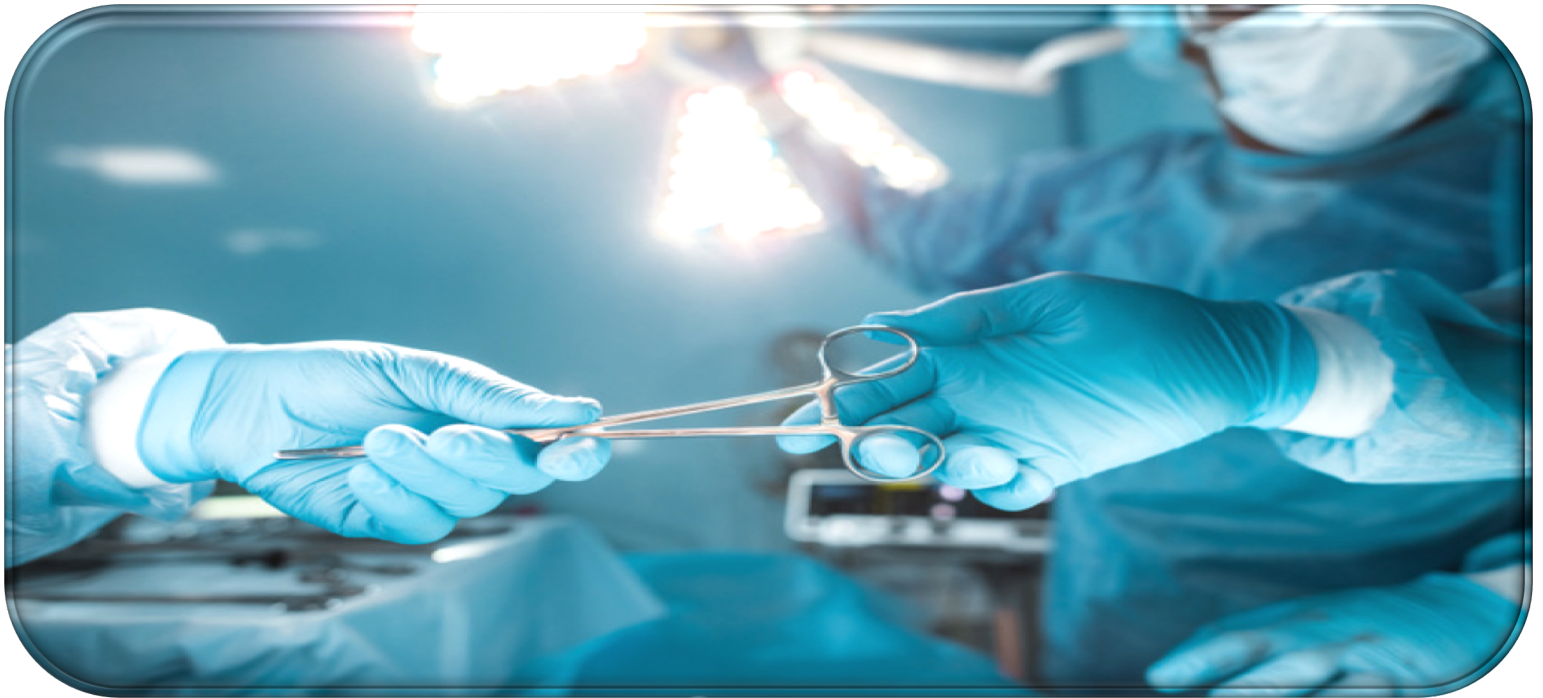


STUDY GUIDE FOR SURGERY AND ALLIED FOR MBBS STUDENTS



LAHORE MEDICAL AND DENTAL COLLEGE

STUDY GUIDE, Department of Surgery & Allied 2026

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LIST OF FACULTY MEMBERS OF GENERAL SURGERY

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MBBS, FCPS

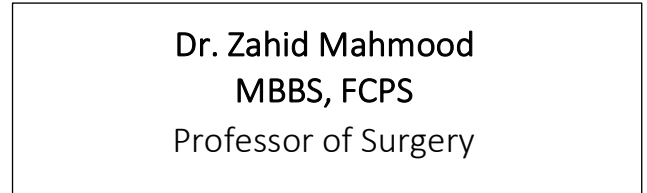
Professor and head department of
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Dr. Zahid Mahmood

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Dr. Shaukat Rabbani

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Anaesthesia



LIST OF FACULTY MEMBERS OF UROLOGY

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LIST OF FACULTY MEMBERS OF ORTHOPAEDICS



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MBBS, FCPS
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Dr. Rizwan Akram
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MBBS, FCPS
Prof. head of department of
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Dr.Wajeeha Andrabi
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LIST OF FACULTY MEMBERS OF RADIOLOGY



Prof. Fozia Umer Qureshi

Head of Department Obs/Gynae



Dr. Kiran Iqbal

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Dr. Saima Jabeen

Associate Professor Obs/Gynae

Dr. Sadia Ilyas

Assistant Professor Obs/Gynae



Dr. Naila Mairaj

Assistant Professor Obs/Gynae

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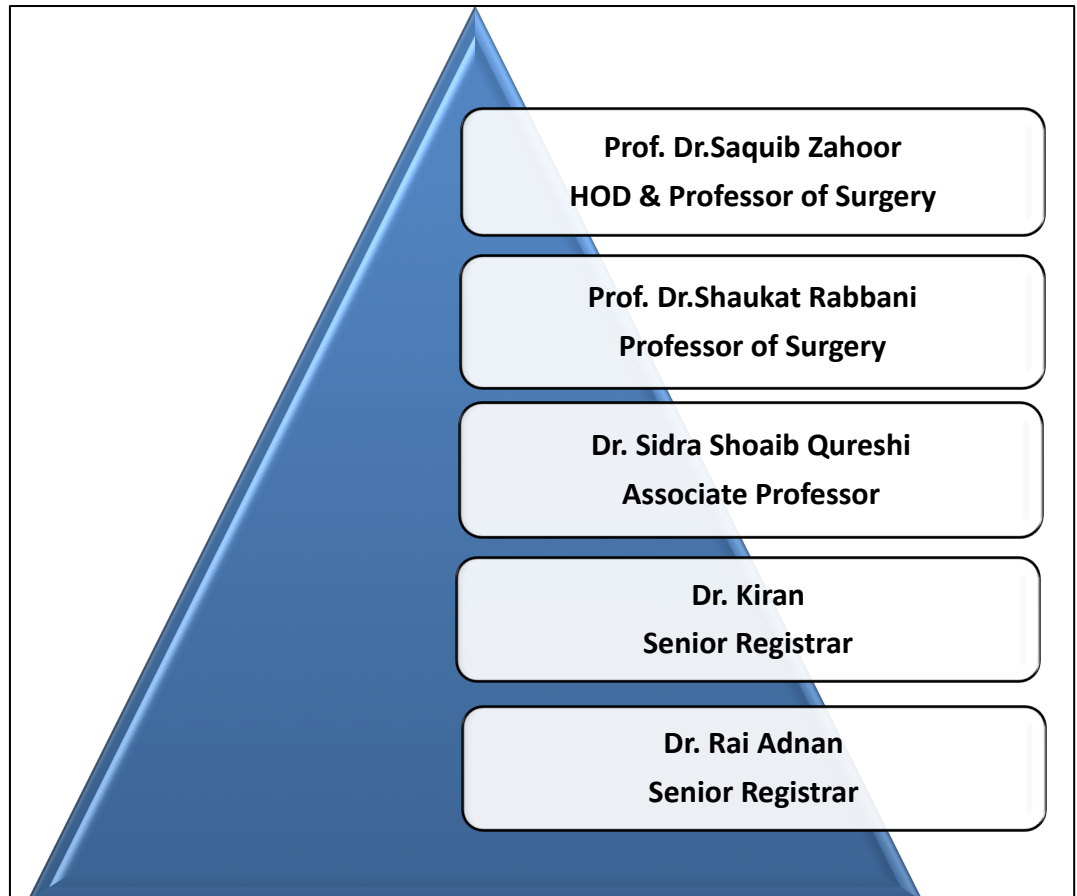
Dr. Shazia Zulfiqar

Assistant Professor Obs/Gynae

HIERARCHY PLAN

Head Of Department
Prof. Saquib Zahoor

SURGICAL UNIT 1



SURGICAL UNIT 2

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Professor of surgery

Dr. Ruh-ul ain
Assistant Professor

Dr.Zubair Fayyaz
Senior Registrar

Dr.Afza Saleem
Senior Registrar

Dr. Danish
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Head of Department

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Dr. Shahid Rasool Dar

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Dr. Waseem Younis

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Dr. Kashif Hussain

Senior Registrar

Head of Department

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RADIOLOGY

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Dr. Wajeeha Imran Andrabi
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Senior Registrar

Dr. Ali Rauf
Senior Registrar

Dr. Hamid Zulfiqar
Senior Registrar

Dr. Shayan R. Khawaja
Consultant Radiologist

Head of Department

Prof. Dr. Nauman Bashir

UROLOGY

Prof. Dr. Nauman Bashir
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Dr. Tahir Saleem Chaudhry
Senior Registrar

Head of Department

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Dr. Kiran Iqbal
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Assistant Professor

Dr. Nabiha Iqbal
Assistant Professor

Dr. Shazia Zulfiqar
Assistant Professor

INTRODUCTION

Medical education is a life-long process and MBBS curriculum is a part of the continuum of education from pre-medical education, MBBS, proceeding to house job, and post-graduation. PM&DC outlines the guiding principles for undergraduate medical curriculum and has defined the generic competencies and desired outcomes for a medical graduate to provide optimal health care, leading to better health outcomes for patients and societies. These generic competencies set the standards of care for all physicians and form a part of the identity of a doctor. Each competency describes a core ability of a competent physician. This study guide will give an insight to the students about all these competencies and how to plan their educational activities in the subject of surgery for the three years period.

