocytosis.

Outcome of inflammatory process

Acute and chronic inflammatory conditions of nose and throat

Inflammatory conditions of orbit and eyelid

2. Discuss the role of:

Chemical mediators in inflammation and anti-inflammatory drugs.

Autocoids, serotonin and its antagonists.

Medicolegal certification in different injuries

3 .Elaborate

Types of Injuries along with their mechanics

Difference between antemortem/postmortem injuries

Systemic effects of inflammation and choice of analgesics.

				interactions of NSAIDs with reference to aspirin as prototype	katzung		
8.45am-9.30am	8.	Mechanism of action of NSAIDs, Adverse effects, contraindications and drug interactions of NSAIDs		Student should be able to describe MOA, adverse effects contraindications and drug interactions of NSAIDs with reference to aspirin as prototype	Basic and clinical pharmacology 12 th edition katzung	Pharmacology	45 mins
9.30-10.15am	9.	Cellular events of inflammation : Leucocyte recruitment and activation		Student should be able to describe the cellular events taking place during inflammation such as Margination, rolling and adhesion to endothelium Transmigration across the endothelium Migration towards a chemotactic stimulus	Robbins Pathology	Pathology	45 min
Hospital work 10.30-12.00							
12.10-2.00PM		PRACTICAL		Batch C : Acute Appendicitis Batch A : Small group discussion Batch B: General description of injury regarding age of injury.	Class divisible in three batches	Respective departments	
DAY 3 04-02-25 (Tuesday)							
8.00-8.45am	10.	Regional Injuries		Students should have sound knowledge of regional injuries		Forensic Medicine	45 min
8.45-9.30am	11.					Pharmacology	45 min
9.30-10.15am	12.	Autacoids histamine and antihistamine.		Student should be able to recall various generations of antihistamines and role of antihistamine in allergic conditions. Their adverse effects and drug interactions.	Basic and clinical pharmacology 12 th edition katzung	Pharmacology	45 min
Hospital work 10.30-12.00							

9.30-10.15am	18	Overview of Acute inflammatory conditions of nose and throat.		Students should be able to describe: Acute tonsillitis Acute pharyngitis Acute laryngitis Acute sinusitis		ENT	45 mins
10.30 - 12.00pm		PRACTICAL		Batch A: Chronic cholecystitis Batch B: small group discussion Batch C: Certification of injury MLC's	Class divisible in three batches	Respective departments	
DAY 6 08-02-25(Saturday)							
8.00-8.45am	19	Cellulitis, Boils, Folliculitis, Impetigo & erythema		Students should have sound understanding of acute inflammatory condition		Surgery	45 min
8.45-9.30am	20.	Prostaglandins pharmacological effects, Clinical uses of prostaglandins		The use of prostaglandins in various clinical conditions	Basic and clinical pharmacology 12 th edition katzung	Pharmacology	45 min
9.30-10.15am	21.	Cell derived Chemical Mediators of Inflammation : details of Vasoactive amines Arachidonic acid metabolites ,Platelet activation factors.		Student should have a sound knowledge of <ul style="list-style-type: none"> Prostaglandins and leucotrienes Differences between different mediators involved in cyclooxygenase and lipooxygenase pathways. 	Robbins pathology	Pathology	45 mins
10.15-11:00am	22.					Surgery	
11:00-	23.					Pathology	

11:45am							
11:45-12:30pm	24.					Forensic Medicine	
12.45-02.30		PRACTICAL		Batch B: ESR determination and its importance Batch C: Therapeutic modalities and choice of analgesics Batch A: Trauma cases which are kept under observation	Class divisible in three batches	Respective departments	
DAY 7 10-02-25 (Monday)							
8.00-8.45am	25.	Bacterimia, Pyaemia, Sepsis, Abscess, Septic Shock		Students should be able to describe various inflammatory processes.		Surgery	45 mins
8.45-9.30am	26.	Disease modifying anti-rheumatic drugs (DMARDs)		Student should be able to enumerate DMARDs and explain their MOA, adverse effects and contraindications	Basic and clinical pharmacology 12 th edition katzung	Pharmacology	45 mins
9.30-10.15am	27.	Plasma protein derived Chemical Mediators of inflammation (details of complement system, kinin system, clotting system)		. The student should be able to i) Enumerate vasoactive amines ii) Describe the 3 systems of plasma proteins integrating during course of inflammation	Robbins Pathology	Pathology	45 min
Hospital work 10.30-12.00							
12.10-02.00		PRACTICAL		Batch C : ESR determination and its importance Batch A : Therapeutic modalities and choice of analgesics Batch B: Trauma cases which are kept under observation	Class divisible in three batches	Respective departments	

				Batch C :Trauma cases which are kept under observation			
DAY 9				12-02-25 (Wednesday)			
8.00-8.45am	30.	Drugs/Age Of Injury		Students should have understanding of various drugs and be able to define age of injury		Forensic Medicine and Toxicology	45 MIN
8.45-9.30 am	31.	Phagocytosis by macrophages		Students should have sound knowledge of various receptors present on macrophages, their function and steps of phagocytosis in macrophages.		Pathology	45 mins
9.30- 10.15 am	32.	Antagonists of adrenocortical agents		They should have a sound knowledge of adverse effects and contraindications to the use of adrenocortical agents.	Basic and clinical pharmacology 12 th edition katzung	Pharmacology	45 mins
Hospital work				10.30-12.00			
12.10-2.00		Practical		Batch B: ESR determination and its importance Batch C : Therapeutic modalities and choice of analgesics Batch A : Trauma cases which are kept under observation	Class divisible in three batches	Respective departments	
DAY 10				13-02-25 (Thursday)			
8.00-8.45am	33	Lymphangitis, Fascitis, Folliculitis		Students should be able to describe the the various acute inflammatory conditions		Surgery	45 mins
8.45-9.30 am	34.	Inflammatory conditions of eye :		Students should be able to		Eye	45 mins

		Stye,Chlazion,Blephritis, Preseptal Cellulitis and Herpes zoster Infection		identify the various inflammatory conditions of eye.			
9.30-10.15 am	35	Anti TB drugs		Students should have knowledge of various Anti tuberculous drugs and their adverse effects.	Basic and clinical pharmacology 12 th edition katzung	Pharmacology	
Hospital work				10.30-12.00			
12.10-02.00		Practical		Batch C: Tuberculosis of lung/ Granuloma Batch A: small group discussion Batch B: (Final Opinion) Interpretation of results	Class divisible in three batches	Respective departments	
DAY 11 14-02-25 (Friday)							
8.00-8.45am	36	Overview of chronic inflammatory conditions of nose and throat.		Students should be able to describe: Chronic tonsillitis Quinsy(Peritonsillar Abcess) Chronic pharyngitis Chronic laryngitis Chronic sinusitis Rhinitis		ENT	45 mins
8.45-9.30am	37	Inflammatory conditions of bones and joints		Students should develop understanding of mechanism and complications of wound contamination		Orthopaedics	45 mins
9.30-10.15 am	38	Orbital Cellulitis, Pseudo tumors of orbit , Dacrocystitis		Students should be able to describe Orbital Cellulitis, Pseudo tumors of orbit , Dacrocystitis		Eye	45 mins
10.30- 12.00 pm		Practical		Batch A: Tuberculosis of lung/ Granuloma Batch B : small group	Class divisible in three batches	Respective departments	

				discussion Batch C : (Final Opinion)Interpretation of results			
Day 12 15-02-25 (Saturday)							
8.00-8.45am	39	Paronychia , Subungal abscess,Hideradenitis		Students should be able to describe the acute inflammatory conditions and should have sound knowledge of septic shock		Dermatology	45 MIN
8.45-9.30am	40	Mineralocorticoid and mineralocorticoid antagonist		Student should be able to understand uses of various mineralocorticoid agonist and antagonist.	Basic and clinical pharmacology 12 th edition katzung	Pharmacology	45 mins
9.30-10.15am	41	Chronic Inflammation:Granulomatous Inflammation with special emphasis on Tuberculosis		Student should be able to describe <ul style="list-style-type: none"> • Cells of Chronic inflammation • Formation of granuloma • Tuberculous granuloma 		Pathology	45 MIN
10.15-11:00am	42					Surgery	45 MIN
11.00-11.45am	43					Pathology	45 MIN
11.45-12.30pm	44					Forensic Medicine	45 MIN

SPECIAL MICROBIOLOGY MODULE

3RD YEAR MBBS 2026

Title	General Surgery	Student Notes
Target Students	3 rd year	
Duration	Lectures: 06	
Outcomes	To understand different types of microbiological infections , their clinical manifestations and role of surgery	
Assessments	MCQs, Case presentation	

OVERVIEW OF BACTEREMIA AND SEPTICEMIA

- Define bacteremia and septicemia
- Compare SIRS, sepsis, septic shock and MOD
- To learn the clinical features of bacteremia and septicemia

ACTINOMYCOSIS, ANTHRAX AND GONORRHEA

- To distinguish different clinical manifestations of actinomycosis, anthrax and gonorrhoea
- Outline diagnosis of actinomycosis, anthrax and gonorrhoea
- Compare treatment of actinomycosis, anthrax and gonorrhoea

GAS GANGRENE AND SYNERGISTIC GANGRENE

- To learn differentiation between gas gangrene and synergistic gangrene
- To plan diagnosis of gas gangrene and synergistic gangrene
- To recommend treatment plan of gas gangrene and synergistic gangrene

SURGICAL ASPECTS OF TETANUS

- To illustrate presentation of tetanus
- To learn the pathophysiology of tetanus
- To describe management plan
- To determine tetanus prophylaxis

SURGERY IN TROPICS: TUBERCULOSIS

- To Describe causative agent of tuberculosis
- To illustrate presentation of tuberculosis
- To learn to diagnose tuberculosis
- To recommend surgical aspect of tuberculosis

CHEST INFECTIONS

- To describe different chest infection
- To review presentation and diagnosis of chest infections

- To learn different treatment plan

SYPHILIS AND CANDIDIASIS

- To illustrate presentation of syphilis & candidiasis
- To learn the pathophysiology of syphilis & candidiasis
- To describe their management plan

OVERVIEW OF HEPATITIS A, B AND C

- To Describe causative agent of hepatitis
- To illustrate presentation of hepatitis
- To learn to diagnose and management of hepatitis
- To learn surgical aspect of tuberculosis

MODULE SPECIAL MICROBIOLOGY

DURATION 58 DAYS (06th March, 2025 to 21st May, 2025)

CONTACT HOURS Lectures 168 = 126 hours + Practicals = 48 Hours + Hospital stay = 120 Hours

CREDIT HOURS 11.9

TEACHING METHODOLOGIES Lectures/Practicals/ small group discussion/clinics

OBJECTIVES:

This integrated module of special microbiology is proposed for 3rd year M.B;B.S. It will introduce the class with microorganisms, the various diseases produced by them and their clinical presentations. It is intended to extend knowledge, understanding and practical skills in the field of microbiology.

By the end of the module the students should have acquired a basic theoretical and practical knowledge of:

Antimicrobial agents and their use,

Clinical microbiology

Parasitology and mycology

Medical, surgical and allied (Eye, ENT, Orthopaedic surgery) related infections and their clinical presentation

A core knowledge of forensic medicine and toxicology will also be included in this module.

The course is intended to cover the capabilities of:

Knowledge (Of microbes and antimicrobial agents)

Technical expertise (Handling of samples, examination of urine and stool specimens, interpretation of antibiogram and various biochemical tests, performing autopsies etc)

Critical analysis and problem solving) (small group discussions, tutorials)

Communication (working in clinics, studying clinical cases)

TIME			PLACE	LEARNING OUTCOME	Recommended books	DEPARTMENT/ Facilitator	DURATI ON
DAY 1 06-03-2025 (Thursday)							
8.00-8.45am	1.	Overview of Bacteraemia and Septicaemia				Surgery	
8.45-9.30am	2.	Staphylococcus aureus (Pathogenesis, Epidemiology, Prevention and Control)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment		Pathology	45 min
9.30-10.15am	3.	Principles of antimicrobial drug action				Pharmacology	45 min
Hospital work 10.30-12.00							
12.10—02.00		Practical		Batch C: Gram staining Batch A : Small group discussion Batch B: Medico legal autopsies	Class divisible in three batches	Respective departments	
DAY 2 07-03-2025 (Friday)							
8.00-8.45am	4.	Streptococcus pneumonia, Beta hemolytic Streptococcus type a and b (Pathogenesis, Epidemiology, Prevention and Control)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment		Pathology	45 min
8.45-9.30am	5.	Pneumonia				Medicine	45 mins
9.30-10.15am	6.	Objectives, rules and techniques of autopsy				Forensic Medicine	45 mins
10.30—12.00pm		Practical		Batch A: Gram staining Batch B : Small group discussion Batch C : Medico legal autopsies	Class divisible in three batches	Respective departments	
DAY 3 08-03-2025 (Saturday)							
8.00-8.45am	7.	Penicillines and cephalosporins (1)				Pharmacology	45 mins
8.45-9.30am	8.	Beta Haemolytic streptococci (Cont) ,Diphtheria Sp. (Pathogenesis, Epidemiology, Prevention and Control)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and		Pathology	45 min

				treatment			
9.30-10.15am	9.	Infective endocarditis				Medicine	45 mins
10.15-11.00am						Orthopedics	
11.00-11.45am						ENT	
11.45-12.30am						EYE	
12.45—2.30pm		PRACTICAL		Batch B: Gram staining Batch C: Small group discussion Batch A: Medico legal autopsies	Class divisible in three batches	Respective departments	
DAY 4 10-03-2025 (Monday)							
8.00-8.45am	10.	Penicillines and cephalosporins (2)				Pharmacology	45 min
8.45-9.30am	11.	Bacillus anthracis, Bordetella sp. (Pathogenesis, Epidemiology, Prevention and Control)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment		Pathology	45 min
9.30-10.15am	12.	Biological weapons (Anthrax, tetanus etc)				Forensic Medicine	45 mins
Hospital work 10.30-12.00							
12.10—2.00 pm		PRACTICAL		Batch C : Oxidase and catalase test Batch A : Small group discussion Batch B : Examination of stomach contents	Class divisible in three batches	Respective departments	
DAY 5 11-03-2025 (Tuesday)							
8.00-8.45am	13.	Preperation of autopsy protocol, types of autopsy				Forensic Medicine	45 min
8.45-9.30am	14.	Actinomyces israeli, Nocardia asteroides (Pathogenesis, Epidemiology,		students should be able to know the characteristics of the micro organism, diseases caused by		Pathology	45 mins

		Prevention and Control,Treatment)		them, their investigations and treatment			
9.30-10.15am	15	Actinomycolosis ,Anthrax and Gonorrhoea				surgery	45 mins
Hospital work 10.30-12.00							
12.10-02:00 pm		PRACTICAL		Batch A: Oxidase and catalase test. Batch B: Small group discussion Batch C : Examination of stomach contents	Class divisible in three batches	Respective departments	
DAY 6 12-03-2025 (Wednesday)							
8.00-8.45am	16.	Penicillines and cephalosporins (3)				Pharmacology	45 min
8.45-9.30 am	17.	Clostridium difficile, Clostridium botulinum (Pathogenesis, Epidemiology, Prevention and Control)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment		Pathology	45 mins
9.30-10.15am	18.	Food poisoning including botulism				Forensic Medicine	45 mins
Hospital work 10.30-12.00							
12.10—2.00 pm		PRACTICAL		Batch B: Oxidase and catalase test. Batch C: Small group discussion Batch A : Examination of stomach contents	Class divisible in three batches	Respective departments	
Day 7 13-03-2025 (Thursday)							
8.00-8.45am	22.	Clostridium perfringens (Pathogenesis, Epidemiology, Prevention and Control,Treatment)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment		Pathology	45 mins
8.45-9.30am	23.	Gas gangrene and synergistic gangrene				Surgery	45 mins
9.30-	24.					Pharmacology	45 mins

10.15am		Sulphonamides and trimethoprim					
Hospital work				10.30-12.00			
12.10 — 02.00pm		PRACTICAL		Batch C : Various culture media Batch A : Small group discussion Batch B: Preparation of autopsy report (certification)	Class divisible in three batches	Respective departments	
DAY 8 14-03-2025 (Friday)							
8.00-8.45 am	25.	Clostridium tetani (Pathogenesis, Epidemiology, Prevention and Control,Treatment)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment		Pathology	45mins
8.45-9.30 am	26.	Tetanus				Medicine	45 mins
9.30-10.15 am	27.	Surgical aspects of tetanus				Surgery	45 Mins
10.30-12.00pm		Practical		Batch A : Various culture media Batch B: Small group discussion Batch C : Preparation of autopsy report (certification)	Class divisible in three batches	Respective departments	
DAY 9 15-03-2025 (Saturday)							
8.00-8.45 am	28.	Neisseria meningitidis, Neisseria gonorrhoeae (Pathogenesis, Epidemiology, Prevention and Control,Treatment)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment		Pathology	45 mins
8.45-9.30 am	29.	Meningitis				Medicine	45 mins
9.30-10.15 am	30.	Macrolides				Pharmacology	45 mins
10.15-11.00 am						Forensic Medicine	45 mins
11.00-11.45 am						ENT	45 mins

11.45-12.30pm						EYE	45 mins
12.45–2.30pm		Practical		Batch B : Various culture media Batch C : Small group discussion Batch A : Preparation of autopsy report (certification)	Class divisible in three batches	Respective departments	
DAY 10 17-03-2025 (Monday)							
8.00-8.45 am	31.	Tetracyclins				Pharmacology	45 min
8.45-9.30 am	32.	Gardenella vaginalis, Hemophilus influenzae (Pathogenesis, Epidemiology, Prevention and Control)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment		Pathology	45 min
9.30-10.15 am	33.	Tuberculosis				Medicine	45mins
Hospital work 10.30-12.00							
12.10-02.00 pm		Practical		Batch C : ZN staining Batch A: Small group discussion Batch B: Identification of volatile poisons by steam distillation	Class divisible in three batches	Respective departments	
Day 11 18-03-2025 (Tuesday)							
8.00-8.45am	34.	Surgery in tropics : tuberculosis				Surgery	45 mins
8.45-9.30 am	35.	Anti Tuberculous Drugs				Pharmacology	45 min
9.30-10.15 am	36.	Mycobacterium tuberculosis (Pathogenesis, Epidemiology, Prevention and Control)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment		Pathology	

Hospital work		10.30-12.00	
12.10-02.00 pm	Practical	Batch A : ZN staining Batch B : Small group discussion Batch C : Identification of volatile poisons by steam distillation	
DAY 12		19-03-2025 (Wednesday)	
8.00-8.45 am	37. Mycobacterium leprae and atypical mycobacterium (Pathogenesis, Epidemiology, Prevention and Control, Treatment)	students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment	Pathology 45 min
8.45-9.30 am	38. Tuberculosis and Leprosy		Dermatology 45 mins
9.30-10.15 am	39. Anti leprosy drugs		Pharmacology 45 mins
Hospital work		10.30-12.00	
12.10—02.00 pm	Practical	Batch B : ZN staining Batch C : Small group discussion Batch A : Identification of volatile poisons by steam distillation	Class divisible in three batches Respective departments
DAY 13		20-03-2025 (Thursday)	
8.00-8.45 am	43. Definition and diagnosis of death		Forensic medicine 45 mins
8.45-9.30 am	44. E. Coli	students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment	Pathology 45 mins
9.30-10.15 am	45. Urinary antiseptics		Pharmacology 45 min
Hospital work		10.30-12.00	
12.10-02.00 pm	Practical	Batch C: Urine examination Batch A: Small group Discussion	Class divisible in Respective departments

Day 22		31-03-2025(Monday)					
8.00-8.45 am		Chest Infection				Surgery	45 min
8.45-9.30 am		Cystic Fibrosis /Pneumonia				Medicine	45 min
9.30-10.15 am						Pathology	45 min
Hospital work		10:30-12:00					
12:10-02:00		PRACTICAL		Batch C: Pathology Batch A : Pharmacology Batch B : Forensic Medicine	Class divisible in three batches	Respective departments	
Day 23		09-04-2025 (Wednesday)					
8.00-8.45 am	73.	Legionella, Mycoplasma pneumonia. (Pathogenesis, Epidemiology, Prevention and Control)		Students should be able to know the characteristics of the microorganisms, disease caused by them their investigations and treatment		Pathology	45 Mins
08:45 – 09:30am	74.	Abscesses (Acute and chronic) and their management				Medicine	45 Mins
09:30 – 10:15am	75.	Chlamydia (Pathogenesis, Epidemiology, Prevention and Control, Treatment)		Students should be able to know the characteristics of the microorganisms, disease caused by them their investigations and treatment		Pathology	45 Mins
Hospital work		10:30-12:00					
12:10-02:00p.m.		RESPECTIVE PRACTICAL		Batch B: Biochemical tests (2) Batch C: Group discussion Batch A: Stas OHO,s process (Extraction technique)	Class divisible in three batches	Respective Departments	

Day 24		10-04-2025 (Thursday)					
8.00-8.45 am	76.	Artifacts, autopsy lab essentials, embalming				Forensic Medicine	45 Mins
08:45 – 09:30am	77.	Treponema pallidum (Pathogenesis, Epidemiology, Preventions and Control, Treatment)				Pathology	45 Mins
09:30 – 10:15am	78.	Syphilis and Candidiasis				Surgery	45 Mins
Hospital Work 10:30 – 12:00noon							
12:10-02:00p.m.		PRACTICAL		Batch C: Biochemical tests (2) Batch A: Group Discussion Batch B: Stas OHO, s process (Extraction technique)	Class divisible in three batches	Respective Departments	
Day 25		11-04-2025 (Friday)					
8.00-8.45 am	79.	Physiology of cough reflex				Physiology	45 Mins
08:45 – 09:30am	80.	Anti tussives, mucolytics and expectorants				Pharmacology	45 Mins
09:30 – 10:15am	81.	Leptospira Rickettsia sp. (Pathogenesis, Epidemiology, Prevention and Control, Treatment)				Pathology	45 Mins
10:30-12:00p.m.		PRACTICAL		Batch A: Biochemical tests (2) Batch B: Group Discussion Batch C: Stas OHO, s process (Extraction technique)	Class divisible in three batches	Respective Departments	
Day 26		12-04-2025 (Saturday)					
8.00-8.45 am	82.					Orthopaedics	45 min
8.45 am-9.30 am	83.	Measles and Mumps virus (Pathogenesis, Epidemiology, Prevention and Control)		students should be able to know the characteristics of the microorganism, diseases caused by them, their investigations and treatment		Pathology	45 mins
9.30 am-10.15 am	84.	Anti viral drugs (1)				Pharmacology	45 min

		(Pathogenesis, Epidemiology, Prevention and Control)		organism, diseases caused by them, their investigations and treatment			
Hospital Work 10:30 – 12:00							
12:10-02:00p.m.		PRACTICAL		Batch A: Biochemical tests (2) Batch B: Group Discussion Batch C: Stas OHO,s process (Extraction technique)	Class divisible in three batches	Respective Departments	
DAY 29 16-04-2025 (Wednesday)							
8.00-8.45 am	94.	Influenza, Para influenza (Pathogenesis, Epidemiology, Prevention and Control,Treatment)		students should be able to know the characteristics of the microorganism, diseases caused by them, their investigations and treatment		Pathology	45 min
8.45-9.30 am	95.	Hepatitis A,B and C				Surgery	45 min
9.30-10.15 am	96.	Organ transplantation and molecular death				Forensic Medicine	45 mins
Hospital work 10.30-12.00							
12.10—02.00 pm		PRACTICAL		Batch B: tutorial Batch C : group discussion Batch A : Plant poisons	Class divisible in three batches	Respective departments	
DAY 30 17-04-2025 (Thursday)							
8.00-8.45 am	97.	Irritants (Metallic Poisons)				Forensic Medicine	45 mins
8.45-9.30 am	98.	Chronic hepatitis : Hepatitis B and C infection				Medicine	45 min
9.30-10.15 am	99.	CMV and EBV (Pathogenesis, Epidemiology, Prevention and Control,Treatment)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment		Pathology	45 mins

Hospital work		10.30-12.00				
12.00-02:00		PRACTICAL	Batch C: tutorial Batch A: group discussion Batch B: Plant poisons	Class divisible in three batches	Respective departments	
DAY 31			18-04-2025 (Friday)			
8.00-8.45 am	100.	AIDS			Surgery	45 min
8.45-9.30 am	101.	HIV (Pathogenesis, Epidemiology, Prevention and Control,Treatment)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment	Pathology	45 mins
9.30-10.15 am	102.	HIV			Medicine	45 mins
10.30—12.00 pm		PRACTICAL	Batch A: tutorial Batch B: group discussion Batch C: Plant poisons	Class divisible in three batches	Respective departments	
DAY 32			19-04-2025 (Saturday)			
8.00-8.45 am	103.	Viral Conjunctivitis : Adenoviral, Molluscum contagiosum conjunctivitis.			Eye	45 min
8.45-9.30 am	104.				Orthopedic	45 mins
9.30-10.15 am	105.	Rabies Virus (Pathogenesis, Epidemiology, Prevention and Control,Treatment)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment	Pathology	45 mins
10.15-11.00 am					Forensic Medicine	45 mins
11.00-11.45 am					ENT	45 mins
11.45-12.30pm					Pathology	45 mins
12.45-2.30pm		Practical	Batch B : Antibigram Batch C : group discussion	Class divisible in three batches	Respective departments	

				Batch A :Examination of blood i) Physical examination ii) spectroscopic examination iii) examination under U/v lamp			
DAY 33				21-04-2025 (Monday)			
8.00-8.45 am	106.	Cryptococcus neoformans, Histoplasma sp (Pathogenesis, Epidemiology, Prevention and Control,Treatment)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment		Pathology	45 min
8.45-9.30 am	107.	Definition, types, medicolegal significance of personal identity				Forensic Medicine	45 mins
9.30-10.15 am	108.	Antifungal drugs (1)				Medicine	45 Mins
Hospital work				10.30-12.00			
12.10—02.00 pm		Practical		Batch C: Tutorial Batch A : group discussion Batch B : Plant poisons	Class divisible in three batches	Respective departments	
DAY 34				22-04-2025 (Tuesday)			
8.00-8.45 am	109.	Candida albicans and Aspergillus sp (Pathogenesis, Epidemiology, Prevention and Control,Treatment)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment		Pathology	45 min
8.45-9.30 am	110.	Anti-fungal drugs (2)				Surgery	45 mins
9.30-10.15 am	111.	Parameters/ methods of establishing identity				Forensic medicine	45 mins
Hospital work				10.30-12.00			
12:10-02:00p.m.		Practical		Batch A: Tutorial Batch B: Group discussion Batch C: Plant poisons	Class divisible In three batches	Respective department	
DAY 35				23-04-2025 (Wednesday)			
8.00-8.45 am	115.	Tinea species (Pathogenesis, Epidemiology, Prevention and Control,Treatment)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and		Pathology	45 min

				treatment			
8.45-9.30 am	116.	Nosocomial infection				Medicine	45 mins
9.30-10.15 am	117.	Anti malarial drugs (1)				Pharmacology	45 mins
		Hospital work		10.30-12.00			
12.10—02.00		Practical		Batch B : Demonstration of malarial parasite Batch C : group discussion Batch A : Preliminary chemical examination of Blood	Class divisible in three batches	Respective departments	12.00—2.30
		Day 36		24-04-2025 (Thursday)			
8.00-8.45 am	118.	Plasmodium sp (Pathogenesis, Epidemiology , prevention and control)				Pathology	
8.45-9.30 am	119.	Malaria				Medicine	45 Mins
9.30-10.15 am	120.	Anti malarials (2)				Pharmacology	
		Hospital work		10.30-12.00			
12.10 - 02.00		Practical		Batch C : Demonstration of malarial parasite Batch A : group discussion Batch B : Preliminary chemical examination of Blood	Class divisible in three batches	Respective departments	10.15 - 12.00
		DAY 37		25-04-2025 (Friday)			
8.00-8.45 am	121.	Prophylaxis of surgical infections: Use of antibiotics (according to type of surgery)				Surgery	45 mins
8.45-9.30 am	122.	Giardia lamblia, Entamoeba histolytica (Pathogenesis, Epidemiology, Prevention and Control,Treatment)		students should be able to know the characteristics of the microorganism, diseases caused by them, their investigations and treatment.		Pathology	45 min
9.30-10.15 am	123.	Anti amboeic drugs (1)				Pharmacology	45 min
10.30—12.00pm		Practical		Batch A : Worm specimens Ascaris, Tenia, Hydatid cyst	Class divisible in three batches	Respective departments	

		Metallic poisons (Mercury, copper, Thallium)					
Hospital work				10.30-12.00			
12.10— 02.00 pm		Practical		Batch C: Tutorial Batch A: group discussion Batch B: Plant poisons	Class divisible in three batches	Respective departments	
DAY 40				29-04-2025 (Tuesday)			
8.00- 8.45 am	130.	Toxoplasmosis gonadi and pneumocystis Carinii (Pathogenesis, Epidemiology, Prevention and Control,Treatment)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment		Pathology	45 min
8.45- 9.30 am	131.	Toxoplasmosis				Medicine	45 min
9.30- 10.15 am	132.	Gender determination of living/ dead				Forensic medicine	45 mins
Hospital work				10.30-12.00			
12:10- 02:000		Practical		Batch A : Worm specimens Ascaris, Tenia, Hydatid cyst Batch B : group discussion Batch C : Confirmatory chemical examination of Blood	Class divisible in three batches	Respective departments	
Day 41				30-04-2025 (Wednesday)			
8.00-8.45 am	136.	Prophylaxis of surgical infection : pre operative preperation				Surgery	45 mins
8.45-9.30 am	137.	Forensic Odontology				Forensic Medicine	45 mins
9.30-10.15 am	138.	Cryptosporidium and trichomonas vaginalis (Pathogenesis, Epidemiology, Prevention and Control,Treatment)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment		Pathology	45 min
Hospital work				10.30-12.00			
12.10—		PRACTICAL		Batch B : Worm specimens	Class divisible in	Respective	

02.30				Ascaris, Tenia, Hydatid cyst Batch C : group discussion Batch A : Confirmatory chemical examination of Blood	three batches	departments	
DAY 42				02-05-2025 (Friday)			
8.00-8.45 am	139.	Anti Helmintics (2)				Pharmacology	45 min
8.45-9.30 am	140.	Prophylaxis of surgical infection : Scrubbing techniques				Surgery	45 min
9.30-10.15 am	141.	Ascaris Lumbricoides (Pathogenesis, Epidemiology, prevention and control)				Pathology	45 min
10.30—12.00		PRACTICAL		Batch A: tutorial Batch B: group discussion Batch C: Species specific and microscopic examination of blood.	Class divisible in three batches	Respective departments	
DAY 43				03-05-2025 (Saturday)			
8.00-8.45 am	142.	Non metallic poisonous irritants (Phosphorus) Mechanical irritants				Forensic Medicine	45 min
8.45-9.30 am	143.	Acchylostoma duodenale (Pathogenesis, Epidemiology, Prevention and Control,Treatment)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment		Pathology	45 min
9.30-10.15 am	144					Orthopedics	45 mins
10.15-11:00 am						Pathology	45 mins
11.00-11.45 am						Surgery	45 mins
11.45-12.30 Pm						Pharmacology	45 mins
12.45-02.30pm		PRACTICAL		Batch B : Tutorial Batch C: group discussion	Class divisible in three batches	Respective departments	

DAY 46 07-05-2025 (Wednesday)							
8.00-8.45 am	151.	Finger prints and other congenital and acquired marks of identification				Forensic medicine	45 mins
8.45-9.30 am	152.	Filarial species (Pathogenesis, Epidemiology, Prevention and Control,Treatment)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment		Pathology	45 min
9.30-10.15 am	153.					Orthopaedic surgery	45 mins
Hospital work				10.30-12.00			
12.10—02.00pm		Practical		Batch B : stool examination Batch C: group discussion Batch A: Examination of hair/ Fibre	Class divisible in three batches	Respective departments	
DAY 47 08-05-2025 (Thursday)							
8.00-8.45 am	157.	Echinococcus Species (Pathogenesis, Epidemiology, Prevention and Control,Treatment)		students should be able to know the characteristics of the micro organism, diseases caused by them, their investigations and treatment		Pathology	45 min
8.45-9.30 am	158.	Establishment of identity from skeleton and skeletal remains				Forensic medicine	45 min
9.30-10.15 am	159.	Pharmacological agents used for Treatment of bronchial asthma				Pharmacology	45 mins
Hospital work				10.30-12.00			
12.10—02.00		Practical		Batch C : stool examination Batch A: group discussion Batch B: Examination of hair/ Fibre	Class divisible in three batches	Respective departments	
DAY 48 09-05-2025 (Friday)							
8.00-8.45 am	160.	Taenia solium and Taenia saginata (Pathogenesis, Epidemiology, Prevention and		students should be able to know the characteristics of the micro organism, diseases caused by		Pathology	45 min

HAEMODYNAMICS MODULE & 3rd INTERMODULE

3RD YEAR MBBS 2026

Title	General Surgery	Student Notes
Target Students	3 rd year	
Duration	Lectures: 05	
Outcomes	To understand different types of wounds and their management, hemodynamic aspects related to surgery	
Assessments	MCQs, Case presentation	

SURGICAL WOUNDS

- To understand the definition of wound
- To learn different types of classification of wounds
 - According to mechanism of injury
 - According to depth
 - According to contamination
- To learn the mechanism of wound healing
- To learn the complications of wound healing

SURGICAL SITE INFECTIONS

- To understand Definition of

- SSI
- SIRS
- MODS
- MSOF
- To learn the types of SSI
- To learn the assessment tools and risk factors of SSI
- To understand the methods to minimize the risk

SKIN CLOSURE TECHNIQUE

- To learn the goals of suturing
- To know various types of suture material and suturing techniques
- To understand the principles of suturing
- To learn the principles of surgical knots
- To learn the reasons for failure of suture and possible complications
- To learn alternatives to suture technique

VENOUS THROMBOEMBOLISM (VTE)

- To learn the definition of VTE
- To learn the types of thrombophlebitis
- To learn the causative factors of DVT
- To learn the clinical presentation of DVT
- To learn the prevention and management of DVT

MESENTERIC ISCHEMIA

- To learn the introduction of mesenteric ischemia
- To know various types of mesenteric ischemia
- To understand the pathophysiology of mesenteric ischemia
- To learn the clinical picture and management of mesenteric ischemia
- To learn the complications of mesenteric ischemia

MODULE**HAEMODYNAMICS****DURATION** **DAYS (10-07-2025 to 24-07-2025)**

CONTACT HOURS Lectures 27 = 20.5 hours + Practicals = 20 Hours + Hospital stay = 9 hours

CREDIT HOURS 1.8

TEACHING METHODOLOGIES Lectures/Practicals/ small group discussion/clinics

LEARNING OBJECTIVES : This module is developed for 3rd year M.B:B.S students . It is intended to impart them core knowledge about the pathologies involved in haemodynamic circulation along with different pharmacological agents used to combat the clinical conditions. Students will also be introduced to clinical conditions which are encountered due to disturbances in haemodynamics. Lectures of forensic medicine and toxicology will also included in this module.

By the end of the module the students should be able to :

1. Apply the knowledge of the biochemical and cellular physiology to discuss the pathogenic mechanisms resulting in alterations in haemodynamics and shock.
2. Describe the clinical manifestations associated with these pathologic changes.
3. Discuss the role of different pharmacological agents used in clinical conditions which arise due to disturbance in haemodynamics.

DAY 3							
12-07-2025 (Saturday)							
8.00-8.45am	7.	Accidents in home and environment : Death due to starvation , Heat and cold effect		Students should be able to describe the effects of starvation and cold/ heat on body.		Forensic Medicine	45 mins
8.45-9.30am	8.					Pathology	45 mins
9.30-10.15am	9.	Coagulants				Pharmacology	45 min
10.15-11.00am	10.					Pharmacology	45 min
11.00-11.45am	11.					Medicine	45 min
11.45-12.30pm	12.					Surgery	45 min
12.45—02.30		PRACTICAL		Batch B : Congestion of liver Batch C : Small group discussion Batch A : Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	
DAY 4							
14-07-2025 (Monday)							
8.00-8.45am	13.	Shock Its pathophysiology, types (hypovlemic , cardiogenic, vasovagal and septic) , causes and compensatory mechanisms involved.			Robbins pathology	Pathology	45 mins
8.45-9.30am	14.	Haemorrhage			Basic and clinical pharmacology 12 th edition katzung	Pharmacology	45 min
9.30-10.15am	15.	Arsenic poisoning				Forensic medicine	45 min
Hospital work							
10.30-12.00							
12.10—02.00		PRACTICAL		Batch C: Pathology Batch A: Small group Discussion Batch B: Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	
DAY 5							
15-07-2025 (Tuesday)							
8.00-8.45am	16.	Anticoagulants : Heparin (low molecular weight and unfractionated)		The use of anticoagulants in various clinical conditions	Basic and clinical pharmacology 12 th edition katzung	Pharmacology	45 min

8.45-9.30am	17	Infarction: Its types, morphological picture and differences between different types.				Pathology	45 min
9.30-10.15am	18	Mesenteric Ischaemia				Surgery	45 mins
Hospital work 10.30-12.00							
12.10-2.00pm		PRACTICAL		Batch A: Pathology Batch B: small group discussion Batch C: Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	
DAY 6 16-07-2025 (Wednesday)							
8.00-8.45am	19	Overview of myocardial infarction				Medicine	45 mins
8.45-9.30am	20					Orthopedics	45 min
9.30-10.15am	21	Thrombosis: Etiology and pathogenesis, possible consequences. Differences between thrombi and clot.		To be able to define and differentiate various types of embolism	Robbins Pathology	Pathology	45 min
Hospital work 10.30-12.00							
12.10 –02.00		PRACTICAL		Batch: B Pathology Batch: C Small group discussion Batch: A Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	
DAY 7 17-07-2025 (Thursday)							
8.00-8.45am	22.	Thrombophlebitis , deep venous thrombosis				Surgery	45 min
8.45-9.30am	23.	Fibrinolytics and antiplatelet drugs				Pharmacology	45 mins
9.30-10.15am	24.	Vascular lesions of orbit / eye; AV Shunt/ Malformatins/ communications Carotico sinus thrombosis Cavernous sinus thrombosis Haemangioma of orbit/ eye				Eye	45 mins
Hospital work 10: 30 to 12: 00 p.m.							
12: 10 –2:00		Practical		Batch C : Pathology Batch A : Small group discussion	Class divisible in three batches	Respective departments	Practical

3RD INTERMODULE/BEHAVIORIAL SCIENCES

DURATION 12 DAYS (25-07-2025 to 13-08-2025)

CONTACT HOURS Lectures =22 hours + Practicals = 22.50 Hours + Hospital stay = 10.5 HOURS

CREDIT HOURS 2

DAY 1		25-07-25(Friday)					
8.00-8.45	1	CNS				Pharmacology	45 min
8.45-9.30	2	FORENSIC ASPECT OF VIOLENT ASPHYXIAL DEATHS; mechanism ,physio-chemico-pathological changes				Forensic Medicine	45 min
9.30-10.15	3		-	=	-	Medicine	45 min
10.30—12.00		PRACTICAL		BATCH A : Pathology Batch B: Pharmacology Batch C: Forensic Medicine	Class divisible in three batches	Respective departments	
DAY 2		26-07-2025(Saturday)					
8.00-8.45	4	CNS			Basic and clinical pharmacology	Pharmacology	45 min
8.45-9.30	5	Autopsy findings (interpretation + cause of death)		smothering ,suffocation, ,strangulation ,hanging & Traumatic asphyxia		Forensic medicine	45 min
9.30-10.15	6	Surgical wounds			-	Forensic Medicine	45 min
10.15-11:00						Medicine	45 min
11.00-11.45						Surgery	45 min

DAY 5								30-07-2025 (Wednesday)								
8.00-8.45 am	13	MEDICOLEGAL ASPECTS OF SEX		Current laws regarding impotency ,sterility, marriage & sexual abuse	Robbins Pathology	Forensic medicine	45 min									
8.45-9.30	14	CNS				Pharmacology	45 min									
9.30-10.15	15	Mental health act				Behaviorial sciences	45 min									
Hospital work								10.30-12.00								
12.10—02.00		PRACTICAL		BATCH B: Pathology Batch C: Pharmacology Batch A: Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments										
DAY 6								31-07-2025 (Thursday)								
8.00-8.45	19.	CNS				Basic and clinical pharmacology 12 th edition katzung	45 min									
8.45-9.30	20	Legal & ethical issues		regarding impotency ,sterility, marriage & sexual abuse		Forensic Medicine	45 MIN									
9.30-10.15	21	Skin closure techniques				surgery	45 min									
Hospital work								10.30-12.00								
12.10-02.00		PRACTICAL		Batch C : Pathology Batch A : Pharmacology Batch B : Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments										

NEOPLASIA MODULE & 4th INTERMODULE

3RD YEAR MBBS 2023-24

Title	General Surgery	Student Notes
Target Students	3 rd year	
Duration	Lectures: 03	
Outcomes	To understand causes, screening and management of cancer	
Assessments	MCQs, Case presentation	

NEOPLASIA

- To learn the definition of neoplasia
- To learn the clinical presentation of neoplasia
- To learn the appropriate investigations required for diagnosis
- To learn the staging of neoplasia
- To learn the management (surgical and non-surgical)

CAUSES AND SCREENING OF NEOPLASIA

- To learn the causes of neoplasia (genetic, environmental, infectious)
- To know the screening method
- To understand the rationale of screening
- To learn the effectiveness of screening

MODULE NEOPLASIA

DURATION 9 DAYS (11-09-2025 to 20-09-2025)

CONTACT HOURS Lectures =22.5 hours + Practicals =22.50 Hours + Hospital stay = 10.5 HOURS

CREDIT HOURS = 2.0

TEACHING METHODOLOGIES Lectures/Practicals/clinics

OBJECTIVES

The course is designed primarily for 3rd year M.B;B.S students and will cover the fundamental aspects of NEOPLASIA and the pharmacology of antineoplastic drugs with interrelated clinical aspects of Medicine, Surgery, Orthopedics ,Eye , Ear, Nose and Throat. By the end of the module, the students should be able to :

1. Describe:

- The differences between Benign and Malignant neoplasms
- Epidemiology of Cancer
- Neoplastic conditions of orbit , eyelid and ENT
- Molecular genetics of Neoplasia

2. Discuss the role of:

Chemotherapy, anticancer drug development, Neoplasia cell burden, Cell cycle Kinetics, resistance to cytotoxic drugs

3. Clinical aspects of neoplasia :

Cancer Cachexia, Para neoplastic syndrome

4. Diagnosis , staging and surgical intervention

4TH INTERMODULE

DURATION 15 DAYS

CONTACT HOURS Lectures =44 hours + Practicals= 44.50 Hours + Hospital stay = 20.5 HOURS

CREDIT HOURS 4

DAY 1 (15-08-2025) Friday							
8.00-8.45	1.				Robbins Pathology	Pathology	45 min
8.45-9.30	2.	Symptoms of Immunological /connective tissue disorders		CASE SCENARIOS: Monoarthritis Polyarthritis SLE Disorders of calcium metabolism		Medicine	45 Min
9.30-10.15	3.	Endocrinology				Pharmacology	45 min
10.30-12.00		PRACTICAL		BATCH A: Pathology Batch B: Pharmacology Batch C: Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	
DAY 2 (16-08-2025) Saturday							
8.00-08.45	3.	Symptoms of Endocrinology Disorders & Diabetes				Medicine	45 Min
8.45-09.30	4.					Pathology	45 Min
9.30-10.15	5.					Pharmacology	45 Min
10.15-11.00						Pharmacology	45 Min
11.00-11.45						Medicine	45 Min
11.45-12.30						Surgery	45 Min
12.45-02.30		Practical		BATCH B: Small Group Discussion Batch C: Pharmacology Batch A: Medicolegal / autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective Departments	

				Batch A: Pharmacology practical Batch B: Medicolegal/ autopsy/ analytical/serology/ radiological lab			
DAY 16 (02-09-2025) Tuesday							
8.00-8.45						Pharmacology	45 Min
8.45-9.30						Surgery	45 Min
9.30-10.15						Orthopedics	45 Min
Hospital work				10.30-12.00			
12.10-02:00		PRACTICAL		Batch A: Pathology Batch B: Pharmacology practical Batch C: Medicolegal/ autopsy/ analytical/serology/ radiological lab			
DAY 17 (03-09-2025) Wednesday							
8.00-8.45	39.					Surgery	45 min
8.45-9.30	40.					Orthopedics	45 min
9.30-10.15	41.					ENT	45 min
Hospital work				10.30-12.00			
12.10-02.00		PRACTICAL		Batch B: Pathology Batch C: Pharmacology practical Batch A: Medicolegal/ autopsy/ analytical/serology/ radiological lab			
DAY 18 (04-09-2025) Thursday							
SELF-STUDY					Hospital Work (10.30-12.00pm)		
DAY 19 (05-09-2025) Friday							
Pharmacology Assessment				Hospital Work (10.30-12.00pm)			
DAY 20 (06-09-2025) Saturday							

8.00-8.45	42.	GIT				Pharmacology	45 min
8.45-9.30	43.					Ophthalmology	45 min
9.30-10.15	44.	GIT				Pharmacology	45 min
10.30-12:00		PRACTICAL		Batch A: Pathology Batch B: Pharmacology practical Batch C: Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	
DAY 14 (30-08-2025) Saturday							
8.00-8.45	45.	GIT				Pharmacology	45 min
8.45-9.30	46.					Surgery	45 min
9.30-10.15	47.					Pharmacology	45 min
10.15-11.00						Pharmacology	45 min
11.00-11.45						Orthopedics	45 min
11.45-12.30						ENT	45 min
12.45-02.30		PRACTICAL		Batch B : small group discussions Batch C: Pharmacology practical Batch A: Medicolegal/ autopsy/ analytical/serology/ radiological lab	Class divisible in three batches	Respective departments	
DAY 15 (01-09-2025) Monday							
8.00-8.45	39.					Ophthalmology	45 min
8.45-9.30	40.					Pharmacology	45 min
9.30-10.15	41.					ENT	45 min
Hospital work 10.30-12.00							
12.10-02.00		PRACTICAL		Batch C: Pathology	Class divisible in three batches	Respective departments	

4th

YEAR

- In FOURTH year, the whole curriculum is divided into **8 modules**; each module will be covered by the end of the year.
- **Lectures** – According to students roster.
 - Lecture are scheduled on every **Monday** and **Thursday**
 - Every lecture is of **45 minutes** duration.
 - At the end of every Lecture feedback from the students would be collected for quality assurance and evaluation

Venue: Maqbool Ahmed Block Lecture Theatre.

Lecturer: according to Roster

Module roster and learning objectives are mentioned below:-

4TH YEAR LECTURES DISTRIBUTION



SOUTH SURGICAL WARD
PROF. DR. ABRAR ASHRAF ALI
FCPS, FRCS (Ed), DCPS (HEP), MCPS (HEP)
PROFESSOR OF SURGERY
CHAIRMAN DEPARTMENT OF SURGERY
DEAN OF FACULTY ALLIED AND HEALTH SCIENCES
DIRECTOR, MEDICAL EDUCATION
KING EDWARD MEDICAL UNIVERSITY /
MAYO HOSPITAL, LAHORE



Ref No: 433/SSW/KEMU/24

Dated: 02/01/2025

To,
THE HEAD OF SOUTH SURGICAL WARD
THE HEAD OF NORTH SURGICAL WARD
THE HEAD OF WEST SURGICAL WARD
THE HEAD OF EAST SURGICAL WARD

SUBJECT: CLASS LECTURES DISTRIBUTION OF 4th YEAR MBBS 2025.

Dear Colleagues,

It is to inform you that according to the decision of Board of Studies in Surgery meeting. You are requested to teach and arrange the class according to below mentioned schedule.

Module Name	Unit Name
Blood Vessels & Heart	South Surgical Ward (Unit-I)
Respiratory	
CNS	
Hematology	North Surgical Ward (Unit-II)
Kidney and Male & Female Genital	West Surgical Ward (Unit-III)
Endocrinology	
Musculoskeletal	
GIT & Hepatobiliary	East Surgical Ward (Unit-IV)

This is for your kind information and further necessary action.


PROF. DR. ABRAR ASHRAF ALI
Chairman Department of Surgery
King Edward Medical University/
Mayo Hospital, Lahore.

Dated: 02/01/2025

Ref No: 434-35/SSW/KEMU/24

Cc:

1. The Vice Chancellor, King Edward Medical University, Lahore
2. The Registrar, King Edward Medical University, Lahore

REVISED SCHEDULE OF BED SIDE (IN & OUT DOOR) TEACHING AT THE MAYO HOSPITAL, LAHORE FOR 4TH YEAR MBBS CLASS SESSION 2022-2023 AFTER SUMMER VACATION IS RE-NOTIFIED AS UNDER:-

No. 12953/REG/KEMU/2023

Date: 12-07-2023

DATE	EYE UNIT-I	EYE UNIT-II	EYE UNIT-III	ENT UNIT-I	ENT UNIT-II	NEUROLOGY
06.02.2023 to 05.03.2023	1 & 2	3 & 4	5 to 8	9 & 10	11 & 12	13 to 16
06.03.2023 to 02.04.2023	17 & 18	19 & 20	21 to 24	25 & 26	27 & 28	29 to 32
03.04.2023 to 08.05.2023	9 & 10	11 & 12	29 to 32	1 & 2	3 & 4	5 to 8
09.05.2023 to 05.06.2023	25 & 26	27 & 28	XXX	29 & 30	31 & 32	1 to 4
06.06.2023 to 02.08.2023	XXX	XXX	XXX	21 & 22	23 & 24	25 to 28
03.08.2023 to 30.08.2023	13 & 14	15 & 16	XXX	5 & 6	7 & 8	9 to 12
31.08.2023 to 27.09.2023	XXX	XXX	XXX	13 & 14	15 & 16	17 to 20
28.09.2023 to 25.10.2023	XXX	XXX	XXX	17 & 18	19 & 20	21 to 24

DATE	ORTHOPAEDICS	PLASTIC SURGERY	UROLOGY.	PAED. SURGERY	TB&CD	DERMATOLOGY	CARDIOLOGY	COMMUNITY MEDICINE
06.02.2023 to 19.02.2023	17 & 18	19 & 20	21 & 22	23 & 24	25 & 26	27 & 28	29 & 30	31 & 32
20.02.2023 to 05.03.2023	31 & 32	29 & 30	27 & 28	25 & 26	23 & 24	21 & 22	19 & 20	17 & 18
06.03.2023 to 19.03.2023	1 & 2	3 & 4	5 & 6	7 & 8	9 & 10	11 & 12	13 & 14	15 & 16
20.03.2023 to 02.04.2023	15 & 16	13 & 14	11 & 12	9 & 10	7 & 8	5 & 6	3 & 4	1 & 2
03.04.2023 to 24.04.2023	13 & 14	15 & 16	17 & 18	19 & 20	21 & 22	23 & 24	25 & 26	27 & 28
25.04.2023 to 08.05.2023	27 & 28	25 & 26	23 & 24	21 & 22	19 & 20	17 & 18	15 & 16	13 & 14
09.05.2023 to 22.05.2023	9 & 10	11 & 12	13 & 14	15 & 16	17 & 18	19 & 20	21 & 22	23 & 24
23.05.2023 to 05.06.2023	23 & 24	21 & 22	19 & 20	17 & 18	15 & 16	13 & 14	11 & 12	9 & 10
06.06.2023 to 19.07.2023	5 & 6	7 & 8	9 & 10	11 & 12	13 & 14	15 & 16	17 & 18	19 & 20
20.07.2023 to 02.08.2023	19 & 20	17 & 18	15 & 16	13 & 14	11 & 12	9 & 10	7 & 8	5 & 6
03.08.2023 to 16.08.2023	21 & 22	23 & 24	25 & 26	27 & 28	29 & 30	31 & 32	1 & 2	3 & 4
17.08.2023 to 30.08.2023	3 & 4	1 & 2	31 & 32	29 & 30	27 & 28	25 & 26	23 & 24	21 & 22
31.08.2023 to 13.09.2023	25 & 26	27 & 28	29 & 30	31 & 32	1 & 2	3 & 4	5 & 6	7 & 8
14.09.2023 to 27.09.2023	7 & 8	5 & 6	3 & 4	1 & 2	31 & 32	29 & 30	27 & 28	25 & 26
28.09.2023 to 11.10.2023	29 & 30	31 & 32	1 & 2	3 & 4	5 & 6	7 & 8	9 & 10	11 & 12
12.10.2023 to 25.10.2023	11 & 12	9 & 10	7 & 8	5 & 6	3 & 4	1 & 2	31 & 32	29 & 30

3/2

Module 4th Year MBBS 2022-2023

GIT and Hepatobiliary

Liver

- The anatomy of the liver.
- The signs of acute and chronic liver disease.
- The investigation of liver disease.
- The management of liver trauma.
- The management of liver infections.
- The management of benign and cystic liver lesions.
- The management of intrahepatic cholangiocarcinoma.
- The management of hepatocellular carcinoma.
- The management of colorectal liver metastases.

Gallbladder and Bile Ducts

- To understand the surgical anatomy and physiology of the gallbladder and bile ducts.

- To be aware of unusual disorders of the biliary tree gallbladder and bile ducts.
- To be aware of malignant disease of the gallbladder.
- To be familiar with the pathophysiology and management bile ducts of gallstones.

The Oesophagus

To understand:

- The clinical features, investigations and treatment of benign and malignant disease with particular reference to relationship to disease common adult disorders
- The anatomy and physiology of the oesophagus and their relationship to disease.

The Stomach and Duodenum

To understand:

- The gross and microscopic anatomy and pathophysiology of the stomach and duodenum.
- The critical importance of gastritis and *Helicobacter pylori* in upper gastrointestinal disease.
- The causes of duodenal obstruction and the presentation of duodenal tumors.
- Decide on the most appropriate investigation of patients with complaints relating to the stomach and duodenum.
- Treat peptic ulcer disease and its complications.
- Recognize the presentation of gastric cancer and understand the principles involved in treatment.

The Small Intestine

To understand:

- The basic anatomy and physiology of the small intestine.
- The range of conditions that may affect the small intestine.
- The etiology and pathology of common small intestinal conditions.
- The principles of investigations of small intestinal symptoms.
- The importance of non surgical management of small intestinal problems.
- The principles of small intestinal surgery.
- That complex intestinal problems are best managed by a multidisciplinary team.

The vermiform appendix

To understand:

- The aetiology and surgical anatomy of acute appendicitis.
- The clinical signs and differential diagnoses of appendicitis.
- The investigation of suspected appendicitis.
- Evolving concepts in the management of acute appendicitis.
- Basic surgical techniques, both open and laparoscopic.

- The management of postoperative problems.
- Tumours of the appendix and pseudomyxoma peritonei.

The large intestine

To understand:

- The basic anatomy and physiology of the large intestine intestinal.
- The range of conditions that may affect the large intestine
- The etiology and pathology of common large intestinal conditions.
- The principles of investigation of large intestinal symptoms symptoms.
- The importance of non-surgical management of large intestinal problems.
- The principles of colonic surgery.
- The management of acute surgical problems of the large intestine.

● The Rectum and anal Canal

- To Understand:
- Anatomy of rectum and its relationship to surgical disease and its treatment.
- The pathology, clinical presentation, investigations, differential diagnosis and treatment of diseases that affect the rectum.
- That carcinoma of the rectum is common and can disease and its treatment present with symptoms similar to benign disease.

- The principles involved in the management of rectal the rectum pathologies.
- The anatomy and physiology of the anus and anal canal with special reference to clinical presentation, investigation and differential diagnosis.
- Anal disease is common and treatment is often conservative.
- •Aggressive or inappropriate surgery may render the patient disabled.

MODULE

GASTROINTESTINAL & HEPATOBILIARY SYSTEM

DURATION 23 DAYS 14-04-2025 to 10-05-2025

CONTACT HOURS Lectures 57 =42.75 hours (2.6) + Practicals + Hospital stay = 39.83 Hours (0.7)

CREDIT HOURS 3.3

TEACHING METHODOLOGIES Lectures/ Practical's / small group discussion/clinics

OBJECTIVES

The course is designed primarily for 4th year M.B.B.S students and will cover the fundamental aspects of congenital anomalies, inflammatory and neoplastic conditions of salivary glands, oral cavity, gastrointestinal tract, liver, gall bladder and pancreas. The interrelated clinical aspects of Medicine, Surgery, Oncology, Radiology and Gynecological problems will also be covered. By the end of the module, the students should be able to:

Discuss the Pathological and Clinical aspects of:

- Sialadenitis
- Leukoplakia
- Barrett oesophagus
- Gastritis/Peptic ulcer
- Benign and malignant tumors of GIT including salivary glands, oral cavity, liver, pancreas and gall bladder
- Congenital anomalies of GIT
- Intestinal obstruction
- Inflammatory bowel disease
- Diarrhea
- Jaundice
- Infectious and autoimmune hepatitis
- Alcoholic and metabolic liver disease
- Cirrhosis
- Cholecystitis& Pancreatitis
- Various related diagnostic & interventional techniques
- Radiological investigations

TIME		COURSE CONTENT	PLACE	LEARNING OUTCOME	Recommended books	DEPARTMENT/ Facilitator	DURATION
WEEK 1							
Monday 14-04-2025							
8.00-8.45	1.	Congenital diseases of GIT				Paeds Surgery	45 min
8.45-9.30	2.	Inflammation of salivary glands, Benign and malignant tumors		Etiology, pathogenesis and morphology	Robbins & Cotrans	Pathology	45 min
9.30-10.15	3.	Salivary Glands		<ul style="list-style-type: none"> Clinical Features Investigations. Management 	Bailey And Love's Short Practice of Surgery 26th Ed	Surgery	45 min
HOSPITAL WORK					Respective departments	10.30-2.30	
Tuesday 15-04-2025							
8.00-8.45	4.	Control of epidemic of GIT diseases		<ul style="list-style-type: none"> Planning and strategizing of GIT epidemic control 	1-Maxcy Public Health and Preventive Medicine. 2-Park's Text Book of Preventive and Social Medicine.	Community Medicine	45 min
8.45-9.30	5.	Infections of oral cavity, Precancerous & cancerous lesions of oral cavity		<ul style="list-style-type: none"> Etiology Oral manifestation of systemic disease 	Robbins & Cotrans	Pathology	45 min
9.30-10.15	6.	Pre cancerous and malignant conditions of oral cavity.		<ul style="list-style-type: none"> Clinical Features Investigations. Management 	Bailey And Love's Short Practice of Surgery 26th Ed	Surgery	45 min
HOSPITAL WORK (10:30 – 12:00)						Community Medicine (Lecture 12:00 – 12:45)	Pathology Practical (12:45-02:30)
Wednesday 16-04-2025							
8.00-8.45	7.	Oesophageal pathologies		<ul style="list-style-type: none"> Achalasia Esophagitis 	Robbins & Cotrans	Pathology	45 min

				<ul style="list-style-type: none"> Barrett Esophagus (GERD) Oesophageal tumors 				
8.45-9.30	8.	Neonatal Gastrointestinal obstruction		Idiopathic Hypertrophic pyloric stenosis, Small and large bowel atresias, Anorectal malformations, Hirschsprung's disease, Malrotation.	Pediatric Surgery by Jay L Grosfeld volume 7	Paederatic Surgery	45 min	
9.30-10.15	9.	Dysphagia, GERD		Dysphagia:Differential Diagnosis GERD: Definition, Clinical Features, Management	<ul style="list-style-type: none"> Davidson's Principles and Practice of Medicine 22nd Edition Kumar and Clark's Clinical Medicine, 8th Edition CURRENT Medical Diagnosis and Treatment 2016 (LANGE CURRENT Series)55th Edition 	Medicine	45 min	
HOSPITAL WORK								10.30-2.30
Thursday 17-04-2025								
8.00-8.45	10.	GI parasitic zoonosis of public health importance		Prevention and Control of parasitic zoonosis	1.Maxcy Public Health and Preventive Medicine 2. Park's Text Book of Preventive and Social Medicine	Community Medicine	45 min	
8.45-	11.	<ul style="list-style-type: none"> Carcinoma 		<ul style="list-style-type: none"> Clinical features. 	Bailey And Love's Short	Surgery	45 min	

9.30		<ul style="list-style-type: none"> esophagus. Achalasia cardia. 		<ul style="list-style-type: none"> Investigations. Management. 	Practice of Surgery 26th Ed		
9.30-10.15	12.	Acute and chronic gastritis		Etiology, Pathogenesis and morphology with emphasis on H pylori	Robbins & Cotrans	Pathology	45 min
HOSPITAL WORK (10:30-12:00 p.m.)						Community Medicine 12:00- 12:45	Pathology Practical 12:45- 2:30
Friday 18-04-2025							
8.00-8.45	13.	<ul style="list-style-type: none"> Peptic ulcer Gastric polyp Gastric Tumours 		<ul style="list-style-type: none"> Etiology, Pathogenesis and morphology Stress ulcers, pyloric stenosis Hypertrophic gastropathies including Zollinger Ellison syndrome 		Pathology	45 min
8.45-9.30	14.	<ul style="list-style-type: none"> Helicobacter Pylori Infection. Acid Peptic Disease. 		<ul style="list-style-type: none"> Helicobacter Pylori Infection: Clinical features, Diagnosis and management. Acid Peptic Disease: Causes, Clinical Features, Investigations and management. 	<ul style="list-style-type: none"> Davidson's Principles and Practice of Medicine 22nd Edition Kumar and Clark's Clinical Medicine, 8th Edition CURRENT Medical Diagnosis and Treatment 2016 (LANGE 	Medicine	45 min

					CURRENT Series)55th Edition		
9.30-10.15	15.	Complications of peptic ulcer disease. Ulcer perforation, Ulcer bleed		<ul style="list-style-type: none"> Clinical features. Investigations. Management. 	Bailey And Love's Short Practice of Surgery 26th Ed	Surgery	45 min
Hospital work 10.30-12.00							
Saturday 19-04-2025							
8.00-8.45	16.	Levels of prevention of acute diarraeal diseases and amoebiasis		Will be able to apply five levels of prevention in acute diarraeal diseases and amoebiasis	<ol style="list-style-type: none"> Maxcy Public Health and Preventive Medicine Park's Text Book of Preventive and Social Medicine 	Community Medicine	45 min
8.45-9.30	17.	Topic not specified				Pediatric Surgery	45 min
9.30-10.15	18.	Gastric polyps and tumours		<ul style="list-style-type: none"> Clinical features. Investigations. Management. 	Bailey And Love's Short Practice of Surgery 26th Ed	Surgery	45 min
Hospital work 10.30-2.30							
Monday 21-04-2025							
8.00-8.45	19.	Plain X-Ray Abdomen / Sialography for Salivary glands Barium Swallow/Barium Follow through /Barium Enema		Interpretation		Radiology	45 min
8.45-9.30	20.	Intestinal pathologies-obstruction and diarrhea		<ul style="list-style-type: none"> Etiology, pathogenesis and morphology of Ischemic Bowel 		Pathology	45 min

				Disease, Irritable bowel syndrome, Intestinal Obstruction, celiac disease <ul style="list-style-type: none"> • Causes of diarrhea including Giardiasis and Amoebiasis 			
9.30-10.15	21.	Intestinal obstruction		<ul style="list-style-type: none"> • Clinical features. • Investigations. • Management. 	Bailey And Love's Short Practice of Surgery 26th Ed	Surgery	45 min
Hospital work				10.30-2.30			

Tuesday 22-04-2025							
8.00-8.45	22.	Poliomyelitis		Will be able to plan and make strategies to combat Polio and understand the bottle necks in its eradication	<ol style="list-style-type: none"> 1. Maxcy Public Health and Preventive Medicine 2. Park's Text Book of Preventive and Social Medicine 	Community Medicine	45 min
8.45-9.30	23.	Acute Diarrhoea & Celia disease				Paederatic medicine	
9.30-10.15	24.	Diarrhea:Acute		Diarrhea:Acute Causes, Clinical Presentations, Investigations and management	<ul style="list-style-type: none"> • Davidson's Principles and Practice of Medicine 22nd Edition • Kumar and Clark's Clinical Medicine, 8th Edition <p>CURRENT Medical Diagnosis and Treatment 2016 (LANGE CURRENT Series)55th Edition</p>	Medicine	
Hospital work (10:30-12.00 p.m.)						Community medicine Lecture 12:00-12:45	Pathology Practical 12:45- 2:30 pm.
Wednesday 23-04-2025							
8.00-8.45	25.	Typhoid		Learn about prevention and epidemic control of Typhoid	<ol style="list-style-type: none"> 1. Maxcy Public Health and Preventive Medicine 2. Park's Text Book 	Community Medicine	

					of Preventive and Social Medicine		
8.45-9.30	26.	Somatoform disorders		Management		Psychiatry	
9.30-10.15	27.	Inflammatory Bowel Disease and Graft vs host disease		Pathogenesis & Morphology	Robbins & Cotrans	Pathology	45 min
HOSPITAL WORK 10.30-2.00							
Thursday 24-04-2025							
8.00-8.45	28.	Intestinal TB		Understand epidemiology and Public Health significance of intestinal T.B	1. Maxcy Public Health and Preventive Medicine 2. Park's Text Book of Preventive and Social Medicine	Community Medicine	45 min
8.45-9.30	29.	Diarrhea Chronic: Large Gut. Inflammatory Bowel Disease		Diarrhea, Chronic: Large Gut. Causes, Clinical Presentations. Inflammatory Bowel Disease: Types, Clinical features, Investigations and management.	<ul style="list-style-type: none"> • Davidson's Principles and Practice of Medicine 22nd Edition • Kumar and Clark's Clinical Medicine, 8th Edition • CURRENT Medical Diagnosis and Treatment 2016 (LANGE CURRENT Series) 55th Edition 	Medicine	45 min

9.30-10.15	30.	Ultrasound Abdomen – Liver, Pancreas, Spleen C.T. Abdomen / C.T. Head and Neck		Interpretation		Radiology	45 min
HOSPITAL WORK 10:30-12:00						Community medicine 12:00- 12:45 p.m.	Pathology Practical 12:45- 2:30
Friday 25-04-2025							
8.00-8.45	31.	Cholera		Learn about prevention and epidemic control of Cholera	1. Maxcy Public Health and Preventive Medicine 2. Park's Text Book of Preventive and Social Medicine	Community Medicine	45 min
8.45-9.30	32.	Inflammatory bowel disease.		<ul style="list-style-type: none"> • Clinical features. • Investigations. • Management. 	Bailey And Love's Short Practice of Surgery 26th Ed	Surgery	45 min
9.30-10.15	33.	Non- Neoplastic and neoplastic polyps, colorectal Carcinoma		Etiology, Pathogenesis & Morphology	Robbins & Cotrans	Pathology	45 min

Hospital work				10.30-12.00			
Saturday 26-04-2025							
8.00-8.45	34.	Celiac Disease		Diarrhea (Chronic) Small Gut: Malabsorption: Causes, Clinical Presentations Celiac Disease: Clinical Features, Investigations. Management	<ul style="list-style-type: none"> • Davidson's Principles and Practice of Medicine 22nd Edition • Kumar and Clark's Clinical Medicine, 8th Edition • CURRENT Medical Diagnosis and Treatment 2016 (LANGE CURRENT Series)55th Edition 	Medicine	45 min
8.45-9.30	35.	Pre malignant and malignant conditions of the colon and rectum.		<ul style="list-style-type: none"> • Clinical features. • Investigations. • Management. 	Bailey And Love's Short Practice of Surgery 26th Ed	Surgery	45 min
9.30-10.15	36.	Colorectal cancers		Screening modalities for colorectal cancers Staging work up and management and targeted therapies in colorectal cancers		Oncology	45 mins
HOSPITAL WORK 10.30-2.30							

Monday 28-04-2025							
8.00-8.45		Liver Pathology				Pathology	
8.45-9.30		Topic not conveyed				Community Medicine	
9.30-10.15		Topic not conveyed				Medicine	
HOSPITAL WORK 10.30-2.30							
Tuesday 29-04-2025							
8.00-8.45	37.	Pattern of hepatocytes response to injury		<ul style="list-style-type: none"> • Reversible and irreversible injury • Hepatic Complications • Hepatic Encaphalopathy 	Robbins & Cotrans	Pathology	45 min
8.45-9.30	39.	Jaundice Cholestasis, LFT's		Classification, causes and pathophysiology, Interpretation of LFTs		Pathology	45 min
		Jaundice Acute Hepatitis		Jaundice. (PreHepatic, Hepatic and Post-Hepatic) Acute Hepatitis: Causes Clinical Presentation (HAV, HEV), Investigation and Management	<ul style="list-style-type: none"> • Davidson's Principles and Practice of Medicine 22nd Edition • Kumar and Clark's Clinical Medicine, 8th Edition • Current Medical Diagnosis and Treatment 2016 (LANGE CURRENT Series) 55th Edition 	Medicine	