TARGET AUDIENCE

1st, 2nd 3rd, 4th and 5th year MBBS students(MBBS)

DURATION OF COURSE surgery &allied

Three years (total 600 hours including specialties)

Total hours in 3rd year MBBS = 96 hours

A. LECTURES

28 LEC/36 WEEKS → 23 HOURS

B. CLINICAL WARD HOURS

Morning: 22 CLASSES/ BATCH → 50 HOURS

EVENING: 10 CLASSES/ BATCH → 23HOURS

Total hours in 4th year MBBS = 243 HOURS

A. LECTURES

2 Lecture/week/36 Weeks → 60 HOURS

B. CLINICAL WARD HOURS

Morning: 28 classes/7 Week: → 70 HOURS

EVENING: 4 hours /4 days/ week for 4 weeks → 64 HOURS

Anaesthesia Evening: 4 CLASSES/4 hrs per day/ 1 week → 16 HOURS

Critical Care Evening: 8 CLASSES/4 hrs per day/ 2 weeks → 32 HOURS

CPC → 1 HOUR

Total hours in General Surgery 5th year MBBS = 400 HOURS

A. LECTURES

4 Lecture/week/32 Weeks → 107 HOURS

B. CLINICAL WARD HOURS

Morning: 12 Weeks/Per batch/4 hrs per day → 192 HOURS

EVENING: 4 hours /4 days/ 5 classes per week for 5 weeks → 100 HOURS

C. CPC

1CPC /36 WEEKS → ~ 1HOUR

Total hours in Anaesthesia 5th year MBBS = 40 HOURS

A. LECTURES

8 Lecture/week/36 Weeks/50 min → 07 HOURS

B. CLINICAL WARD HOURS

Morning: 3 CLASSES/4 hrs per day/ 12 week → 12 HOURS

Evening: 5 CLASSES/4 hrs per day/ 1 week → 20 HOURS

C. CPC

1CPC /36 WEEKS → ~ 1HOUR

Total hours in Critical 5th year MBBS = 20 Hours

Evening : 5 CLASSES/ 1 week / Each class,4 hours /day → 20 Hours

Total hours in Orthopedics 5th year MBBS = 103 Hours

A. LECTURES

1 Lecture/week/36 Weeks/50 min → 30 HOURS

B. CLINICAL WARD HOURS

Morning: 3 classes/12 Weeks / 4 hrs per day → 12 HOURS

EVENING: 4 hours /4 days/ 5 classes per week for 3 weeks → 60 HOURS

C. CPC

1CPC /36 WEEKS → ~ 1HOUR

Total hours in Urology 5th year MBBS = 75 Hours

A. LECTURES

1 Lecture/week/36 Weeks/50 min → 30 HOURS

B. CLINICAL WARD HOURS

Morning: 6 classes/12 Weeks / 4 hrs per day → 24 HOURS

EVENING: 4 hours /4 days/ 5 classes per week for 1 week → 20 HOURS

C. CPC

1CPC /36 WEEKS → ~ 1HOUR

Duration of session

3rd year: March 2024- November 2024

4th year: April 2024- December 2024

5th year: February 2026 -- October 2024

LEARNING OUTCOMES (*knowledge, skills, attitude*)

By the end of this academic session the students should be able,

- 1) To acquire specific knowledge, essential skills and appropriate attitude towards the human body
- 2) To become problem solvers, dealing effectively with familiar and unfamiliar problems
- 3) To become lifelong learners
- 4) To direct their own learning and evaluate this activity
- 5) To be able to reason critically and make justifiable decisions regarding patient management
- 6) To practice evidence-based medicine
- 7) To always ensure patient safety
- 8) To ensure compliance with the legal system as it impacts health care and the PM&DC regulations.
- 9) To adopt a multidisciplinary approach for health promoting interventions
- 10) Medical graduates should be able to demonstrate professional values of self and professional accountability, honesty, probity, and ethics
- 11) Medical and dental graduates are expected to demonstrate exemplary professional conduct
- 12) To be able to understand the pathogenesis of specific diseases
- 13) To be able to take a focused history and identify the patient's risk factors related to the disease process
- 14) To be able to perform a physical examination on a patient, to diagnose specific surgical diseases and differentiate from other systems
- 15) To formulate a provisional diagnosis with justification, and the likely differential diagnoses
- 16) To be able to select appropriate biochemical investigations and interpret their reports to confirm the diagnosis
- 17) To be able to select specific radiological investigations for specific diseases
- 18) To be able to apply evidence-based surgical concepts for the surgical treatment of different diseases
- 19) To be able to describe the required surgical procedures for different diseases
- 20) List indications and advantages of modern techniques

Essential Skills to be acquired

1. Provide First Aid: Resuscitation (ABC) of polytrauma, CPR.
2. Collect samples of blood, urine, stool, sputum, pus swab etc.
3. Insert Naso-gastric tube, have observed chest intubation and paracentesis.
4. Do IV cannulation, have observed CV-line insertion and cut- down of veins.
5. Catheterize male and female patients.
6. Prepare the patient for and know the procedure of doing X-Ray chest, abdomen, KUB, bones, IVU, barium studies, ultrasound and other imaging investigations.
7. Principles of pre-operative preparations, sterilization/disinfection techniques.
8. Principles of wound care, skin suturing and suture removal, incision, tissue lumps, needle biopsies, aspiration of localized fluids, etc.
9. Have observed common surgical procedures, treatment of fracture/ dislocation and methods of general / local anaesthesia.
10. Apply bandage and splint/pop cast to the patient's limbs.
11. Have observed instillation of chemotherapy and principles of radiotherapy.

SYLLABUS

The course outline is as follows:

GENERAL SURGERY

Principles of Surgery

- Metabolic response to Surgical trauma and homeostasis
- Pathophysiology and Management of Shock
- Fluid, electrolyte and acid base balance
- Haemorrhage, coagulopathy and Blood/products Transfusion and its complications
- Nutrition of surgical patients
- Wounds, wound repair and its complications
- Investigation and treatment of common Infections and Parasitic Infestations of Surgical Importance including clinical therapeutics
- Gas Gangrene and Tetanus
- Special Infections related to surgery
- Tuberculosis
- Principles in the Management of common Skin and Soft Tissue Problems: Ulcers, abscesses, inflammations, cysts, sinuses & fistulae, swellings, embedded foreign Bodies, minor Injuries and benign and malignant conditions
- Principles of oncologic therapy and palliation
- Principles of organ transplantation and its ethics and implications
- Surgical Audit
- Surgical ethics

Trauma

- Pre-hospital care
- Triage
- Primary survey, ABCDE
- Primary Survey of Polytrauma patients with airway difficulty and circulatory instability
- External Haemorrhage
- Airway management
- Tension Pneumothorax
- Cardiac Tamponade

Head injuries

- Resuscitation
- Management of the Patient with Head Injury
- Management of an Unconscious patient due to Head Injury and Glasgow Coma Scale
- Skull fractures

- Intracranial pressure
- Intracranial hemorrhage
- Cervical spine injury
- Spinal cord trauma
- Blunt and Penetrating Injuries of chest and their Complications including haemothorax, pneumothorax, resuscitation, chest drains
- Principles of management of (blunt and penetrating), liver/spleen, pelvic and urogenital trauma
- Principles of management of fractures / dislocation
- Focused Abdominal Sonographic Assessment for trauma (FAST)
- Peripheral nerve Injuries
- Amputations

Lump/swelling

- Congenital
- Traumatic
- Inflammatory
- Neoplastic

Neck swelling

- Lymphadenopathy (Inflammatory), acute and chronic
- Chronic granulomatous
 - Neoplastic benign/malignant
 - Lymphatic leukemia
 - Autoimmune disorders
- Lipoma
- Neurofibroma
- Sebaceous cyst
- Sublingual dermoid
- Thyroglossal cyst
- Salivary Glands: calculi, enlargement (benign/malignant)
- Thyroid gland enlargement
- Branchial cysts, sinus or fistula
- Cystic hygroma
- Carotid artery tumor

Plastic and reconstructive surgery

- Principles of skin coverage
- Common benign and malignant skin lesions

- Burns, principles of management
- Cleft lip and palate
- Epispadias
- Hypospadias

Principles of Anaesthesia

- Pre-operative assessment of patients and pre-medication
- Local Anaesthesia
- Local Anaesthetic agents (Pharmacology)
- Regional Anaesthesia (Spinal and Epidural)
- Intravenous Anaesthetic agents
- Muscle Relaxants
- Inhalational Anaesthetic agents
- Complications of Anaesthesia
- Perioperative Management
- Recovery from Anaesthesia
- Pain Management and postoperative care
- ICU Monitoring

Neurosurgery

- Raised intracranial pressure/ hydrocephalus
- Introduction to intracranial infections
- Introduction to intracranial tumors
- Peripheral nerve Injuries

Paediatric surgery

- Pediatrics Tumors
- Neonatal surgical problems
- Tracheoesophageal malformations
- Pyloric stenosis
- Hirschsprung's disease
- Imperforate anus
- Intestinal obstruction
- Intussusception
- Foreign body (Aspirated or Ingested)

SYSTEMIC SURGERY

Head, face and neck

1. Developmental abnormalities of face, palate, lips.
2. Principles of management of head injuries and its complications.
3. Oral cavity including tongue.
4. Diseases of salivary glands (Inflammation, Calculus, Tumours)
5. Neck lumps including lymph nodes, thyroid and parathyroid

Breast

1. Diseases of the breast, nipple and areola
2. Benign and malignant tumours.

Chest wall & thorax

1. Blunt & penetrating injuries and their complications.
2. Lung abscess and empyema thoracis.
3. Tumors and cysts in the lungs.

Gastro Intestinal Tract

Diseases causing oesophageal obstruction.

Peptic ulcer disease & its complications.

Tumours of stomach.

conditions causing acute abdomen

Conditions causing chronic abdomen including malignant lesions of small and large bowel

Ano-rectal and peri-anal conditions requiring surgery.

Abdominal, Pelvic and Genital Trauma and Hernia

1. Principles in management of abdominal pelvic and urogenital trauma.
2. Inguinal/ Inguinoscrotal and femoral hernia.
3. Epigastric hernia/umbilical/ para-umbilical hernia.
4. Incisional hernia.

Liver

1. Trauma.
2. Obstructive jaundice.
3. Liver abscess.
4. Hydatid cyst.
5. Malignancy (Hepatoma & secondaries)

Gall Bladder

1. Acute and chronic cholecystitis.

2. Cholelithiasis and its complications.
3. Tumors

Pancreas

1. Acute, relapsing and chronic pancreatitis.
2. Pancreatic masses including cysts
3. Benign and malignant neoplasia.

Spleen

1. Trauma
2. Surgical aspects of spleen

Urinary Tract

1. Common congenital anomalies.
2. Infection & its sequelae.
3. Calculus disease and its sequelae.
4. Bladder lesions.
5. Enlarged prostate.
6. Urogenital trauma.
7. Neoplasms of kidney and urinary tract.

External Genitalia, Male and Female

1. Developmental abnormalities.
2. Common pelvic conditions

Scrotal and testicular lesions

1. Scrotal swelling.
2. Testicular swelling.

Skin & Soft Tissues

1. Common benign and malignant skin lesions.
2. Wounds/ulcers/abscesses/sinuses/fistulae.
3. Soft tissue lumps.

Vascular and Nerve Disorders

1. Vascular afflictions and limb ischaemia
2. Varicosities
3. Deep venous thrombosis.
4. Peripheral nerve injuries

Radiology

Orthopedics

Applied basic orthopaedics

Congenital and developmental diseases

Bone & joint infection

Metabolic bone disease

Neuro muscular disorders

Bone Tumors

Neck pain, low back pain

Arthritis

Soft Tissue Injury

Deformity

Fractures

LEARNING & TEACHING METHODOLOGIES FOR SURGERY AND ALLIED

- 1) Interactive Lectures
- 2) Tutorials
- 3) Case based learning (CBL)
- 4) Team based learning
- 5) Essential Skills to be learned in the skills lab
- 6) Power point presentations by students
- 7) Small group discussions
- 8) Teaching of surgical procedures in Operation theatres
- 9) Clinical ward rotations
- 10) Simulations
- 11) Ward rounds
- 12) CPC's – using modern audio-visual techniques, distant learning using electronic devices and current Information technology facilities
- 13) Journal Club meetings
- 14) Reflective writings
- 15) Self-directed learning is the most vital part to solve problematic cases, go through different learning resources and discuss with peers and the faculty to clarify difficult concepts

LEARNING RESOURCES

Recommended books

- 1) **Bailey and Love's Short Practice of Surgery**, 28th edition published in 2022 by CRC PressTaylor & Francis Group.
- 2) **General surgery** (lecture Notes Series) by Harold Ellis, Roy Calne, Chris Wastson
- 3) **Schwartz's Principles of Surgery** by F. Charles Brunicaudi, Dana K. Anderson, Timothy R. Billiar and David L. Dunn 11th edition 2019
- 4) **Current Surgical Practice:** by Norman L. Browse, Alan G. Johnson and Tom. Vol.6
- 5) **Browse's Introduction to symptoms and signs of surgical disease**, 6th edition published in 2021 CRC Press Taylor & Francis Group. Kevin G Burnand John Black, Steven A Corbett and William EG Thomas.
- 6) **Hamilton Bailey**. Demonstration of physical signs in clinical surgery
- 7) **Gynecology** by Ten Teachers
- 8) Online Journals and Reading Materials through HEC Digital Library Facility.

Technologies to be used for Learning

- 1) Textbooks are the most important part of student learning for this subject
- 2) Hands-on activities and practical sessions to enhance the learning.
- 3) Skills lab will be used for simulated learning of the basic skills related to the gastrointestinal system
- 4) Videos from different web portals to familiarize the students with the procedures and protocols.

- 5) Computer and Internet resources are essential to gather the latest information about a specific disease.

ASSESSMENT METHODOLOGY

3rd year

Formative

MBBS 3 rd Professional							
Block-7							
Subject	Written Exam			Oral/Practical/Clinical Exam			
	MCQ (1 mark)	SEQ (5 mark each)	Marks	OSPE /OSCE (8 marks each observed)	OSCE (10 marks each observed)	OSVE (14 marks each observed)	Marks
Pharmacology	30	05	55	03	-	01	38
Pathology	30	04	50	03	-	01	38
Family Medicine	-	-	-	-	-	-	-
Community Medicine	02	-	02	01	-	-	08
Surgery	05	-	05	01	-	-	08
Medicine	05	-	05	01	-	-	08
Forensic	13	01	18	01	-	01	22
Behavioral	02	-	02	-	-	-	-
Patient Safety	03	-	03	-	-	-	-
CFRC	-	-	-	01	-	-	08
PERLs + Expository	-	-	-	-	01	-	10
Total	90	10x5=50	140	11 stations x 08 = 88	01 stations x 10 = 10	03 stations x 14=42	140

MBBS 3rd Professional

Block-8

Subject	Written Exam			Oral/Practical/Clinical Exam			
	MCQ (1 mark)	SEQ (5 mark each)	Marks	OSPE /OSCE (8 marks each observed)	OSCE (10 marks each observed)	OSVE (14 marks each observed)	Marks
Pharmacology	12	02	22	03	-	01	38
Pathology	30	05	55	04	-	02	60
Family Medicine	-	-	-	-	-	-	-
Community Medicine	04	-	04	-	-	-	-
Surgery	15	01	20	01	-	-	08
Medicine	15	01	20	01	-	-	08
Forensic	10	01	15	01	-	-	08
Behavioral	02	-	02	-	-	-	-
Patient Safety	02	-	02	-	-	-	-
CFRC	-	-	-	01	-	-	08
PERLs + Expository	-	-	-	-	01	-	10
Total	90	10x5=50	140	11 stations x 08 = 88	01 stations x 10 = 10	03 stations x 14=42	140

MBBS 3rd Professional

Block-9

Subject	Written Exam			Oral/Practical/Clinical Exam			
	MCQ (1 mark)	SEQ (5 mark each)	Marks	OSPE /OSCE (8 marks each observed)	OSCE (10 marks each observed)	OSVE (14 marks each observed)	Marks
Pharmacology	09	02	19	02	-	01	30
Pathology	12	02	22	02	-	-	16
Family Medicine	05	-	05	-	-	-	-
Community Medicine	27	03	42	03	-	01	38
Surgery	10	01	15	-	-	-	-
Medicine	10	01	15	01	-	-	08
Forensic	15	01	20	02	-	01	30
Behavioral	02	-	02	-	-	-	-
Patient Safety	-	-	-	-	-	-	-
CFRC	-	-	-	01	-	-	08
PERLs + Expository	-	-	-	-	01	-	10
Total	90	10x5=50	140	11 stations x 08 = 88	01 stations x 10 = 10	03 stations x 14=42	140

5th year

SURGERY CLERKSHIP						
Theory			Clinical skills			Total Marks
Paper 1 MCQs	100 Marks	200 Marks	OSCE	10 stations x 5 marks= 50 marks	200 Marks	400 Marks
			OSVE	02 Stations x 10 marks= 20 marks		
Paper 2 MCQs	100 Marks		Short case	02 Short case x 30 marks = 60 marks		
			Long case	1 Long case x 70 marks = 70 marks		
Internal assessment (10%) Theory		50 marks	Internal assessment (10%) Practical		50 marks	100 Marks
Total=500 Marks						
Theory Examination Paper 1 time duration will be 1hr 45mins. Paper 2 time duration will be 1hr 45mins. Clinical Examination Time duration for each OSCE/OSVE station will be 06 minutes, short case will be 15 minutes and long case will be 30minutes.						
OBSTETRIC & GYNAECOLOGY CLERKSHIP						
Theory			Clinical skills			Total Marks
Obstetrics MCQs	60 Marks	120 Marks	OSCE	08 stations x 5 marks= 40 marks	120 Marks	240 Marks
			OSVE	02 Stations x 10 marks= 20 marks		
Gynaecology MCQs	60 Marks		Short case	2 Short case x 15 marks = 30 marks		
			Long case	1 Long case x 30 marks = 30 marks		
Internal assessment (10%) Theory		30 marks	Internal assessment (10%) Practical		30 marks	60 Marks
Total=300 Marks						
Theory Examination Obstetrics paper time duration will be 1hr 5min. Gynaecology paper time duration will be 1hr 5mins. Clinical Examination Time duration for each OSCE/OSVE station will be 06 minutes, short case will be 15 minutes and long case will be 30minutes.						

INTERNAL ASSESSMENT

It shall constitute 20% of the total assessment at the end of the academic year.

	Scoring Parameter	Weightage (percentage)
Theory 10 %	Attendance	75% attendance -1 % >85% attendance -2 %
	Block Exam	5 %
	Continuous assessment	3 %
Practical 10 %	Attendance	75% attendance -1 % >85% attendance -2 %
	Block Exam	5 %
	Clinical logbooks	3 %

ATTENDANCE REQUIREMENT FOR SURGERY AND ALLIED

- 1) Students are expected to attend all scheduled teaching sessions and examinations
- 2) Attendance in lectures, tutorials, and wards is mandatory. Absence from these sessions will make the students ineligible to sit the final summative assessment.
- 3) A minimum of 85 % attendance in the lectures and wards is mandatory to appear in the summative UHS examination
- 4) Attendance will be recorded through a log-in/log-out biometrics system
- 5) Absence due to illness must be certified appropriately by the General Physician

DEPARTMENTAL TIME TABLES

Vary according to blocks

ACADEMIC CALANDER

3RD YEAR MBBS

MODULE 12

GENERAL SURGERY			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 03	
		INTEGRATING DISCIPLINE	TOPIC
F2-S-001	Describe the basics of Wound Healing & tissue repair	Pathology	Wound Management
F2-S-002	Classify Burns & its management	Gen surgery	Burns
F2-S-003	Identify hemorrhage & shock in Trauma patient.	Emergency medicine	Shock & hemorrhage

CLINICAL ROTATIONS / COMMUNITY HEALTHCARE			
SURGERY			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 02	
		INTEGRATING DISCIPLINE	TOPIC
F2-S-004	Enlist Suture types & techniques	Surgical Emergency Integrate General Surgery	Basic Surgical Skills
F2-S-005	Classify Wound Dressings & its protocols		Wound Management

MODULE 16

SURGERY			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 01	
		INTEGRATING DISCIPLINE	TOPIC
N-S-001	Understand the principles of oncologic surgery, including when and how surgery is indicated during the treatment Identify role of surgery, techniques, indicators for curative and palliative surgery.	Surgery	Principles of oncologic surgery

MODULE 17

SURGERY			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 02	
		INTEGRATING DISCIPLINE	TOPIC
ID-S-001	Discuss the treatment of carbuncle, necrotizing fasciitis and gas gangrene	Integrate with Microbiology	Skin infections
ID-S-002	Discuss the signs symptoms diagnosis and surgical treatment of hydatid cyst and its differential diagnosis with amoebic liver abscess	Integrate with Medicine	GIT

MODULE 18

ORTHOPEDICS			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 14	
		INTEGRATING DISCIPLINE	TOPIC
MS2-Orth-001	Define the field of orthopedics and its significance.	Orthopedics	Introduction to Orthopedics
	Identify common orthopedic conditions and their impact.	Community Medicine	

MS2-Orth-002	Explain the classification of fractures using the AO system.	Orthopedics, Radiology	Fracture Classification and Healing
	Describe principles of fracture healing.		
	Differentiate between complete and incomplete fractures.		
MS2-Orth-003	Discuss pediatric fractures and their management.	Orthopedics, Pediatrics, Rehabilitation	Pediatric Fractures
	Explain Salter-Harris classification for growth plate injuries.		
MS2-Orth-004	Define osteoporotic fractures and their clinical features.	Orthopedics, Geriatrics, Endocrinology	Osteoporotic Fractures
	Identify common sites of osteoporotic fractures.		
	Discuss risk factors for osteoporosis.		
MS2-Orth-005	Define pathological fractures and differentiate from traumatic.	Orthopedics, Oncology, Radiology	Pathological Fractures
	Identify causes of pathological fractures.		
	Describe diagnostic approaches for pathological fractures.		
	Explain management options for pathological fractures.		
MS2-Orth-006	Classify sports injuries and their management.	Orthopedics, Sports Medicine, Physical Therapy	Sports Injuries
	Describe common sports injuries in upper and lower limbs.	Pathology, Sports Medicine	
	Discuss pathophysiology of muscle strains and ligament sprains.	Biomechanics, Orthopedics, Sports Medicine	
	Explain biomechanics of gait and malalignment injuries.	Physiology, Sports Medicine	
	Outline injury prevention strategies in sports.		
	Analyze rehabilitation processes for sports injuries.		