HOSPITAL WORK 10: 30- 12: 00						Community Medicine 12: 00- 12: 45 p.m.	Pathology Practical 12: 45- 2: 30 p.m.
Wednesday 30-04-2025							
8.00- 8.45	43.	Infectious and inflammatory liver disorders		Pathogenesis, Morphology and laboratory diagnosis of Viral hepatitis, Liver abcess, Autoimmune hepatitis		Pathology	45 min
8.45- 9.30	44.	Chronic Hepatitis. Hepatitis B, Hepatitis C		Chronic Hepatitis: Causes. Hepatitis B: Clinical Features, Investigations and Management. Hepatitis C: Clinical Features, Investigations and Management.	<ul style="list-style-type: none"> • Davidson's Principles and Practice of Medicine 22nd Edition • Kumar and Clark's Clinical Medicine, 8th Edition • CURRENT Medical Diagnosis and Treatment 2016 (LANGE CURRENT Series)55th Edition 	Medicine	45 min
9.30- 10.15	45. 45.	Hydatid disease and Yellow fever		Learn about prevention and control measures of Hydatid Disease and Yellow Fever	1. Maxcy Public Health and Preventive Medicine	Community Medicine	45 min

					2. Park's Text Book of Preventive and Social Medicine		
HOSPITAL WORK 10.30-2.30							
Thursday 01-05-2025 (Holiday)							
Friday 02-05-2025							
8.00-8.45	46.	Portal hypertension.		<ul style="list-style-type: none"> • Clinical features. • Investigations. • Management. 	Bailey And Love's Short Practice of Surgery 26th Ed	Surgery	45 min
8.45-9.30	47.	Alcoholic and metabolic liver disease, Cirrhosis		Pathophysiology and morphology of <ul style="list-style-type: none"> • alcoholic liver disease, • Non-alcoholic liver disease, • Wilson's disease, • Haemochromatosis • Cirrhosis 		Pathology	45 min
9.30-10.15	48.	Chronic Liver Disease.		Chronic Liver Disease: Causes, Clinical features, Complications, Investigations and Management.	<ul style="list-style-type: none"> • Davidson's Principles and Practice of Medicine 22nd Edition • Kumar and Clark's Clinical Medicine, 8th Edition • CURRENT Medical Diagnosis and Treatment 2016 (LANGE CURRENT) 	Medicine	45 min

					Series)55th Edition		
HOSPITAL WORK 10:30-12:00							
Saturday 03-05-2025							
8.00-8.45	49.	Benign and malignant neoplasms of liver, gall bladder and pancreas		Etiology and Morphology with emphasis on Metastatic liver disease		Pathology	45 min
8.45-9.30	50.	Hepatocellular carcinoma		<ul style="list-style-type: none"> Clinical features. Investigations. Management. 	Bailey And Love's Short Practice of Surgery 26th Ed	Surgery	45 min
9.30-10.15	51.	Hepatocellular carcinoma , Pancreatic cancer		Staging work up and management of HCC , Pancreatic Adenocarcinoma and Neuroendocrine tumors		Oncology	45 min
HOSPITAL WORK 10.30-2.30							
Monday 05-05-2025							
8.00-8.45	52.	Carcinoma gall bladder		<ul style="list-style-type: none"> Clinical features. Investigations. Management. 	Bailey And Love's Short Practice of Surgery 26th Ed	Surgery	
8.45-9.30	53.	Aspiration of gastric contents; causes, prevention and management				Anaesthesia	45 min
9.30-10.15	54.	HIV/AIDS		Will be able to plan and make strategies to control HIV/AIDS and understand the bottle necks in its management	<ol style="list-style-type: none"> Maxcy Public Health and Preventive Medicine Park's Text Book of Preventive and Social Medicine 	Community Medicine	45 min
HOSPITAL WORK 10.30-2.30							
Tuesday 06-05-2025							
8.00-8.45	55.	Pancreatitis and cholecystitis		<ul style="list-style-type: none"> Acute and chronic forms Etiology, pathogenesis and 		Pathology	45 min

				morphology			
8.45-9.30	56.	Pancreatitis. Acute and Chronic.		Pancreatitis: (Acute and Chronic). Clinical Features, Complications , Investigations and management.	<ul style="list-style-type: none"> • Davidson's Principles and Practice of Medicine 22nd Edition • Kumar and Clark's Clinical Medicine, 8th Edition • CURRENT Medical Diagnosis and Treatment 2016 (LANGE CURRENT Series)55th Edition 	Medicine	
9.30-10.15	57.	Acute and chronic pancreatitis.		<ul style="list-style-type: none"> • Clinical features. • Diagnosis. • Management. 	Bailey And Love's Short Practice of Surgery 26th Ed	Surgery	45 min
HOSPITAL WORK 10: 30- 12: 00						Community Medicine 12: 00- 12: 45 p.m.	Pathology Practical 12: 45- 2: 30 p.m.
Wednesday 07-05-2025							
8.00-8.45	58	Acute and Chronic Viral Hepatitis		Understand the epidemiology, planning and control measures of acute and chronic viral hepatitis	<ul style="list-style-type: none"> • Maxcy Public Health and preventive Medicine • Park's Text Book of Preventive and 	Community Medicine	45 min

					social Medicine		
8.45-9.30	59	Neonatal Jaundice				Paeds Medicine	45 min
9.30-10.15	60	Jaundice in Pregnancy HELLP		Management		Gynecology	45 min
HOSPITAL WORK 10.30-2.30							
Thursday 08-05-2025							
8.00-8.45	61	Revision				Paed- Medicine	45 min
8.45-9.30	62.	Revision				Community Medicine	45 min
9.30-10.15	63.	Revision				Community Medicine	45 min
HOSPITAL WORK 10: 30- 12: 00						Community Medicine 12: 00- 12: 45 p.m.	Pathology Practical 12: 45- 2: 30 p.m.
Friday 09-05-2025							
8.00-8.45	64.	Revision				Paeds Surgery	45 min
8.45-9.30	65.	Liver Function Test				Pathology	45 min
9.30-10.15	66.	Liver Function Test				Pathology	45 min
Hospital work				10.30-12.00			
Saturday 10-05-2025							
8.00-8.45	67	Revision				Gynecology	45 min
8.45-9.30	68	Revision				Medicine	45 min
9.30-10.15	69	Revision				Surgery	45 min
HOSPITAL WORK 10.30-2.30							

HEMATOLOGY MODULE- 4th year MBBS

LEARNING OBJECTIVES:

1. Surgical management of conditions arising from Hemolytic Anemias:

At the end of this activity, participants should be able to;

- Describe what is hemolytic anemias
- Discuss its different types
- Comprehend the perioperative management of patients with hemolytic anemias undergoing minor surgical procedures
- Elaborate the perioperative management of patients with hemolytic anemias undergoing minor surgical procedures

2. Medical Indications of splenectomy:

At the end of this activity, participants should be able to;

- Classify common medical conditions involving spleen
- Review indications of splenectomy
- Interpret principles and potential complications of splenectomy
- Narrate the potential advantage of laparoscopic splenectomy
- Discover the benefits of splenic preservation.

3. Fluid and electrolytes abnormalities and interpretations of ABGs in surgical patients.

At the end of this activity, participants should be able to;

- Assess fluid and electrolytes requirements in pre and post operative patients.
- Generate consequences of fluid and electrolytes abnormalities.
- Explain interpretation of ABGs.

4. Surgical ethics:

At the end of this activity, participant would be able to;

- Understand the importance of autonomy in good surgical practice
- Comprehend the moral and legal boundaries and practical difficulties of informed consent.
- Recognise good practice in making decisions about withdrawal of life sustaining treatment.
- Acknowledge the importance and boundaries of confidentiality in surgical practice.

- Realise the importance of appropriate regulation in surgical research.
- Be aware of the importance of rigorous training and maintenance of good practice standards.

5. Critically ill surgical patients

At the end of this activity, participants should be able to;

- Define critically ill surgical patients
- Order indications of admissions in ICU & HDU
- Organize ventilator management of critically ill surgical patients
- Prepare circulatory support of critically ill surgical patients
- Specify renal support of critically ill surgical patients
- Describe septic shock
- Compute indications of step down from ICU & HDU

6. Principles of controlling hemorrhage and different tools of trade:

At the end of this activity, participants should be able to;

- Enlist types of hemorrhage
- Explain principles of controlling hemorrhage
- Discuss options available of controlling hemorrhage

- Summarize recent advances

7. Management of surgical patients with coagulation and bleeding disorders:

At the end of this activity, participants should be able to;

- Explain pathophysiology of coagulation and bleeding disorders
- Define types of bleeding and coagulation disorders
- Compile perioperative management of patients with coagulation and bleeding disorders undergoing minor surgical procedures.
- Outline perioperative management of patients with coagulation and bleeding disorders undergoing major surgical procedures

8. Blood products used in different hematological conditions.

At the end of this activity, participants should be able to;

- Describe types of blood products, their shelf life, compatibility testing and how to use it
- Compare indications of use in different hematological disorders

INTRODUCTION TO SURGERY:-

- To define surgical diseases as those requiring operative management
- To classify surgical procedures as urgent, emergent and elective
- To divide the timeline of a surgical patient into three distinct periods, namely preoperative, intra-operative and post-operative

- To understand briefly the preoperative evaluation of the surgical patient
- To understand intra-operative considerations
- To be able to describe the technique of scrubbing, gowning and gloving
- To understand principles of post-operative care, both in immediate recovery period and late post-operative phase

HAEMATOLOGY MODULE OF 4TH YEAR MBBS (SESSION 2024-25)

DURATION: 02-01-2025 to 01-02-2025

TIME	COURSE CONTENT	PLACE	LEARNING OUTCOME	Recommended books	DEPARTMENT/ Facilitator	DURATION
02-01-2025 Thursday						
08.00-8.45	1 Evaluating Patients with orbital lesions				EYE	45 min
08.45-9.30	2 Basic concepts of Community Medicine and Public Health				Community medicine	45 min

09.30-10.15	3	Normal haematopoiesis & Overview of various Lab investigations		<ul style="list-style-type: none"> • Students should have understanding of normal haematopoietic development • Should be familiar with the terms of leucopenia, leukocytosis, lymphocytosis, lymphopenia and their causes. • A clear understanding of basic hematological investigations 	Robbins Pathology	Pathology	45 min
Hospital work 10:30 a.m. to 2:30 p.m.							
03-01-2025 Friday							
08.00-8.45	4.					Anaesthesia	45 mins
08.45-9.30	5.	Anemia in Pregnancy				Gynaecology	45 min
9.30-0.15	6.	Anemias: their classification, anemias of blood loss, hemolytic anemias due to membrane disorders		Students should be able to define & classify anemias, know their underlying pathology and have clear concept of anemias due to membrane disorders	Robbins Pathology	Pathology	45 min
Hospital work 10:30 a.m. to 12:00 p.m.							

04-01-2025 Saturday							
8.00-8.45	7.	Surgical management of condition arising from hemolytic anemias				Surgery	45 min
8.45-9.30	8.	Inherited Hemolytic Anemias		<ul style="list-style-type: none"> • Red cell membrane defect • Hb. Abnormalities • Thalassemia • Sickle cell syndrome • Metabolic disorders (G6PD deficiency) 		Paediatric Medicine	45 min
9.30-10.15	9.	Hemolytic anemias due to enzymopathies & haemoglobinopathies		Student should have a clear understanding of pathogenesis, clinical presentation and lab diagnosis of G6PD and sickle cell disease.	Robbins Pathology	Pathology	45 min
Hospital work				10:30 a.m. to 2:30 p.m.			
06-01-2025 Monday							
8.00-8.45	10.	Basic concepts of Community Medicine and Public Health				Community Medicine	45 min
8.45-9.30	11.	Thalassemia		Genetic counseling and special care of patient		Gynecology	45 min
9.30-10.15	12.	Thalassemias		Student should have a clear understanding of pathogenesis, clinical presentation and lab diagnosis of Beta and alpha thalassemia .	Robbins Pathology	Pathology	45 min
Hospital work				10:30 a.m. to 2:30 p.m.			

07-01-2025 Tuesday							
8.00-08.45	13.	Medical indications of splenectomy				surgery	45 min
8.45-9.30	14	Acquired Hemolytic Anemias		<ul style="list-style-type: none"> • Autoimmune • Drug induced • Alloimmune • Non immune • Mechanical 		Paediatric Medicine	45 min
9.30-10.15	15.	PNH and immune haemolytic anaemias		Students should be able to differentiate between different types of immune haemolytic anaemias and should have a clear understanding of their pathogenesis , clinical presentation and lab diagnosis	Robbins Pathology	Pathology	
Hospital work 10:30 a.m. to 2:30 p.m.							
		PRACTICAL		Pathology	Community Medicine	Respective departments	12:00-2:30PM
08-01-2025 Wednesday							
8.00-8.45	16.	Vertigo				ENT	45 min
8.45-9.30	17.	Orbital Lesions				Eye	45 min
9.30-10.15	18.	Anaemias of diminished erythropoiesis – Iron deficiency anaemia		Student should have a clear understanding of pathogenesis , clinical presentation and lab diagnosis of iron deficiency anemia	Robbins Pathology	Pathology	45 min
Hospital work 10:30 a.m. to 2:30 p.m.							

09-01-2025 Thursday							
8.00-8.45	20.	Basic concepts of Community Medicine and Public Health				Community Medicine	45 min
8.45-9.30	21.	Deficiency Anemias (Definition, Classification, Clinical manifestations, Lab workup, Differential diagnosis)		<ul style="list-style-type: none"> • Iron deficiency • Vit.B 12 • Folic acid 		Medicine	45 min
9.30-10.15	22.	Megaloblastic anaemia		Student should have a clear concept of pathogenesis , clinical presentation and lab diagnosis of megaloblastic anaemia	Robbins Pathology	Pathology	45 min
Hospital work 10:30 a.m. to 2:30 p.m.							
		PRACTICAL		Pathology	Community Medicine	Respective departments	12:00-2:30PM
10-01-2025 Friday							
8.00-8.45	23.	Fluid & electrolyte abnormalities and interpretation of ABG'S in surgical patients				Surgery	45 min
8.45-9.30	24.	Anemias due to Bone marrow failure (Etiology, Clinical features ,Lab diagnosis & Management)		❖ Aplastic anemia Bone marrow transplantation Etiology, Clinical features ,Lab diagnosis & Management		Oncology	45 min
9.30-10.15	25.	Aplastic anaemia, Pure red cell aplasia and anemia of chronic		Student should have a clear understanding of	Robbins Pathology	Pathology	45 min

		disease		pathogenesis , clinical presentation and lab diagnosis of Aplastic anaemia, Pure red cell aplasia and anemia of chronic disease			
Hospital work				10:30 to 12:00 p.m.			
11-01-2025 Saturday							
8.00-8.45	26.	Personality Development & impact on Patient interaction			Integrating Behavioral Sciences in Healthcare (AsmaHumayun) Brig MowadatRana book on behavioral sciences	Behavioral sciences	45 min
8.45-9.30	27					Gynecology	45 mins
9.30-10.15	28.	Acute myeloid leukemia,		Students should be able to classify acute myeloid leukemia, should have a clear concept of their pathogenesis and related investigations.	Robbins Pathology	Pathology	45 min
Hospital work				10:30 a.m. to 2:30 p.m.			
13-01-2025 Monday							
8.00-8.45	29.	Otosclerosis				ENT	45 min
8.45-9.30	30.	Health & Disease				Community medicine	45 min
9.30-10.15	31.	Acute lymphoid leukemia		Students should be able to classify acute lymphoid leukemia , should have a clear concept of their pathogenesis and related	Robbins Pathology	Pathology	45 min

				investigations			
Hospital work				10:30 to 2:30 p.m.			
14-01-2025 Tuesday							
8.00-8.45	32.	Surgical ethics		<p>To understand:</p> <ul style="list-style-type: none"> • The importance of autonomy in good surgical practice • The moral and legal boundaries and practical difficulties of informed consent • Good practice in making decisions about the withdrawal of life-sustaining treatment • The importance and boundaries of confidentiality in surgical practice • The importance of appropriate regulation in surgical research • The importance of rigorous training and maintenance of good practice standards 	Surgery	Surgery	45 min
8.45-9.30	33.	Retinoblastoma				Eye	45 min
9.30-10.15	34.	Lymphoid neoplasms. Their classification , B cell NHL (1)		Student should have a clear understanding of pathogenesis , clinical presentation and lab diagnosis of B cell NHL and	Robbins Pathology	Pathology	45 min

				special emphasis on CLL			
Hospital work				10:30 to 12:00 p.m.			
		PRACTICAL		Pathology	Community Medicine	Respective departments	12:00-2:30PM
15-01-2025 Wednesday							
8.00-8.45	35.	Health & Disease				Community medicine	45 min
8.45-9.30	35.	B and T cell NHL (2)		Student should have a clear understanding of pathogenesis , clinical presentation and lab diagnosis of B and T cell NHL	Robbins Pathology	Pathology	45 min
9.30-10.15	36.	Lymphoproliferative disorders		(Definition, Classification, Clinical manifestations, Lab workup, Differential diagnosis)		Medicine	45 min
Hospital work				10:30 to 2:30 p.m.			
16-01-2025 Thursday							
8.00-8.45	37.	Hodgkin's lymphoma		Should be familiar with its type, clinical and morphological features.	Robbins Pathology	Pathology	45 min
		Lymphoproliferative disorders		(Definition, Classification, Clinical manifestations, Lab workup, Differential diagnosis)		Medicine	45 min
8.45-9.30	38.	Management of Lymphoproliferative disorders		Management of Lymphoproliferative diseases including adverse effects & complications of Chemotherapy		Oncology	45 min
Hospital work				10:30 to 12:00 p.m.			
		PRACTICAL		Pathology	Community Medicine	Respective	12:00-2:30PM

						departments	
Hospital work				10:30 to 12:00 p.m.			
17-01-2025 Friday							
08:00 – 8:45	39.	Health and Disease				Community Medicine	
08:45 – 9:30	40	Multiple Myeloma				Pathology	
9:30 – 10:15	41	Multiple myeloma and Gamma globulin pathis				Medicine	
Hospital work				10:30 to 12:30 p.m.			
18-01-2025 Saturday							
8.00-8.45	42.	Critically ill surgical patient				Surgery	45 min
8.45-9.30	43.	Glomus tumor				ENT	45 min
9.30-10.15	44.	Myeloproliferative disorders- Chronic myeloid leukemia Multiple myeloma		Students should be able to classify various myeloproliferative disorders, should be able to discuss in detail chronic myeloid leukaemia	Robbins Pathology	Pathology	45 min
Hospital work				10:30 to 2:30 p.m.			

20-01-2025 Monday							
8.00-8.45	45.	Myeloproliferative disorders-polycythemia Vera, Essential thrombocythemia and myelofibrosis		students should be able to describe various myeloproliferative disorders and their lab diagnosis	Robbins Pathology	Pathology	45 min
8.45-9.30	46.	Myeloproliferative disorders		(Definition, Classification, Clinical manifestations, Lab workup, Differential diagnosis)		MEDICINE	
9.30-10.15	47.	Management of Myeloproliferative Disorders		❖ Etiology, Clinical features ,Lab diagnosis & Management		Oncology	45 min
Hospital work				10:30 to 02:30 p.m.			
21-01-2025 Tuesday							
8.00 – 8.45	48	Health & Disease				Community Medicine	45 min
8.45 – 9.30	49.	Myelodysplastic syndrome		Student should have a clear concept of myelodysplasia and how to investigate it.	Robbins Pathology	Pathology	45 min
9.30 – 10.15	50.	Myelodysplasia& Stem cell Transplantation		Etiology, Clinical features ,Lab diagnosis & Management		Oncology	45 min
HOSPITAL WORK 10.30-12.00 p.m.							
		PRACTICAL		Pathology	Community Medicine	Respective departments	12:00-2:30PM

22-01-2025 Wednesday							
8.00 – 8.45	51	Immunology				Community medicine	45 min
8.45 9.30	52.	Overview of Bleeding diathesis, its investigation and interpretation		Students should be familiar with various bleeding diathesis and should be able to interpret the findings of related investigations	Robbins Pathology	Pathology	45 min
9.30 – 10.15	53.	Principles of controlling hemorrhage and different tools of trade				Surgery	45 min
HOSPITAL WORK 10.30-02:30 p.m.							
23-01-2025 Thursday							
8.00-8.45	54.	Medicines in Ophthalmology				Eye	
8.45-9.30	55.	Topic not suggested by relevant Department				Anaesthesia	
9.30-10.15	56.	Thrombocytopenia		Students should be able to classify and investigate various types of thrombocytopenias	Robbins Pathology	Pathology	45 min
Hospital work 10:30 to 12:00 p.m.							
		PRACTICAL		Pathology	Community Medicine	Respective departments	12:00-2:30PM
Hospital work 10:30 to 12:00 p.m.							
24-01-2025 Friday							
8.00-8.45	57.	Topic not suggested by relevant Department				Behavioral Sciences	45 min
8.45-9.30	58.	Inherited and acquired platelet defects.		Students should be able to classify and investigate various types of platelet functional disorders	Robbins Pathology	Pathology	

				especially Bernard Soulier and Glanzman 's thrombosthenia			
9.30-10.15	59.	Platelet disorders		<ul style="list-style-type: none"> • ITP • Platelet functional disorders 		Paediatric MEDICINE	
Hospital work 10:30 to 02:30 p.m.							
25-01-2025 Saturday							
8.00-8.45	66.	Disseminated intra vascular coagulation.		Students should have a clear concept of pathogenesis, clinical presentation and lab investigation of disseminated intra vascular coagulation	Robbins Pathology	Pathology	45 min
8.45-9.30	67.	DIC		Etiology, clinical manifestations, labwork up, differential diagnosis		Medicine	45 min
9.30-10.15	68.	Management of a surgical patient with coagulation disorders & Bleeding disorders				Surgery	45 min
Hospital work 10:30 to 02:30 p.m.							
27-01-2025 Monday							
8.00-8.45	69.	Thrombophilia/ Idiopathic thrombocytopenic purpura		Pathogenesis		Pathology	45 min
8.45-9.30	70.	Thrombosis , Thrombophilia		(Etiology, Clinical manifestations, Lab workup, Differential diagnosis)		MEDICINE	45 min
9.30-10.15	71.	Stroke		Epidemiology, Risk factors, Etiology & Pathogenesis of Ischemic stroke		Neurology	45 min
Hospital work 10:30 to 12:00 p.m.							
28-01-2025 Tuesday							
8.00-8.45	72.	Blood grouping and Blood		Students should develop comprehensive understanding	Robbins Pathology	Pathology	45 min

		products and components		of various blood groups, how to make various components of blood and its products.			
8.45-9.30	73.	Blood products used in different hematological conditions				surgery	45 min
9.30-10.15	74.	immunology				Community Medicine	45 min
Hospital work 10:30 to 12:00 p.m.							
		PRACTICAL		Pathology	Community Medicine	Respective departments	12:00-2:30PM
Hospital work 10:30 to 2:30 p.m.							
29-01-2025 Wednesday							
88.00- 8.45	75.	Vascular malformations				Plastic surgery	45 mins
8.45 – 9.30	76.	Stroke		Investigations and management		Neurology	45 mins
9.30-10.15	77	Blood transfusion reactions (1)		Students should be able to describe in detail various blood transfusion reactions	Robbins Pathology	Pathology	45 min
Hospital work 10:30 a.m. to 02:30 p.m.							
30-01-2025 Friday Thursday							
8.00 - 8.45	78	Topics not suggested by relevant Department				Community Medicine	45 mins
8.45 – 9.30	79	Topics not suggested by relevant Department				Anesthesia	45 min
9.30 – 10.30	80	Blood transfusion reactions (2)		Students should be able to describe in detail various blood transfusion	Robbins Pathology	Pathology	45 min

				reactions			
Hospital work				10:30 a.m. to 12:00 p.m.			
		PRACTICAL		Pathology	Community Medicine	Respective departments	12:00-2:30PM
31-01-2025 Friday							
8.00-8.45	81.	Ocular Side effect of systemic medications				Eye	45 min
8.45-9.30	82.	Von willibrand Disease				Pathology	
9.30-10.15	83.	Immunology				Community Medicine	45 min
Hospital work				10:30 a.m. to 2:30 p.m.			
01-02-2025 Saturday							
8.00-8.45	84	Revision				Community Medicine	45 min
8.45-9.30	85	Revision				Behaviorial Sciences	45 min
9.30-10.15	86	Revision				Pathology	45 min

The CARDIOVASCULAR MODULE- 4th year MBBS

1. ACUTE LIMB ISCHEMIA

To understand

- The definition and etiology of Acute limb ischemia
- To know the clinical manifestations and stages of Acute limb ischemia
- To appreciate the difference between thrombosis and embolism
- To understand the relevant investigations and treatment options for Acute limb ischemia
- To understand principles of revascularisation including embolectomy
- To know the possible complications

2. CHRONIC LIMB ISCHEMIA

- To define chronic limb ischemia
- To understand epidemiology and risk factors for chronic limb ischemia
- To appreciate clinical manifestations of CLI, in particular intermittent claudication
- To explain the differences between wet and dry gangrene
- To describe the relevant investigations, in particular Ankle-brachial pressure index (ABPI), sonography (Doppler and Duplex scans) and angiography
- To understand the treatment options in CLI, including conservative and surgical management

3. CARDIAC TAMPONADE AND CARDIAC CONTUSION

- To define, and understand the mechanism and etiology of cardiac tamponade
- To understand the clinical features, investigations and treatment (emergent as well as definitive) of cardiac tamponade
- To understand cardiac contusion with relevance to its etiology and preferential involvement of the heart chambers
- To understand the assessment of a patient with cardiac contusion; investigations undertaken and its treatment

4. VARICOSE VEINS

To understand:

- Venous anatomy and physiology
- The pathophysiology of venous hypertension
- the epidemiology, classification and clinical presentation of varicose veins
- The investigations undertaken for varicose veins
- To understand the management options for varicose veins, ranging from conservative to nonsurgical and surgical treatment

5. DEEP VENOUS THROMBOSIS

- To understand the definition of deep venous Thrombosis
- To list the risk factors for developing DVT
- To stratify patients according to their level of risk into mild, moderate or high
- To explain Virchow's triad of thrombogenic factors
- To describe the presentation of DVT and its clinical assessment
- To understand the role of blood tests (D-Dimers, INR) and imaging (e.g. Doppler, Duplex, venography, MRI) in diagnosing DVT
 - To understand the differential diagnoses of DVT

- To understand the treatment options for DVT including thrombolytics and surgical management
- To understand the role of heparin and warfarin in anticoagulation
- To explain the complications of DVT, in particular pulmonary embolism
- To briefly understand the principles of DVT prophylaxis

MODULE

DISEASES OF BLOOD VESSELS AND HEART

DURATION 10 DAYS (03-02-2025 to 15-02-2025)

CONTACT HOURS Lectures 45 =33.75 hours (2.1) + Practical's + Hospital stay = 31.45 Hours (0.6)

CREDIT HOURS 2.7

TEACHING METHODOLOGIES Lectures/Practicals/ small group discussion/clinics

OBJECTIVES

The course is designed primarily for 4rth year M.B.B.S students and will cover the fundamental aspects of inflammatory and neoplastic conditions of blood vessels and Heart. The interrelated clinical aspects of Medicine, Surgery, Eye, Ear, Nose and Throat and Gynecological problems will also be covered. By the end of the module, the students should be able to:

1. Describe:

Vascular structure and cardiac structure

2. Discuss the Pathological and all clinical aspects of:

- Atherosclerosis
- Hypertensive vascular diseases
- Vasculitis
- Vascular tumors
- Ischemic heart diseases
- Valvular heart diseases
- Cardiomyopathies

- Cardiac tumors

TIME		COURSE CONTENT	PLACE	LEARNING OUTCOME	Recommended books	DEPARTMENT/ Facilitator	DURATION
Monday 03-02-2025							
08:00-08: 45	1	Atherosclerosis		Pathogenesis -Complications of Atherosclerosis		Pathology	45 min
08: 45-09: 30	2	Changes in physiology of CVS and blood vessels in Pregnancy				Gynecology	45 min
09: 30-10: 15	3	Clinical features of vascular diseases of Retina and orbit		To know clinical relevance of CVS changes in pregnancy To know how this modifies routine and emergency care of pregnant patients		EYE	45 min
Hospital work				10.30-2.30 p.m.			
Tuesday 04-02-2025							
08:00-08: 45	4.	Vacuities		<ul style="list-style-type: none"> • Buerger disease • Behcet disease • Granulomatous polyangitis 		Pathology	45 min
08: 45-09: 30	5.	Valvular Heart Disorder				Pathology	45 min
09: 30-	6.	inherited connective tissue				Medicine	45 min

10: 15		disorders					
Hospital work				10.30-12:00			
		PRACTICAL		LECTURE PRACTICAL SMALL GROUP DISCUSSIONS	Community Medicine Lecture 12: 00 to 12:45	Respective departments	12:45- 2:30
05-02-2025 (Holiday)							

Wednesday 06-02-2025							
08:00- 08: 45	7.	Limb ischemia		Acute & chronic		Surgery	45 min
08: 45- 09: 30	8.	Vascular disorders of ENT				ENT	45 min
09: 30- 10: 15	9.	Vascular lesions of brain				Neurosurgery	45 min
Hospital work				10.30-2.30 p.m.			
Friday 07-02-2025							
08:00- 08: 45	10.	Aneurysms		Clinical presentation and management		Cardiac Surgery	45 min
08: 45- 09: 30	11	Dissecting Aneurysms		Abdominal Thoracic aortic		Pathology	45 min
09: 30- 10: 15	12	Vasculitis		<ul style="list-style-type: none"> • Polyarteritis nodosa • Takayasu arylteritis • Kawasaki arteritis 		pathology	45 min
		HOSPITAL WORK		Respective Departments 10.30-12.00 p.m.			
Saturday 08-02-2025							
08:00-	13.	Coronary artery disease and		Pathophysiology and clinical		Medicine	45 min

08: 45		peripheral vascular disease		features			
08: 45-09: 30	14.	Environmental/ social factors contributing towards Cardiovascular diseases (1)		Five levels of prevention for hypertension		Community Medicine	
09: 30-10: 15	15.	Anesthesia in cardiovascular diseases		Perioperative management of hypertensive patient		Anesthesia	45 min
HOSPITAL WORK 10.30-2.30 p.m.							
Monday 10-02-2025							
08:00-08: 45	16	Cardiomyopathies		Pathological aspects		Pathology	45 min
08: 45-09: 30	17	Cardiomyopathies		Clinical aspects		Medicine	45 min
09: 30-10: 15	18	Cardiac diseases in pregnancy		-To know common cardiac diseases in pregnant pts. -Effects of pregnancy on preexisting cardiac disease -Antenatal and labor management of pregnant patients		Obstetrics	45 min
Hospital work				10:30-12:00			
Tuesday 11-02-2025							
08:00-08: 45	19	Hypertensive retinopathy				Eye	45 min
08: 45-09: 30	20	Cardiac contusion & cardiac tamponade				SURGERY	45 min
09: 30-10: 15	21	Anesthesia in Ischemic heart disease		Assessment & management, Anaesthetic goals		Anesthesia	45 min
Hospital work				10:30-12:00 p.m.			
		PRACTICAL		PRACTICAL SMALL GROUP DISCUSSIONS	Community Medicine Lecture	Respective Departments	12.00—2.30

					12:00-12:45		
Wednesday 12-02-2025							
08:00-08:45	22.	Varicose veins & DVT				Surgery	45 min
08:45-09:30	23.	Chemodectoma & cavernous sinus thrombosis				ENT	45 min
09:30-10:15	24.	Management of Intra Cranial hematoma		Extradural, Subdural, Intracerebral, intraventricular (causes, manifestation & management)		Neurosurgery	45 min
Hospital work 10.30-2.30 p.m.							
Thursday 13-02-2025							
08:00-08:45	25.	vertigo				ENT	45 min
08:45-09:30	26.	Prevention of CVA				Community medicine	45 min
09:30-10:15	27.	Vascular lesions of the Orbit				Eye	45 min
Hospital work 10:30-12:00 p.m.							
		PRACTICAL		Pathology & Community Medicine	Community Medicine Lecture 12:00 – 12:45	Respective departments	12.00—2.30
Friday 14-02-2025							
08:00-08:45	28.	ISCHEMIC HEART DISEASES		Pathophysiology of IHD		pathology	45 min
08:45-09:30	29	ISCHEMIC HEART DISEASES		Clinical aspects of IHD		Cardiology	45 min
09:30-10:15	30	Systemic hypertension				Medicine	45 min
HOSPITAL WORK 10.30-12.00							

Saturday 15-02-2025							
08:00-08:45		Cardiac Tumor		Pathophysiology		Pathology	45 min
08:45-09:30		Cardiac Tumor		Clinical Aspect		Cardiology	45 min
09:30-10:15		Revision				Community Medicine	45 min

The RESPIRATORY MODULE – 4th year MBBS

1. PNEUMOTHORAX:-

- To define Pneumothorax
- To understand the different types of Pneumothoraces including Tension, Open, and Closed (Spontaneous and Iatrogenic) pneumothorax
- To understand the symptoms and clinical signs of each type of pneumothorax
- To understand that diagnosis of pneumothorax is mainly clinical, with adjunctive investigations like chest X-Ray
- To understand that tension pneumothorax is a surgical emergency and explain its management including needle decompression and tube thoracostomy
- To explain the management of open pneumothorax, in particular three way occlusive dressing
- To explain the etiology, clinical presentation and management of closed Pneumothoraces, namely Spontaneous and Iatrogenic pneumothorax

2. EMPYEMA THORACIS:-

- To understand the definition and etiology of empyema thoracis
- To understand the clinical presentation, and diagnosis of empyema thoracis (including the role of thoracocentesis)
- To understand the pathological phases of empyema thoracis and their respective treatments
- To understand the principles of management of empyema thoracis
- To understand the diagnosis and management of post-pneumonectomy empyema/bronchopleural fistula

3. CHEST WALL MASSES:-

- To know the incidence and classification of chest wall tumors
- To understand their clinical presentation
- To briefly understand the benign and malignant lesions of the ribs

- To briefly understand the benign and metastatic soft tissue tumors of the chest wall

4. DIAPHRAGMATIC HERNIA:-

- To understand the embryological origin of the thoracoabdominal diaphragm
- To understand diaphragmatic hernia, its etiology, pathophysiology and types
- to understand the clinical presentation and differential diagnosis of congenital diaphragmatic hernia
- to know the investigations and treatment undertaken for congenital diaphragmatic hernia
- to understand the clinical features, investigations and treatment of traumatic diaphragmatic hernia

5. MEDIASTINAL MASSES:-

- To understand the anatomy of the mediastinum, including its anatomical divisions and their respective contents
- To recognize the mediastinal masses that may present in each mediastinal division, including germ cell tumors and lymphomas
- To understand the clinical features of mediastinal masses
- To understand the investigations and treatment undertaken for mediastinal masses
- Thymomas- histological classification, clinical staging and clinical features
- Investigation and treatment of thymomas
- Retrosternal goitre- types, clinical features, investigations and treatment

DURATION 17-03-2025 To 12-04-2025

CONTACT HOURS Lectures 49 =33.75 hours (2.1) + Practical's + Hospital stay = 31.45 Hours (0.6)

CREDIT HOURS 2.7

TEACHING METHODOLOGIES Lectures/ Practical's / small group discussion/clinics

OBJECTIVES

The course is designed primarily for 4th year M.B.B.S students and will cover the fundamental aspects of inflammatory and neoplastic conditions of LUNGS & PLEURA. The interrelated clinical aspects of Medicine, Surgery, Eye, Ear, Nose and Throat and Gynecological problems will also be covered. By the end of the module, the students should be able to:

Discuss the Pathological and all clinical aspects of:

- Congenital Anomalies
- Tuberculosis
- Pulmonary infections
- Obstructive & Restrictive lung diseases
- Pulmonary edema
- Benign & malignant tumors of Lung, Pleura, Larynx
- Various related interventional techniques (Bronchoscopy, tracheostomy)
- Imaging

TIME		COURSE CONTENT	PLACE	LEARNING OUTCOME	Recommended books	DEPARTMENT/ Facilitator	DURATION
17-03-2025 Monday							
08:00 – 08:30	1.	Stridor				ENT	30 min
08:30 – 09:00	2.	Chicken pox and small pox		Epidemiology, Outbreak, Investigations and Five levels of prevention of Disease (Students will get full knowledge of disease determinants, distribution, dynamics, diagnostic investigations & effective preventive measures)		Community Medicine	30 min
09:00 – 09:30	3.	Topic Not Specified				Eye	30 min
Hospital work 10:10 a.m. to 1:00 p.m.							
18-03-2025 Tuesday							
08:00 – 08:30	4.	Topic Not Specified				Behavioral Sciences	30 min
08:30 – 09:00	5.	Congenital Anomalies Atelectasis, Pulmonary Edema				Pathology	30 min
09:00 – 09:30	6.	Management of respiratory failure				Anesthesia	30 min
HOSPITAL WORK 10:00 To 11:45						Community Lecture /Practical 11:45-1:00PM	
19-03-2025 Wednesday							
08:00 – 08:30	7.	Obstructive lung diseases		Clinical aspects		Chest Medicine	30 min
08:30 – 09:00	8.	Obstructive lung diseases		Pathogenesis, Morphology • Emphysema Chronic Bronchitis	Robbins & Cotrans	Pathology	30 min
09:00 – 09:30	9.	Measles and Mumps		Epidemiology, Outbreak, Investigations and Five levels of prevention of Disease		Community medicine	30 min

Hospital work							10:00 a.m. to 1:00 p.m.	
20-03-2025 Thursday								
08:00 – 08:30	10.	Physiological changes in Respiratory system in Pregnancy				Obstetrics & Gynecology	30 min	
08:30 – 09:00	11.	Obstructive lung diseases		Pathogenesis& Morphology Asthma Bronchiectasis	Robbins & Cotrans	Pathology	30 min	
09:00 – 09:30	12.	Respiratory involvement in Systemic disorders		ILD, Vasculitis & Connective tissue disorders		Medicine	30 min	
HOSPITAL WORK 10:00 To 11:45						Community Lecture /Practical 11:45-1:00PM		
21-03-2025 Friday								
08:00 – 08:30	13.	Respiratory Failure		Type I & II & Ventilator support		Medicine	30 min	
08:30 – 09:00	14.	Pyogenic infections (Pneumococcal, H. influenzae, Meningococcal infections)		Epidemiology, Outbreak, Investigations and Five levels of prevention of Disease		Community medicine	30 min	
09:00 – 09:30	15.	Perioperative management of Asthma & COPD & Post-operative pulmonary complications				Anesthesia	30 min	
HOSPITAL WORK 10.10-12.00								
22-03-2025 Saturday								
08:00 – 08:30	16.	Empyema Thoracis				Surgery	30 min	
08:30 – 09:00	17	Tracheostomy				ENT	30 min	
09:00 – 09:30	18	Neurological causes of Type II Respiratory failure & Diagnostic approach				Neurology	30 min	
Hospital work							10:10 a.m. to 1:00 p.m.	
24-03-2025 Monday								

08:00 – 08:30	19.	Bronchoscopy				ENT	30 min
08:30 – 09:00	20.	Restrictive Lung diseases		Pathogenesis & Morphology of Sarcoidosis Smoking related Interstitial diseases Feedback & Views of students in last 10mins about smoking	Robbins & Cotrans	Pathology	30 min
09:00 – 09:30	21.	Rubella & Influenza (Bird flu, SARS, MERS)		Epidemiology, Outbreak, Investigations and Five levels of prevention of Disease		Community medicine	30 min
Hospital work 10:10 a.m. to 1:00 p.m.							
25-03-2025 Tuesday							
08:00 – 08:30	22	Test				Pathology	30 min
08:30 – 09:00	23	Test				Pathology	30 min
09:00 – 09:30	24	Test				Pathology	30 min
Hospital Work 09:45a.m. To 11:00 a.m.							
PRACTICAL						Respective departments	11.45— 1.00
26-03-2025 Wednesday							
08:00 – 08:30	25.	Pneumothorax		Presentation & management		Surgery	30 min
08:30 – 09:00	26.	Restrictive Lung diseases		Pathogenesis & Morphology of <ul style="list-style-type: none"> • Usual interstitial Pneumonia • Cryptogenic organizing Pneumonia • Pneumoconiosis • Silicosis • Asbestosis 	Robbins & Cotrans	Pathology	30 min

09:00 – 09:30	27.	Anthrax & Plague/ Bioterrorism		Epidemiology, Outbreak, Investigations and Five levels of prevention of Disease		Community medicine	30 min
HOSPITAL WORK 09:45 To 01:00							
27-03-2025 Thursday							
08:00 – 08:30	28.	Pneumonias & lung abscess		Diagnosis & Management		Chest Medicine	30 min
08:30 – 09:00	29.	Pulmonary Infections		Pathogenesis & Morphology of <ul style="list-style-type: none"> • Chronic Pneumonia/Tuberculosis • Community acquired Pneumonia • Hospital acquired Pneumonia 	Robbins & Cotrans	Pathology	30 min
09:00 – 09:30	30.	Tuberculosis		Epidemiology, Outbreak, Investigations and Five levels of prevention of Disease		Community Medicine	30 min
Hospital Work: 09: 45 to 11: 00 a.m.							
PRACTICAL						Respective departments	11.45— 1.00
28-03-2025 Friday							
08:00 – 08:30	31.	Respiratory diseases in Pregnancy		<ul style="list-style-type: none"> • Asthma • Pulmonary edema 		Obstetrics & Gynecology	30 min
08:30 – 09:00	32.	Pulmonary Infections		Pathogenesis & Morphology of <ul style="list-style-type: none"> • Aspiration Pneumonia • Pneumonia in Immunocompromised patients Lung abscess	Robbins & Cotrans	Pathology	30 min
09:00 – 09:30	33.					Eye	30 min
Hospital Work: 09: 45 to 1: 00 a.m.							

29-03-2025 Saturday							
08:00 – 08:30	34.	Tumors of lung		Symptoms & investigations		Chest Medicine	30 min
08:30 – 09:00	35.	Tumors of lung		Pathogenesis, Morphology of <ul style="list-style-type: none"> • Carcinomas • Neuroendocrine tumors • Metastatic tumors 	Robbins & Cotrans	Pathology	30 min
09:00 – 09:30	36.	Mediastinal Masses		Clinical aspect & Management		Surgery	30 min
Hospital work: 09:45 a.m. to 1:00 p.m.							
Eid and Spring Holidays							
09-04-2025 Wednesday							
08:00 – 08:45	40.	Benign & malignant lesions of Larynx				ENT	45 min
08:45 – 09:30	41.	Diphtheria & Whooping cough		Epidemiology, Outbreak, Investigations and Five levels of prevention of Disease		Community medicine	45 min
09:30 – 10:15	42					Eye	45 min
Hospital work: 10.30-2.30							
10-04-2025 Thursday							
08:00 – 08:45	43.	Vascular Diseases of Lung		Pathogenesis, Morphology of <ul style="list-style-type: none"> • Pulmonary Embolism • Pulmonary Hypertension • Good Pastur syndrome • Wegener Granulomatosis 	Robbins & Cotrans	Pathology	45 min
08:45 – 09:30	44.	HIV/AIDS		Epidemiology, Outbreak, Investigations and Five levels of prevention of Disease		Community Medicine	45 min
09:30 – 10:15	45.	Relationship between stress, personality, emotions, immunity & respiratory				Behavioral Sciences	45 min

		illnesses					
Hospital work		10.30-11.45					
PRACTICAL						Respective departments	12.00—2.30
11-04-2025 Friday							
08:00 – 08:45	46.	Chest wall Masses		Symptoms & investigations		Surgery	45 min
08:45 – 09:30	47.	Laryngeal Paralysis				ENT	45 min
09:30 – 10:15	48.	Management of type II respiratory failure associated with neurological diseases				Neurology	45 min
HOSPITAL WORK 10.30-12.00							
12-04-2025 Saturday							
08:00 – 08:45	49.	Diaphragm Hernias				Surgery	45 min
08:45 – 09:30	50.	Pleura		Pathogenesis & Morphology of <ul style="list-style-type: none"> • Pleural effusion • Pneumothorax • Pleural tumors 	Robbins & Cotrans	Pathology	45 min
09:30 – 10:15	51.	Lung Injury		•		Medicine	45 min
Hospital work: 10.30-2.30							

Kidney, Male & Female Genital Module– 4th year

MBBS

Learning Objectives:

- **Carcinoma of Prostate:**

To enable students have a basic understanding of:

1. Basic anatomy of prostate gland
2. Etiology of prostate CA
3. Clinical signs and symptoms
4. How to investigate
5. Surgical approach for treatment
6. Role of nonsurgical treatment modalities

MODULE Kidney & Urinary Bladder

DURATION 08 DAYS (26-05-2025 to 07-06-2025)

CONTACT HOURS Lectures 24 =18.0 hours (1.1) + Practicals + Hospital stay = 16.8 Hours (0.3)

CREDIT HOURS 1.4

TEACHING METHODOLOGIES Lectures small group discussion/clinics

OBJECTIVES

The course is designed primarily for 4rth year M.B.B.S students and will cover the fundamental aspects of Etiology, Pathogenesis and Morphology of diseases related to Kidney and Urinary bladder. The interrelated clinical aspects of Medicine/Nephrology, Surgery/Urology, Oncology and Radiology will also be covered. By the end of the module, the students should be able to:

Discuss the Pathological and Clinical aspects of:

- Glomerulonephritis
- Cystic and vascular diseases of kidney
- Obstructive uropathy
- Acute & Chronic pyelonephritis
- Acute tubular necrosis
- Renal stones
- Inflammatory and metaplastic lesions of urinary bladder
- Tumors of kidney and urinary bladder
- Various related diagnostic & interventional techniques
- Radiological investigations

TIME		COURSE CONTENT	PLACE	LEARNING OUTCOME	Recommended books	DEPARTMENT/ Facilitator	DURATION
WEEK 1							
Monday, 26-05-2025							
8.00-8.45	1.	Congenital anomalies of kidney, cystic disease, Urolithiasis				Pathology	45 min
8.45-9.30	2.	Glomerular diseases		Histological alterations and Pathogenesis	Robbins & Cotrans	Pathology	45 min
9.30-10.15	3.	Radiological evaluation of renal disease		Plain X-ray KUB, IVU, USG & ET		Radiology	45 min
Hospital work 10.30-2.30							
Tuesday 27-05-2025							
8.00-8.45		Nephritic syndrome		Pathogenesis and Morphology of Post infectious glomerulonephritis, Rapidly progressive glomerulonephritis	Robbins & Cotrans	Pathology	
8.45-9.30		Nephritic syndrome			Robbins & Cotrans	Pathology	45 min
9.30-10.15	4.	Nephritic syndrome		Definition, Causes, Clinical Features, Investigations and management of Nephritic syndrome	<ul style="list-style-type: none"> • Davidson's • Kumar and Clark's Clinical Medicine, • CURRENT Medical Diagnosis and Treatment 	Medicine	45 min
Hospital work 10.30-12.00							
		PRACTICAL		PATHOLOGY		Community Medicine (Lecture 12:00 – 12:45)	12.00–2.30
Wednesday 28-05-2025							
8.00-	7.	Nephrotic syndrome		Definition, Causes, Clinical Features,	<ul style="list-style-type: none"> • Davidson's 	Medicine	45 min

8.45				Investigations and management of Nephritic syndrome	<ul style="list-style-type: none"> • Kumar and Clark's Clinical Medicine, • CURRENT Medical Diagnosis and Treatment 		
8.45-9.30	8.	Radiological Evaluation of renal diseases		Plain X-ray KUB, IVU, USG & ET		Radiology	45 min
9.30-10.15	9.	Nephrotic Syndrome		Definition, Causes, Clinical Features, Investigations and management of Nephritic syndrome		Nephrology/ Medicine	45 min
Hospital work 10.30-12.00							
Thursday 29-05-2025							
8.00-8.45	10.	Nephrotic Syndrome		Definition, Causes, Clinical Features, Investigations and management of Nephritic syndrome		Nephrology/ Medicine	45 min
8.45-9.30	11.	Nephrotic Syndrome		Pathogenesis and Morphology of Post infectious glomerulonephritis, Rapidly progressive glomerulonephritis	Robbins & Cotrans	Pathology	45 min
9.30-10.15	12.	Nephrotic Syndrome			Robbins & Cotrans	Pathology	45 min
Hospital work 10.30-12.00							
		PRACTICAL		PATHOLOGY		Community Medicine (Lecture 12:00 – 12:45)	12.00—2.30
Hospital work 10:30 to 02:30							
Friday 30-05-2025							
8.00-8.45	13.	Chronic Glomerulonephritis		Pathogenesis and Morphology of Diabetic nephropathy , SLE & Henon Schole in Purpura related glomerular lesions	Robbins & Cotrans	Pathology	45 min
8.45-	14.	Acute Kidney Injury/		Etiology, Pathogenesis and Morphology	Robbins & Cotrans	Pathology	45 min

9.30		Tubulo Inter Nephritis Acute Pyelonephritis					
9.30-10.15	15.	Chronic Glomerulonephritis		Definition, Causes, Clinical Features, Investigations and management of Acute Kidney injury	<ul style="list-style-type: none"> Davidson's Kumar and Clark's Clinical Medicine, CURRENT Medical Diagnosis and Treatment 	Medicine/ Nephrology	45 min
Hospital work 10.30a.m. to 12.00 p.m.							
Saturday 31-05-2025							
8.00-8.45	16.	Acute Kidney Injury Chronic Pyelonephritis and reflex nephropathy		Definition, Causes, Clinical Features, Investigations and management of Acute Kidney injury	<ul style="list-style-type: none"> Davidson's Kumar and Clark's Clinical Medicine, CURRENT Medical Diagnosis and Treatment 	Medicine/ Nephrology	45 min
8.45-9.30	17.	Chronic pyelonephritis and Reflux nephropathy		Etiology, Pathogenesis and Morphology of drug induced interstitial nephritis, Analgesic nephropathy, Urate nephropathy, Nephrocalcinosis, Myeloma kidney		Pathology	45 min
9.30-10.15	18.	Congenital anomalies and cystic disease of kidney, Urolithiasis				Pediatric Medicine	45 min
Hospital work 10:30-2:30							
Monday 02-06-2025							
8.00-8.45	19	Anesthetic considerations in patient with renal failure				Anesthesia	45 min
8.45-9.30	20.	introduction to cytology and stricture urethra and its management				Urology	45 min

9.30-10.15	21.	Carcinoma of urogenital tract				Urology	45 min
Hospital work 10.30-2.30							
Tuesday 03-06-2025							
8.00-8.45	22.	Renal cell carcinoma		Clinical features and management		Urology	45 min
8.45-9.30	23.	Vascular diseases of Kidney		Pathogenesis and Morphology		Pathology	45 min
9.30-10.15	24.	Renal Tumors		Management of Metastatic or Recurrent renal cancer and targeted therapies in RCC		Oncology	45 min
Hospital work 10:30a.m. to 12:30 p.m.							
		PRACTICAL		PATHOLOGY		Community Medicine (Lecture 12:00 – 12:45)	12.00–2.30
Wednesday 04-06-2025							
8.00-8.45		Renal Tumors		Clinical features and management		Urology	45 min
8.45-9.30		Renal Cell Carcinoma		Pathogenesis and Morphology		Pathology	45 min
9.30-10.15		Renal Function Test				Pathology	45 min
Hospital work 10:30a.m. to 02:30 p.m.							
Thursday 05-06-2025							
8.00-8.45		Stricture Urethra and its management				Urology	45 min
8.45-9.30		Urinary bladder pathologies (Congenital anomalies, Inflammation, Metaplastic lesions, Neoplasms)		Pathogenesis and Morphology		Pathology	45 min
9.30-10.15		management of renal failure				Medicine	45 min

Hospital work							10:30a.m. to 12:30 p.m.	
		PRACTICAL		PATHOLOGY		Community Medicine (Lecture 12:00 – 12:45)	12.00—2.30	
Friday 06-06-2025								
8.00- 8.45		Revision				Nephrology	45 min	
8.45- 9.30		Revision				Urology	45 min	
9.30- 10.15		Revision				Pathology	45 min	
Hospital work							10:30a.m. to 02:30 p.m.	
Saturday 07-06-2025								
8.00- 8.45		Revision				Medicine	45 min	
8.45- 9.30		Revision				Urology	45 min	
9.30- 10.15		Revision				Oncology	45 min	
Hospital work							10:30a.m. to 02:30 p.m.	

MODULE

Female & Male genital System

DURATION 18 DAYS (12-05-2025 to 24-05-2025)

CONTACT HOURS Lectures 39 =29.25 hours (1.7) + Practicals + Hospital stay = 27.2 Hours (0.4)

CREDIT HOURS 2.1

TEACHING METHODOLOGIES Lectures/ Practicals / small group discussion/clinics

OBJECTIVES

The course is designed primarily for 4th year M.B.B.S students and will cover the fundamental aspects of Etiology, Pathogenesis and Morphology of diseases related to male and female genital System. The interrelated clinical aspects of Medicine, Surgery/Urology, Oncology, Radiology and Gynecological problems will also be covered. By the end of the module, the students should be able to:

Discuss the Pathological and Clinical aspects of:

- Pelvic inflammatory disease
- Benign and malignant lesions of vulva, cervix, vagina , ovaries and uterus
- Gestational and Placental disorders
- Benign and malignant neoplasms of prostate
- Inflammatory and neoplastic lesions of testes
- Various related diagnostic & interventional techniques
- Radiological investigations

TIME		COURSE CONTENT	PLACE	LEARNING OUTCOME	Recommended books	DEPARTMENT/ Facilitator	DURATION
Monday 12-05-2025							
8.00-8.45	1.	Female genital tract introduction, Pelvic inflammatory disease		Anatomy of genital tract Etiology, Pathogenesis & Morphology of PID	Robbins & Cotrans	Pathology	45 min
8.45-9.30	2.	Vulval pathologies		Etiology, Pathogenesis & Morphology of Bartholian cyst, Non-neoplastic and neoplastic lesions	Robbins & Cotrans	Pathology	45 min
9.30-10.15	3.	PID		Presentation and management of PID		Gynecology	45 min
Hospital work				10.30-2.30			
Tuesday 13-05-2025							
8.00-8.45	4.	Vulval pathologies		Presentation and management of Benign and malignant of disease of vulva		Gynecology	45 min
8.45-9.30	5.	Inflammatory diseases of cervix		Etiology, Pathogenesis & Morphology of acute & chronic cervicitis, endocervical polyp		Pathology	45 min
9.30-10.15	6.	Vaginal Pathologies		Etiology, Pathogenesis & Morphology of pre-malignant and malignant lesions	Robbins & Cotrans	Pathology	45 min
Hospital work				10.30-11.45			
		PATHOLOGY PRACTICAL				Respective departments	12.00—2.30
Wednesday 14-05-2025							
8.00-8.45	7.	Vaginal Pathologies		Presentation and management of vaginal pathologies		Gynecology	45 min
8.45-9.30	8.	pre-malignant and malignant lesions of cervix		Etiology, Pathogenesis & Morphology of CIN, Squamous cell carcinoma	Robbins & Cotrans	Pathology	45 min
9.30-10.15	9.	Prevention and Early detection and treatment Cervical Cancers		Vaccination against HPV, screening guidelines, role of radiation therapy	Robbins & Cotrans	Oncology	45 min
Hospital work				10.30-2.30			

Thursday 15-05-2025							
8.00-8.45	10.	Cervical pathologies		Presentation and treatment of cervicitis + cervical polyp		Gynaecology	45 min
8.45-9.30	11.	Dating of Endometrium		Morphological changes during menstrual cycle		Gynaecology	45 min
9.30-10.15	12.	Functional endometrial disorders/Dysfunctional uterine bleeding		Pathogenesis and morphology of <ul style="list-style-type: none"> Anovulatory cycle Acute & chronic endometritis Adenomyosis Endometriosis 		Pathology	45 min
Hospital work				10.30-11.45			
		PATHOLOGY PRACTICAL				Respective departments	12.00—2.30
Friday 16-05-2025							
8.00-8.45	13.	Uterine pathologies		Presentation and management of adenomyosis + endometriosis		Gynaecology	45 min
8.45-9.30	14.	Endometrial polyp and hyperplasia		Etiology, Pathogenesis & Morphology	Robbins & Cotrans	Pathology	45 min
9.30-10.15	15.	Laboratory diagnosis of various Gynaecological disorders		Interpretation of LH,FSH,LH:FSH, Testosterone	Robbins & Cotrans	Pathology	45 min
Hospital work				10.30-12.00			
Saturday 17-05-2025							
8.00-8.45	16.	Endometrial pathologies		Presentation and management of endometrial polyps + hyperplasia		Gynaecology	45 min
8.45-9.30	17.	Endometrial carcinoma		Etiology, Pathogenesis & Morphology	Robbins & Cotrans	Pathology	45 min
9.30-10.15	18.	Endometrial stromal tumors		Etiology, Pathogenesis & Morphology	Robbins & Cotrans	Pathology	45 min
Hospital work				10.30-2.30			
Monday 19-05-2025							
8.00-	19	Endometrial pathologies		Presentation and treatment of endometrial CA		Gynaecology	

8.45				+ fibroid			
8.45-9.30	20.	Benign and Malignant tumors of myometrium		Etiology, Pathogenesis & Morphology	Robbins & Cotrans	Pathology	45 min
9.30-10.15	21.	Evaluation of Genital Pathologies				Radiology	45 min
Hospital work				10.30-2.30			
Tuesday 20-05-2025							
8.00-8.45	25.	Ovarian tumors PCOS		Presentation and management of ovarian tumors & PCOS		Gynecology	45 min
8.45-9.30	26.	Ovarian tumors		Classification & Frequency	Robbins & Cotrans	Pathology	45 min
9.30-10.15	27.	Surface epithelial tumors Follicular and Luteal Cyst		Pathogenesis & Morphology	Robbins & Cotrans	Pathology	45 min
Hospital work				10.30-12:00			
PATHOLOGY PRACTICAL						Respective departments	12.00—2.30
HOSPITAL WORK 10.30-2.30							
Wednesday 21-05-2025							
8.00-8.45	28.	Sex cord stromal and Germ cell tumors		Pathogenesis & Morphology	Robbins & Cotrans	Pathology	45 min
8.45-9.30	29.	Gestational and Placental disorders		Pathogenesis and Morphology of ectopic pregnancy and Gestational Trophoblastic Disease	Robbins & Cotrans	Pathology	45 min
9.30-10.15	30.	Germ Cell tumors		Staging, biomarkers and Management of Germ cell tumors in males and Females		Oncology	45 min
Hospital work				10.30-02.30			
Thursday 22-05-2025							
8.00-8.45	31.			<ul style="list-style-type: none"> Presentation and management of Ectopic + GTT 		Gynaecology	45 min
8.45-9.30	32.	Inflammatory lesions of prostate and Benign prostatic hyperplasia		Pathogenesis and Morphology	Robbins & Cotrans	Pathology	45 min

9.30-10.15	33.	BPH clinical features and investigations				Urology	45 min
Hospital work 10.30-11.45							
		PATHOLOGY PRACTICAL				Respective departments	12.00—2.30
Friday 23-05-2025							
8.00-8.45	34.	Carcinoma of prosatate		Etiology, Pathogenesis , Morphology and Staging	Robbins & Cotrans	Pathology	45 min
8.45-9.30	35.	Carcinoma of prosatate				Surgery	45 min
9.30-10.15	36.	Carcinoma of prostate		Principals of Androgen Deprivation therapy (ADT) and management of Castration resistant Prostate cancer (CRPC)		Oncology	45 mins
Hospital work 10.30-11.45							
Saturday 24-05-2025							
8.00-8.45	37.	Neoplastic lesions of testes		Classification, Pathogenesis and Morphology	Robbins & Cotrans	Pathology	45 min
8.45-9.30	38.	Carcinoma Testes				Surgery	45 min
9.30-10.15	39.	Non-neoplastic lesions of testes		Pathogenesis and Morphology of congenital anomalies, inflammatory and vascular lesions of testes	Robbins & Cotrans	Pathology	45 min
Hospital work 10.30-2.30							

MODULE

CENTRAL NERVOUS SYSTEM

DATE: 21-07-2025 to 26-07-2025

DURATION 6 DAYS

CONTACT HOURS Lectures 18 =13.5 hours (0.8) + Practical's + Hospital stay = 22 Hours (0.4)

CREDIT HOURS 1.2

TEACHING METHODOLOGIES Lectures/Practicals/ small group discussion/clinics

OBJECTIVES

The course is designed primarily for 4rth year M.B.B.S students and will cover the fundamental aspects of inflammatory and neoplastic conditions of CNS.

TIME		COURSE CONTENT	PLACE	LEARNING OUTCOME	Recommended books	DEPARTMENT/ Facilitator	DURATION
21-07-2025 Monday							
8:00-8:45	1	Cerebrovascular Accidents Ischemic Stroke		<ul style="list-style-type: none"> • Definition • Classification /Types • Clinical features • Etiology • Management 		Neurology	45 min
8:45-9:30	2	CEREBROVASCULAR DISEASES	•	Pathophysiology & Morphological features of <ul style="list-style-type: none"> • Cerebral edema, Hydrocephalus • Raised intracranial pressure • Non Haemorrhagic & Haemorrhagic Infarct • Hypertensive CVD 	Robbins & Cotran	Pathology	45 min
9:30-10:15	3	3rd & 4th nerve Palsy and 6th nerve palsy	•			Ophthalmology	45 min
Hospital work 10.30-02.30							
22-07-2025 Tuesday							
8:00-8:45	4.	Hemorrhagic Stroke	<ul style="list-style-type: none"> • Definition • Risk Factors • Etiology • Management 			Neurology	45 min
8:45-9:30	5.	Headache	•	Types ,clinical approach		Neurology	45 min

		Epilepsy						
9:30-10:15	6.	Prion disease & Degenerative diseases of CNS				Pathology	45 min	
Hospital work 10.30-11.45								
		PRACTICAL						12.00—02:30

23-07-2025 Wednesday							
8:00-8:45	7.	Acute Meningitis		Clinical features Etiology Management		Medicine	45 min
8:45-9:30	8.	Dementias/Degenerative brain disorders. - Alzheimer's disease - Parkinson's disease				Neurology	45 min
9:30-10:15	9.	Infectious meningitis		<ul style="list-style-type: none"> • Acute pyogenic • Acute viral Brain abscess 	Robbins & Cotran	Pathology	45 min

Hospital work 10.30-02.30

24-07-2025 Thursday							
8:00-8:45	10.	Chronic Meningitis		<ul style="list-style-type: none"> • Clinical features • Etiology Management 		Neurology	45 min
8:45-9:30	11.	Chronic meningitis		<ul style="list-style-type: none"> • Chronic bacterial (T.B, neurosyphilis, Lyme's disease) • Chronic Viral (HSV, HIV, CMV, RABIES, Poliomyelitis) • Fungal meningitis 	Robbins & Cotran	Pathology	45 min

9:30-10:15	12.	Tumors of CNS		• Gliomas Meningiomas		Pathology	45 min	
Hospital work 10.30-11:45								
PRACTICAL							12.00—02:30	
25-07-2025 Friday								
8:00-8:45		Revision CNS Tumor				Neurology	45 min	
8:45-9:30		Revision CNS Tumor				Neurology	45 min	
9:30-10:15		CNS tumors				Medicine	45 min	
Hospital work: 10.30-12:30								
26-07-2025 Saturday								
8:00-8:45							45 min	
8:45-9:30		Pathology Test						45 min
9:30-10:15							45 min	

Endocrinology Module– 4th year MBBS

Learning Objectives:

1. Metabolic Bone Disease:

To enable students to have a basic understanding of:

- Different types of metabolic bone disorder
- Prevalence of bone disorders in population
- Osteoporosis and its type
- Bone involvement in systemic diseases
- Osteomalacia and rickets
- Pagets disease of bone
- Radiological findings
- Treatment Modalities

2. Surgery in Diabetic Foot:

To enable students to have a basic understanding of:

- Multidisciplinary approach to diabetic foot
- Clinical Signs and Symptoms
- Pathophysiology of diabetic foot
- Classification of diabetic foot ulcers
- Treatment modalities
- Type of amputations
- Post operative care

ENDOCRINE SYSTEM (3rd March, 2025 to 15th March, 2025)

DURATION 12 DAYS

CONTACT HOURS Lectures 22 =16.5 hours (1) + Practical's + Hospital stay = 44 Hours (0.91)

CREDIT HOURS 2

TEACHING METHODOLOGIES Lectures/Practicals/ small group discussion/clinics

OBJECTIVES

The course is designed primarily for 4th year M.B.B.S students and will cover the fundamental aspects of inflammatory and neoplastic conditions of Endocrine System including Pituitary Thyroid & Parathyroid gland. The interrelated clinical aspects of Medicine, Surgery, Orthopaedics will be covered. The radiological aspects will also be dealt with.