	Discuss use of assistive devices in rehabilitation.	Orthopedics, Physical Therapy	
	Explain psychological impact of sports injuries.	Psychology, Sports Medicine	
	Describe nutritional roles in recovery from sports injuries.	Nutrition, Sports Medicine	
	Understand surgical intervention in severe sports injuries.	Surgery, Orthopedics, Physical Therapy	
	Promote multidisciplinary approach in managing sports injuries.	Sports Medicine, Team Management	
MS2-Orth-007	Define genetic conditions: Achondroplasia and Marfan's Syndrome.	Orthopedics, Genetics, Surgery	Genetic Conditions in Orthopedics
	Describe clinical features of Achondroplasia.		
	Explain management of Marfan's Syndrome.		
MS2-Orth-008	Define scoliosis and its types.	Orthopedics, Rehabilitation	Bone and Joint Disorders
	Identify clinical features and screening methods for scoliosis.	Orthopedics, Pediatrics	
	Discuss treatment options for scoliosis.	Orthopedics, Rehabilitation	
	Recognize multidisciplinary approach in managing scoliosis.		
	Define Osteogenesis Imperfecta and its genetic basis.	Orthopedics, Genetics, Rehabilitation	
	Identify clinical features and types of Osteogeneses Imperfecta.	Orthopedics, Pediatrics	
	Discuss management strategies for Osteogenesis Imperfecta.	Orthopedics, Rehabilitation	
	Educate patients on Osteogenesis Imperfecta.	Orthopedics, Rehabilitation	

	Define Marfan's Syndrome and its genetic basis.	Orthopedics, Genetics, Surgery	
	Identify clinical manifestations of Marfan's Syndrome.	Orthopedics, Cardiology	
	Discuss management strategies for Marfan's Syndrome.	Orthopedics, Surgery	
	Promote patient education and support for Marfan's Syndrome.	Orthopedics, Rehabilitation	
SURGICAL TRAUMATOLOGY			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 12	
		INTEGRATING DISCIPLINE	TOPIC
MS2-Orth-009	Define ATLS and describe its relevance in trauma management.	Trauma Surgery, Surgery, Orthopedics	Introduction to Surgical Traumatology
MS2-Orth-010	Explain principles of trauma management and primary survey.	Trauma Surgery, Emergency Medicine	Introduction to Trauma Management & ATLS
	Describe types of injuries managed in traumatology.	General Surgery	
	Discuss multidisciplinary approach in trauma care.	Trauma Surgery, Surgery, Orthopedics	
	Identify key specialties in managing traumatic injuries.	Trauma Surgery, Surgery, Orthopedics	
MS2-Orth-011	Understand ATLS guidelines in primary survey (ABCDE).	Emergency Medicine, Trauma Surgery	Primary Survey and ATLS
	Recognize common causes of severe trauma.	Emergency Medicine, Trauma Surgery	
	Apply ATLS principles in conducting primary survey.	Emergency Medicine,	

		Trauma Surgery	
	Identify indications for rapid imaging in trauma assessment.	Radiology, Emergency Medicine	
MS2-Orth-012	Describe shock recognition and resuscitation measures.	Trauma Surgery, Critical Care	Shock Recognition and Management
MS2-Orth-013	Define Traumatic Brain Injury (TBI) and classify its severity.	Neurology, Neurosurgery	Traumatic Brain Injury (TBI)
	Describe pathophysiology of primary and secondary brain injury.	Neurosurgery, Pathology	
	Identify common causes of TBI.	Epidemiology, Emergency Medicine	
	Describe clinical features of TBI.	Neurology, Emergency Medicine	
	Explain importance of early imaging for TBI diagnosis.	Radiology, Neurology	
	Discuss ATLS role in TBI management.	Emergency Medicine, Trauma Surgery	
	Outline complications of TBI.	Neurology, Neurosurgery, Critical Care	
MS2-Orth-014	Define Neck and Spine Trauma and classify it.	Orthopedics, Neurosurgery, Trauma Surgery	Neck and Spine Trauma
	Recognize mechanisms of neck and spine trauma.	Epidemiology, Emergency Medicine	
	Describe anatomy of spine and spinal cord in trauma context.	Anatomy, Orthopedics, Neurosurgery	
	Identify clinical features of neck and spine trauma.	Neurology, Emergency Medicine, Neurosurgery	

	Understand importance of immobilization in spinal trauma.	Emergency Medicine, Orthopedics	
	Discuss role of imaging in spinal trauma diagnosis.	Radiology, Orthopedics, Neurosurgery	
	Recognize role of ATLS in spinal trauma management.	Emergency Medicine, Trauma Surgery	
	Outline complications of spine trauma.	Critical Care, Neurology, Rehabilitation	
MS2-Orth-015	Define Maxillofacial Trauma and its classification.	Oral & Maxillofacial Surgery, Plastic Surgery	Maxillofacial Trauma
	Identify causes of Maxillofacial Trauma.	Epidemiology, Emergency Medicine	
	Explain anatomy relevant to Maxillofacial Trauma.	Plastic Surgery, ENT	
	Recognize clinical features of facial trauma.	Surgery, Maxillofacial Surgery, ENT	
	Identify importance of airway management in facial trauma.	Emergency Medicine	
	Describe radiological investigations for facial fractures.	Radiology, Oral & Maxillofacial Surgery	
	Discuss complications of maxillofacial trauma.	Emergency Medicine, Plastic Surgery, ENT	
	Outline ATLS principles in maxillofacial trauma management.	Emergency Medicine, Trauma Surgery	
	Discuss surgical interventions for maxillofacial trauma.	Oral & Maxillofacial Surgery, Plastic Surgery	

	Discuss use of assistive devices in rehabilitation.	Orthopedics, Physical Therapy	
	Explain psychological impact of sports injuries.	Psychology, Sports Medicine	
	Describe nutritional roles in recovery from sports injuries.	Nutrition, Sports Medicine	
	Understand surgical intervention in severe sports injuries.	Surgery, Orthopedics, Physical Therapy	
	Promote multidisciplinary approach in managing sports injuries.	Sports Medicine, Team Management	
MS2-Orth-007	Define genetic conditions: Achondroplasia and Marfan's Syndrome.	Orthopedics, Genetics, Surgery	Genetic Conditions in Orthopedics
	Describe clinical features of Achondroplasia.		
	Explain management of Marfan's Syndrome.		
MS2-Orth-008	Define scoliosis and its types.	Orthopedics, Rehabilitation	Bone and Joint Disorders
	Identify clinical features and screening methods for scoliosis.	Orthopedics, Pediatrics	
	Discuss treatment options for scoliosis.	Orthopedics, Rehabilitation	
	Recognize multidisciplinary approach in managing scoliosis.		
	Define Osteogenesis Imperfecta and its genetic basis.	Orthopedics, Genetics, Rehabilitation	
	Identify clinical features and types of Osteogeneses Imperfecta.	Orthopedics, Pediatrics	
	Discuss management strategies for Osteogenesis Imperfecta.	Orthopedics, Rehabilitation	
	Educate patients on Osteogenesis Imperfecta.	Orthopedics, Rehabilitation	

	Define Marfan's Syndrome and its genetic basis.	Orthopedics, Genetics, Surgery	
	Identify clinical manifestations of Marfan's Syndrome.	Orthopedics, Cardiology	
	Discuss management strategies for Marfan's Syndrome.	Orthopedics, Surgery	
	Promote patient education and support for Marfan's Syndrome.	Orthopedics, Rehabilitation	
SURGICAL TRAUMATOLOGY			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 12	
		INTEGRATING DISCIPLINE	TOPIC
MS2-Orth-009	Define ATLS and describe its relevance in trauma management.	Trauma Surgery, Surgery, Orthopedics	Introduction to Surgical Traumatology
MS2-Orth-010	Explain principles of trauma management and primary survey.	Trauma Surgery, Emergency Medicine	Introduction to Trauma Management & ATLS
	Describe types of injuries managed in traumatology.	General Surgery	
	Discuss multidisciplinary approach in trauma care.	Trauma Surgery, Surgery, Orthopedics	
	Identify key specialties in managing traumatic injuries.	Trauma Surgery, Surgery, Orthopedics	
MS2-Orth-011	Understand ATLS guidelines in primary survey (ABCDE).	Emergency Medicine, Trauma Surgery	Primary Survey and ATLS
	Recognize common causes of severe trauma.	Emergency Medicine, Trauma Surgery	
	Apply ATLS principles in conducting primary survey.	Emergency Medicine,	

ORTHOPEDICS			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 22	
		INTEGRATING DISCIPLINE	TOPIC
MS2-Orth-018	Inspect normal gait and assess deviations such as limping, stiffness, or imbalance.	Orthopedics, Medicine	Physical Examination
	Assess muscle strength surrounding normally functioning limbs using standard grading techniques (e.g., Oxford scale).	Orthopedics, Physical Therapy	
	Assess joint stability through special tests (e.g., Lachman test for ACL integrity, McMurray test for meniscus tears).		
	Perform a compartment syndrome assessment (checking for swelling, pain, and vascular compromise).	Orthopedics, Traumatology	
	Assess vascular status (pulses, capillary refill) in cases of trauma or orthopedic injury.		
	Conduct a neurological examination of the upper and lower limbs to assess motor and sensory function.	Orthopedics, Neurology	
MS2-Orth-019	Demonstrate skills in performing a thorough assessment of extremity injuries, including physical examination techniques.	Clinical Skills, Orthopedics	Soft Tissue, Neurological, and Bony Extremity Injuries
	Provide first aid to a person with bone injury like common sprains, fractures and dislocations (immobilization of body part) resuscitation of injured patient.	Orthopedics, Emergency Medicine	

MS2-Orth-020	Demonstrate skills in assessing fractures through physical examination and appropriate imaging modalities, including X-rays and CT scans.	Clinical Skills, Radiology	Fractures
	Perform a fracture assessment and evaluate signs of potential fractures or dislocations (e.g., deformity, abnormal movement).	Orthopedics, Traumatology	
	Demonstrate skills in developing individualized treatment plans based on fracture type, patient factors, and healing principles.	Orthopedics, Patient Care	
	Demonstrate clinical skills in assessing and managing fractures in various locations, including the use of appropriate imaging studies.	Orthopedics, Radiology	
	Observe application of dressings, splints, plasters and other immobilization techniques in fracture patients in emergency	Orthopedics, Radiology	
	Observation of fracture reduction and fixation	Orthopedics, Radiology	
	Observation of internal and external fixation	Orthopedics, Radiology	
MS2-Orth-021	Assess and prioritize patients based on the severity of injuries.	Orthopedics, Emergency Medicine	Principles of Triage Surgery and Damage Control
	Implement damage control surgery techniques for orthopedic trauma.	Orthopedics, Trauma Surgery	
	Identify candidates for damage control surgery.		
	Stabilize fractures and manage soft tissue injuries in a timely manner.		
	Minimize the risk of complications and improve patient outcomes through damage control strategies.		
AFFECTIVE DOMAIN			
MS2-Orth-022	Recognize the indications for surgical intervention in the management of fractures, including fixation techniques and considerations for rehabilitation.	Orthopedics, Rehabilitation	Fractures

MS2-Orth-023	Educate patients on the principles of fracture healing and the importance of adherence to treatment protocols for optimal recovery.	Orthopedics, Patient Education	Fracture Healing and Principles of Treatment
MS2-Orth-024	Educate patients on the importance of follow-up and rehabilitation based on fracture location to optimize healing and functional recovery.	Orthopedics, Patient Education	Treatment by fracture location and region
	Collaborate with multidisciplinary teams to address unique challenges presented by fractures in specific regions (e.g., elderly patients with hip fractures).	Orthopedics, Geriatrics, Rehabilitation	
MS2-Orth-025	Coordinate with other specialties for comprehensive trauma care.	Orthopedics, Emergency Medicine, Anesthesiology	Principles of Triage Surgery and Damage Control
	Educate patients and families about the triage process and damage control strategies.	Orthopedics, Rehabilitation	
SURGICAL TRAUMATOLOGY			
General Principles of ATLS - ABCDE			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 12	
		INTEGRATING DISCIPLINE	TOPIC
MS2-S-001	Assess airway patency and clear airway obstructions. Apply cervical spine immobilization if necessary.	Surgery, Anesthesiology	General Principles of ATLS - ABCDE
	Inspect for chest movement, auscultate breath sounds, palpate for deformities.	Surgery	
	Assess pulse, control external bleeding, and assess perfusion. Initiate shock management if required.	Surgery, Cardiology	
	Assess level of consciousness using the Glasgow Coma Scale (GCS) and check pupil reaction.	Surgery, Neurology	
	Expose the patient to assess for hidden injuries and prevent hypothermia.	Surgery, Emergency Medicine	
	Conduct secondary survey - a head-to-toe examination, including history and detailed physical exam.	Surgery, Emergency Medicine	

SPECIAL EXAMINATIONS ACCORDING TO TYPE OF TRAUMA			
MS2-M-001	Use the Glasgow Coma Scale to assess consciousness in patients with head injuries.	Neurology	Traumatic Brain Injury (TBI)
MS2-Orth-026	Assess for tenderness and deformity along the cervical spine in trauma patients.	Orthopedics	Neck and Spine Trauma
MS2-M-002	Identify abnormal breath sounds during auscultation to detect potential injuries.	Pulmonology	Thoracic Trauma
MS2-S-002	Perform abdominal palpation to identify tenderness or rigidity indicating injury.	Surgery	Abdominal Trauma
MS2-S-003	Recognize signs of facial fractures or deformities during the examination.	Surgery	Maxillofacial Trauma
MS2-S-004	Conduct a quick neurovascular examination of the limbs to evaluate pulse and sensation.	Orthopedics	Extremity Trauma
MS2-S-005	Conduct a triage to prioritize patients in mass casualty situations.	General Surgery	Disaster Surgery

MODULE 20

GENERAL SURGERY/VASCULAR SURGERY			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 10	
		DISCIPLINE	TOPIC
	Discuss the Pathophysiology of Peripheral Vascular Diseases	Integrate with pathology	Peripheral Vascular

CV2-S-001	Identify key risk factors for peripheral vascular diseases		Diseases (PVD)
	Differentiate between the types of PVD, such as peripheral artery disease (PAD) and venous insufficiency.		
	Discuss the role of embolism and thrombosis in the etiology of acute limb ischemia		
	Describe the signs and symptoms of peripheral vascular diseases		
	Enlist the investigations required to diagnose peripheral vascular disease		
	Discuss the role of medical treatment and surgical interventions for management of peripheral vascular disease		
	Describe the complications of untreated peripheral vascular diseases		
	Differentiate between acute and chronic limb ischemia		
	Classify different types of gangrene		
	What are different dysfunctions of venous system?		
	Discuss the etiology and pathophysiology of varicose veins and venous ulcers		

CLINICAL ROTATIONS

CARDIOLOGY AND SURGERY

CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 10	
		DISCIPLINE	TOPIC

CV2-S-002	Perform examination of an ischemic limb	Surgery	Examination of peripheral vascular system
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MODULE 21

SURGERY			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 08	
		DISCIPLINE	TOPIC
Re2-S-001	Surgical approach to lung cancer resection, Complications of lung resection	Surgery	lung cancer resection
Re2-S-002	Management of Lung metastases		Lung Metastasis
Re2-S-003	Describe mechanism of tension pneumothorax (T.P.) Enlist the causes of T.P. Describe the clinical of features of tension pneumothorax (signs & symptoms) Outline the steps of treatment of T.P.		Tension Pneumothorax
Re2-S-004	Describe sucking chest wound. Describe the underlying respiratory physiological changes in flail chest. Describe steps of management of such wound.		Open Pneumothorax
Re2-S-005	Enlist the causes of thoracic trauma in Describe significance of RTA mortality. Enlist the causative factors for breathing difficulty in chest trauma patients. Review the different thoracic injuries. Enumerate the sources of probable bleeding in a chest trauma.		Thoracic Trauma

	Describe the initial management of a patient with chest trauma. Outline the management of thoracic injuries		
Re2-S-006	Define flail chest. Describe mechanism of respiratory sequel of flail chest. Describe the clinical features of flail chest. Describe treatment options in flail chest Define surgical emphysema. Enumerate the causes of surgical emphysema. Describe clinical features of Surgical emphysema Describe the steps of management of Surgical emphysema Enumerate complications.		Thoracic Trauma-II
Re2-S-007	Describe the clinical features of following respiratory complications: Atelectasis, pneumonia, pulmonary embolism Interpret the X ray findings of post-operative pneumonia Outline the treatment option of complications. Enlist the causes of diaphragmatic rupture Enumerate the clinical features Describe the x-ray/USG findings Describe the steps of management		Post Op Respiratory Complications
Re2-S-008	Define the pulmonary contusions Enumerate the clinical features Describe the steps of management Describe complications of pulmonary contusion.		Lungs Injuries

CLINICAL ROTATIONS / COMMUNITY HEALTHCARE

MEDICINE & SURGERY

CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 17	
		DISCIPLINE	TOPIC

Re2-S-009	Clinical Presentation, Management Strategies & Complications Students should be able to identify and differentiate between types of pneumothoraxes (primary, secondary, and tension pneumothorax) through clinical assessment and imaging techniques	Surgery (Thoracic)	Pneumothorax
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Re2-S-010	Management & Complications	Surgery (Thoracic)	Pulmonary embolism
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	>Should be able to perform risk assessments using validated scoring systems (e.g., Wells criteria) interpret imaging findings to differentiate pulmonary embolism from other respiratory conditions.		
Re2-S-011	ABCDE approach in trauma settings >Students should be able to assess and prioritize the management of thoracic trauma by identifying key injuries (such as pneumothorax, hemothorax, rib fractures, and flail chest)	Surgery (Thoracic)	Principles of management of trauma
Re2-S-012	Student should be able to demonstrate appropriate interventions (including airway management and fluid resuscitation)	Surgery (Thoracic)	Principles of management of trauma
Re2-S-013	Students should be able to identify the anatomical landmarks of the pediatric patient for pleural tap 2) perform the pleural tap procedure on simulation in skill lab 3) Counsel the attendants for the indication, procedure, and contraindication of the pleural tap.	Paeds (Thoracic)	Pleural Tap

MODULE 24

CMFH2-FM-006	Identify common urogenital symptoms in males and females.	Family Medicine/ Nephrology/ Urology	Urogenital Symptoms (Male and female)
	Enlist the common causes.		
	Outline baseline investigations to reach diagnosis.		
	Evaluate warning signs that require urgent referral.		
	Discuss the general principles of management of common urogenital conditions in primary care, including symptomatic treatment, infection control, and referral.		

MODULE 25

STOMACH AND DUODENUM

GIT2-S-028	Describe the causes of duodenal obstruction. Diagnose duodenal tumours based on clinical presentation. Outline the investigations to confirm diagnosis.	Surgery	Duodenal obstruction
GIT2-S-029	Describe the management of obesity as a surgical disease. Explain the rationale for bariatric and metabolic surgery. Outline the eligibility criteria and summarize NICE guidelines for bariatric surgery. Describe the multidisciplinary assessment and multimodal treatment required before surgery. Enumerate the types of bariatric surgical procedures. Identify and manage perioperative complications. Describe the follow-up plan, including nutritional supplementation and biochemical monitoring.	Surgery	Bariatric and metabolic surgery

SMALL & LARGE INTESTINE

GIT2-PS-051	List causes of congenital (atresia's, neonatal volvulus,, malrotation,) and acquired intestinal obstruction. Define intussusception. Classify types of intussusception and pathophysiology. Identify common age group and etiology. Enumerate the classical triad of symptoms. Enlist diagnostic methods. Discuss importance of early diagnosis and complications of non/delayed treatment. Outline treatment plan.	Pediatric Surgery	Intussusception and causes of intestinal obstruction in children
GIT2-PS-051a	Define acute appendicitis.	Pediatric Surgery	Appendicitis in children
	Identify clinical features and complications of delayed treatment. Outline the diagnostic investigations and initial management.		
GIT2-PS-051b	Define inguinal hernia and hydrocele. Classify them in children. Describe the pathophysiology of communicating and non-communicating hydrocele. Enumerate clinical features of hernia and hydrocele. Differentiate between two. Outline principles of management with referral for treatment to Pediatric Surgical Setting.	Pediatric Surgery	Hernia (inguinal & umbilical) and Hydrocoele

GIT2-PS-051c	Define Phimosis and Paraphimosis. Differentiate physiological and pathological phimosis. Enumerate complications. Outline management options.	Pediatric Surgery	Phimosis and paraphimosis
GIT2-PS-051d	Define vesical and cloacal exstrophy. Describe embryological basis. Enumerate clinical features. Outline management principles.		Vesical and Cloacal Exstrophy

MODULE 25

HEPATOBILLARY SYSTEM

GIT2-S-065	Describe the surgical anatomy and basic function of the gallbladder and bile ducts. Explain in simple terms the formation of gallstones and outline their surgical management.	Surgery	Cholecystectomy
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	Identify common disorders of the biliary tree.		
GIT2-S-066	Describe the surgical anatomy of the pancreas and important adjacent structures to preserve during surgery. Diagnose acute pancreatitis based on symptoms, signs, and risk factors. Outline the role of surgery in the management of pancreatitis.	Surgery	Pancreatitis and its management

GIT2-PS-066	Define primary peritonitis and differentiate from secondary peritonitis. List predisposing factors and common causative organisms. Describe clinical features. Outline investigations. State principles of management and early referral.	Pediatric Surgery	Primary peritonitis
SPLEEN			

GIT2-PS-068	Enlist the indications for splenectomy. Describe potential complications of splenectomy. Describe the potential advantages of laparoscopic splenectomy. Describe the benefits of splenic conservation. Describe the importance of prophylaxis against infection following splenectomy.	Pediatric Surgery/ General Surgery	Splenectomy
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HEALTH & NUTRITION

GIT2-S-075	Explain the importance of assessing perioperative nutritional status and its implications. Describe the causes and complications of malnutrition in surgical patients. Discuss fluid balance management in the perioperative setting. Outline the nutritional requirements of surgical patients and options for nutritional support, including indications for enteral versus parenteral feeding. Explain the nutritional consequences of intestinal resection.	Surgery	Perioperative Nutritional Management
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MODULE 27

NEUROSCIENCES

NS2-PS-003	Define neural tube defects and hydrocephalus. Classify types. Identify risk factors and clinical features. Outline management plan with early referral.	Pediatric Surgery	Hydrocephalus and spinal malformations
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MODULE 28

OBSTRUCTIVE AND INFECTIVE DISORDERS OF THE URINARY TRACT			
Re2-Uro-007	Define obstructive uropathy and hydronephrosis. Describe etiology and clinical presentation. Enlist the investigations. Outline management plan. Identify complications.	Urology/ Surgery	Obstructive Uropathy and Hydronephrosis

Re2-Uro-008	Define urolithiasis and classify urinary stones by composition. Explain the pathogenesis and predisposing factors for stone formation. Describe the clinical presentation and diagnostic evaluation. Discuss the principles of medical and surgical management. Outline preventive strategies and patient education.	Urology/ Surgery/ Pediatric Surgery	Urolithiasis
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Re2-Uro-010	Classify urinary tract infections by site and severity. Explain the clinical features of acute cystitis and prostatitis. Discuss diagnostic investigations and interpretation of urine analysis. Outline management principles, antibiotic stewardship, and prevention.	Urology	Cystitis and Prostatitis
Re2-Uro-011	Define hematuria and differentiate between microscopic and macroscopic types. Enumerate common causes of hematuria. Describe the diagnostic approach and interpretation of investigations. Correlate clinical features with underlying renal or urological pathology.	Urology/ Nephrology	Hematuria
FUNCTIONAL BLADDER DISORDERS			
Re2-Uro-012	Define neurogenic bladder and describe its types based on neurological involvement.	Urology	Neurogenic Bladder

	Explain the pathophysiology of bladder dysfunction in neurological diseases. Correlate clinical features with the level of neural lesion. Discuss diagnostic methods and management principles, including catheterization and rehabilitation		
Re2-Uro-013	Define urinary retention and urinary incontinence. Classify types of incontinence based on mechanism. Describe the etiological factors and pathophysiology of each condition. Discuss clinical features, investigations, and management approaches.	Urology	Urinary Retention and Incontinence