TIME		COURSE CONTENT	PLACE	LEARNING OUTCOME	Recommended books	DEPARTMENT/ Facilitator	DURATION
03-03-2025 Monday							
8:00 8:45	1	Introduction to Endocrinology				Medicine	45 min
8:45- 9:30	2	Pituitary gland		<ul style="list-style-type: none"> • Classification of Pituitary Adenomas • Morphological features of various types of Pituitary adenomas • Genetic alterations in Pituitary tumors 	Robbins & Cotran	Pathology	45 min
9:30- 10:15	3	Acromegaly and gigantism. Hyperprolactinaemia		<ul style="list-style-type: none"> • Causes, clinical features, investigation and treatment of Acromegaly. • Causes, clinical features, investigation and treatment of Hyperprolactinaemia. • 	<ul style="list-style-type: none"> •Davidson's Principles and Practice of Medicine 22nd Edition •Kumar and Clark's Clinical Medicine, 8th Edition •CURRENT Medical Diagnosis and Treatment 2016 (LANGE CURRENT Series) 55th Edition 	Medicine	45 min
Hospital work 10.30-2.30							
04-03-2025 Tuesday							
8:00- 8:45	4.	Posterior Pituitary (Diabetes insipidus, SIADH)		<ul style="list-style-type: none"> • Types, Causes, clinical features, investigation and treatment of Diabetes insipidus. • Causes, clinical features, investigation and treatment of SIADH. 	<ul style="list-style-type: none"> •Davidson's Principles and Practice of Medicine 22nd Edition •Kumar and Clark's Clinical Medicine, 	Medicine	45 min

					8th Edition •CURRENT Medical Diagnosis and Treatment 2016 (LANGE CURRENT Series) 55th Edition		
8:45-9:30	5.	Hypopituitarism. GROWTH AND ABNORMAL STATURE		<ul style="list-style-type: none"> • Causes, clinical features, investigation and treatment of Hypopituitarism. • Causes, investigation and treatment of Short Stature 	<ul style="list-style-type: none"> •Davidson's Principles and Practice of Medicine 22nd Edition •Kumar and Clark's Clinical Medicine, 8th Edition •CURRENT Medical Diagnosis and Treatment 2016 (LANGE CURRENT Series) 55th Edition 	MEDICINE	45 min
9:30-10:15	6.	Pituitary lesions in brain				Neuro Surgery	45 min
Hospital work				10.30-11.45			
PRACTICAL						Respective departments	12.00—2.30
05-03-2025 Wednesday							
8:00 8:45	7.	Role of imaging in endocrine lesions				RADIOLOGY	45 min
8:45-9:30	8.	Hypothyroidism		<ul style="list-style-type: none"> • Causes, clinical features, investigation and treatment of Hypothyroidism. • Myxedema Coma 	<ul style="list-style-type: none"> •Davidson's Principles and Practice of Medicine 22nd Edition •Kumar and Clark's Clinical Medicine, 	Medicine	45 min

					8th Edition •CURRENT Medical Diagnosis and Treatment 2016 (LANGE CURRENT Series) 55th Edition		
9:30- 10:15	9.	Non neoplastic thyroid diseases		Etiology & morphology of Hyperthyroidism Causes of hypothyroidism Cretinism , Myxedema		Pathology	45 min
Hospital work 10.30-2.30							
06-03-2025 Thursday							
8:00 8:45	10.	Hyperthyroidism		Causes, clinical features, investigation and treatment of Hyperthyroidism. Thyroid Crisis	Davidson's Principles and Practice of Medicine 22nd Edition •Kumar and Clark's Clinical Medicine, 8th Edition •CURRENT Medical Diagnosis and Treatment 2016 (LANGE CURRENT Series) 55th Edition	Medicine	45 min
8:45- 9:30	11.	Thyroiditis & thyroid neoplasms		Pathogenesis & morphological features of • Hashimotos thyroiditis & Graves disease Adenomas ,Papillary, Medullary & Follicular carcinomas		Pathology	45 min
9:30- 10:15	12.	Lab investigations for pituitary & thyroid				Pathology	45 min

		Disorders					
Hospital work				10.30-11.45			
PRACTICAL						Respective departments	12.00—2.30
07-03-2025 Friday							
8:00-8:45	13.	Thyroid eye disease				Ophthalmology	45 min
8:45-9:30	14	NeuroOphthalmology (Lesions of optic tract)				Ophthalmology	45 min
9:30-10:15	15	Polycystic ovarian disease				Gynaecology	45 min
HOSPITAL WORK 10.30-12.00							
08-03-2024 Saturday							
8:00-8:45	16.	Disorders Of Calcium Metabolism. Hyperparathyroidism. hypoparathyroidism		<ul style="list-style-type: none"> • • Causes of Hypercalcemia. • Types, causes, clinical features, investigation and treatment of Hyperparathyroidism. • Causes of Hypocalcemia. • Causes, clinical features, investigation and treatment of Hypoparathyroidism. 	Davidson's Principles and Practice of Medicine 22nd Edition •Kumar and Clark's Clinical Medicine, 8th Edition •CURRENT Medical Diagnosis and Treatment 2016 (LANGE CURRENT Series) 55th Edition	Medicine	45 min
8:45-9:30	17.	Parathyroid glands		Pathogenesis & morphological features of <ul style="list-style-type: none"> • Primary & Secondary Hyperparathyroidism • Hypoparathyroidism 		Pathology	
9:30-10:15	18.	Management of metabolic fractures		<ul style="list-style-type: none"> • 		Surgery	45 min
HOSPITAL WORK 10.30-2.30							

10-03-2025 Monday							
8:00-8:45	20	Surgery in Diabetes & Diabetic Foot				Surgery	45 min
8:45-9:30	21	Diabetes Mellitus		<ul style="list-style-type: none"> Classification, clinical features, complications, investigation and treatment of DM. 	<ul style="list-style-type: none"> Davidson's Principles and Practice of Medicine 22nd Edition Kumar and Clark's Clinical Medicine, 8th Edition CURRENT Medical Diagnosis and Treatment 2016 (LANGE CURRENT Series) 55th Edition 	Medicine	45 min
9:30-10:15	22	Diabetes Mellitus		<ul style="list-style-type: none"> Insulin signaling pathways Classification Morphology & pathogenesis of type 1 & type 2 Diabetes Mellitus 	Robbins & Cotran	Pathology	45 min
Hospital work				10.30-2.30			
11-03-2025 Tuesday							
8:00-8:45	23	Diabetic retinopathy2		Classification	Robbins & Cotran	Ophthalmology	
8:45-9:30	24.	Diabetic retinopathy 1		Pathophysiology		Ophthalmology	
9:30-10:15	25.	Diabetes Mellitus		Differences btw type 1 & type 2 D.M Morphological features & Pathogenesis of diabetic complications (microvascular, macrovascular)		Pathology	45 min
Hospital work				10.30-11.45			
PRACTICAL						Respective	12.00—2.30

						departments	
12-03-2025 Wednesday							
8:00-8:45	26.	Diabetes Mellitus – Metabolic Emergencies		Diabetic ketoacidosis. Hyperosmolar hyperglycaemic state. Lactic acidosis.	<ul style="list-style-type: none"> •Davidson's Principles and Practice of Medicine 22nd Edition •Kumar and Clark's Clinical Medicine, 8th Edition •CURRENT Medical Diagnosis and Treatment 2016 (LANGE CURRENT Series) 55th Edition 	Medicine	45 min
8:45-9:30	27.	Gestational diabetic Mellitus				Gynaecology	45 min
9:30-10:15	28.	Diabetic retinopathy (3)		Management		Ophthalmology	45 min
Hospital work				10.30-2.30			
13-03-2025 Thursday							
8:00-8:45	29.	Diabetic neuropathy				Neurology	45 min
8:45-9:30	30.					Plastic surgery	45 min
9:30-10:15	31.					Community medicine	45 min
Hospital work				10.30-11.45			
PRACTICAL						Respective departments	12.00—2.30
14-03-2025 Friday							
8:00-8:45	32.	<ul style="list-style-type: none"> • Hyperaldosteronism • Pheochromocytoma 		<ul style="list-style-type: none"> • Causes, clinical features, investigation and treatment of Hyperaldosteronism 	<ul style="list-style-type: none"> • Davidson's Principles and Practice of 	Medicine	45 min

				<ul style="list-style-type: none"> • Clinical features, investigation and treatment of Pheochromocytoma • 	<p>Medicine 22nd Edition</p> <ul style="list-style-type: none"> • Kumar and Clark's Clinical Medicine, 8th Edition • CURRENT Medical Diagnosis and Treatment 2016 (LANGE CURRENT Series) 55th Edition 		
8:45-9:30	33	<ul style="list-style-type: none"> • Adrenal glands 		<p>Causes, Pathogenesis & Morphological features of</p> <ul style="list-style-type: none"> • Cushing's syndrome • Hyperaldosteronism • Congenital adrenal hyperplasia 	Robbins & Cotran	Pathology	45 min
9:30-10:15	34	Anesthesia consideration for surgery for pheochromocytoma & Adrenal & thyroid				Anesthesia	45 min
HOSPITAL WORK 10.30-12.00							
15-03-2025 Saturday							
8:00-8:45	35.	Hypoadrenalism		<ul style="list-style-type: none"> • Causes, clinical features, investigation and treatment of Addison's disease: Primary Hypoadrenalism • Secondary Hypoadrenalism 	<p>Davidson's Principles and Practice of Medicine 22nd Edition</p> <ul style="list-style-type: none"> •Kumar and Clark's Clinical Medicine, 8th Edition •CURRENT Medical 	Medicine	45 min

					Diagnosis and Treatment 2016 (LANGE CURRENT Series) 55th Edition		
8:45-9:30	36.	Adrenal glands		Causes, Pathogenesis & Morphological features of Adrenal insufficiency Adrenocortical neoplasms	Robbins & Cotran	Pathology	45 min
9:30-10:15	37.					Surgery	45 min
Hospital Work 10.30-2.30							

Musculoskeletal Module– 4th year MBBS

Learning Objectives:

1.Basic Principles in fracture management:

To enable students to have a basic understanding of:

- Definition of fracture
- Types of fracture
- Trauma vs Pathological fracture
- Factors affecting healing
- Non operative management
- Operative management

2.Surgical aspects of soft tissue tumors:

To enable students to have a basic understanding of:

- Definition of soft tissue tumors
- Classification
- Fat tumors
- Tumors of fibrous tissue
- Skeletal muscle tumors
- Tumors of unknown origin

3.Soft tissue infections:

To enable students to have a basic understanding of:

- Difference between
- SSI

- SIRS
- MODS
- MFOS
- Clinical Assessment of SSI
- Criteria to differentiate between different types
- Grading of Surgical wound infection
- Treatment Modalities

4.Osteomyelitis:

To enable students to have a basic understanding of:

- Definition of osteomyelitis
- Causative organism
- Clinical picture
- Risk Factor
- Radiological investigations
- Treatment Modalities

MUSCULOSKELETAL SYSTEM, 2025

DURATION 18 DAYS

Dated: 11-08-25 to 30-08-25

CONTACT HOURS Lectures 22 =16.5 hours (1) + Practical's + Hospital stay = 44 Hours (0.91)

CREDIT HOURS 2

TEACHING METHODOLOGIES Lectures/Practicals/ small group discussion/clinics

OBJECTIVES

The course is designed primarily for 4rth year M.B.B.S students and will cover the fundamental aspects of inflammatory and neoplastic conditions of Bones, Joints & Soft tissue .The interrelated clinical aspects of Medicine, Surgery, Orthopaedics will be covered. The radiological aspects will also be dealt with. By the end of the module, the students should be able to:

1. Describe:

Basic structure & function of Bones, Joints & soft tissue

2. Discuss the Pathological and all clinical aspects of:

- Congenital bone diseases
- Acquired bone diseases
- Tumours of bones, joints & soft tissue
- Various types of Arthritis

TIME		COURSE CONTENT	PLACE	LEARNING OUTCOME	Recommended books	DEPARTMENT/ Facilitator	DURATION
11-8-25 Monday							
8:00-8:45	1					Orthopaedics	45 min
8:45-9:30	2	Developmental disorders of Bone & Cartilage		<ul style="list-style-type: none"> Metabolic disorders 	Robbins & Cotran	Pathology	45 min
9:30-10:15	3	Developmental dysplasia of bone		<ul style="list-style-type: none"> 		Radiology	45 min
Hospital work		10.30-2.30					
12-08-25 Tuesday							
8:00-8:45	4.	Rickets & Osteomalacia, Osteoporosis		Definition, Causes, Clinical Features, Investigations and management of Rickets & Osteomalacia. Definition, Causes, Clinical Features, Investigations and management of Osteoporosis	<ul style="list-style-type: none"> 	Medicine	45 min
8:45-9:30	5.	Metabolic & Degenerative bone diseases				Radiology	45 min
9:30-10:15	6.					Orthopaedics	45 min
Hospital work		10.30-11.45					
		PRACTICAL		<u>-- OVERVIEW</u> <u>-- PRACTICAL</u> <u>-- SMALL GROUP DISCUSSIONS</u>		Respective departments	12.00—2.30
13-08-25 Wednesday							
8:00-8:45	7.	Rickets & Osteomalacia		Definition, Causes, Clinical Features, Investigations and management of Rickets & Osteomalacia.	<ul style="list-style-type: none"> 	Medicine	45 min
8:45-9:30	8.			<ul style="list-style-type: none"> 		Orthopaedics	45 min
9:30-10:15	9.	Acquired Bone diseases		Pathophysiology of <ul style="list-style-type: none"> Osteoporosis Paget's disease 	Robbins & Cotran	Pathology	45 min

Hospital work	10.30-2.30
14-08-25 Thursday (Holiday)	

15-08-25 Friday							
8:00-8:45	13.	Osteomyelitis		Surgical Aspects		Surgery	45 min
8:45-9:30	14	Fractures		•		Radiology	45 min
9:30-10:15	15	Bone tumours		• Bone and cartilage forming tumours	Robbins & Cotran	Pathology	45 min
HOSPITAL WORK 10.30-12.00							
16-08-25 Saturday							
8:00-8:45	16.	Basic principles of Fracture management		•		Surgery	45 min
8:45-9:30	17.	Multiple Myeloma		Definition, Causes, Clinical Features, Investigations and management of Multiple Myeloma	•	MEDICINE	
9:30-10:15	18.	Tumours of Bones				Radiology	45 min
HOSPITAL WORK 10.30-2.30							
18-08-25 Monday							
8:00-8:45		Arthritis		Etiology, Pathogenesis & Morphology with special emphasis over Osteoarthritis, Rheumatoid Arthritis	Robbins & Cotran	Pathology	45 min
8:45-9:30	21					Orthopedics	45 min
9:30-10:15	22	Hyperparathyroidism. Renal osteodystrophy		Definition, Causes, Clinical Features, Investigations and management of Hyperparathyroidism and Renal osteodystrophy		Medicine	
Hospital work 10.30-2.30							
19-08-25 Tuesday							
8:00-8:45	23					Orthopedics	45 min
8:45-9:30	24	Arthritis		Clinical features of Arthritis. Case scenario.....Rheumatoid arthritis	•	Medicine	45 min
9:30-	25.	Inflammatory conditions		Bones & Joints		Radiology	45 min

10:15							
Hospital work 10.30-11.45							
		PRACTICAL		Overview -- PRACTICAL --SMALL GROUP DISCUSSIONS		Respective departments	12.00— 2.30
20-08-25 Wednesday							
8:00-8:45	26	Soft tissue infection				Surgery	45 min
8:45-9:30	27	Seronegative Arthritis		Seronegative Arthritis.....Case Scenarios.		Medicine	45 min
9:30-10:15	28	Other types of arthritis				Pathology	45 min
Hospital work 10.30-2.30							
21-08-25 Thursday							
8:00-8:45		Infectious arthritis & Crystal induced arthritis		Etiology, Pathogenesis & Morphology of Gout	Robbins & Cotran	Pathology	45 min
8:00-8:45	29.					Orthopedics	45 min
8:45-9:30	30.	Crystal Arthropathy		Definition, Causes, Clinical Features, Investigations and management of Crystal Arthropathy (Gout)	•	Medicine	45 min
Hospital work 10.30-11.45							
		PRACTICAL		Community medicine		Respective departments	12.00— 2.30
22-08-25 Friday							
8:00-8:45	32.	Soft tissue tumors				Pathology	45 min
8:45-9:30	33	Soft tissue tumor				Radiology	45 min
9:30-10:15	33	Soft tissue tumors (Benign)		Surgical Aspects		Surgery	45 min
		HOSPITAL WORK				Respective	10.30-

						departments	12.00
23-08-25 Saturday							
8:00-8:45	34.	Bone & soft tissue sarcomas Overview				Oncology	45 min
8:45-9:30	35.	Soft tissue tumor (Sarcoma)				Surgery	
9:30-10:15	36.					Orthopedics	45 min
Hospital work				10.30-2.30			
25-08-2025 Monday							
8:00-8:45	37					Orthopedics	45 min
8:45-9:30	38					Radiology	45 min
9:30-10:15	39					Surgery	45 min
Hospital work				10.30-2.30			
26-08-2025 Tuesday							
8:00-8:45	40					Medicine	45 min
8:45-9:30	41					Orthopedic	45 min
9:30-10:15	42					Radiology	45 min
Hospital work				10.30-11.45			
		PRACTICAL		Community medicine		Respective departments	12.00—2.30
27-08-2025 Wednesday							
8:00-8:45	43					Surgery	45 min
8:45-9:30	44					Medicine	45 min
9:30-10:15	45					Orthopedic	45 min

Hospital work 10.30-2.30							
28-08-2025 Thursday							
8:00-8:45	46					Pathology	45 min
8:45-9:30	47					Surgery	45 min
9:30-10:15	48					Radiology	45 min
Hospital work 10.30-11.45							
		PRACTICAL		Community medicine		Respective departments	12.00—2.30
29-08-2025 Friday							
8:00-8:45	49					Medicine	45 min
8:45-9:30	50					Oncology	45 min
9:30-10:15	51					Orthopedics	45 min
HOSPITAL WORK 10.30-12.00							
30-08-2025 Saturday							
8:00-8:45	52					Oncology	45 min
8:45-9:30	53					Surgery	45 min
9:30-10:15	54					Radiology	45 min

Sr.#	Assessment	Tools	Frequency
1	Class Tests	30 MCQs 3 SEQs	1 test at the end of each module

FINAL

YEAR

FINAL YEAR

- In final year, the whole curriculum of general surgery is divided into **9 modules**; each module will be covered by the end of the year.
- **Lectures** – According to roster
 - Lecture are scheduled on every **Monday-Thursday**
 - Every lecture is of **45 minutes** duration.
 - At the end of every Lecture feedback from the students would be collected for quality assurance and evaluation

Timings: 8.00 AM to 8.45 AM

Venue: Quaid e Azam block Auditorium.

Lecturer: according to roster

THE STRUCTURE OF CLINICAL ROTATIONS OF FINAL YEAR IN SURGICAL WARDS WILL BE AS FOLLOWS

Venue: Department of General Surgery

Dates: Specified according to roster

Duration: 4 weeks for each batch.

A TOTAL OF 8 BATCHES ACCORDING TO ROSTER WILL ROTATE IN NSW

Schedule: 2 Ward days,2 OPDS, 2 Elective OTs ,2 ERs each week

Timings: 10.30 Am-3.00pm (Ward, OPD), 6.00pm to 9.00pm (Evening class and ER)

Lecturer: Consultant (Ward , OPD), On Call senior registrar (Evening class,ER)

TOPICS TO BE TAUGHT DURING WARD CLINICAL ROTATION:

LONG CASES:

- Peripheral vascular disease
- Varicose veins
- Limb Swelling (DVT/Cellulitis/Lymphedema)
- Salivary gland tumors
- Thyroid disease / Goiter
- Lymphadenopathy due to infections, lymphoma, metastatic disease.
- Parathyroid disease
- Pheochromocytoma
- CA Breast
- Fibroadenoma/adenosis breast
- Abdominal TB
- Appendicular mass
- Sarcoma (limb/retroperitoneal)
- Cholelithiasis/Cholecystitis
- Acute Pancreatitis
- Obstructive jaundice due to CA head of pancreas, CA gall bladder, periampullary

- carcinoma, cholangiocarcinoma, choledocholithiasis
- Inguinal and ventral hernias
- Achalasia/CA Esophagus/ corrosive esophageal stricture
- Gastric outlet obstruction (Corrosive intake/CA Stomach)
- Acute Intestinal Obstruction
- Colorectal Carcinoma
- OTHERS: (instruments, Radiographs)
- Breaking Bad News

TOPICS TO BE LEARNT IN EMERGENCY

- ATLS
- Head injury
- Burns
- RIF pain
- Acute intestinal obstruction
- Emergency management of Peritonitis
- Diabetic foot ulcers and amputations
- Pneumothorax
- Endotracheal intubation and advanced airways

PROCEDURES MANDATORY FOR FINAL YEAR MBBS

- Removal of stitches and staples
- Applications of dressings and bandages
- Examination of a lump (e.g. its size, consistency, location, mobility and whether it is tender, pulsatile or transilluminate)
- Assessment of a wound
- Examination for fitness for surgery (chest, heart, neck and mouth opening)

- Examination of the abdomen
- Digital rectal examination
- Examination of the scrotum
- Examination of the breast
- Examination of the hip
- Examination of the knee
- Examination of the back
- Use of local anesthetics
- Giving information about the procedure
- Obtaining and recording consent, and ensuring appropriate aftercare procedure.
- Hand washing (including surgical scrubbing up')
- Use of personal protective equipment (gloves, gowns, masks)

WARD TEST IS CONDUCTED AT THE END OF CLINICAL ROTATION OF EACH BATCH. IT INCLUDES OSCE,SHORT CASE EXAMINATION AND LONG CASE VIVA VOCE.

CLINICAL COMPETENCY

TABLE OF SPECIFICATIONS

PAPER A	SEQ	MCQS	%	PAPER B	SEQ	MCQ S	%
Principles	2	10	22.2%	Breast and endocrine	2	10	22.2%
Perioperative workup and care	2	10	22.2%	Git & hernia	2	15	25.9%
Trauma	2	12	23.7%	Hepatobiliary	1	5	11.1%
Skin and head & neck	1	5	11.1%	Vascular	1	4	10.4%
Elective orthopedics	1	3	9.6%	Genitourinary	1	4	10.4%
Miscellaneous I	1	5	11.1%	Miscellaneous II	2	7	20.0%

Table of Specifications

Specific Learning Outcomes	C%	S %	A%	Total
Perform collaboration with colleagues to collect patient data	5		8	13
Patient Examination	5	10	5	20
History taking	8	17	10	35
Recognize the role of teamwork and function as an effective member / leader of the team	3		7	10
Perform scrubbing gowning and gloving	3	2	2	7
Pass IV line , maintaining IV line, NG Intubation, Folley's catheterization	3	2	2	7
Advise the community on matters related to promoting health and preventing disease	3		5	08
Total	30	31	39	100

Week	Monday	Tuesday	Wednesday	Thursday	Thursday Emergency	Saturday Emergency
	10:30 – 12:00	10:30 – 12:00	10:30 – 12:00	10:30 – 12:00		
Week 1 Jan 4-11	Orientation Class Formal Introduction Time table, History, Videos	Role play Communication skills	Role play Communication skills	History taking Role modelling Elective cases	History taking Emergency cases Appendicitis	Procedure Performance
Week 2	History taking Pain Right Iliac Fossa	History taking Pain Right Hypochondrium	History taking Lump Neck	History taking Lump Breast	History taking Emergency cases Abscess	Procedure Performance
Week 3	History taking Lump Groin	History taking Ulcer Diabetic foot	How to analyse Inductive reasoning	How to analyse Deductive Reasoning	History taking Emergency cases Trauma	Procedure performance
Week 4	History taking Vascular Insufficiency	Mock Exam	Feedback	Simulation and its use in Clinical Examination	Procedure performance	Procedure performance
Week 5	Importance of Consent, Privacy, Exposure and Chaperon	General Physical Examination Initial Impression	Examination Of Chest	Examination of Breast	Procedure performance	Procedure performance
Week 6	Examination of Abdomen	Examination of Inguinoscrotal Region	Examination of Lump	Examination of Ulcer	Procedure performance	Procedure performance
Week 7	Examination of Vascular system	Examination of venous system	Examination of Lymphatic System	Examination of Motor system	Procedure performance	Procedure performance
Week 8	Examination of sensory system	Examination of joint	Examination of Limb	Final exam		

Week	Monday	Tuesday	Wednesday	Thursday	Thursday Emergency	Saturday Emergency
	10:30 – 12:00	10:30 – 12:00	10:30 – 12:00	10:30 – 12:00		
Week 1 Jan 4-11	Orientation Class Formal Introduction Setting ground rules	History Taking -1 Medical Interview Basics-I Biodata/Presenting Complaints/ HOPI	History taking -2 Medical Interview Basics-II PH/ Personal history/ Family History/ Provisional/working diagnosis	General Physical Examination	History taking The acute abdomen Emergency cases Appendicitis	AMPLE History in trauma patients Procedure Performance
Week 2	History taking Pain Right Iliac Fossa	History taking Pain Right Hypochondrium	Case presentations	History taking Lump Breast	History taking Emergency cases Abscess	Procedure Performance
Week 3	History taking Lump Groin	History taking Ulcer Diabetic foot	How to analyse Inductive reasoning	How to analyse Deductive Reasoning	History taking Emergency cases Trauma	Procedure performance
Week 4	History taking Vascular Insufficiency	Mock Exam	Feedback	Simulation and its use in Clinical Examination	Procedure performance	Procedure performance
Week 5	Importance of Consent, Privacy, Exposure and Chaperon	General Physical Examination Initial Impression	Examination Of Chest	Examination of Breast	Procedure performance	Procedure performance
Week 6	Examination of Abdomen	Examination of Inguinoscrotal Region	Examination of Lump	Examination of Ulcer	Procedure performance	Procedure performance
Week 7	Examination of Vascular system	Examination of venous system	Examination of Lymphatic System	Examination of Motor system	Procedure performance	Procedure performance
Week 8	Examination of sensory system	Examination of joint	Examination of Limb	Final exam		

Procedures mandatory for final year MBBS

24. Use of local anaesthetics	Safe use of drugs that produce numbness and prevent pain, either applied directly to the skin or injected into skin or body tissues. Awareness of toxic doses. Ability to deal with anaphylaxis. Understanding of allergy, including to latex.
25. Skin suturing	Closing wounds in the skin by inserting stitches.
26. Wound care and basic wound dressing	Providing basic care of surgical or traumatic wounds and applying dressings appropriately.
28. Giving information about the procedure, obtaining and recording consent, and ensuring appropriate aftercare procedure.	Awareness of the risks and benefits of procedures and possible alternatives. Ability to communicate in a variety of ways to individualise the discussion with the patient or their supporters. Recognition of the barriers to communication inherent in a hospital/ clinic setting with which patients are not familiar, including heightened stress levels for the patient, which often impedes communication. Understanding of the importance of written documentation. Being clear in the observations required and communicating with those involved in aftercare, including handover.
29. Hand washing (including surgical 'scrubbing up')	Following a sequence to ensure clean hands and gloving without contamination.
30. Use of personal protective equipment (gloves, gowns, masks)	Following a sequence to fit mask, scrub, gown and gloves without contamination. Behaviour while using equipment. Appropriate doffing procedures to avoid contamination of self or environment.
31. Infection control in relation to procedures	Understanding the importance of minimising infection risk. This includes understanding team dynamics, avoiding contamination, commanding respect and adhering to local protocols.
32. Safe disposal of clinical waste, needles and other 'sharps'	Ensuring that these materials are handled carefully and placed in a suitable container for disposal.

Procedures mandatory for final year MBBS

Other skills an undergraduate should master, including examination skills

Removal of stitches and staples

Applications of dressings and bandages

Examination of a lump (eg its size, consistency, location, mobility and whether it is tender, pulsatile or transilluminates)

Assessment of a wound

Examination for fitness for surgery (chest, heart, neck and mouth opening)

Examination of the abdomen

Digital rectal examination

Examination of the groin

Examination of the scrotum

Examination of the soft tissues of the neck

Examination of pulses

Examination of the breast

Examination of the hip

Examination of the knee

Examination of the back



SOUTH SURGICAL WARD
PROF. DR. ABRAR ASHRAF ALI
FCPS, FRCS (Ed), DCPS (HEP), MCPS (HEP)
PROFESSOR OF SURGERY
CHAIRMAN DEPARTMENT OF SURGERY
DEAN OF FACULTY ALLIED AND HEALTH SCIENCES
DIRECTOR, MEDICAL EDUCATION
KING EDWARD MEDICAL UNIVERSITY /
MAYO HOSPITAL, LAHORE



Ref No: 472/SSW/KEMU/25

Dated: 22/01/2025

THE HEAD OF SOUTH SURGICAL WARD
THE HEAD OF NORTH SURGICAL WARD
THE HEAD OF WEST SURGICAL WARD
THE HEAD OF EAST SURGICAL WARD

SUBJECT: GENERAL SURGERY UNIT WISE DISTRIBUTION OF 9 MODULES FOR
FINAL YEAR MBBS FOR THE YEAR 2025

Dear Colleagues,

It is to inform you that according to the decision of Board of Studies in Surgery meeting 08-01-2025 following is the distribution of 9 Modules for the Final Year MBBS for the year 2025. You are requested to teach and arrange the class according to below mentioned schedule.

Module Name	Unit Name
General Surgical Care	South Surgical Ward (Unit-I)
HPB & Pancreas	
GIT	North Surgical Ward (Unit-II)
CNS/Respiratory & HEAM ONC	West Surgical Ward (Unit-III)
Acute Care & Trauma	
CVS Related Diseases/ Vascular Disease	East Surgical Ward (Unit-IV)
Endocrine / Breast	
Elective Orthopedic Rheumatology (2 Weeks)	Orthopedics
Renal Module (2 Weeks)	Urology

This is for your kind information and further necessary action.


PROF. DR. ABRAR ASHRAF ALI
Chairman Department of Surgery
King Edward Medical University/
Mayo Hospital, Lahore.

Dated: 22/01/2025

Ref No: 472-75/SSW/KEMU/25

Cc:

1. The Vice Chancellor, King Edward Medical University, Lahore
2. The Registrar, King Edward Medical University, Lahore
3. All the officials concerned

FINAL YEAR CLINICAL ROTATIONS SCHEDULE

NO. 161/MBBS/Reg/KEMU/2026

OFFICE OF THE REGISTRAR
K.E. MEDICAL UNIVERSITY, LAHORE.

DATED: 03-02-2026

NOTICE

The bed-side teaching program of Final Year MBBS class of King Edward Medical University for the session 2025-2026 commencing from 09.02.2026 is hereby notified as under:-

BATCH NO.	WARDS	FROM	TO
A-1 TO A-4	MEDICAL	09.02.2026	31.03.2026
A-1 TO A-4	MEDICAL	09.04.2026	13.04.2026
B-1 TO B-4	SURGICAL	09.02.2026	31.03.2026
B-1 TO B-4	SURGICAL	09.04.2026	13.04.2026
C-1 TO C-4	OBST. & GYNAE.	09.02.2026	31.03.2026
C-1 TO C-4	OBST. & GYNAE.	09.04.2026	13.04.2026
D-1 & D-2	PAEDIATRICS	09.02.2026	08.03.2026
D-3	PAED. EMERGENCY	09.02.2026	22.02.2026
D-4	GYNAE. EMERGENCY	09.02.2026	22.02.2026
D-4	PAED. EMERGENCY	23.02.2026	08.03.2026
D-3	GYNAE. EMERGENCY	23.02.2026	08.03.2026
D-3 & D-4	PAEDIATRICS	09.03.2026	31.03.2026
D-3 & D-4	PAEDIATRICS	09.04.2026	13.03.2026
D-1	PAED. EMERGENCY	09.03.2026	22.03.2026
D-2	GYNAE. EMERGENCY	09.03.2026	22.03.2026
D-2	PAED. EMERGENCY	23.03.2026	31.03.2026
D-2	PAED. EMERGENCY	09.04.2026	13.04.2026
D-1	GYNAE. EMERGENCY	23.03.2026	31.03.2026
D-1	GYNAE. EMERGENCY	09.04.2026	13.04.2026

BATCH NO.	WARDS	FROM	TO
A-1 TO A-4	SURGICAL	14.04.2026	08.06.2026
B-1 TO B-4	MEDICAL	14.04.2026	08.06.2026
C-1 & C-2	PAEDIARIC	14.04.2026	11.05.2026
C-3	PAED. EMERGENCY	14.04.2026	27.04.2026
C-4	GYNAE. EMERGENCY	14.04.2026	27.04.2026
C-4	PAED. EMERGENCY	28.04.2026	11.05.2026
C-3	GYNAE. EMERGENCY	28.04.2026	11.05.2026
C-3 & C-4	PAEDIATRIC	12.05.2026	08.06.2026
C-1	PAED. EMERGENCY	12.05.2026	25.05.2026
C-2	GYNAE. EMERGENCY	12.05.2026	25.05.2026
C-2	PAED. EMERGENCY	26.05.2026	08.06.2026
C-1	GYNAE. EMERGENCY	26.05.2026	08.06.2026
D-1 TO D-4	OBST. & GYNAE	14.04.2026	08.06.2026

f D

BATCH NO.	WARDS	FROM	TO
A-1 TO A-4	OBST. & GYNAE	09.06.2026	15.06.2026
A-1 TO A-4	OBST. & GYNAE	16.07.2026	02.09.2026
B-1 & B-2	PAEDIARIC	09.06.2026	15.06.2026
B-1 & B-2	PAEDIARIC	16.07.2026	05.08.2026
B-3	PAED. EMERGENCY	09.06.2026	15.06.2026
B-3	PAED. EMERGENCY	16.07.2026	22.07.2026
B-4	GYNAE. EMERGENCY	09.06.2026	15.06.2026
B-4	GYNAE. EMERGENCY	16.07.2026	22.07.2026
B-4	PAED. EMERGENCY	23.07.2026	05.08.2026
B-3	GYNAE. EMERGENCY	23.07.2026	05.08.2026
B-3 & B-4	PAEDIATRIC	06.08.2026	02.09.2026
B-1	PAED. EMERGENCY	06.08.2026	19.08.2026
B-2	GYNAE. EMERGENCY	06.08.2026	19.08.2026
B-2	PAED. EMERGENCY	20.08.2026	02.09.2026
B-1	GYNAE. EMERGENCY	20.08.2026	02.09.2026
C-1 TO C-4	MEDICAL	09.06.2026	15.06.2026
C-1 TO C-4	MEDICAL	16.07.2026	09.02.2026
D-1 TO D-4	SURGICAL	09.06.2026	15.06.2026
D-1 TO D-4	SURGICAL	16.07.2026	09.02.2026

BATCH NO.	WARDS	FROM	TO
A-1 & A-2	PAEDIARIC	03.09.2026	30.09.2026
A-3	PAED. EMERGENCY	03.09.2026	16.09.2026
A-4	GYNAE. EMERGENCY	03.09.2026	16.09.2026
A-4	PAED. EMERGENCY	17.09.2026	30.09.2026
A-3	GYNAE. EMERGENCY	17.09.2029	30.09.2026
A-3 & A-4	PAEDIATRIC	01.10.2026	28.10.2026
A-1	PAED. EMERGENCY	01.10.2026	14.10.2026
A-2	GYNAE. EMERGENCY	01.10.2026	14.10.2026
A-2	PAED. EMERGENCY	15.10.2026	28.10.2026
A-1	GYNAE. EMERGENCY	15.10.2026	28.10.2026
B-1 TO B-4	OBST. & GYNAE	03.09.2026	28.10.2026
C-1 TO C-4	SURGICAL	03.09.2026	28.10.2026
D-1 TO D-4	MEDICAL	03.09.2026	28.10.2026

TWO WEEKS SCHEDULE

BATCH NO.	WARDS	FROM	TO
A-1 TO A-4	MEDICAL	29.10.2026	11.11.2026
B-1 TO B-4	SURGERY	29.10.2026	11.11.2026
C-1 TO C-4	PSYCHIATRY	29.10.2026	11.11.2026
D-1 TO D-4	EMERGENCY	29.10.2026	11.11.2026

BATCH NO.	WARDS	FROM	TO
A-1 TO A-4	SURGICAL	12.11.2026	25.11.2026
B-1 TO B-4	MEDICAL	12.11.2026	25.11.2026
C-1 TO C-4	EMERGENCY	12.11.2026	25.11.2026
D-1 TO D-4	PSYCHIATRY	12.11.2026	25.11.2026

out of 316

FA

BATCH NO.	WARDS	FROM	TO
A-1 TO A-4	EMERGENCY	26.11.2026	09.12.2026
B-1 TO B-4	PSYCHIATRY	26.11.2026	09.12.2026
C-1 TO C-4	SURGERY	26.11.2026	09.12.2026
D-1 TO D-4	MEDICAL	26.11.2026	09.12.2026

A-1 TO A-4	PSYCHIATRY	10.12.2026	23.12.2026
B-1 TO B-4	EMERGENCY	10.12.2026	23.12.2026
C-1 TO C-4	MEDICAL	10.12.2026	23.12.2026
D-1 TO D-4	SURGERY	10.12.2026	23.12.2026

The combination of various Wards will be as under:-

BATCH NO.	SURGICAL WARD (TEN WEEKS).	MEDICAL WARD (TEN WEEKS)	PAEDIATRICS WARD (FOUR WEEKS)
A1,B1,C1,D1	SSW	EMW	UNIT-I
A2,B2,C2,D2	NSW	WMW	UNIT-II
A3,B3,C3,D3	WSW	NMW	UNIT-I
A4.B4.C4.D4	ESW	SMW	UNIT-II

NOTE

- The batches attending the Midwifery & Gynecology department at Lady Willingdon Hospital, Lady Aitcheson Hospital Lahore (Eight Weeks) will be divided by the Professors concerned for Indoor, Outdoor and Maternity duties.
- Pediatric Emergency and Gynae Emergency will be managed by respective Chairpersons of Pediatrics & Obst. & Gynaecology.
- Emergency rotations will be split in batches by respective Chairpersons.
- Psychiatry rotations will be split in batches by respective Chairpersons.

[Signature]
REGISTRAR

K.E. MEDICAL UNIVERSITY, LAHORE.

NO: 162-179/11885 /KEMU/2026

DATED: 03-02-2026

Copy forwarded to the:-

- Medical Superintendent, Mayo Hospital, Lahore.
- Medical Superintendent, Lady Willingdon Hospital, Lahore.

Final Year (internal Assessment)

Sr.#	Assessment	Tools	Frequency
1.	Class Tests	30 MCQs 3 SEQs	2 tests at the end of each module (2 modules)
2.	Ward Tests	Short Case OSCE Long Case	1 ward test at the end of each batch rotation

Summative Assessment

Summative Assessment: Final Year

Sr.#	Assessment	Tools
1.	Written Assessment	30 MCQs 10 SEQs
2.	Skill Assessment	15 stations of OSPE
3.	Oral Assessment	1 long cases 4 short cases

BOS MINUTES

REGARDING

FINAL YEAR



SOUTH SURGICAL WARD
PROF. DR. ABRAR ASHRAF ALI
FCPS, FRCS (Ed), DCPS (HEP), MCPS (HEP)
PROFESSOR OF SURGERY
CHAIRMAN DEPARTMENT OF SURGERY
DEAN OF FACULTY ALLIED AND HEALTH SCIENCES
DIRECTOR, MEDICAL EDUCATION
KING EDWARD MEDICAL UNIVERSITY /
MAYO HOSPITAL, LAHORE



Ref No: 381/SSW/KEMU/24

Dated: 16/11/2024

THE REGISTRAR
King Edward Medical University
Lahore

Subject: - **MINUTES OF THE MEETING OF BOARD OF STUDIES IN SURGERY**

The meeting of Board of Studies in Surgery was held on 06-11-2024 at 08:30 am in the office of Prof. Dr. Abrar Ashraf Ali, South Surgical Ward, Surgical Tower, Mayo Hospital, Lahore, under the Chairmanship of Prof. Dr. Abrar Ashraf Ali

Following Members attended the meeting

Prof. Dr. Abrar Ashraf Ali	(Chairman Department of Surgery)
Prof. Dr. Ameer Afzal	(Professor of North Surgical Ward)
Prof. Dr. Ahmad Uzair Qureshi	(Professor of West Surgical Ward)
Prof. Dr. Yar Muhammad	(Professor of A&E Department)
Prof. Syed Muhammad Raza Naqvi	(HOD Department of Thoracic Surgery)
Dr. Somer Masood	(Associate Professor of Surgery)
Dr. M. Zeeshan Sarwar	(Associate Professor of Surgery)
Dr. Ali Akbar	(Associate Professor of Surgery)
Dr. Usman Ismat Butt	(Assistant Professor of Surgery)

Meeting Started with Recitation of verses from the Holy Quran. Minutes of the previous BOS meeting were approved. Agenda items were discussed in detail. The proceedings of the meeting are as follows:

AGENDA NO 01:-

Progress Report of the agendas of the previous BOS meetings was discussed.

The agendas of "Thoracic surgery clinical rotation in undergraduate program (MBBS) curriculum at KEMU" was discussed. Professor of Thoracic Surgery presented the details of the current situation. After discussion in detail, it was decided that at present this should be deferred till the availability of additional faculty.

The agenda "Antibiotic Stewardship policy for pre-operative patients." was discussed. In this regard Prof Ahmad Uzair Qureshi shall provide details by next BOS meeting.

The Chair discussed regarding the agenda "Workshop on Surgical Skills for MS General Surgery Students". Dr Zeeshan updated regarding the current progress of the surgical skills workshop. The chair directed to present a working business model at the next BOS meeting.

The agenda "Establishment of a task force to develop and implement a standardized transfer protocol" and "Establishment of a task force to develop and implement MOUs with district hospitals for proper transfer of patients to Mayo Hospital Emergency" was brought under discussion. It was decided that this agenda should be shifted to the hospital committee to ensure better implementation.

The agenda "Policy regarding management of trauma victims by specialty" was discussed. Prof Ameer Afzal and Prof Yar Muhammad to work on SOPs and submit for review to BOS within 1 week.

AGENDA NO 2: -

Regarding "Standardization of teaching methods" it was decided that three things are needed:

- Study guide composition
- Standardization of Learning objectives and lectures
- Standardization of curriculum and alignment of clinical clerkship

A committee headed by Prof Ahmad Uzair Qureshi and comprising Dr Zeeshan, Dr Bahzad , Dr Balak , Dr Usman Ismat Butt and Dr Haris would work on this. They would also work to standardize the lectures in the following format. Start with clinical Vignettes, unfolding scenario and topic presentation and discussion.

The idea of using KE Dramatic Society for inclusion of students and making standardized videos of clinical examination was also discussed and approved.

Further "Curriculum revision committee" comprising of Prof Ameer Afzal, Prof Yar Muhammad, Dr Somer, Dr Shahid, Dr Usman Siddique and Dr Noor would be constituted. The TOR of this committee would be to

- Define competencies of Under graduate and post graduate trainees
- Review curriculum of MBBS & MS
- Present review curriculum within 2 months.

It was also decided that this review shall be a yearly activity which would be held at the end of each academic session.

It was decided that the respective BOS-Allied Sciences would recommend a set of questions related to allied component of the paper. BOS-Surgery would finalize the questions from among the questions submitted by BOS-Allied Sciences. Paper checkers for the allied component would also be selected and recommended by respective BOS-Allied Sciences as per university rules.

TOACS
It was also decided that a **TOCAS committee** would be constituted to review and revise the TOCAS. It would comprise all the associate professors of the surgical floor and be headed by the senior most.

It was also decided to look into the ideas of **e-log for undergraduate students**. In addition, it was also decided to look into the formulation of online feedback for each academic session from the final year which would also be used to validate the physical attendance.

It was decided to make an **exam AUDIT committee** for the exam of MS and MBBS. This committee would be headed by Chairman Department of Surgery and include all professors of General Surgery.

AGENDA NO 3:-

The agenda "Common File for Surgical Floor" was discussed. The format of the file for review was also presented. It was decided to share soft copy of the template via Official WhatsApp Group with all the members. Feedback in this regard would be submitted to the Chairman by 11/11/2024.

AGENDA NO 4:-

Regarding "Panel of paper setters", the paper setters were already decided as per the previous BOS meeting. The same would be forwarded.


AGENDA NO 5:-


The agenda "Applications for change of Supervisor" was discussed. In this regard it was decided that Prof Ahmed Uzair Qureshi would review the applications and forward suggestions to the Chair.


AGENDA NO 6:-

The chair decided to formulate a committee comprising Prof Abrar Ashraf Ali , Prof Ameer Afzal and Prof Ahmed Uzair Qureshi who would meet with the COO regarding shortage of various items and discuss regarding SOPs for the management of the situation.

Meeting ended with the vote of thanks


PROF. DR. AMEER AFZAL
Professor of Surgery - NSW
KEMU / Mayo Hospital, Lahore


PROF. DR. AHMAD UZAIR QURESHI
Professor of Surgery- WSW
KEMU / Mayo Hospital, Lahore


PROF. DR. WASIM HAYAT KHAN
Professor of Surgery - ESW
KEMU/Mayo Hospital, Lahore



SOUTH SURGICAL WARD
PROF. DR. ABRAR ASHRAF ALI
FCPS, FRCS (Ed), DCPS (HEP), MCPS (HEP)
PROFESSOR OF SURGERY
CHAIRMAN DEPARTMENT OF SURGERY
DEAN OF FACULTY ALLIED AND HEALTH SCIENCES
DIRECTOR, MEDICAL EDUCATION
KING EDWARD MEDICAL UNIVERSITY /
MAYO HOSPITAL, LAHORE



Ref No: 558 /SSW/KEMU/25

Dated: 17/04 / 2025

THE REGISTRAR
King Edward Medical University
Lahore

Subject: - **MINUTES OF THE MEETING OF BOARD OF STUDIES IN SURGERY**

The meeting of Board of Studies in Surgery was held on 09-04-2025 at 08:30 am in the office of Prof. Dr. Abrar Ashraf Ali, South Surgical Ward, Surgical Tower, Mayo Hospital, Lahore, under the Chairmanship of Prof. Dr. Abrar Ashraf Ali

Following Members attended the meeting

Prof. Dr. Mahmood Ayyaz	(Vice Chancellor, KEMU)
Prof. Dr. Abrar Ashraf Ali	(Chairman Department of Surgery)
Prof. Dr. Ahmad Uzair Qureshi	(Professor of West Surgical Ward)
Prof. Dr. Yar Muhammad	(Professor of A&E Department)
Dr. Somer Masood	(Associate Professor of Surgery)
Dr. M. Zeeshan Sarwar	(Associate Professor of Surgery)
Dr. Usman Ismat Butt	(Associate Professor of Surgery)

AGENDA NO 01: -

Meeting started with Recitation of verses from the Holy Quran.

AGENDA NO 02: -

Minutes of the previous BOS meeting were approved.

Agenda items were discussed in detail. The proceedings of the meeting are as follows:

AGENDA NO 03: -

Progress Report of the agendas of the previous BOS meetings were discussed.

The agenda "antibiotic stewardship" was discussed. In this regard Prof Ahmad Uzair Qureshi updated that a letter has been submitted to Board of Management. Prof. Abrar Ashraf Ali will pursue this matter in Board of Management further.

The agenda "Establishment of a task force to develop and implement MOUs with district hospitals for proper transfer of patients to Mayo Hospital Emergency" was brought under discussion. In this regard Dr. Somer Masud was requested to collect data of incoming patients being referred from various other hospitals and institutions to Mayo Hospital.

The agenda of "Curriculum revision committee" was discussed and Prof. Dr. Ameer Afzal was requested to call a meeting of Curriculum revision Committee and update in the next BOS meeting.

"Difficulty in getting sample size for MS Candidates" and the agenda of "First Evaluation of E-log for postgraduate MS Candidates" were discussed. Prof. Ahmad Uzair Qureshi will discuss with VC KEMU and update further in next BOS meeting.

The agenda of "e-courses through Coursera" was discussed Prof. Dr. Ahmad Uzair Qureshi updated that Email had been sent to Coursera and reply is awaited.

The agendas "overview of final year MBBS annual examination 2024, attendance of final year MBBS class and evaluation and way forward for current practices of lectures attendance and clerkship at KEMU" were discussed. Prof. Dr. Abrar Ashraf Ali updated that this matter had already been discussed in Deans Committee however BOS should submit its feedback to Deans Committee.

AGENDA 04:

The agenda of "Punjab Healthcare Commission Visit" was discussed. In this regard it was noted that the key points where marks were lost included improper filling of the charts and operational deficiency. The hospital administration would be recommended to share the P.H.C evaluation proforma with the units to reflect and reduce omissions and improve outcomes.

AGENDA 05:

The agenda of "SSI Evaluation of All Surgical Units" was discussed. It was decided Dr. Ammara shall incorporate focal persons from each ward and notify to BOS. All the focal persons from all surgical units shall be collecting data on SSI and categorizing the data on the basis of Emergency, Wards and Elective Lists. Trace back of cases would also be done. Furthermore Prof. Dr. Ahmad Uzair Qureshi will generate Document in line with healthcare commission guideline and get CEO approval for implementation.

AGENDA 06:

The agenda of "Blue Print of IMM Examination" was discussed. Dr. M. Zeeshan Sarwar presented the draft of blue print of IMM Exam. It was decided that the draft shall be shared with all BOS members via WhatsApp for review and approval within next two days. It was felt that there is a need to involve Exam Branch more proactively. VC KEMU recommended that Chairman department of surgery should nominate an associate professor of surgery as deputy examiner for official nomination from VC office. In order to proceed with building of MCQ and OSCE pools, VC KEMU also directed to call a meeting between DME, Exam Department and IT department to setup digital pool.

AGENDA 07:

The agenda of "specialty-oriented practices of wards" was discussed. It was decided that working paper in this regard will be generated by the associate professors and shared with BOS in next meeting.



SOUTH SURGICAL WARD
PROF. DR. ABRAR ASHRAF ALI
FCPS, FRCS (Ed), DCPS (HEP), MCPS (HEP)
PROFESSOR OF SURGERY
CHAIRMAN DEPARTMENT OF SURGERY
DEAN OF FACULTY ALLIED AND HEALTH SCIENCES
DIRECTOR, MEDICAL EDUCATION
KING EDWARD MEDICAL UNIVERSITY /
MAYO HOSPITAL, LAHORE



Ref No: 588 /SSW/KEMU/25

Dated: 15/05/2025

THE REGISTRAR
King Edward Medical University
Lahore

Subject: - **MINUTES OF THE MEETING OF BOARD OF STUDIES IN SURGERY**

The meeting of Board of Studies in Surgery was held on **07-05-2025 at 08:30 am** in the office of Prof. Dr. Abrar Ashraf Ali, South Surgical Ward, Surgical Tower, Mayo Hospital, Lahore, under the Chairmanship of Prof. Dr. Abrar Ashraf Ali

Following Members attended the meeting

Prof. Dr. Mahmood Ayyaz	(Vice Chancellor, KEMU)
Prof. Dr. Abrar Ashraf Ali	(Chairman Department of Surgery)
Prof. Dr. Ameer Afzal	(Professor of North Surgical Ward)
Prof. Dr. Ahmad Uzair Qureshi	(Professor of West Surgical Ward)
Prof. Dr. Yar Muhammad	(Professor of A&E Department)
Dr. Somer Masood	(Associate Professor of Surgery)
Dr. M. Shahid Farooq	(Associate Professor of Surgery)
Dr. M. Zeeshan Sarwar	(Associate Professor of Surgery)
Dr. Ali Akbar	(Associate Professor of Surgery)
Dr. Usman Ismat Butt	(Associate Professor of Surgery)
Dr. Balakh Sher Zaman	(Assistant Professor of Surgery)

AGENDA NO 01: -

Meeting started with Recitation of verses from the Holy Quran.

AGENDA NO 02: -

Minutes of the previous BOS meeting were approved.

Agenda items were discussed in detail. The proceedings of the meeting are as follows:

AGENDA NO 03: -

Progress Report of the agendas of the previous BOS meetings were discussed.

The agenda "Antibiotic Stewardship" was discussed. In this regard Prof Ahmad Uzair Qureshi updated that a letter has been submitted to Board of Management reply to which is awaited. Prof. Abrar Ashraf Ali further updated that the department of Pathology at Mayo Hospital and KEMU is being revamped. This matter was discussed with the Department of Pathology which shared the issue of non-availability of appropriate petri dishes for testing and undefined mechanism for collection of samples in afterhours. It was recommended that a policy and system should be formulated for the proper collection and transport of samples. In this regard Prof Ahmad Uzair Qureshi and DR Shahid

Farooq shall co-ordinate and follow-up with the department of Pathology. They shall update regarding progress in the next BOS meeting.

The agenda "Establishment of a task force to develop and implement MOUs with district hospitals for proper transfer of patients to Mayo Hospital Emergency" was brought under discussion. Prof Ahmad Uzair Qureshi updated that the MOU is now with and to be done by hospital committee. Dr. Somer Masud updated that there was no official data collection of incoming patients being referred from various other hospitals and institutions to Mayo Hospital. It was decided that all the Surgical Units shall generate their own data of referred cases for presentation and discussion in the next BOS.

The agenda of "Curriculum revision committee" was discussed and Prof. Dr. Ameer Afzal was requested to call a meeting of Curriculum revision Committee and update in the next BOS meeting.

"Difficulty in getting sample size for MS Candidates" and the agenda of "First Evaluation of E-log for postgraduate MS Candidates" were discussed. Prof. Ahmad Uzair Qureshi shared initial data of e-log with the members and shall provide detailed data for review of members soon. The data is also be shared with VC KEMU for further review and formulation of plan to improve e-log system. Regarding sample size discussion was done with VC sahib and further suggestions will be put forward for implementation. After discussion both agendas will be shared in the next BOS meeting.

The agenda of "E-courses through Coursera" was discussed Prof. Dr. Ahmad Uzair Qureshi updated that another Email had been sent to Coursera and he would update BOS as soon as reply was available.

The agenda of "Punjab Healthcare Commission Visit" was discussed. In this regard letter is to be written to hospital administration for sharing the P.H.C evaluation proforma with the units in order to reflect performance and reduce omissions and improve outcomes.

The agenda of "SSI Evaluation of All Surgical Units" was discussed. Dr. Ammara shall be rejoining next week. Prof Dr. Ahmad Uzair Qureshi will co-ordinate with her. Update shall be provided in the next BOS meeting.

The agenda of "Broken scopes in surgical Tower operation theater" was discussed. In this regard Prof AUQ shared copy of draft of SOPs of endoscopy usage for review of the BOS members.

The agenda of "Blue Print of IMM Examination" was discussed. The draft of blue print of IMM Exam was again discussed. A need was felt to emphasis more on generalized and critical skills. It was decided to discuss the draft again in the next BOS meeting.

AGENDA 04:

The agenda "General Surgery List on Friday" was discussed by Prof Ahmad Uzair Qureshi. The day of CPC on Friday was suggested to be changed after review and discussion in next BOS.

Agenda 05:

The agenda "Final Year Module Class Testing" was discussed. It was pointed out the there is testing to be done at the end of each module with a collective mid-term at the mid of session. Further the policy is to be shared with all the Units by Prof Ahmad Uzair Qureshi. Dr Balakh Sher and Prof. Ahmad Uzair Qureshi shall discuss any problems being faced and present suggestions and solutions.

Agenda 06:

The synopsis of "Dr. Sunia Riaz" was discussed. After discussion it was decided that Dr Zeeshan Sarwar shall review and provide feedback regarding it.

The synopsis of "Dr. Rana Rawaiza Fida" was discussed. After discussion it was suggested that the candidate should revise and resubmit after revision.

MODULES

FINAL YEAR MBBS

Final Year MBBS Lecture Details from Modules

Module	Medicine	Surgery	Peds	Gynae																										
Basic concepts for Infections / Perioperative Surgical care / Hematologic Disorders (Module-1)	<p style="text-align: center;">Total 23</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Medicine</td> <td>Derma</td> <td>Pulmo</td> </tr> <tr> <td>16</td> <td>04</td> <td>03</td> </tr> </table>	Medicine	Derma	Pulmo	16	04	03	<p style="text-align: center;">Total 18</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Surg.</td> <td>PlasS.</td> <td>Anes</td> </tr> <tr> <td>13</td> <td>03</td> <td>02</td> </tr> </table>	Surg.	PlasS.	Anes	13	03	02	07	11														
Medicine	Derma	Pulmo																												
16	04	03																												
Surg.	PlasS.	Anes																												
13	03	02																												
HEPATOBIILIARY & PANCREAS (Module-2)	<p style="text-align: center;">Total 15</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Medicine</td> <td>Radiology</td> </tr> <tr> <td>13</td> <td>02</td> </tr> </table>	Medicine	Radiology	13	02	<p style="text-align: center;">Total 17</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Surg.</td> <td>PedS.</td> </tr> <tr> <td>16</td> <td>01</td> </tr> </table>	Surg.	PedS.	16	01	05	10																		
Medicine	Radiology																													
13	02																													
Surg.	PedS.																													
16	01																													
GASTROINTESTINAL TRACT (Module-3)	<p style="text-align: center;">Total 17</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Medicine</td> <td>Psych.</td> </tr> <tr> <td>11</td> <td>06</td> </tr> </table>	Medicine	Psych.	11	06	<p style="text-align: center;">Total 27</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Surg.</td> <td>PedS.</td> </tr> <tr> <td>22</td> <td>05</td> </tr> </table>	Surg.	PedS.	22	05	03	08																		
Medicine	Psych.																													
11	06																													
Surg.	PedS.																													
22	05																													
CNS/ Respiratory & HaemOnc (Intermodule 1) (Module-4)	<p style="text-align: center;">Total 23</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Medicine</td> <td>Haem.</td> <td>Pulmo</td> </tr> <tr> <td>09</td> <td>08</td> <td>06</td> </tr> </table>	Medicine	Haem.	Pulmo	09	08	06	<p style="text-align: center;">Total 06</p>	05	00																				
Medicine	Haem.	Pulmo																												
09	08	06																												
Acute Care & Trauma (Module -5)	<p style="text-align: center;">Total 18</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Medicine</td> <td>Derma</td> <td>Psych.</td> <td>Neph</td> <td>Pulmo</td> </tr> <tr> <td>11</td> <td>02</td> <td>03</td> <td>01</td> <td>01</td> </tr> </table>	Medicine	Derma	Psych.	Neph	Pulmo	11	02	03	01	01	<p style="text-align: center;">Total 29</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Surg.</td> <td>PedS.</td> <td>Plasts.</td> <td>Onco.</td> <td>Anes.</td> <td>Ortho.</td> <td>OMF.</td> <td>Neuro.</td> </tr> <tr> <td>13</td> <td>02</td> <td>06</td> <td>02</td> <td>01</td> <td>02</td> <td>01</td> <td>02</td> </tr> </table>	Surg.	PedS.	Plasts.	Onco.	Anes.	Ortho.	OMF.	Neuro.	13	02	06	02	01	02	01	02	04	08
Medicine	Derma	Psych.	Neph	Pulmo																										
11	02	03	01	01																										
Surg.	PedS.	Plasts.	Onco.	Anes.	Ortho.	OMF.	Neuro.																							
13	02	06	02	01	02	01	02																							
Cardiovascular System and Related Diseases (Module -6)	<p style="text-align: center;">Total 27</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Medicine</td> <td>Derma</td> <td>Psych.</td> <td>Card.</td> <td>Neph</td> <td>Radio.</td> </tr> <tr> <td>15</td> <td>04</td> <td>01</td> <td>05</td> <td>01</td> <td>01</td> </tr> </table>	Medicine	Derma	Psych.	Card.	Neph	Radio.	15	04	01	05	01	01	<p style="text-align: center;">Total 10</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Surg.</td> <td>PlastS.</td> </tr> <tr> <td>09</td> <td>01</td> </tr> </table>	Surg.	PlastS.	09	01	03	08										
Medicine	Derma	Psych.	Card.	Neph	Radio.																									
15	04	01	05	01	01																									
Surg.	PlastS.																													
09	01																													

Endocrine & Breast Disease (Module-07)	<p style="text-align: center;">Total 21</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Medicine</td> <td>Psych.</td> </tr> <tr> <td>19</td> <td>03</td> </tr> </table>	Medicine	Psych.	19	03	<p style="text-align: center;">Total 25</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Surg.</td> <td>PedS.</td> <td>Onco.</td> <td>Anes.</td> <td>Neuro.</td> </tr> <tr> <td>15</td> <td>02</td> <td>01</td> <td>02</td> <td>03</td> </tr> </table>	Surg.	PedS.	Onco.	Anes.	Neuro.	15	02	01	02	03	04	10
Medicine	Psych.																	
19	03																	
Surg.	PedS.	Onco.	Anes.	Neuro.														
15	02	01	02	03														
Elective orthopedics and Rheumatology (Module-08)	<p style="text-align: center;">Total 11</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Rheum.</td> </tr> <tr> <td>11</td> </tr> </table>	Rheum.	11	<p style="text-align: center;">Total 09</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Ortho.</td> <td>PedsS.</td> <td>PlastS.</td> </tr> <tr> <td>06</td> <td>01</td> <td>02</td> </tr> </table>	Ortho.	PedsS.	PlastS.	06	01	02	02	00						
Rheum.																		
11																		
Ortho.	PedsS.	PlastS.																
06	01	02																
RENAL MODULE (Module-09)	<p style="text-align: center;">Total 09</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Medicine</td> <td>Neph</td> <td>Radio.</td> </tr> <tr> <td>01</td> <td>07</td> <td>01</td> </tr> </table>	Medicine	Neph	Radio.	01	07	01	<p style="text-align: center;">Total 12</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Urology.</td> <td>PedsS.</td> </tr> <tr> <td>10</td> <td>02</td> </tr> </table>	Urology.	PedsS.	10	02	03	02				
Medicine	Neph	Radio.																
01	07	01																
Urology.	PedsS.																	
10	02																	
Total Number of Lectures	164	153	36	57														



DISTRIBUTION OF FINAL YEAR MBBS LECTURE ACCORDING TO MODULE
King Edward Medical University, Lahore

MODULE / INTER MODULE	MEDICINE	SURGERY	PEDIATRICS	GYNAE
1. BASIC CONCEPTS FOR INFECTIONS/PERIOPERATIVE SURGICAL CARE/ HEMATOLOGIC DISORDERS	23	17	07	12
2. HEPATOBILIARY & PANCREAS	26	10	03	08
3. GASTROINTESTINAL TRACT (GIT)	17	26	03	08
4. CNS/ RESPIRATORY & HAEMONC (INTERMODULE 1)	21	08	04	--
5. ACUTE CARE & TRAUMA	19	26	04	08
6. CVS/ VASCULAR DISEASES	18	21	06	11
7. ENDOCRINE & BREAST DISEASE	22	28	04	15
8. ELECTIVE ORTHOPEDICS AND RHEUMATOLOGY	10	08	02	--
9. RENAL MODULE	08	12	02	02
Grand Total lectures	164	156	35	64



Modular order with dates-Final Year MBBS 2025
King Edward Medical University, Lahore

MODULE / INTER MODULE	STARTING DATE	ENDING DATE
1. BASIC CONCEPTS FOR INFECTIONS/PERIOPERATIVE SURGICAL CARE/ HEMATOLOGIC DISORDERS	03-02-2025	09-03-2025
2. HEPATOBILIARY & PANCREAS	10-03-2025	18-04-2025
3. GASTROINTESTINAL TRACT (GIT)	19-04-2025	25-05-2025
4. CNS/ RESPIRATORY & HAEMONC (INTERMODULE 1)	26-05-2025	30-06-2025
5. ACUTE CARE & TRAUMA	1-07-2025	26-08-2025
6. CVS/ VASCULAR DISEASES	27-08-2025	25-09-2025
7. ENDOCRINE & BREAST DISEASE	26-09-2025	31-10-2025
8. ELECTIVE ORTHOPEDICS AND RHEUMATOLOGY	01-11-2025	13-11-2025
9. RENAL MODULE	14-11-2025	28-11-2025

KEMU Curricular Map: A Competency-Based Framework

Final YEAR MBBS Modular Integrated Framework

Period	Block	Primary Modules	Horizontal Integration	Skill component	Vertical Integration	Spiral threads	
03 Feb – 18 Apr	Block 1	BASIC CONCEPTS FOR INFECTIONS/PERIOPERATIVE SURGICAL CARE/ HEMATOLOGIC DISORDERS (5 Weeks) End-of-module test	Shock Resuscitation Blood Transfusion Wound Management Liver And	<ul style="list-style-type: none"> • Clinical Rotation • Clinical ward • Elective OTs • Trauma Bay • Surgical ER 	Pathology Oncology Radiology Interactive Lecture SDL	K-CORE: Ward orientation, hand hygiene, vitals, Scrubbing. Ward rotations Daily 10:30 to 2:30 K-PRISM: Clinical Judgement Decision making 1.5 Hr/Day Lecture in Jinnah Auditorium	
		HEPATOBIILIARY & PANCREAS (4 Weeks) End-of-module test	Hepatobiliary Anatomy Malignancies Surgical Management	<ul style="list-style-type: none"> • Elective OTs • Trauma Bay • Surgical ER 	VENUE: 1.Jinnah Auditorium 2.Respective Wards		
BLOCK ASSESSMENT – Written Component (SEQ +MCQ) and OSPE							
19 Apr – 25 May	Block 2	GASTROINTESTINAL TRACT (GIT) (6 Weeks) End-of-module test	Dysphagia Gastric Outlet Obstruction Gastric Carcinomas PUD Motility Disorders Salivary Gland Pathologies	<ul style="list-style-type: none"> • Clinical Rotation • Clinical ward • Elective OTs • Trauma Bay • Surgical ER 	Pathology Oncology Radiology Psychiatry Interactive Lecture SDL	K-CORE: History-taking, Abdominal exams, Fluid Management & Nutrition Assessment Ward rotations Daily 10:30 to 2:30 K-PRISM: Clinical Judgement Decision making 1.5 Hr/Day Lecture in Jinnah Auditorium	
BLOCK ASSESSMENT - Written Component (SEQ + MCQ) and OSPE							
26 May- 26 Aug	Block 3	CNS/ RESPIRATORY & HAEMODYNAMICS (INTERMODULE 1) (3 Weeks) End-of-module test	Lymphomas Venous thromboembolism Carotid Stenosis Soft Tissue	<ul style="list-style-type: none"> • Clinical Rotation • Clinical 	Pathology Oncology Radiology Interactive Lecture	K-CORE: CNS & Respiratory examination, Emergency response K-PRISM: Crisis Management,	

		ACUTE CARE & TRAUMA (5 Weeks) End-of-module test	Sarcomas Disaster Surgeries Acute Abdomen Abdominal Injuries	ward • Elective OTs • Trauma Bay • Surgical ER	SDL VENUE: 1.Jinnah Auditorium 2.Respective Wards	Teamwork,Multidisciplinary Care. 1.5 Hr/Day Lecture in Jinnah Auditorium
27 Aug-31 Oct	Block 4	CVS/ VASCULAR DISEASES (4 Weeks) End-of-module test	Cardiac Surgeries Valvular Disorders Acute limb Ischemia	• Clinical Rotation	Pathology Oncology Radiology Interactive Lecture SDL VENUE: 1.Jinnah Auditorium 2.Respective Wards	K-CORE: CVS exam, ECG interpretation Vascular Assessment, Thyroid and Breast exam. Ward rotations Daily 10:30 to 2:30 K-PRISM: Critical care, Decision making, MDT Approach 1.5 Hr/Day Lecture in Jinnah Auditorium
		ENDOCRINE & BREAST DISEASE (5 Weeks) End-of-module test	DVT Breast Pathologies Thyroid & Parathyroid Disorders Metabolic surgeries	• Clinical ward • Elective OTs • Trauma Bay • Surgical ER		
01 Nov-28 Nov	Block 5	ELECTIVE ORTHOPEDICS AND RHEUMATOLOGY (2 Weeks) End-of-module test	Spine Hip & Knee Metabolic Bone Disorders Nephrolithiasis	• Clinical Rotation • Clinical ward	Pathology Oncology Radiology Interactive Lecture SDL VENUE: 1.Jinnah Auditorium 2.Respective Wards	K-CORE: Musculoskeletal Exam, Rehabilitation Principles, Fluid & Electrolyte management, Renal Exam Ward rotations Daily 10:30 to 2:30 K-PRISM: Disability Awareness, Long term patient Care, Counseling & Professionalism 1.5 Hr/Day Lecture in Jinnah Auditorium
		RENAL MODULE (2 Weeks) End-of-module test	Urinary Bladder Disorders Prostate Disorders	• Elective OTs • Trauma Bay • Surgical ER		
BLOCK ASSESSMENT - Written Component (SEQ + MCQ) and OSPE						

December	Prep Leave 4 Weeks
January	SUMMATIVE ASSESSMENT - Written component + Structured Viva Programme evaluation

MODULE NO 01 FINAL YEAR MBBS 2026

BASIC CONCEPTS FOR INFECTIOUS DISEASES AND PERIOPERATIVE SURGICAL CARE

	DURATION	STUDENT NOTES
Target Students	Final year	
Duration	lectures=14	
Outcomes	Outcomes To acquire appropriate knowledge, skills and attitude in relation to topics	
Assessment	MCQs, OSPE, Case presentation	

LEARNING OBJECTIVES:

TO UNDERSTAND:

- The pathophysiology of shock

The different patterns of shock and the principles and priorities of resuscitation

- Appropriate monitoring and end points of resuscitation

Recognition and management of bleeding

- Use of blood and blood products, the benefits and risks of blood transfusion

TO UNDERSTAND:

- Normal wound healing and how it can be adversely affected

- Types of healing and how to classify wounds

- The principles of wound management

- The principles of scar management

TO UNDERSTAND:

- The characteristics of the common surgical pathogens and their sensitivities

- The factors that determine whether a wound will become infected

- The classification of sources of infection and their severity

- The clinical presentation of surgical infections

- The indications for and choice of prophylactic antibiotics

- The spectrum of commonly used antibiotics in surgery and principles of therapy

TO UNDERSTAND:

- The importance of safe patient positioning
- Surgical craft and wound closure
- The steps involved in surgical site preparation
- Haemostasis and electro-surgery
- The principles of surgical exposure and laparoscopic
- The role of drains in surgery

01

Basic concepts for Infections / Perioperative Surgical care / Hematologic Disorders

Time duration : 5 weeks (weeks 1-5)

1	2	3	4	5
6	7	8	9	10
11		13	14	
16				
21				25
26	27	28		
31				
36	37	38	39	40
41	42	43	44	45
46	47	48	49	50
51	52			

Date: 03-02-2025

Credit Hours

3.3

Medicine	Surgery	Peds	Gyne
23	18	07	11

Final Year MBBS Module No. 1

1

Week 2/42- Final draft

01

Time	Monday 10-02-25	Tuesday 11-02-25	Wednesday 12-02-25	Thursday 13-02-25	Friday 14-02-25	Saturday 15-02-25
Day	6	7	8	9	10	11
08.00 – 08:45	Management of patient in shock	TPN/ Central line placement and Care	Acute management of wounds (Plastic Surgery)	Care in operating Room/ WHO checklist	Pre-pregnancy counselling & Antenatal Care	Prenatal diagnosis of congenital malformations
	Surgery/04	Surg05	Plastic Surgery /01	Surg 06	Oba& Gyne/03	Oba & Gyne 04
8:45 – 09:30	Liver Abscesses	Pulmonary TB	HIV	Sodium abnormalities	Potassium & Calcium abnormalities	Bacterial and Mycobacterial infections
	Medicine 04	Pulma/ 01/03	Medicine/06	Med/07	Med/08	(Derna01/08)
Break						
Clinical Work						
			Final Year MBBS Module No. 1			3

Week 3/42

01

Time	Monday 17-02-25	Tuesday 18-02-25	Wednesday 19-02-25	Thursday 20-02-25	Friday 21-02-25	Saturday 22-02-25
Day	12	13	14	15	16	17
08.00– 08:45	Nutritional requirement & Medical feeding	Postoperative care	Day Care Surgery- Principles	ERAS (Enhanced Recovery after Surgery)	Prenatal assessment of fetal wellbeing	Anaemia in pregnancy
	Surg/07	Surg/08	Surg/09	Surg/10	Obs & Gyne/05	Obs & Gyne/06
08:45 – 9:30	Analgesia and pain relief (Anesthesia)	Acid Base balance-1	Acid – Base 2 Balance	Thrombophilia	Diphtheria/Pertussis/Tetanus-III	Menstrual cycle and premenstrual syndrome/ Dysmenorrhoea
	Anca/01	Med/09	Med/10	Med/11	(Paediatrics/03)	Obs & Gyne/07
Break						
Clinical Work						
			Final Year MBBS Module No. 1			4

Week 4/42

01

Time	Monday 24-02-25	Tuesday 25-02-25	Wednesday 26-02-25	Thursday 27-02-25	Friday 28-02-25	Saturday 01-03-25
Day	18	19	20	21	22	23
08:00–08:45	Pre-operative preparation for surgery (Anesthesia)	Malaria	Surgical Management of vascular malformations (Plastic Surgery)	Types of wounds, Drains & Dressings (Plastic Surgery)	Abnormal uterine bleeding	Pelvic inflammatory disease
	Anae02	Medicine/13	Plastic Surgery -02	Plastic Surgery -02	Obs& Gync/08	Obs& Gync/09
08:45 – 9:30	Disseminated intravascular coagulation (DIC)	Platelet abnormalities	Vascular lesions of skin / Hematological cut. Manifestation	Meningitis	Leptospirosis, Brucellosis, Toxoplasmosis	Anatomy, Physiology, of Skin related to Clinical Dermatology
	Med/12	Med/014	(Derm02)	Med/15	Medicine/18	Derm02/
Break						
Clinical Work						

Week 5/42

01

	Monday 03-03-25	Tuesday 04-03-25	Wednesday 05-03-25	Thursday 06-03-25	Friday 07-03-25	Saturday 08-03-25
Day	24	25	26	27	28	29
08:00–08:45	Blood transfusion	Blood products and their indications + BRAB	Renal involvement in systemic disease	Lichen planus Psoriasis	Infections in pregnancy	Thyroid disorder in pregnancy / epilepsy in pregnancy
	Surg 011	Surgery 12	Med/019	(Derma/03	Obs& Gyn/10	Obs& Gyn/011
08:45 – 9:30	Extrapulmonary TB. Multi-Drug-resistant tuberculosis (MDR-TB)	Pneumonia	AP7/Poliomyelitis	Measles/Rubella-IV (Pediatrics)	Mumps/Chicken Pox-V (Pediatrics)	Tuberculosis in children
	Pulm/02/m17	Pulm/03/m18	(Pediatrics/05	(Pediatrics)06	(Pediatrics/05	(Pediatrics/04
Break						
Clinical Work						6
			Final Year MBBS Module No. 1			

Week 6/42

01

Time	Monday 10-03-25	Tuesday 11-03-25	Wednesday 12-03-25	Thursday 13-03-25	Friday 14-03-25	Saturday 15-03-25
Day	30	31				
08:00– 08:45	END OF MODULE 1					
08:45 – 9:30						
Break						
Clinical Work						
			Final Year MBBS Module No. 1			7

MODULE NO 2 FINAL YEAR MBBS 2026

CARDIO VASCULAR SYSTEM AND RELATED DISEASES

	DURATION	STUDENT NOTES
Target students	final year	
Duration	lectures=12	
outcomes	To acquire appropriate knowledge, skills and attitude in relation to topics	
assessment	MCQs, OSPE, Case presentation	

LEARNING OBJECTIVES

Cardiothoracic surgery:

To provide an overall view of

- The principles of cardiovascular bypass
- Incisions, conduits and valve options in cardiac surgery.
- The role of investigation and preoperative assessment in planning surgery.
- The management of coronary heart disease.
- The role of surgery in valvular heart disease.
- The role of surgery in congenital heart disease.