PROSTATE AND MALE GENITOURINARY DISORDERS

Re2-Uro-008	Describe the anatomy and physiology of the prostate gland. Differentiate between benign and malignant prostatic diseases. Describe clinical features of: • BPH • Prostatitis • Prostate cancer Discuss diagnostic evaluation, including PSA testing and imaging. Outline management plan.	Urology	Prostatic Diseases (BPH, Prostatitis, Prostate Cancer)
Re2-PS-008a	Enlist contraindications to circumcision. Plan circumcision (methods). Discuss counselling points regarding timing of surgery and follow-up.	Pediatric Surgery	Circumcision

RENAL, UROTHELIAL, AND TESTICULAR TUMORS

Re2-Uro-012	Describe the clinical features and common presentations of Urothelial cell carcinoma Enlist the diagnostic investigations used in the evaluation. Outline management plan and factors affecting prognosis.	Urology	Urothelial cell carcinoma
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TRAUMA AND EMERGENCY UROLOGY			
Re2-Uro-014	Describe the mechanisms and patterns of renal, ureteric, bladder, and urethral trauma. Discuss clinical presentation and diagnostic evaluation. Outline principles of initial management and surgical repair. Identify the potential complications and rehabilitation needs.	Urology	Genitourinary Injuries
CONGENITAL GENITOURINARY ANOMALIES			
Re2-Uro-015	Describe the embryological basis and classification of congenital urinary tract anomalies including PUJ obstruction and vesicoureteric reflux. Explain the pathophysiology and potential renal complications. Identify the diagnostic modalities. Outline management plan. Counsel parents regarding prognosis, long-term renal monitoring, and preventive strategies.	Urology	PUJ obstruction and vesicoureteric reflux
Re2-PS-016	Define Posterior urethral valve. Describe clinical features. Outline investigations and management plan.	Pediatric Surgery	Posterior urethral valve
Re2-PS-017	Define and classify hypospadias and epispadias. Identify associated anomalies. Outline management plan.	Pediatric Surgery	Hypospadias and epispadias
Re2-PS-018	Classify the types of Undescended testis. Identify complications. Outline management and timing of surgery and referral.	Pediatric Surgery	Undescended testis
Re2-PS-019	Describe testicular torsion considering it as surgical emergency. Describe its pathophysiology. Identify the clinical presentation. Outline investigations and management plan including timely referral.	Pediatric Surgery	Torsion testis

FINAL YEAR MBBS

PREOPERATIVE ASSESSMENT OF SURGICAL PATIENT		
Theory		
Sr.No.	Topic	Clinical Methods/Skills
S1-001	Pre-operative evaluation	- Discuss the steps of preoperative history-taking, physical examination, and baseline investigations in surgical patients - Explain the evaluation and optimization of patients with cardiovascular, neurological, respiratory, gastrointestinal, hepatic and renal, neurological, endocrine and metabolic disorders, including malnutrition, obesity, diabetes, and thyroid dysfunction in the preoperative settings.
S1-002	Pre-operative investigations	- Enlist the pre-operative investigations. - Interpret common abnormalities in lab reports relevant to surgical patients. - Explain the role of blood glucose monitoring in ensuring peri-operative safety. - Interpret ECG and chest X-ray in surgical patients.
S1-003	High-risk patient	Describe risk stratification tools in surgery, including POSSUM, RCRI, and ACS-NSQIP, and their role in predicting perioperative morbidity and mortality
S1-004	Optimization	Discuss strategies to reduce perioperative morbidity and mortality in high-risk surgical patients.
S1-005	Consent for surgery (<i>integrate with Forensic Medicine</i>)	Explain the process of taking informed consent in surgical practice and its medico-legal significance.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
S1-006	Pre-operative evaluation	Take pre-operative history. Perform systemic examination. Record and interpret ECG in a patient. Assist in obtaining arterial blood gases and interpreting

		results. • Counsel patients for necessary investigations • Assess airway and anesthetic risk. • Calculate ASA grade and surgical risk scores. • Communicate patients/families for informed consent. • Document comorbidities and prior surgical history. • Identify and refer high-risk patients for specialist optimization. • Follow OT protocols for patient preparation (e.g., fasting, medications, marking surgical site).
POSTOPERATIVE CARE		
Theory		
Sr.No.	Topic	Clinical Methods/Skills
S1-007	Immediate recovery care	• Describe monitoring standards in post-anesthesia care unit (PACU). • Describe the role of nurses, physiotherapists, and ICU team in post-op care. • Explain the use of repeat labs and imaging to detect complications early.
S1-008	Postoperative complications	• List common respiratory, cardiac, renal, and neurological complications encountered during postoperative care. • Describe strategies for prevention and immediate management of postoperative complications.
S1-009	Post-operative wound care	• Outline wound assessment, steps of wound dressing, and infection control in post-operative care.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
S1-010	Post-operative Care & ICU	• Monitor vital signs and fluid balance post-surgery. • Assess post-op airway and breathing of a patient. • Examine the surgical wounds.

		• Identify and assist in immediate management of hemorrhage, shock, DVT, PE. • Apply wound dressings. • Remove drains/catheters under supervision. • Counsel patient and relatives regarding complications and progress. • Follow ICU and OT protocols in the post-op setting.
NUTRITION, FLUID, ELECTROLYTE AND ACID-BASE BALANCE		
Theory		
Sr.No.	Topics	Specific Learning Objectives
S1-011	Malnutrition in surgical patients	• Enlist the causes of malnutrition in surgical patients. • Describe the consequences of malnutrition in surgical patients. • Identify the risk groups prone to malnutrition.
S1-012	Nutritional assessment	• Explain the role of BMI in assessing nutritional status and surgical risk. • Describe the use of anthropometric measurements in evaluating malnutrition in surgical patients. • Explain the significance of serum proteins in predicting surgical outcomes. • Describe key clinical indicators of malnutrition relevant to perioperative assessment.
S1-013	Nutritional support	• Compare enteral vs. parenteral nutrition. • Describe complications.
S1-014	Fluid & electrolytes	• Describe the body fluid compartments and their relevance in surgical patients. • Explain the daily fluid and electrolyte requirements in the perioperative period. • Identify and describe insensible fluid losses and their significance in surgical management.
S1-015	Perioperative fluid	• Explain maintenance versus replacement fluid therapy and

	management	their roles in perioperative fluid management. Describe the differences between crystalloids and colloids and their appropriate use in surgical patients.
S1-016	Acid-base balance	- Identify the types of acid-base disorders seen in surgical patients. - Interpret arterial blood gas (ABG) results to identify the underlying disturbance. - Describe the basic management principles for correcting acid-base imbalances in the perioperative setting.
Clinical Skills		
Sr.No.	Topics	Clinical Methods/Skills
S1-017	Perioperative Care	Perform nutritional assessment at bedside (BMI, mid-arm circumference, skin fold). Calculate fluid and electrolyte requirements. Observe/assist in setting up IV fluids correctly and monitor input/output. Identify signs of dehydration, fluid overload, and electrolyte imbalance. Interpret serum electrolyte abnormalities and their clinical significance in surgical patients. Observe/assist in collection and interpretation of arterial blood gases (ABG). Counsel patient/family about nutritional support and risks.
SHOCK, HEMMORRHAGE, AND WOUND		
Theory		
Sr.No.	Topics	Specific Learning Objectives
S1-018	Metabolic response to injury	- Define homeostasis. - List the mediators of response and describe their actions. - Describe “ebb & flow” phases.

S1-019	Shock	• Classify types of shock. • Discuss cardiovascular and metabolic features of shock. • Identify the signs of severity. • Outline principles of IV fluid replacement, blood, and blood component therapy.
S1-020	Blood transfusion (See Annexure-I)	• Classify hemorrhage. • List the indications for blood transfusion. • Describe transfusion reactions and management. • Identify avoidable factors that worsen injury response. • Describe the hazards of massive transfusion.
S1-021	Wound management	• Describe the steps of acute wound care. • Describe different types of dressings and their indications based on wound characteristics. • Explain chronic wound management. • Describe the rationale and indications for contracture release and strategies to prevent recurrence.
S1-022	Compartment syndrome	• Explain the pathophysiology of compartment syndrome. • Identify the clinical features. • Describe the surgical management, including indications for and steps of fasciotomy. • Identify early warning signs to prevent irreversible tissue damage. • Describe postoperative care and monitoring after fasciotomy.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
S1-023	Critical Care Skills in Shock Management	• Perform clinical assessment of patient in shock (airway, breathing, circulation). • Record vital signs, urine output, and fluid balance charting. • Monitor IV fluids, central lines, and blood transfusion. • Identify signs of transfusion reaction and observe/assist in initiating the immediate management. • Counsel patient/family regarding consent for blood

		transfusion. • Follow OT and ICU protocols for perioperative resuscitation.
SURGICAL INFECTIONS		
Theory		
Sr.No.	Topics	Specific Learning Objectives
S1-024	Risk factors and sources	• Describe causative organisms, endogenous and exogenous sources leading to surgical infections. • Explain host and procedural factors influencing infection risk.
S1-025	Surgical site infections (SSI)	• Define SSI • Differentiate major vs. minor infections • Discuss “decisive period.”
S1-026	Specific wound infections	• Describe gas gangrene, necrotizing fasciitis, cellulitis with their management.
S1-027	Systemic infections	• Define bacteremia and describe its clinical significance and laboratory investigations. • Explain septicemia, its pathophysiology, clinical features, and potential complications. • Identify the criteria for SIRS and differentiate it from infectious and non-infectious causes. • Define sepsis, identify its clinical manifestations, and explain its progression from infection to organ dysfunction.
S1-028	Viral infections in surgery	• Describe the transmission routes of HIV in surgical settings and outline standard precautions to prevent infection. • Describe the transmission routes of Hepatitis B and C in surgical settings and outline standard precautions to prevent infection.
S1-029	Hospital-acquired & tropical infections	• Identify the clinical features, diagnostic methods, and surgical relevance of tuberculosis in abdominal and other organ involvement. • Describe the clinical manifestations, complications, and surgical considerations of typhoid infection, amoebiasis,

		ascariasis, and hydatid disease.
S1-030	Prevention & treatment	• Discuss the aseptic techniques and protocols in surgical and clinical procedures to prevent infection. • Explain the principles and indications of antimicrobial prophylaxis in surgery. • Demonstrate rational use of antibiotics, including g selection, dosing, and duration, to prevent resistance and optimize patient outcomes.

Clinical Skills

Sr.No.	Topics	Clinical Methods/Skills
S1-031	Infection control and management of infected wounds	• Examine wound for signs of infection. • Collect wound swab/aspirate for culture & sensitivity. • Observe/assist in wound debridement and abscess drainage. • Follow protocols for safe handling of infected material and proper specimen labeling. • Counsel and take consent from patients regarding HIV/Hepatitis testing. • Follow infection control measures in OT and ICU including hand hygiene, PPE, sterilization.

PRINCIPLES OF ANESTHESIA AND ANALGESIA

Theory

Sr.No.	Topics	Specific Learning Objectives
S1-032	General Anesthesia	• Enlist the indications. • Describe the phases of general anesthesia. • Explain airway management during general anesthesia. • Discuss principles of muscle relaxation and artificial ventilation during general anesthesia. • Identify the causes of failure to awake after anesthesia. • Discuss the complications with their management.
S1-033	Regional Anesthesia	• Classify the types of regional anesthesia with indications.