- The management of aortic pathology.
- The management of pericardial disease.
- The principles of cardiopulmonary resuscitation after cardiac surgery.
- **Arterial disorders:**

To understand,

- The nature and associated features of occlusive peripheral arterial disease
- The investigation and treatment options for occlusive peripheral arterial disease.
- The principles of management of the severely ischaemic limb.
- The nature and presentation of aneurysmal disease, including the abdominal aorta and popliteal artery.
- The investigation and treatment options for aneurysmal disease.
- The arteritides and vasospastic disorders.

- **Venous disorders:**

To understand:

- Venous anatomy and physiology.
- The pathophysiology and venous hypertension.
- The clinical significance and management of superficial venous reflux.
- The management of venous ulceration.
- The management and prevention of venous thromboembolism.

02

Cardiovascular System and Related Diseases

Time Duration :

4 weeks

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30
31	32	33	34	35
36	37	38	39	40
41	42	43	44	45
46	47	48	49	50
51	52			

Starting Date:10-03-2025

Medicine	Surgery	Peds	Gyne
27	10	03	08

Week 06/42

02

	Monday 24-03-2025	Tuesday 25-03-2025	Wednesday 26-03-2025	Thursday 27-03-2025	Friday 28-03-2025	Saturday 29-03-2025
Day	13	14	15	16		
8:00 – 8:45	Cardiomyopathy Med/034	Chronic Limb Ischemic Surgery /19	Amputations (lower limbs) Surg/20/CV331	Varicose Veins Surgery/21/CV340	Holiday of Annual Sports Day & Convocation 2025	
8:45 – 9:30	Valvular heart disease III Med/035	Infective endocarditis Med/036	Heart Failure Med/037	Panic disorders Psych 01/Med038		
Break						
Clinical Work						
			Final Year MBBS Module No. 02			2

Week 07/42

02

Time	Monday 31-03-2025	Tuesday 01-04-2025	Wednesday 02-04-2025	Thursday 03-04-2025	Friday 04-04-2025	Saturday 05-04-2025
Day						
8:00 – 8:45	EID-UL-FITAR/ SPRING VACATIONS					
8:45 – 9:30						
Break						
Clinical Work						

Final Year MBBS Module No. 02

3

Week 08/42

02

Time	Monday 07-04-2025	Tuesday 08-04-2025	Wednesday 09-04-2025	Thursday 10-04-2025	Friday 11-04-2025	Saturday 12-04-2025
Day			17	18	19	20
8:00 – 8:45	SPRING VACATIONS		Thromboembolism approach and management	Lymphedema (Plastic Surgery)	Third stage of labour and its complications	Holiday of Mela Chiraghan
			Surg02/02/CV342	P.Surg03/011/CV344	Obstet Gynec/19/CV336	
8:45 – 9:30			Pericardial disease/ pericarditis	Myocarditis	Common acquired Heart Disease (Rheumatic fever- III)	
			Card02/30041/CV304	Med/042	(Pediatrics/09/ cv336)	
Break						
Clinical Work						
			Final Year MBBS Module No. 02			4

Week 09/42

02

	Monday 14-04-2025	Tuesday 15-04-2025	Wednesday 16-04-2025	Thursday 17-04-2025	Friday 18-04-2025	Saturday 19-04-2025
Day	21	22	23	24		
8:00 – 8:45	Mesenteric Ischemia (Surgery)	Abdominal Aortic aneurysms	Normal First and Second stages of Labour and its management	Abnormal First and Second stages of Labour and its management	Post-partum collapse	End of 2nd Module
	Surgery023	Surgery024	Obst& Gyno/17/CV333	Obst& Gyno/018/CV335	Obst& Gyno/20/CV337	
8:45 – 9:30	Bradycardia	Tachycardia	Eczema	Renal Vascular Disease Renal Artery Stenosis	Bullous Disorders	
	Card03/30044/CVS 06	Card03/30045/CVS 06	Derm. 06/30039	Neph01/30040	Derm. 07/30043	
Break					Lecture shifted due to holiday of Mela Chiraghan	
Clinical Work			Final Year MBBS Module No. 02			5

MODULE NO. 3 FINAL YEAR MBBS 2026

Gastrointestinal Tract

Title	General Surgery	Student Notes
Target Students	Final year	
Duration	Lectures=22	
Objectives	To acquire appropriate knowledge, skills and attitude in relation to topic	
Assessment	MCQs, OSPE, Case presentation	

Gastrointestinal Module Learning Objectives

1.Overview and work up

At the end of this learning activity participants will be able to

- Outline schema to diagnose GIT pathologies
- Enlist various GIT pathologies
- Categorize diagnostic procedures used to diagnose GIT pathologies
- Enlist structural test to diagnose GIT problems
- Discuss various types of histological diagnosis
- Discuss treatment options to deal GIT pathologies
- Discuss rehabilitation plan for GIT pathologies

2.Dysphagia

At the end of this learning activity participants will be able to

- Differentiate between Dysphagia and GOO
- Enlist causes of dysphagia
- Identify grades of dysphagia
- Outline investigation plan for patient with dysphagia
- Discuss treatment plan for patient with dysphagia

3.Gastric Outlet Obstruction

At the end of this presentation participants will be able to

- Identify GOO
- Enlist causes of GOO
- Discuss management of nutritional deficiencies

- Identify and correct electrolyte imbalances
- Outline investigation plan
- Discuss management plan for benign and malignant GOO

4. Peptic Ulcer

At the end of this presentation participants will be able to

- Identify complications of peptic ulcer disease
- Outline plan to investigate peptic ulcer disease and its complications
- Discuss treatment options for peptic ulcer disease and its complications
- Identify complications of surgical treatments of peptic ulcer and its complications

5. Gastric Carcinoma

At the end of this learning activity participants will be able to

- Discuss Epidemiology of Ca stomach in the world
- Enlist common risk factors
- Identify symptoms and signs
- Discuss stages of Carcinoma stomach
- Discuss management plan of Carcinoma stomach

6. Parotid Tumours

At the of this learning activity participants will be able to

- Enlist different types of salivary glands
- Name different types of salivary gland tumours
- Discuss management of pleomorphic adenoma of parotid gland
- Discuss post operative complications of superficial parotidectomy

7.Carcinoid Tumours

At the of this learning activity participants will be able to

- Enlist the Sites Of Carcinoid Tumors
- Discuss the Pathology Of Carcinoid Tumors
- Discuss Mesothelial Tumors Of Peritoneum
- Differentiate Between Mesothelial Tumors and Cacrinomatosis Peritonei
- Recognize their Various Presentation
- Diagnose And Treat The Tumors

8.Diaphragmatic Hernia

At the end of this learning activity participants will be able to

- Discuss anatomy of Hiatus and Diaphragmatic Hernias
- Enlist common risk factors Diaphragmatic Hernias
- Identify symptoms and signs Diaphragmatic Hernias
- Discuss management plan of Hiatus and Diaphragmatic Hernias

9.Surgical Management of IBD

At the end of this learning activity participants will be able to

- Discuss Inflammatory bowel Disease
- Enlist Indications for surgical intervention in inflammatory bowel disease
- Discuss various surgical options available to treat IBD
- Discuss management of stoma in IBD

10.Sigmoid Volvulus

At the end of this session Participants will be able to

- Define Volvulus
- Discuss reasons and presentation of Volvulus
- Outline plan of management for sigmoid volvulus

11. Enterocutaneous Fistula

At the end of this presentation participants will be able to

- Define enterocutaneous fistula (ECF)
- Identify types of ECF
- Identify causes of Fistula formation
- Identify factors responsible for post operative ECF formation
- Outline plan of fistula Management
- Identify factors responsible for spontaneous closure of ECF

12. Bleeding Per Rectum

At the end of this learning session participants will be able to

- Identify causes of bleeding per rectum
- Plan treatment for patient with haemorrhoids
- Outline treatment plan for patient with fissure in ano

13. Colorectal Carcinoma

At the end of This learning activity participants will be able to:

- Enlist risk factors for Colorectal Carcinoma
- Identify symptoms and signs of Colon and Rectal carcinoma
- Discuss diagnostic tools to confirm colorectal carcinoma and stage of Disease
- Design treatment and follow up plan for patients with colorectal carcinoma

14. Multi-Disciplinary team approach and chemoradiation for Rectal carcinoma

At the end of this learning experience participants will be able to

- Define MDT
- Outline process and members of MDT
- Apply concepts of MDT
- Outline treatment plan for patient with colorectal carcinoma

15. Rectal Prolapse

At the end of this learning session participants will be able to

- Discuss anatomy of the rectum
- Discuss pathophysiology of rectal prolapse
- Identify clinical features consistent with Rectal prolapse
- Differentiate rectal prolapse from its D/D
- Outline investigation plan for patient with rectal prolapse
- List down treatment options for rectal prolapse

16. Acute Appendicitis

At the end of this learning session participants will be able to

- Discuss history of appendectomy
- Discuss anatomy of appendix
- Identify pathophysiology of acute appendicitis
- Discuss clinical features of acute appendicitis
- Enlist differential diagnosis in different age groups and genders
- Outline management plan for acute appendicitis and its complications

17.Abdominal Tuberculosis

At the end of this learning activity participants will be able to

- Discuss history of tuberculosis
- Discuss causative agent and mode of transmission
- Discuss different types of abdominal tuberculosis
- Outline diagnostic plan for abdominal tuberculosis
- Discuss treatment options for abdominal tuberculosis

18.Peri-Anal fistula and abscess

At the end of this learning session participants will be able to

- Define Peri anal fistula and abscess
- Classify Peri anal fistula and abscess
- Identify secondary causes of developing Peri anal fistula and abscess
- Outline diagnosing plan for Peri anal fistula and abscess
- Develop concept map of treatment of Peri anal fistula and abscess

19.Groin Hernia

At the end of this session participants will be able to

- Define hernia
- Draw anatomical land marks of groin hernia
- Enlist etiological factor to cause groin hernia
- Differentiate between different groin swellings
- Classify groin hernias
- Customize treatment plan for patients with groin hernias
- Stratify use of different types of mesh for groin hernioplasty
- Identify post operative complications

3

Module GASTROINTESTINAL TRACT

STARTING DATE: 19-04-2025

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	
31	32	33	34	35
36	37	38	39	40
41	42	43	44	45
46	47	48	49	50
51	52			

Medicine	Surgery	Peds	Gynae
17	27	03	08

Final Year MBBS Module 03

1

Week 09/42

03

Time	Monday 14-04-2025	Tuesday 15-04-2025	Wednesday 16-04-2025	Thursday 17-04-2025	Friday 18-04-2025	Saturday 19-04-2025																									
Day	END OF MODULE 2nd					1																									
8:00 – 8:45						END OF MODULE 2nd					Bonign disease of uterus																				
											END OF MODULE 2nd					Obs&Gyn/20/GIT															
8:45 – 9:30																END OF MODULE 2nd					Alcoholism										
																					END OF MODULE 2nd					PSY-02/Md046/GIT22					
Break																										END OF MODULE 2nd					
Clinical Work																															END OF MODULE 2nd
	END OF MODULE 2nd																														
						END OF MODULE 2nd																									
											END OF MODULE 2nd																				
																END OF MODULE 2nd															
																					END OF MODULE 2nd										

Week 10/42

03

Time	Monday 21-04-2025	Tuesday 22-04-2025	Wednesday 23-04-2025	Thursday 24-04-2025	Friday 25-04-2025	Saturday 26-04-2025
Day	2	3	4	5	6	7
8:00 – 8:45	Overview and diagnostic approach to patients of GIT disorders	CA Esophagus	Gastric outlet obstruction And its surgical management	Abdominal Tuberculosis (Obstruction / Perforation)	Pre malignant and Malignant disease of uterus	Benign & Preinvasive disease of cervix Principles of cervical cytology and colposcopy
	Surg25/GIT03	Surg26/GIT14	Surg27/GIT16	Surgery 28/ GIT	Oba&Gyn/21/	Oba&Gyn/22/GIT45
8:45 – 9:30	Approach to a patient with gastrointestinal disease	Schizophrenia.	Acute/ Chronic Gastritis Med/ GE	Abdominal Tuberculosis Med/ GE	Chronic Diarrhea (Malabsorption, Celiac Disease)	Pyloric stenosis / Gastroesophageal fistula
	Med47/GIT13	Psy03/med048/GIT	Med49/GIT15	Med50/GIT05	Pediatrics/027/GIT	PedsSurg29/GIT60
Break						
Clinical Work						
						3

Week 11/42

03

Time	Monday 28-04-2025	Tuesday 29-04-2025	Wednesday 30-04-2025	Thursday 01-05-2025	Friday 02-05-2025	Saturday 03-05-2025
Day	8	9	10		11	12
8:00 – 8:45	Surgical Management of Peptic ulcers	Salivary gland disease (parotid/submandibular)	Metastodial & carcinoid tumour, Carcinoma piriformi	Holiday of 1st May 2025 Labor Day	Malignant disease of conix	Benign disease of ovary
	Surg28/01T18	Surg29/01T05	Surg31/01T17		Oba&Oyn/23/01T	Oba&Oyn/24/01T
8:45 – 9:30	Complications of AFD	Malabsorption syndromia	Inflammatory Bowel disease 05/ Med		Obsessive Compulsive Disorder	Addiction
	Med29/01T17	Med30/01T18	Med33/01T28	PSY04/Med34/01T	PSY_05/Med35/01T	
Break						
Clinical Work						4

Week 12/42

03

Time	Monday 05-05-2025	Tuesday 06-05-2025	Wednesday 07-05-2025	Thursday 08-05-2025	Friday 09-05-2025	Saturday 10-05-2025
Day	13	14	15	16	17	18
8:00 – 8:45	Carcinoma Stomach	Hiatal & Diaphragmatic Hernias	Surgical management of ulcerative colitis and crohn's disease	Management of sigmoid volvulus & diverticulitis	Holiday of War Emergency	
	Surg32/GIT30	Surg33/GIT29	Surg34/GIT31	Surg35/GIT42		
8:45 – 9:30	Neonatal intestinal obstruction.	Bleeding Per rectum in children.	Inflammatory Bowel Syndrome	Constipation		
	PedsSurg026/GIT19	Peds surg25/GIT28	Med36/GIT32	Med37/GIT37		
Break					*Lectures shifted to 23-05-2025 and 24-05-2025	
Clinical Work						5

Week 13/42

03

Time	Monday 12-05-2025	Tuesday 13-05-2025	Wednesday 14-05-2025	Thursday 15-05-2025	Friday 16-05-2025	Saturday 17-05-2025
Day	19	20	21	22	23	24
8:00 – 8:45	Management of Entero-cutaneous fistula	Bleeding per rectum (Hemorrhoids and fissure)	Orin Hernia- Management & Surgery	Carcinoma colon (work up & staging)	Carcinoma Rectum (workup & staging)	Multiple gestation
	Surg36/GIT43	Surg37/GIT44	Surg38/GIT49	Surg39/GIT52	Surg41/GIT51	Obs&Gyn/27/GIT
8:45 – 9:30	Somatoform Disorder	Diverticulitis	Management of Diaphragmatic Hernia	Carcinoma Colon (surgical Management)	Carcinoma Rectum (Surgical management)	Micronutrient Deficiencies (Nickel)IDA, Vitamin A Deficiency, Iodine Deficiency
	Psy07/Med39/GIT	Med39/GIT41	PedsSurg GIT49	Surg40/GIT50	Surg42/GIT53	Pediatrics /GIT48
Break						
Clinical Work						6

Week 14/42

03

Time	Monday 19-05-2025	Tuesday 20-05-2025	Wednesday 21-05-2025	Thursday 22-05-2025	Friday 23-05-2025	Saturday 24-05-2025
Day	25	26	27	28		
8:00 – 8:45	Role of chemo-radiotherapy in management of Colorectal Cancer Oncological Aspects of Surgery	Rectal Prolapse- Surgical Management	Acute appendicitis	Perianal fistula and sinuses	Malignant disease of ovary	Diseases of valve
	Surg43/GIT34	Surg44/GIT35	Surg45/GIT36	Surg46/GIT37	Obs&Gyn/25/GIT	Obs&Gyn/26/GIT
8:45 – 9:30	GERD	Congenital GI defects (pediatrics surgery)	Dysphagia	Operative Surgery for Diaphragmatic Hernias	Acute Diarrhoea & Dehydration (GIT)	Generalized anxiety disorders
	Med30/GIT41	PedsSurg/GIT50	Med31/GIT	Ped. Surg. GIT49	Pediatrics /GIT	PSY06/Med38/GIT
Break					*Lectures shifted from 09-05-2025 and 10-05-2025	
Clinical Work						7

Week 15/42

03

Time	Monday 26-05-2025	Tuesday 27-05-2025	Wednesday 28-05-2025	Thursday 29-05-2025	Friday 30-05-2025	Saturday 31-05-2025
Day	25	26	27	28		
8:00 – 8:45	End of 3rd Module					
8:45 – 9:30						
Break						
Clinical Work						8

MODULE NO 4 FINAL YEAR MBBS 2026

CNS/RESPIRATORY & HAEMATOLOGY ONCOLOGY

	General Surgery	Student Notes
Target Students	Final year	
Duration	Lectures: 05	
Outcomes	To acquire appropriate knowledge, skills and attitude in relation to topics	
Assessments	MCQs, OSPE, Case presentation	

LEARNING OBJECTIVES

PRINCIPLES OF ONCOLOGY

- To understand the etiology and biological nature of cancer
- To learn the principles of cancer prevention, early detection and screening
- To learn the principles of surgical and non surgical treatment of cancer
- To know the multidisciplinary management of cancer
- To understand the distinction between palliative care and end of life care

SOFT TISSUE SARCOMA

- To understand the distinct nature of soft tissue sarcomas
- To learn the principles of detection, biopsy and staging of sarcomas.
- To learn the role of limb sparing vs amputation in extremity sarcomas
- To understand the non surgical management of irresectable tumors

VENOUS THROMBOEMBOLISM

- To understand the Virchow's Triad of DVT
- To know the signs and symptoms to identify DVT
- To understand the high risk patients with DVT
- To learn different ways of prophylaxis and treatment options for DVT and its complications

SURGICAL MANAGEMENT OF CAROTID STENOSIS

- To understand the different scenarios and clinical presentation of carotid artery stenosis
- To learn about different diagnostic modalities for diagnosis.
- To understand medical and surgical options for management.
- To understand a brief overview of Carotid body tumors

LYMPHOMA

- To understand the nature and etiology of lymphoma

- To understand the difference between Hodgkin and Non Hodgkin lymphoma
- To know the role of surgery in diagnosis of lymphoma
- To learn different diagnostic and staging modalities for lymphoma
- To understand the role of chemotherapy and radiotherapy in management.



CNS/ Respiratory & HaemOnc (Intermodule 1)

4

Time duration: 3 weeks (weeks 15 – 18)

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30
31	32	33	34	35
36	37	38	39	40
41	42	43	44	45
46	47	48	49	50
51	52			

Starting Date: 26-05-2025

Medicine	Surgery	Peds	Gyne
21	08	04	-



Week 15/42

04

Time	Monday 26-05-2025	Tuesday 27-05-2025	Wednesday 28-05-2025	Thursday 29-05-2025	Friday 30-05-2025	Saturday 31-05-2025
Day	1	2		3	4	5
8:00 – 8:45	Epilepsy	Movement disorders and gait. Parkinsonism	Holiday of Youm-e-Takbir	Soft tissue sarcoma	Bronchial Asthma	Smoking and Lungc
	CNS01/nn049/nn01	CNS02/nn051/nn03		Surg047/nn22	Pulm02/nn055/nn07	Pulm01/nn054/nn06
8:45 – 9:30	Acute myeloid leukaemia (AML)	Acute lymphoblastic leukaemia (ALL)		Approach to Patient with Headache	Pneumothorax	Respiratory Infections in Children (Bronchiolitis, Pneumonia, Croup)
	Haem01/nn050/nn02	Haem02/nn052/nn04		CNS09/nn070/nn22	Chest surgery 01/13	Pediatrics/05
			* Lecture Shifted to 05-06-2025			
Clinical Work			Final Year MBBS Curriculum / Time Table			Page 2-7



Week 16/42

04

Time	Monday 02-06-2025	Tuesday 03-06-2025	Wednesday 04-06-2025	Thursday 05-06-2025	Friday 06-06-2025	Saturday 07-06-2025
Day	6	7	8	9		
8:00 – 8:45	MND and other anterior Horn Cell disorder	Lymphoma	Chronic Obstructive Pulmonary Disease (COPD)	* Demyelinating disorder, Multiple Sclerosis/ADEM	Eid- ul-Adha Holidays (06-06-2025 to 09-06-2025)	
	CNS04/IN037/IN032	/Surg049	Pulm03/IN056/IN08	CNS03/IN033/IN05		
8:45 – 9:30	Chronic lymphocytic leukemia (CLL)	Chronic myelogenous leukemia (CML)	Interstitial Lung Disease	*Cerebral Palsy & Mental Retardation		
	HaeM04/IN060/IN02	HaeM03/IN058/IN01	Pulm04/IN063/IN05	Pediatrics/04		
				* Lecture Shifted from 28-05-2025		
Clinical Work						
			Final Year MBBS Curriculum / Time Table			Page 3-7



Week 17/42

04

Time	Monday 09-06-2025					
Day						
8:00 – 8:45	Eid- ul- Adha Holidays (06-06-2025 to 09-06- 2025)	Summer Vacations From 10-06-2025 to 09-07-2025 (Notification from Registrar Office, No. 1564/REG dated 02-06-2025)				
8:45 – 9:30						
Clinical Work						



Week 17/42

04

Time	Monday 07-07-2025	Tuesday 08-07-2024	Wednesday 09-07-2025	Thursday 10-07-2025	Friday 11-07-2025	Saturday 12-07-2025
Day				10	11	12
8:00 – 8:45	<p style="text-align: center;">Summer Vacations From 10-06-2025 to 09-07-2025</p> <p style="text-align: center;">(Notification from Registrar Office, No. 1564/REG dated 02-06-2025)</p>			Principles of oncology & Operative Surgery	Bronchogenic carcinoma	Peripheral nerve disease and Polyneuropathy GGS/CIP GGS
				Surg030	Pulm03/NO63/NO17	CNS03/NO30/NO11
8:45 – 9:30				Chest Trauma & Thoracotomies	Febrile fits & Epilepsy	Plasma Cell Dyscrasias
				Chest surgery 02/13	Pediatrics/006/NO14	Haem03/NO62/NO4
Clinical Work						
				Final Year MBBS Curriculum / Time Table		Page 3-7



Week 18/42

04

Time	Monday 14-07-2025	Tuesday 15-07-2025	Wednesday 16-07-2025	Thursday 17-07-2025	Friday 18-07-2025	Saturday 19-07-2025
Day	13	14	15	16	17	18
8:00 – 8:45	Pulmonary vascular disease: Pulmonary HTN	Clinical features and Diagnosis of Ischemic Stroke/TIA	Occupational Lung Disease	Surgical Management of Carotids with stenosis	Inherited coagulation disorders: Haemophilia, Von Willebrand's disease (VWD).	Immune thrombocytopenic purpura (ITP), Thrombocytosis.
	Haem06/n066/n07	CNS07/n080/n019	Pulm06/n064/n016	Surg052	Haem08/n071/n09	Haem07/n060/n021
8:45 – 9:30	Management of Ischemic Stroke/TIA	Behaviour Problems (ADHD, Autism)	Neuromuscular junction disorder, Myopathies Myasthenia Gravis/Muscular Dystrophies.	Bleeding disorders in children	Mediastinal Masses Lobectomies & Lung Resections	Surgery Assessment
	CNS08/n090/n020	Pediatrics/007/	CNS06/n061/n019	Pediatrics/008	Chest surgery 3/13	Surgery
Clinical Work						



Week 18/42

04

Time	Monday 21-07-2025	Tuesday 22-07-2025	Wednesday 23-07-2025	Thursday 24-07-2025	Friday 25-07-2025	Saturday 26-07-2025
Day						
8:00 – 8:45	End of 4th Module					
8:45 – 9:30						
Clinical Work			Final Year MBBS Curriculum / Time Table			Page 7-7

MODULE NO. 5 FINAL YEAR MBBS 2026
ACUTE CARE AND TRAUMA

Title	General Surgery	Student Notes
Target Students	Final year	
Duration	Lectures: 11	
Outcomes	To acquire appropriate knowledge, skills and attitude in relation to topics	
Assessments	MCQs, OSPE, Case presentation	

LEARNING OBJECTIVES

PRINCIPLES OF DISASTER SURGERY AND TRIAGE

- An introduction to disasters, its types and associated common features
- To learn about factors influencing rescue and relief
- To understand the sequence of relief efforts and disaster management plan
- To understand TRIAGE and its role in treatment and evacuation
- To learn about the features of conditions peculiar to disasters and their management

PRIMARY AND SECONDARY SURVEY FOR TRAUMA VICTIMS

- An introduction to trauma and its mechanisms
- To learn about Trimodal distribution of death
- To understand Primary survey and the importance of A,B,C,D & E in Primary survey

- To learn and understand the Secondary survey and its importance

ACUTE ABDOMEN

- An introduction to acute abdomen and the relevant abdominal anatomy
- To learn about the pathophysiology of common causes of acute abdomen
- To understand the clinical presentation of patients with acute abdomen
- To learn about different diagnostic modalities in diagnosis
- To learn about the initial and definitive management of the patient with acute abdomen

ABDOMINAL INJURIES

- An introduction to abdominal trauma and the relevant abdominal anatomy
- To understand the different mechanisms of abdominal injuries
- To learn about the clinical presentations and the importance of initial assessment
- To learn about the diagnostic workup and the management
- To understand and learn about the damage control and the Deadly Triad

HEPATOBILIARY INJURIES

- An overview of hepatobiliary anatomy
- To learn about the grading of liver injury and the role of different diagnostic modalities
- To learn about the initial management and the surgical management of hepatobiliary injuries
- To learn about long term problems following hepatobiliary injuries and their management

SHOCK AND ITS MANAGEMENT

- An introduction to shock and its pathophysiology
- To learn about the types of shock
- To understand the presentation and management of different types of shock
- To understand the different parameters in monitoring of the patient with shock
- To learn about the stages of shock

MANAGEMENT OF INTESTINAL OBSTRUCTION

- To learn the definition, types and presentation of intestinal obstruction
- To understand the cardinal features of obstruction and strangulation
- To learn how to diagnose the different etiologies of intestinal obstruction
- To understand the expectant and surgical management
- To learn how to manage complications

MANAGEMENT OF APPENDICITIS AND ITS COMPLICATIONS

- An introduction to acute appendicitis, its etiology and pathophysiology
- To understand the role of history, examination and different diagnostic modalities in diagnosis of acute appendicitis
- To learn about the differential diagnosis of right iliac fossa pain
- To learn about the different complications
- To learn about the management of acute appendicitis and its complications

MANAGEMENT OF HOLLOW VISCUS PERFORATION

- An introduction to hollow viscus perforation and its pathophysiology
- To learn about the etiology and clinical presentation of patients with hollow viscus perforation
- To learn about the diagnostic modalities required for the diagnosis
- To understand the management principles of hollow viscus perforation

MANAGEMENT OF OBSTRUCTED HERNIAS

- An introduction to hernias and the relevant anatomy
- To learn about the risk factors of hernias
- To learn and understand different types of hernias and their clinical presentation
- To understand the role of history, examination and different diagnostic modalities
- To learn about the pre-operative measures and operative management of different hernias

GENITOURINARY INJURIES

- An introduction to anatomy of urinary system
- An overview of trauma to different parts of urinary system
- To learn about the vulnerability of retro-peritoneal versus intra-peritoneal parts of urinary system
- To learn about the urinary leakage and the anatomical basis of treatment
- To understand the management of genitourinary injuries

5

Acute Care & Trauma

Time duration : 5 weeks (weeks 15 – 19)

STARTING DATE:

21-07-2025

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30
31	32	33	34	35
36	37	38	39	40
41	42	43	44	45
46	47	48	49	50
51	52			

Medicine	Surgery	Peds	Gyne
18	29	04	08

Week 19/42

05

Time	Monday 21-07-2025	Tuesday 22-07-2025	Wednesday 23-07-2025	Thursday 24-07-2025	Friday 25-07-2025	Saturday 26-07-2025
Day	1	2	3	4	5	6
8:00 – 8:45	Principles of disaster Surgery	Airway & breathing with Thoracic injuries Resuscitation (Anesthesia)	Primary & Secondary Survey for trauma victims	Concept of Triage & pre-hospital preparedness/ Transfer	Ante-partum haemorrhage	Ectopic pregnancy
	Surg049	Anesthesia /S04	Surg030	Surgery031	Oba&Gyna/021	Oba&Gyn/022
8:45 – 9:30	Non-traumatic shock (Cardiogenic/ Neurogenic shock)	ABG's interpretation	Type I & II respiratory failure	Shock & Anaphylaxis	Disorders of milk	Common Neonatal Problems-1 (Prematurity, LBW Metabolic problems etc)
	Med/073	Med/072	Med/074	Pediatrics/017	Diem09	Pediatrics/018
Break						
Clinical Work						

Final Year MBBS Module 05

2

Week 20/42

05

Time	Monday 28-07-2025	Tuesday 29-07-2025	Wednesday 30-07-2025	Thursday 31-07-2025	Friday 01-08-2025	Saturday 02-08-2025
Day	7	8	9	10	11	12
8:00 – 8:45	Acute abdomen	Head injuries (Neurosurgery)	Cervical spine injuries and their management (Neurosurgery)	Burns-1 (Plastic Surgery)	Miscarriages	Gestational trophoblastic disease
	Surg02/	Neurosurgery 01/	neurosurgery02/	P.S_07	Obs&Gyn/023	Obs&Gyn/024
8:45 – 9:30	Sepsis/ Septic Shock	Neurological deficit & GCS	Trauma in paediatric	Acute abdomen	Class Assessment	Burns-2 (Plastic Surgery)
	Med/076	Med/077	Ped.surg01/	Ped.surg02	Pediatrics	P.S_08/
Break						
Clinical Work			Final Year MBBS Module 05			3

Week 21/42

05

Time	Monday 04-08-2025	Tuesday 05-08-2025	Wednesday 06-08-2025	Thursday 07-08-2025	Friday 08-08-2025	Saturday 09-08-2025
Day	13	14	15	16	17	18
8:00 – 8:45	Abdominal Injuries	Squamous Cell Carcinoma (Plastic Surgery)	Hepatobiliary injuries	Maxillofacial Trauma and its management (Oral and Maxillofacial)	Cephalic malpositions	Non-cephalic malpositions
	Surg2	P.S_08/	Surg3	Ornt-1	Obs&Gyn/025/	Obs&Gyn/026/
8:45 – 9:30	Acute Psychosis	Comatose Patient	Diabetes Mellitus. Hypoglycemia.	Diabetes Mellitus Emergencies HONC/DKA/ Hyperosmolar state	Common Neonatal Problems-I (Prematurity, LBW Metabolic problems etc)	Oncological Emergencies: Superior Vena Cave Syndrome. (Oncology)
	SPY-01	Med78	Med-79	Med/80	Pediatrics/018	Onc01
Break						
Clinical Work						
			Final Year MBBS Module 05			4

Week 22/42

05

Time	Monday 11-08-2025	Tuesday 12-08-2025	Wednesday 13-08-2025	Thursday 14-08-2025	Friday 15-08-2025	Saturday 16-08-2025
Day	19	20	21	22	23	24
8:00 – 8:45	Shock & its management Surg04/	Plastic and Reconstructive Surgery (Plastic Surgery) P.S/09	Management of Intestinal Obstruction Surg055/	14 August Holiday Jashn-e-Azadi	Holiday of Urs Hazrat Usman Ali Hajveri (RA)	Fetal distress, intra-uterine fetal demise & intra-uterine growth restriction Obs&Gyn/028
8:45 – 9:30	Management of Upper GI bleed Med/ Gc Med084/	Psychic Traumatic disorders PSY02	Acute respiratory distress syndrome (ARDS) Pulm 09/			Class Assessment Obs&Gyn
Break						*Lecture shifter to 26-08-2025
Clinical Work			Final Year MBBS Module 05			

Week 23/42

05

Time	Monday 18-08-2025	Tuesday 19-08-2025	Wednesday 20-08-2025	Thursday 21-08-2025	Friday 22-08-2025	Saturday 23-08-2025
Day	25	26	27	28	29	
8:00 – 8:45	Management of Obstructed Hernias	Pelvic Injuries	Genitourinary Injuries	Management of Appendicitis and its complications	Management of Hollow viscus perforation	Class Assessment
	Surg037/	Ortho-1	Surgery/38	Surgery/39	Surg60	Surgery 61
8:45 – 9:30	Tumour Lysis Syndrome. SIADH. (Oncology)	Acute Kidney Injury	Disorders of Hair	Basal Cell Carcinoma (Plastic Surgery)	Management of Lower GI Bleed Med/62	Extremity Trauma
	Onc02/	Neph02	Dermat10	P.S/10	Med083	Ortho-2
Break						
Clinical Work			Final Year MBBS Module 05			6

Week 24/42

05

Time	Monday 25-08-2025	Tuesday 26-08-2025	Wednesday 27-08-2025	Thursday 29-08-2025	Friday 30-08-2025	Saturday 31-08-2025				
Day	25	26	27	28	29					
8:00 – 8:45	Malignant Melanoma (Plastic Surgery)	Psoriasis	End of Module 5							
	P_S_11	Obst&Gyn/027/								
8:45 – 9:30	Class Assessment	Phobic disorder								
	Medicine	PSY03/								
Break		*Lecture shifter from 15-08-2025								
Clinical Work							Final Year MBBS Module 05			7

MODULE NO. 6 FINAL YEAR MBBS 2026

Hepatobiliary and Pancreas

Title	General Surgery	Student Notes
Target Students	Final year	
Duration	Lectures=18	
Objectives	To acquire appropriate knowledge, skills and attitude in relation to topics	
Assessment	MCQs, OSPE, Case presentation	

Learning Objectives :

1.Surgical Anatomy,physiology and investigation of HPB system:

- Anatomical Landmarks and Functional Anatomy of Liver.
- Detailed Knowledge of Functions of Liver.
- Relevant Investigations, Biochemical Testing, and Role of Imaging in diagnosis making of Hepatobiliary diseases.