		- Identify the contraindications to spinal/epidural anesthesia. - Differential between spinal and epidural anesthesia. - Describe complications and their management.
S1-034	Pain Management	- Identify the methods of acute pain relief. - Enlist the causes of chronic pain. - Describe principles of chronic pain management.
S1-035	ICU Monitoring and Care	- Discuss indications for ICU admission. - Explain basic ICU monitoring. - Describe principles of ICU care.

Clinical Skills

Sr.No.	Topics	Clinical Methods/Skills
S1-036	Patient preparation and anesthesia fitness	Interpret relevant investigation reports for anesthesia fitness (under supervision). Observe/assist in preparing patient for general anesthesia. Observe/assist in mask ventilation and endotracheal intubation Identify landmarks for spinal or epidural anesthesia.

PRINCIPLES OF RADIOLOGY

Theory & Clinical Skills

Sr.No.	Topics	Specific Learning Objectives
S1-037	Chest X-ray	- Identify normal chest anatomy and standard projections. - Identify radiological features of pneumothorax, pneumonia, pleural effusion, cardiomegaly, pulmonary oedema, fractures, surgical emphysema, neoplastic disease, and chronic inflammatory conditions.
S1-038	Skull X-ray	- Identify normal skull anatomy and projections. - Identify fractures, lytic and sclerotic lesions, calcifications, pituitary fossa abnormalities, and paranasal sinus pathology.
S1-039	Abdominal X-ray	- Identify normal abdominal anatomy and projections. - Detect renal and urinary tract stones, gallstones, and other calcifications.

		- Identify free gas under the diaphragm indicating perforation. - Identify radiological signs of hepatomegaly and splenomegaly.
S1-040	Spine X-ray	- Identify normal spinal anatomy and projections. - Identify disc space reduction and vertebral collapse.
S1-041	Barium Studies	- Identify normal anatomy and projections on barium meal and double-contrast studies. - Interpret radiological features of gastric outlet obstruction, filling defects, stomach masses, esophageal varices and strictures. - Identify intussusception, colonic defects, malabsorption patterns, strictures, ulcerative colitis, and ulcers.
S1-042	Specialized Imaging	- Identify hydronephrosis and renal masses on Intravenous Urogram (IVU). - Identify vesicoureteric reflux on Micturating Cystourethrogram (MCU). - Identify gall bladder diseases and gallstones on Cholecystogram.
S1-043	Advanced Imaging	- Interpret basic echocardiography reports. - Interpret basic CT scan reports relevant to common clinical conditions. - Describe the basic principles of MRI and interpret simple MRI reports.

BURN INJURIES

Theory

Sr.No.	Topics	Specific Learning Objectives
S1-044	Assessment and Management of Burn Injuries	- Define burn injury and classify burns according to cause and depth. - Describe the pathophysiology of burn injuries. - Explain assessment of burn patients, including severity and extent of burns. - Describe the Rule of Nines for estimation of total body surface

		area (TBSA) involved in burns. • Discuss initial management of burn injuries. • Explain principles of fluid resuscitation in burn patients. • Describe local wound management in burns. • Identify complications of burn injuries. • Explain basic principles of rehabilitation and prevention of burn injuries.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
S1-045	Burn management	Observe/assist in: • initial burn care, including airway support and oxygen administration. • fluid resuscitation for burn patients under supervision. • wound cleaning and dressing of burn injuries using aseptic technique. • monitoring vital signs and urine output in burn patients.
RECONSTRUCTIVE AND PLASTIC SURGERY		
Theory		
Sr.No.	Topics	Specific Learning Objectives
S1-046	Basics of Plastic Surgery	• Describe the basic anatomy and physiology of tissues used in reconstruction. • Explain principles of wound healing relevant to reconstructive surgery. • Describe the types of grafts used in surgery and discuss their clinical uses. • Explain the types of flaps used in reconstructive surgery and discuss their indications. • Discuss the role of plastic and reconstructive surgery in the management of difficult and complex tissue loss.

PRINCIPLES OF LAPAROSCOPIC AND ROBOTIC SURGERY

Theory

Sr.No.	Topics	Specific Learning Objectives
S1-047	Minimally Invasive Surgery	- Describe the physics of pneumoperitoneum in laparoscopic surgery. - Compare laparoscopy and robotic surgery with open surgery regarding technique, benefits, and outcomes. - Enlist the common intraoperative risks in minimally invasive surgery. - Identify common procedures suitable for laparoscopic and robotic approaches. - Explain the principles of postoperative care in surgical patients. - Describe the benefits of early mobilization, effective pain management, and strategies to achieve faster recovery.

Clinical Skills

Sr.No.	Topic	Clinical Methods/Skills
S1-048	Minimally Invasive Surgery	Assist in laparoscopic procedures (camera holding, basic instrument handling). Identify and assist in safe handling of laparoscopic ports, trocars, and robotic arms. Observe setting up laparoscopic tower (light source, insufflator, camera). Counsel a patient about minimally invasive vs. open approach and take consent.

SURGICAL ETHICS & PATIENT SAFETY

Theory

Sr.No.	Topics	Specific Learning Objectives
S1-049	Surgical ethics	- Describe the process and importance of obtaining informed consent in surgical practice. - Discuss the significance of confidentiality in patient care.

		• Explain the impact of communication and teamwork on surgical safety and outcomes. • Describe how fatigue and stress contribute to surgical errors and strategies to mitigate them.
S1-050	Patient safety	• Explain the purpose and components of the WHO Surgical Safety Checklist in reducing operative risks. • Describe key infection control measures in the surgical environment. • Outline strategies to prevent retained surgical items, including counting protocols, checklists, radiopaque tools, team communication, and documentation.
S1-051	Medico-legal aspects (Integrate with Forensic Medicine)	• Explain the concepts of negligence and malpractice in surgical practice. • Describe the importance of accurate documentation in patient care. • Discuss the principles of disclosure of medical errors to patients and families.

VASCULAR AND NERVE DISORDERS

Theory

Sr.No.	Topics	Specific Learning Objectives
S1-052	Limb ischemia (acute and chronic)	• Diagnose acute limb ischemia based on the signs and symptoms (6 P's) with potential complications. • Differentiate it from chronic limb ischemia. • List the differential diagnoses. • Explain the relevant investigations to confirm diagnosis. • Outline the management strategies for acute and chronic limb ischemia. • Discuss potential complications.
S1-053	Gangrene	• Describe gangrene with pathophysiology. • Differentiate between dry, wet, and diabetic gangrene based on etiology and presentation.

		- Outline investigations with management strategies. - List the potential complications and outcomes.
S1-054	Varicose veins	- Describe the signs and symptoms of varicose veins. - Discuss potential complications and outline the management.
S1-055	Venous thromboembolism	- Identify risk factors for deep vein thrombosis and pulmonary embolism. - Diagnose deep vein thrombosis and pulmonary embolism based on signs and symptoms. - Describe potential complications of venous thromboembolism. - Explain strategies for prevention. - Outline the emergency management.
S1-056	Peripheral nerve injuries	- Enlist the causes of peripheral nerve injuries. - Outline the basic principles of management of peripheral nerve injuries.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
S1-057	Clinical assessment of arterial disease	Palpate peripheral pulses (femoral, popliteal, dorsalis pedis, posterior tibial). Examine varicose veins through inspection, palpation, and special tests e.g., Trendelenburg. Perform bedside assessment of ischemia (capillary refill, temperature, Doppler signals). Demonstrate application of compression bandaging/stockings. Demonstrate the clinical differentiation between arterial and venous ulcers through inspection, palpation, and assessment of local signs. Assist in wound care for gangrene and pre/post-op care. Counsel patients/families regarding limb salvage vs. amputation. Follow OT and ICU protocols for vascular emergencies.

PEDIATRIC SURGERY		
Theory		
Sr.No.	Topics	Specific Learning Objectives
S1-058	Cleft Lip	- Describe cleft lip with embryological basis. - Enumerate clinical features. - Outline timing of repair and treatment plan
S1-059	Cleft Palate	- Describe cleft palate with embryological basis. - Enumerate complications of non-treatment. - Outline management principles with referral for treatment to Pediatric Surgical Setting
S1-060	Clubfoot (Congenital Talipes Equinovarus)	- Describe the clinical features. - Outline principles of management, including conservative and surgical options - Identify possible complications and importance of long-term follow-up
S1-061	Anorectal Malformation (ARM)	- Identify the spectrum of anorectal anomalies with embryologic basis. - Identify associated anomalies in ARM. - Describe typical presentations such as absence of anal opening and failure to pass meconium. - Discuss principles of diagnosis, need for careful perineal examination, and referral for surgical planning.
S1-062	Hirschsprung's Disease	- Define Hirschsprung's disease as congenital aganglionosis of the bowel. - Explain pathophysiology and its functional effects leading to obstruction. - Enlist key clinical features. - Outline diagnostic investigations and treatment plan.
S1-063	Umbilical hernia, Umbilical anomalies, granuloma/adenoma	Differentiate umbilical hernia and granuloma/adenoma.

		- Describe etiology and natural history. - Enumerate clinical features. - Identify indications for surgical intervention.
S1-064	Gastroschisis and Omphalocele.	- Differentiate gastroschisis and omphalocele with embryological origin. - Enumerate clinical features. - Identify complications of mis/non treatment. - Outline steps of resuscitation.
S1-065	Intussusception and causes of intestinal obstruction in children	- Define intussusception. - Classify types of intussusception and pathophysiology with common age group and etiology. - Describe the classical triad of symptoms. - Outline diagnostic methods and management plan.
S1-066	Infantile Hypertrophic pyloric stenosis (IHPS)	- Describe etiopathogenesis of infantile hypertrophic pyloric stenosis. - Describe the classical clinical features. - Identify importance and correction of metabolic abnormalities. - Outline the management plan.
S1-067	Esophageal atresia and Tracheoesophageal fistula (TOF)	- Define esophageal atresia and tracheoesophageal fistula. - Classify types and pathophysiology of esophageal atresia. - Identify clinical features. - Outline management plan.

Clinical Skills

Sr.No.	Topic	Clinical Methods/Skills
S1-068	Clinical skills-Pediatric Surgery	Take history and perform focused clinical examination in newborns and children presenting with common pediatric surgical conditions (e.g., cleft lip

		and palate, umbilical anomalies, gastroschisis, omphalocele, genitourinary anomalies, hydrocephalus, spina bifida, CTEV, DDH). • Observe/assist in OT procedures. • Identify indications for referral, counsel caregivers regarding timing of surgery, contraindications, and follow-up.
UROGENITAL CONDITIONS		
Theory		
Sr.No.	Topics	Specific Learning Objectives
S1-069	Renal calculi	• Identify causes and types of renal calculi. • Explain clinical features and sequelae. • Describe basic principles of diagnosis and management.
S1-070	Enlarged Prostate	Benign Prostatic Hyperplasia (BPH) • Describe benign prostatic hyperplasia and its pathophysiology. • Explain its clinical features and complications. • Describe investigations and basic principles of management. Prostate Cancer • Describe prostate cancer and its risk factors. • Explain clinical features and staging of prostate cancer. • Describe investigations used in diagnosis of prostate cancer. • Discuss basic principles of management of prostate cancer.
S1-071	Scrotal and Testicular Swellings	• Describe causes of scrotal and testicular swellings. • Explain clinical features and evaluation of scrotal and testicular swellings.