2.Cystic Swellings of liver, vascular lesions:

- Cystic swellings of liver: Causes, Presentation, Diagnosis and Treatment Options.

3.Tumors of Liver and Transplant:

- Classification of Liver Tumors.
- Principles and Indications of Liver Transplantation
- Types of rejection and Problems encountered in Post operative period of Liver transplantation.

4.Diseases of Extrahepatic biliary channels:

- Anatomy of Extrahepatic Biliary Apparatus
- Commonly encountered Extrahepatic Biliary diseases.

5.Gall Stones:

- Stepwise approach in the management of Gall stone Diseases.
- Indications and Procedure details of Laparoscopic Cholecystectomy.

6.Gall Bladder Cancer:

- Recognition and management of Gall bladder Cancer.
- Resection options and palliative techniques for Gall bladder Cancer.

7.Cholangiocarcinoma:

- Classification of CholangioCarcinoma and Management options

8.Pancreatitis and complications:

- Anatomy and Physiology of Pancreas.
- Acute and Chronic Pancreatitis and Severity Scoring.
- Management of Pancreatitis and its Local and Systemic Complications.
- Incidence, Pathophysiology and Diagnosis of Carcinoma Pancreas. Treatment options according to the stage of the disease.

6

HEPATOBIILIARY & PANCREAS

Time duration : 4 weeks (weeks)

**Starting Date:
(27-08-2025)**

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30
31	32	33	34	35
36	37	38	39	40
41	42	43	44	45
46	47	48	49	50
51	52			

Medicine	Surgery	Peds	Gynae
15	17	05	10

Week 24/42

06

Time	Monday	Tuesday	Wednesday 27-08-2025	Thursday 28-08-2025	Friday 29-08-2025	Saturday 30-08-2025
Day			1	2	3	4
8:00 – 8:45	END OF MODULE 5		Surgical anatomy Clinical Physiology & investigation of Hepatobiliary system	Carcinoma Gall Bladder (Surgery)	Jaundice in pregnancy and its management / obstetric cholestasis	Preterm labour
			Surg114/HPB01	Surg115/HPB13	Obs&Gyn/047/H PB11	Obs&Gyn/048/HPB 11
8:45 – 9:30			Acute hepatitis	Surgical Care of Jaundice in Children	Clinical Physiology of Hepatobiliary System	Approach to patient with Jaundice
			Med125/HPB08	Peds Surgery HPB36	Pediatrics/114/H PB12	Med126/HPB07
Break						
Clinical Work						

Week 25/42

06

Time	Monday 01-09-2025	Tuesday 02-09-2025	Wednesday 03-09-2025	Thursday 04-09-2025	Friday 05-09-2025	Saturday 06-09-2025
Day	5	6	7	8	9	10
8:00 – 8:45	Management of Gall stone disease	Diseases of extrahepatic biliary apparatus (CBD stones choledochal Cyst)	Cholangio-carcinoma	Surgical causes of Jaundice/ Obstructive Jaundice	Amniotic fluid and its abnormalities	Eid Milled un-Nabi
	Surg116/HP826	Surg117/HP828	Surg118/HP832	Surg119/HP813	Obs&Gyn/049 /HP811	
8:45 – 9:30	Jaundice pre & post hepatic jaundice	Complications & Management of pre & post hepatic jaundice	Portal hypertension 1	Portal hypertension 2 & Hepatic encephalopathy	Prolonged Pregnancy	
	Med127/HP807	Med128/HP827	Med129/HP829	Med130/HP829	Obs&Gyn/31/ HP811	
Break						
Clinical Work						

Week 26/42

06

Time	Monday 08-09-2025	Tuesday 09-09-2025	Wednesday 10-09-2025	Thursday 11-09-2025	Friday 12-09-2025	Saturday 13-09-2025
Day	11	12	13	14	15	16
8:00 – 8:45	Portocaval Shunts	Acute pancreatitis	Complications & management of acute pancreatitis	Chronic pancreatitis	Medical Disorders in Pregnancy , Renal diseases and Autoimmune disorders	Fetomaternal blood group incompatibility
	Surg120/HP844	Surg121/HP838	Surg122/HP840	Surg123/HP841	Obs&Gyn/050/HP811	Obs&Gyn/052/HP833
8:45 – 9:30	NAFLD	Wilson/haemochromatosis/ Autoimmune hepatitis	Chronic hepatitis B & D	Chronic hepatitis C	Common childhood malignancies	Imaging techniques for hepatobiliary system/ Abdomen-1 (Radiology)
	Med131/HP831	Med132/HP837	Med133/HP813	Med134/HP817	Pediatrics/034/HP824	RAD129/HP806
Break						
Clinical Work						

Week 27/42

06

	Monday 15-09-2025	Tuesday 16-09-2025	Wednesday 17-09-2025	Thursday 18-09-2025	Friday 19-09-2025	Saturday 20-09-2025
Day	17	18	19	20	21	22
8:00 – 8:45	Management of complications of Hepatobiliary Surgery	Cystic swelling of Liver and their management cysts/ abscess/ vascular lesions	CA pancreas	Procedures for pancreatic mass and palliation	Recurrent miscarriages	Induction and augmentation of labour
	Surg124/HP843	Surg125/HP830	Surg126/HP804	Surg127/HP820	Obs&Gyn/053/HP835	Obs&Gyn/053/HP835
8:45 – 9:30	Liver Abscess	Malnutrition	Acute Liver Disease/Fulminant Hepatic Failure	Hemolytic anemias in children (Thalassemia)	Hepatocellular Carcinoma	Neonatology
	Med135/HP802	Pediatrics	Med136/HP803	Pediatrics/028/HP805	Medicine	Obs&Gyn/054/HP835
Break						
Clinical Work						

Week 28/42

06

Time	Monday 22-09-2025	Tuesday 23-09-2025	Wednesday 24-09-2025	Thursday 25-09-2025	Friday	Saturday
Day	23	24	25	26	End of Module of 6th	
8:00 – 8:45	Medicine Class Test	Benign and malignant tumours of liver (Perioperative care/resections) Liver resections & Transplantation	Surgery Class Assessment	Gynaecological infections of upper and lower genital tract		
	Med137/HPB19	Surg128/HPB46	Surgery	Obs&Gyn/034/HPB33		
8:45 – 9:30	Gynecology Class Assessment	Imaging techniques for hepatobiliary system/ Abdomen-2 (Radiology)	Neonatal Cholestasis	Pediatric Class Test		
	Gynecology	RAD129/HPB06	Pediatrics/033/HPB22	Pediatrics/116/HPB36		
Break						
Clinical Work						

MODULE NO. 7 FINAL YEAR MBBS 2026

Endocrine and Breast Disease

Titles	General Surgery	Student Notes
Target Students	Final year	
Duration	Lectures=16	
Outcomes	To acquire appropriate knowledge, skills and attitude in relation to topics	
Assessment	MCQs, OSPE, Case presentation	

LEARNING OBJECTIVES

1.Breast:

- To understand appropriate investigations of breast disease.
- To know aberrations of normal development and involution(ANDI).
- To know types and management of cancer.
- To be able to understand modern management of breast cancer.

2. Thyroid Gland:

To understand the development and anatomy of the thyroid gland

- To know the physiology and investigation of thyroid function
- To be able to select appropriate investigations for thyroid swellings
- To know when to operate on a thyroid swelling.
- To describe thyroidectomy
- To know the risks and complications of thyroid surgery

3.The parathyroid glands

To understand:

- The anatomy of the parathyroid glands
- The physiology of calcium regulation
- The underlying causes of hypercalcemia and appropriate emergency management
- The etiology, presentation, investigation and management of primary hyperparathyroidism and associated special cases.
- The etiology, presentation, investigation, and management of secondary and tertiary hyperparathyroidism
- The etiology and management of parathyroid carcinoma

4. Adrenal gland •

- To understand the investigation and diagnosis of disorders of the adrenal gland
- To know of the principles and postoperative management of adrenalectomy
- Pancreatic endocrine disorders and gastrointestinal neuro-endocrine tumours (GI-NETs)
- To understand the investigation and diagnosis of pancreatic endocrine tumours/GI-NETs
- To know the principles of management of pancreatic endocrine tumours/GI-NETs, including surgery
- To understand the immediate and long-term care after surgery
- Multiple endocrine neoplasia (MEN syndromes)
- To understand the genetics and various presentations of patients with MEN
- To be able to manage patients with MEN disorders and familial medullary thyroid cancer To understand the principles of surgery and postoperative management of patients with MEN

5. Metabolic syndrome and bariatric surgery

To know and understand:

- How to treat obesity as a disease
- Rationale for surgery and the concept of metabolic surgery
- Eligibility and NICE guidelines
- Multidisciplinary assessment and multimodal treatment The common operations and how they work
- How to assess and treat perioperative complications
- Follow-up, nutritional supplements and biochemical monitoring

6.Pancreas

To understand:

- The anatomy and physiology of the pancreas
- Investigations of the pancreas
- Assessment and management of pancreatitis
- Diagnosis and treatment of pancreatic cancer
- Congenital abnormalities of the pancreas

7

Endocrine & Breast Disease

Time duration: 5 weeks (weeks)

**Starting Date:
(26-09-2025)**

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30
31	32	33	34	35
36	37	38	39	40
41	42	43	44	45
46	47	48	49	50
51	52			

Medicine	Surgery	Peds	Gyne
21	25	04	10

Week 28/42- Hypothalamus & Pituitary

07

Time	Monday 22-09-2025	Tuesday 23-09-2025	Wednesday 34-09-2025	Thursday 25-09-2025	Friday 26-09-2025	Saturday 27-09-2025
Day					1	2
8:00 – 8:45	END OF MODULE 6TH				Diabetes in pregnancy	Adolescence/ Normal and delayed Puberty and precocious puberty
					Obs&Gyn/038	Obs&Gyn/029
8:45 – 9:30					Over view of surgical skills for common endocrine problems	Cushing syndrome
					Peds surg/surg089	Med064
Break						
Clinical Work			Final Year MBBS Module 05			2

Week 29/42 – Thyroid Diseases

07

Time	Monday 29-09-2025	Tuesday 30-09-2025	Wednesday 01-10-2025	Thursday 02-10-2025	Friday 03-10-2025	Saturday 04-10-2025
Day	3	4	5	6	7	8
8:00 – 8:45	Functional & surgical anatomy of pituitary gland	Surgical management of pituitary lesions	Clinical workshop for thyroid nodule	Short stature.	Primary Amenorrhoea	Polycystic ovarian disease and related issues
	Neuro Surg/ 02	NeuroSurg_08/	Surg070/	Pediatrics/021/	Obs&Gyn/030	Obs&Gyn/031
8:45 – 9:30	Anterior pituitary. Prolactinoma, Acromegaly	Posterior Pituitary (Diabetes insipidus, SIADH)	Pathways for thyroid hormone synthesis and its functional anatomy, biological and medical aspects	Hyperthyroidism	Growth & Development (developmental delay, Down's syndrome)	Perioperative management of thyroid patients (Anaesthesia)
	Med061/	Med062/	Med065/	Med066/	Pediatrics/022	ANES_01
Break						
Clinical Work		Final Year MBBS Module 05				3

Week 30/42- Parathyroid & Adrenals

Time	Monday 06-10-2025	Tuesday 07-10-2025	Wednesday 08-10-2025	Thursday 09-10-2025	Friday 10-10-2025	Saturday 11-10-2025
Day	9	10	11	12	13	14
8:00 – 8:45	Thyroidectomy indications/ steps And complications	Surgery for Carcinoma Thyroid / Neck Dissections	Neuroendocrine tumors & Incidentaloma	Investigating parathyroid (surgical and endocrinological Aspects)	Secondary amenorrhoea	Contraception Principles, reversible and Permanent methods & emergency contraception
	Surg072/	Surg073	Surg075	Surg077/	Obs&Gyn/032	Obs&Gyn/033
8:45 – 9:30	Hypothyroidism	Workup for Carcinoma Thyroid Oncology	Parathyroid abnormalities/ disorders of calcium metabolism	Disorders of Calcium Metabolism. (Hyperparathyroid dism)	Endocrine problems in children : surgical aspect	Mood disorders- Major depressive episodes
	Med067	ONCO08/ Surg74	Med063/	Med068	Ped Surg/076	PSY04/Med071
Break						
Clinical Work						
		Final Year MBBS Module: 05				
						4

Week 31/42- Adrenals

07

Time	Monday 13-10-2025	Tuesday 14-10-2025	Wednesday 15-10-2025	Thursday 16-10-2025	Friday 17-10-2025	Saturday 18-10-2025
Day	15	16	17	18	19	20
8:00 – 8:45	Surgical aspects of parathyroid management (hypo & hypercalcaemia)	Operative Surgery for Parathyroid and complication management	Surgery for Functional Adrenal Tumors (pheochromocytoma)	Surgery for adrenals (Perioperative considerations) (Anesthesia)	Infertility Causes of male and female infertility & Investigations of an infertile couple	Infertility Principles of management of an infertile couple
	Surg078	Surg079	Surg081	ANES_02	Obs&Gyn/034	Obs&Gyn/035
8:45 – 9:30	Disorders of Calcium Metabolism. (Hypoparathyroidism)	Sellar & Suprasellar lesions & their management	Adrenal Gland. Hypo functioning Medicine	Adrenal Gland. Hyperaldosteronism & Pheochromocytoma	Hypothyroidism/ and other endocrine problems	Mood disorders- Unipolar/ bipolar
	Med069	Neuro_Surg_05	Med070	Med072	Obs&Gyn/023/	PSY05/Med76
Break						
Clinical Work			Final Year MBBS Module 05			

Week 32/42 – Diabetes Mellitus

07

Time	Monday 20-10-2025	Tuesday 21-10-2025	Wednesday 22-10-2025	Thursday 23-10-2025	Friday 24-10-2025	Saturday 25-10-2025
Day	21	22	23	24	25	26
8:00 – 8:45	Workup for breast lump – Triple assessment	Benign conditions of breast -1 (Mastalgia & breast Mass)	Benign conditions of breast -2 (Mastalgia & breast Mass)	Investigations and Staging for breast carcinoma Surgical oncology	Endometriosis/ Adenomyosis	Menopause and HRT
	Surg082	Surg083	Surg084/	Surg085/	Obs&Gyn/036	Obs&Gyn/037
8:45 – 9:30	Multiple endocrine neoplasia (MEN) syndromes. Autoimmune polyendocrine syndrome (APS).	Diabetes Mellitus Overview. Definition, Diagnosis, Classification.	Diabetes Mellitus. Complications. (Microvascular) MEDICINE	Diabetes Mellitus. Complications. (Macrovascular) MEDICINE	Insulin Dependent Diabetes Mellitus (pediatrics)	Mood Disorders – Manic episodes/ atypical
	Med073/	Med074/	Med75/	Med77	Pediatrics/024/	PSY06/Med3-1/
Break						
Clinical Work		Final Year MBBS Module 05				

6

Week 33/42 – Diabetes Mellitus

07

Time	Monday 27-10-2025	Tuesday 28-10-2025	Wednesday 29-10-2025	Thursday 30-10-2025	Friday 31-10-2025	Saturday 01-11-2025
Day	27	28	29	30	31	
8:00 – 8:45	Breast Carcinoma (different surgical options & Clinical Oncology)	Surgery on Breast and complications	Surgery Test	Pancreatitis with Management of complications of pancreatitis	Obs & Gynae Test	Continue 8th Module
	Surg086	Surg087	Surgery	Surg088	Obs&Gyn	
8:45 – 9:30	Diabetes Mellitus. Management. Treatment of Type 1 and Type 2 DM.	Reproduction and Sex Disorders.	Medicine Test	Acute pancreatitis Medicine	Pediatrics Test	
	Med78/	Med80/	Medicine	Med79/	Pediatrics	
Break						
Clinical Work						
			Final Year MBBS Module 05			

7

MODULE NO. 8 FINAL YEAR MBBS 2026

Elective Orthopedics and Rheumatology

Title	Surgery	Student Notes
Target Students	Final Year	
Duration	Lectures=05	
Objectives	To acquire appropriate knowledge, skills and attitude in relation to topics	
Assessment	MCQs, OSPE, Case presentation	

Learning Objectives:

The purpose of this module is to enable students to have a better understanding of following topics:

1.Spine

- Clinical examination
- Spinal causes of backache
- Degenerative conditions of spine
- Cauda equina syndrome
- Tumors of spine
- Infections of spine
- Spine deformities
- Metabolic diseases affecting spine

2.Hip and Knee

- The anatomy and biomechanics of the hip and knee their clinical implications
- The clinical presentation, aetiology and management of common hip and knee pathologies
- The principles of joint replacement including important complications
- The advances in surgical practice in this field

3.Foot and Ankle

- The basic anatomy and biomechanics of the foot and ankle

- The common problems affecting the foot and ankle in each age group
- The principles behind the treatment of each condition, be it conservative or surgical
- The significance of progressive neurological diseases

4.Neck and Shoulder:

- The biomechanics of neck and shoulder joint
- Benign diseases affecting this region
- Common dislocations and their treatment
- Inflammatory conditions of shoulder joint

8

Elective orthopedics and Rheumatology

Time duration : 02 weeks (weeks 39-40)

Starting Date: 01-11-2025

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30
31	32	33	34	35
36	37	38	39	40
41	42	43	44	45
46	47	48	49	50
51	52			

Medicine	Surgery	Peeds	Gynae
11	08	02	00

Week 39/42

08

Time	Monday 27-10-2025	Tuesday 28-10-2025	Wednesday 29-10-2025	Thursday 30-10-2025	Friday 31-10-2025	Saturday 01-11-2025
Day						1
8:00 – 8:45	<h2>End of 7th Module</h2>					Hip & Knee
						Ortho_/Surp137 /Rhe01
08:45-9:30						SLE + Anti phospholipid syndrome
						Rhe_02/Med137 /Rhe02
Break						
Clinical Work						

Week 40/42

08

Time	Monday 03-11-2025	Tuesday 04-11-2025	Wednesday 05-11-2025	Thursday 06-11-2025	Friday 07-11-2025	Saturday 08-11-2025
Day	2	3	4	5	6	7
8:00 – 8:45	Foot & Ankle	Neck & shoulder	Hand Infections (Plastic Surgery)	Hand Surgery (Plastic Surgery)	Pediatric Orthopedics	Monoarthritis / Septic Arthritis
	Ortho_/Surg138/ Rhe03	Ortho_/Surg139/ Rhe05	P.S_08/Surg139 /Rhe07	P.S_09/Surg140 /Rhe09	Ortho_/Surg141 /Rhe11	Rhe_09/Med144 /Rhe13
08:45-9:30	Polymyositis/ Dermatomyositis	Common rheumatological disorders in Children.	Sjogren syndrome/MCTD	Seronegative arthritis	Vasculitis I	Vasculitis II
	Rhe_03/Med138 /Rhe04	Pediatrics/032 /Rhe05	Rhe_05/Med140 /Rhe08	Rhe_06/Med141 /Rhe10	Rhe_07/Med142 /Rhe12	Rhe_08/Med143 /Rhe14
Break						
Clinical Work						

Week 40/42

08

Time	Monday 10-11-2025	Tuesday 11-11-2025	Wednesday 12-11-2025	Thursday 13-11-2025	Friday 14-11-2025	Saturday 15-11-2025
Day	8	9	10	11		
8:00 – 8:45	Spine Orthopedics	Orthopedic Class Assessment	Paget's disease.	Paediatric Orthopaedic & Rheumatology problems (OCH, TEV, Reactive Arthritis, JA etc)	End of 8th Module	
	Ortho_/Surg136 /Rhe17	Ortho_/Surg137 /Rhe21	Rhe_10/Med146 /Rhe15	Ped.Surg_/Surg1 42/Rhe19		
08:45-9:30	Scleroderma	Rheumatoid arthritis	Child Abuse & Neglect	Rheumatology Class Assessment		
	Rhe_04/Med145/ Rhe16	Rhe_01/Med136 /Rhe18	Pediatrics/033 /Rhe20	Rhe_04/Med145 /Rhe22		
Break						
Clinical Work						

MODULE NO. 9 FINAL YEAR MBBS 2026

Renal Module

Title	Surgery	Duration
Target Students	Final year	
Duration	Lectures=10	
Objectives	To acquire appropriate knowledge, skills and attitude in relation to topics	
Assessment	MCQs, OSPE, Case presentation	

Learning Objectives:

The purpose of this module is to have students a basic understanding of following topics:

1.Urolothiasis and its management

- Type of renal stones
- Pathophysiology
- Involvement in systemic diseases
- Clinical signs and symptoms
- Investigations
- Treatment
 - Medical
 - Surgical

2.Stricture Urethra and its management:

- Etiology
- Traumatic strictures
- Infectious Strictures
- Pathological Strictures
- Signs and symptoms
- Treatment
- Follow up

3.Urogenital Trauma:

- Mechanism
- Signs according to area involved
- Most common scenarios
- Initial management
- Non surgical and Surgical Treatment

4.Renal Cell Carcinoma:

- Epidemiology
- Pathology
- Clinical signs and symptoms
- Investigations
- Management

5.Urinary Bladder tumor:

- Epidemiology
- Risk factors
- Signs and symptoms
- Investigations
- Treatment
- Systemic therapies

6.Renal Transplantation:

- Types of transplant
- History of renal transplant
- Indications of transplant
- Pre requisite
- Pre op preparation
- Brief overview of step by step approach of renal transplant
- Post op Complications
- Long term follow up

7.Urinary Tract Infections:

- Etiology
- Risk factors
- Causative organisms
- Signs and symptoms
- Complications
- Investigations
- Treatment

8.BPH and CA Prostate:

- Anatomy of prostate gland
- Incidence of BPH

- Signs and symptoms for BPH
- Medical and Surgical Management
- Incidence of CA Prostate
- Screening for CA Prostate
- When to suspect?
- Investigations
- Management
- Role of systemic therapies

9.Erectile Dysfunction:

- Definition
- Prevalence
- Causative factors
- Management

9

RENAL MODULE

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30
31	32	33	34	35
36	37	38	39	40
41	42	43	44	45
46	47	48	49	50
51	52			

Time Duration : 2 weeks (weeks 41 – 42)

Starting Date: 14-11-2025

Medicine	Surgery	Paeds	Gyne
09	12	03	02

Week 41/42

09

Time	Monday 10-11-2025	Tuesday 11-11-2025	Wednesday 12-11-2025	Thursday 13-11-2025	Friday 14-11-2025	Saturday 15-11-2025
Day					1	2
8:00 – 8:45	End of 8th Module				Urolithiasis and its management	Uterovaginal prolapse
					Uro_01/Surg 144/Ren01	Obs&Gyn/055/ Ren03
8:45 – 9:30					Symptoms and investigations of Renal and urinary tract diseases (Medical)	Glomerulonephritis (nephrology/ Medicine)
					Neph/Med147/ Ren02	Neph/Med148/ Ren04
Break						
Clinical Work						

Week 42/42

09

Time	Monday 17-11-2025	Tuesday 18-11-2025	Wednesday 19-11-2025	Thursday 20-11-2025	Friday 21-11-2025	Saturday 22-11-2025
Day	3	4	5	6	7	8
8:00 – 8:45	Acute Kidney Injury (AKI, ATN etc)	Kidney cell carcinoma diagnosis & management	Bladder Tumors diagnosis / Management	Congenital & pediatric problems with Genitourinary systems	Stricture urethra and its management	Urinary incontinence
	Pediatrics/034/ Ren05	Uro_03/Surg 146/Ren07	Uro_04/Surg147/ Ren09	Ped.Surg_09/ Surg148/Ren11	Uro_06/Surg150/ Ren13	Obs&Gyn/016/ Ren15
8:45 – 9:30	Urogenital Trauma	Chronic Kidney disease	Infections of Kidneys Tubulo-interstitial disease (nephrology/ Medicine)	Kidney transplantation	Common investigations and their interpretation for urinary tract (Radiology)	UTI
	Uro_02/Surg 145/Ren06	Neph /Med149/Ren08	Neph/Med150/ Ren10	Uro-05/Surg 149/Ren12	Rad 01/Surg151/ Ren14	Uro-07 Surg 152/ Ren16
Break						
Clinical Work						

Week 42/42

09

Time	Monday 24-11-2025	Tuesday 25-11-2025	Wednesday 26-11-2025	Thursday 27-11-2025	Friday 28-11-2025	Saturday 29-11-2025
Day	9	10	11	12	13	
8:00 – 8:45	SPH/CA prostate/diagnosis & management	Erectile dysfunction	Class Assessment (Urology)	Polycystic Kidney Disease	Congenital renal anomalies	End of Module 09
	Uro_08/Surg153/ Ren17	Uro_09/Surg154/ Ren19	Uro_10/Surg155/ Ren21	Neph /Med152/ Ren23	PedSURG/Surg156/ Ren25	
8:45 – 9:30	Nephrotic syndrome (pediatrics)	Renal Replacement Therapy	Chronic Kidney Disease in children	Palliative care in advanced genitourinary system Medicine/ Oncology	Class Assessment (Nephrology)	
	Pediatrics/095/ Ren18	Neph /Med151/ Ren20	Pediatrics/096/ Ren22	Med153/ Ren24	Neph /Med154 Ren26	
Break						
Clinical Work						

CURRICULUM MAP:

KEMU Curricular Map: A Competency-Based Framework

Final YEAR MBBS Modular Integrated Framework

Period	Block	Primary Modules	Horizontal Integration	Skill component	Vertical Integration	Spiral threads	
03 Feb – 18 Apr	Block 1	BASIC CONCEPTS FOR INFECTIONS/PERIOPERATIVE SURGICAL CARE/ HEMATOLOGIC DISORDERS (5 Weeks) End-of-module test	Shock Resuscitation Blood Transfusion Wound Management Liver And Hepatobiliary Anatomy Malignancies Surgical Management	<ul style="list-style-type: none"> • Clinical Rotation • Clinical ward • Elective OTs • Trauma Bay • Surgical ER 	Pathology Oncology Radiology Interactive Lecture SDL VENUE: 1.Jinnah Auditorium 2.Respective Wards	K-CORE: Ward orientation, hand hygiene, vitals, Scrubbing. Ward rotations Daily 10:30 to 2:30 K-PRISM: Clinical Judgement Decision making 1.5 Hr/Day Lecture in Jinnah Auditorium	
		HEPATOBILIARY & PANCREAS (4 Weeks) End-of-module test					
BLOCK ASSESSMENT – Written Component (SEQ +MCQ) and OSPE							
19 Apr – 25 May	Block 2	GASTROINTESTINAL TRACT (GIT) (6 Weeks) End-of-module test	Dysphagia Gastric Outlet Obstruction Gastric Carcinomas	<ul style="list-style-type: none"> • Clinical Rotation 	Pathology Oncology Radiology Psychiatry	K-CORE: History-taking, Abdominal exams, Fluid Management & Nutrition Assessment	

			PUD Motility Disorders Salivary Gland Pathologies	<ul style="list-style-type: none"> • Clinical ward • Elective OTs • Trauma Bay • Surgical ER 	Interactive Lecture SDL VENUE: 1.Jinnah Auditorium 2.Respective Wards	Ward rotations Daily 10:30 to 2:30 K-PRISM: Clinical Judgement Decision making 1.5 Hr/Day Lecture in Jinnah Auditorium	
BLOCK ASSESSMENT - Written Component (SEQ + MCQ) and OSPE							
26 May- 26 Aug	Block 3	CNS/ RESPIRATORY & HAEMODYNAMICS (INTERMODULE 1) (3 Weeks) End-of-module test	Lymphomas Venous thromboembolism Carotid Stenosis Soft Tissue Sarcomas Disaster Surgeries Acute Abdomen Abdominal Injuries	<ul style="list-style-type: none"> • Clinical Rotation • Clinical ward • Elective OTs • Trauma Bay • Surgical ER 	Pathology Oncology Radiology Interactive Lecture SDL VENUE: 1.Jinnah Auditorium 2.Respective Wards	K-CORE: CNS & Respiratory examination, Emergency response K-PRISM: Crisis Management, Teamwork,Multidisciplinary Care. 1.5 Hr/Day Lecture in Jinnah Auditorium	
		ACUTE CARE & TRAUMA (5 Weeks) End-of-module test					
27 Aug- 31 Oct	Block 4	CVS/ VASCULAR DISEASES (4 Weeks) End-of-module test ENDOCRINE & BREAST DISEASE (5 Weeks) End-of-module test	Cardiac Surgeries Valvular Disorders Acute limb Ischemia DVT Breast Pathologies Thyroid & Parathyroid Disorders Metabolic surgeries	<ul style="list-style-type: none"> • Clinical Rotation • Clinical ward • Elective OTs • Trauma Bay • Surgical ER 	Pathology Oncology Radiology Interactive Lecture SDL VENUE: 1.Jinnah Auditorium 2.Respective Wards	K-CORE: CVS exam, ECG interpretation Vascular Assessment, Thyroid and Breast exam. Ward rotations Daily 10:30 to 2:30 K-PRISM: Critical care, Decision making, MDT Approach 1.5 Hr/Day Lecture in Jinnah Auditorium	

01 Nov- 28 Nov	Block 5	ELECTIVE ORTHOPEDICS AND RHEUMATOLOGY (2 Weeks) End-of-module test RENAL MODULE (2 Weeks) End-of-module test	Spine Hip & Knee Metabolic Bone Disorders Nephrolithiasis Urinary Bladder Disorders Prostate Disorders	<ul style="list-style-type: none"> • Clinical Rotation • Clinical ward • Elective OTs • Trauma Bay • Surgical ER 	Pathology Oncology Radiology Interactive Lecture SDL VENUE: 1.Jinnah Auditorium 2.Respective Wards	K-CORE: Musculoskeletal Exam, Rehabilitation Principles, Fluid & Electrolyte management, Renal Exam Ward rotations Daily 10:30 to 2:30 K-PRISM: Disability Awareness, Long term patient Care, Counseling & Professionalism 1.5 Hr/Day Lecture in Jinnah Auditorium
BLOCK ASSESSMENT - Written Component (SEQ + MCQ) and OSPE						
December	Prep Leave 4 Weeks					
January	SUMMATIVE ASSESSMENT - Written component + Structured Viva					
Programme evaluation						

Contact hours

General Surgery

	LECTURES		ROTATION		CPC
	No.	Duration	Weeks	Hours per week	
1 st Year	07	01 hour	--	--	
3 rd Year	31	45 min	4	1.5 hr x 4 days = 9	
4 th Year	38	45 min	--	--	
Final Year	156	45 min	8	8hour x 6days = 48	72 hrs

Lectures: 232 hours

Rotations: 408

CPC: 72

Total contact hours: 712

1st, 3rd, 4th & Final Year

	LECTURES		ROTATION	
	No.	Duration	Weeks	Hours per week
Anaesthesia & Critical care	07	45 min	08	06x01
Orthopedic & Trauma	28	45 min	02	04x1.5
			02	Mentioned below
			08	06x01
Neurosurgery	08	45 min	--	--
Cardiac + Thoracic Surgery	06	45 min	--	--
Paeds Surgery	15	45 min	02	04x1.5
			02	Mentioned below

Plastic Surgery	16	45 min	02	Mentioned below
Urology	16	45 min	02	Mentioned below

Rotation hours for 4th year in one week

4 hours -2 days

1.5 hours -3 days

1 hour -1 day

Total hours in one week : 13.5 hours

Total hours for anaesthesia & critical care 55

Total hours for orthopedic & trauma 108

Total hours for remaining allied 131.5

Total duration for surgery & allied sciences 900 hours

OFFICE OF THE REGISTRAR
KING EDWARD MEDICAL UNIVERSITY
(FORMERLY KING EDWARD MEDICAL COLLEGE)
LAHORE PAKISTAN
Phone : +92-42-99213063, +92-42-99211145-50 Ext.103
Email : registrar@kemu.edu.pk
Website: www.kemu.edu.pk




ALTA PETE
No: 19667/REG/KEMU

Date: 16-10-2023

NOTIFICATION

A Student Advisory Committee for Curriculum Development comprising of the following elected representatives of each MBBS Class of this University is hereby notified / constituted at King Edward Medical University, Lahore.

1. Class Representatives of Final Year MBBS Class, KEMU, Lahore.
2. Class Representatives of 4th Year MBBS Class, KEMU, Lahore.
3. Class Representatives of 3rd Year MBBS Class, KEMU, Lahore.
4. Class Representatives of 2nd Year MBBS Class, KEMU, Lahore.
5. Class Representative of 1st Year MBBS Class, KEMU, Lahore.

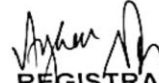

REGISTRAR
King Edward Medical University,
Lahore

NO: 19668-19674 /KEMU/2023

DATED: 16-10-2023.

A copy is forwarded for information and necessary action to the:

1. The Vice Chancellor, KEMU, Lahore.
2. The Pro-Vice Chancellor, KEMU, Lahore.
3. All the Deans, KEMU, Lahore.
4. The Chairman Curriculum Committee, KEMU, Lahore.
5. The Director Medical Education, KEMU, Lahore.
6. All the Assistant Registrars, KEMU, Lahore.
7. All Concerned.


REGISTRAR
King Edward Medical University,
Lahore

LEARNING RESOURCES

RECOMMENDED BOOKS:

- Bailey and Love Short Practice of Surgery 28 edition
- Washington Manual of Surgery
- Schwartz Principles of Surgery

ONLINE RESOURCES:

- Teachmesurgery.net
- NICE guidelines
- Online journals and articles

THE END