		Describe basic principles of management of scrotal and testicular swellings.
S1-072	Bladder lesions	- Explain common bladder lesions, including cystitis, bladder stones, and bladder tumors. - Discuss the clinical presentation of bladder diseases (e.g., hematuria, dysuria, urinary frequency). - Explain the principles of diagnosis, including urine analysis, imaging, and cystoscopy. - Discuss basic management principles of bladder conditions, including medical and surgical approaches. - Identify potential complications of bladder diseases and their management.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
S1-073	Clinical skills-Urology	Take focused history from patients with renal calculi, bladder lesions, enlarged prostate (BPH and prostate cancer), and scrotal/testicular swellings. Perform physical examination of the abdomen, genitourinary system, prostate (digital rectal exam), and scrotum/testes. Interpret laboratory investigations, including urinalysis, urine culture, and relevant blood tests. Interpret imaging investigations, including ultrasound, X-ray KUB, CT scan, and cystoscopy. Observe/assist in the operating theatre (OT) during urological procedures such as cystoscopy, bladder tumor resection, prostate surgery, and scrotal/testicular surgery.



**MBBS
Final Year**

SURGERY-II

Systemic Diseases

**ACADEMIC
YEAR 2025-2026**

HEAD, FACE, AND NECK SURGERY

Theory

Sr.No.	Topics	Specific Learning Objectives
S2-001	Head injuries	- Outline the principles of management of head injuries. - Enlist the common complications of head injuries.
S2-002	Diseases of oral cavity	- Identify leukoplakia, erythroplakia, and oral lichen planus. - Outline the risk factors associated with these oral premalignant lesions. - Describe the clinical features of oral cavity malignancies. - Explain the investigations used for diagnosis and assessment. - Outline the staging systems for oral cavity cancers. - Discuss the treatment options, including surgical, radiotherapy, and multidisciplinary approaches - Discuss etiology, clinical features, investigations, and management of tongue ulcer
S2-003	Salivary gland disorders	Differentiate benign and malignant diseases of parotid, submandibular, sublingual glands.
S2-004	Neck lumps	- Identify lymph node enlargements in the neck. - Differentiate common surgical causes of cervical lymphadenopathy. - Outline the principles of surgical evaluation of cervical lymph nodes. - Classify thyroid swellings. - Identify clinical features suggestive of benign and malignant thyroid disease. - Outline indications for surgical management of thyroid disorders. - Describe causes of parathyroid enlargement. - Recognize clinical features of hyperparathyroidism relevant

		to surgery. Outline indications for surgical management of parathyroid disease.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
S2-005	Clinical examination- Head, face, and neck	Take a focused history for oral/tongue ulcers and suspicious lesions. Examine oral cavity, lips, and palate for lesions. Examine salivary glands through inspection, palpation, and functional tests. Perform head and neck lymph node examination. Perform clinical examination of thyroid gland (inspection, palpation, auscultation). Assist in biopsy specimens' collection and ensuring proper labeling. Counsel patients about risk factors (tobacco, alcohol, poor oral hygiene).
BREAST SURGERY		
Theory		
Sr.No.	Topics	Specific Learning Objectives
S2-006	Surgical anatomy	Describe surgical anatomy and lymphatic drainage of breast.
S2-007	Triple assessment	- Describe the signs and symptoms assessed during clinical examination of the breast in suspected malignancy. - Explain the role of imaging, including ultrasound and mammography, in breast evaluation. - Discuss tissue sampling techniques such as fine-needle aspiration and core biopsy for diagnosis.
S2-008	Benign breast diseases	Tabulate benign breast diseases to compare clinical

		presentation, common age group, investigations, and management for fibroadenoma, breast cysts, mastitis, and gynecomastia.
S2-009	Malignant breast disease	- Describe the clinical signs and symptoms of malignant breast disease. - Explain the staging systems used for breast cancer. - Discuss prognostic factors influencing outcomes. - Outline the treatment options, including surgical, medical, and radiotherapy approaches. - Outline indications and types of breast reconstruction. - Identify features, staging, and treatment of male breast carcinoma.
S2-010	Nipple and areola diseases	- Identify common nipple and areola pathologies, including eczema, duct ectasia, and Paget's disease. - Describe the clinical features of these conditions. - Outline management strategies for each pathology.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
S2-011	Clinical examination of breast	Demonstrate breast examination through inspection, palpation, and lymph node exam. Observe/assist in fine-needle aspiration cytology (FNAC) and core biopsy. Interpret mammography and ultrasound reports under supervision. Counsel patients regarding benign vs malignant breast conditions. Practice communication skills for delivering sensitive information. Follow OT protocols for breast surgery and specimen labeling.

THORACIC DISEASES		
Theory		
Sr.No.	Topics	Specific Learning Objectives
S2-012	Surgical Anatomy	Identify critical structures to preserve during thoracic surgery, such as the phrenic and vagus nerves, recurrent laryngeal nerves, major blood vessels, and the esophagus.
S2-013	Blunt and Penetrating Injuries	- Differentiate between blunt and penetrating injuries. - Outline initial assessment and stabilization. - Identify common complications and their basic management.
S2-014	Lung Abscess	- Enlist common causes and risk factors of lung abscess. - Describe clinical features and basic diagnostic approach. - Outline principles of medical and surgical management. - Identify possible complications and their prevention.
S2-015	Empyema Thoracis	- Enlist common causes and predisposing conditions of empyema. - Describe clinical presentation and diagnostic methods. - Outline principles of management, including drainage and supportive care. - Enlist the complications.
S2-016	Lung Tumors	- Describe the clinical features, diagnostic evaluation, and general management of common benign thoracic tumors. - Explain the staging, prognostic indicators, and treatment modalities for malignant thoracic tumors, including primary lung cancer and mediastinal

		masses. Outline the indications, operative techniques, and postoperative complications associated with lung- resection procedures.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
S2-017	Respiratory system examination and surgical skills	Perform a structured respiratory examination, including inspection, palpation, percussion, and auscultation. Interpret findings on chest X-rays and CT scans relevant to common thoracic conditions. Observe/Assist in thoracocentesis and chest-drain insertion under supervision. Observe and record key steps of bronchoscopy procedures. Monitor post-thoracotomy care, including chest-drain function, pain control, and respiratory physiotherapy. Counsel patients on smoking cessation and risks associated with lung cancer. Follow ICU postoperative protocols for patients after thoracic surgery.

GASTROINTESTINAL SURGERY

Theory

Sr.No.	Topics	Specific Learning Objectives
S2-018	Surgical Anatomy	Identify key structures that must be preserved during gastrointestinal surgery.
S2-019	Esophageal obstruction	- Enlist common benign and malignant causes of esophageal obstruction. - Describe clinical features and basic diagnostic approach. - Outline principles of surgical and non-surgical management - Identify possible complications and basic preventive measures. - Discuss causes, clinical signs, and surgical management of esophageal perforation.
S2-020	Peptic Ulcers	- Identify clinical features, diagnostic methods, complications, and treatment options. - Describe the role of H. pylori in gastritis and peptic ulcer disease.
S2-021	Gastric volvulus and perforation	- Diagnose gastric volvulus through clinical signs and imaging findings. - Describe the causes, presentation, and diagnosis of gastric perforation. - Plan the surgical management for gastric volvulus and perforation.
S2-022	Gastric tumors	- Explain classification, staging, prognosis, and surgical management. - Outline GIST, lymphomas, and benign gastric and duodenal tumors, with surgical relevance.
	Inflammatory bowel disease	Describe the anatomical involvement, pathological features, and complications of Crohn's disease

S2-023		relevant to surgery. • Discuss the diagnostic approaches, including imaging and endoscopic findings, that guide surgical decision-making. • Outline the indications, principles, and techniques of surgical management, including resection, stricturoplasty, and management of fistulas or abscesses.
S2-024	Tuberculosis	• Describe the clinical presentation and imaging features of intestinal tuberculosis. • Discuss surgical principles, including indications for resection or stricturoplasty.
S2-025	Diverticula	• Differentiate congenital (Meckel's) and acquired diverticula. • List the complications. • Discuss surgical management strategies for complicated diverticula.
S2-026	Intestinal Obstruction	• List the common causes of intestinal obstruction. • Define intussusception and volvulus. • Explain the pathophysiology of obstruction and potential progression to strangulation. • Identify key clinical features. • List the investigations required to reach the diagnosis. • Outline initial management including resuscitation, NG decompression, fluid and electrolyte replacement, and antibiotics. • Describe surgical indications. • List the complications.
S2-027	Stomas	• Describe types of stomas (ileostomy, jejunostomy) and indications. • List common complications and principles of stoma care.

S2-028	Fistulas	- Identify causes and clinical presentation of enterocutaneous fistulas. - Discuss diagnostic approaches and surgical management principles.
S2-029	Short Bowel Syndrome	- Describe etiologies and nutritional consequences of short bowel syndrome. - Outline medical, nutritional, and surgical management strategies.
S2-030	Small Intestinal Tumors	- Differentiate benign (adenomas, lipomas) from malignant (adenocarcinoma, lymphoma, sarcoma) small intestine tumors. - Discuss diagnostic workup and surgical management plan.
S2-031	Ulcerative colitis	- Describe pathological features, extent of disease, and mucosal involvement. - Describe clinical features, complications (toxic megacolon, bleeding), and indications for surgery. - Outline the management plan including surgical options, including colectomy and ileal pouch-anal anastomosis.
S2-032	Vascular lesions	- Diagnose angiodysplasia and ischemic colitis clinically and on imaging. - Discuss plan of surgical and endoscopic management.
S2-033	Large Intestine Tumors	- Differentiate benign polyps/adenomas from malignant adenocarcinoma. - Discuss staging, prognosis, and surgical management options.
S2-034	Acute and chronic Appendicitis	- Identify classical signs of acute appendicitis. - Describe atypical presentations. - Differentiate acute from chronic appendicitis based on symptom duration, severity, and presentation.

		- Outline differential diagnoses including mesenteric adenitis, Meckel's diverticulitis, gynecological, and urinary conditions. - List the investigations to reach diagnosis. - Identify complications of appendicitis.
S2-035	Appendix Tumors	- Differentiate benign (mucinous cystadenoma) and malignant (carcinoid, adenocarcinoma) tumors. - Describe surgical approaches and extent of resection based on tumor type and size.
S2-036	Appendectomy	- Outline indications for appendectomy in acute and chronic appendicitis. - Describe the steps of open and laparoscopic appendectomy. - List post-operative complications.
S2-037	Hemorrhoids	- Explain pathophysiology and classification. - Diagnose hemorrhoids based on clinical features, complications, and indications for surgery. - Outline the management plan.
S2-038	Anal Fissure	- Differentiate acute and chronic fissures. - Discuss conservative and surgical treatment (lateral internal sphincterotomy). - List complications and describe preventive strategies.
S2-039	Fistula-in-Ano	- Describe etiology and common classification (Park's classification). - Outline surgical plan including fistulotomy, seton placement, and sphincter preservation.
S2-040	Pilonidal Sinus	- Describe the clinical features and differentiate from sebaceous cyst, gluteal/perianal abscess, dermoid cyst. - List common complications. - Describe surgical management.
S2-041	Anal Canal Tumors	Differentiate benign (papilloma, adenoma) and

		malignant tumors (squamous cell carcinoma, adenocarcinoma). • Discuss staging, prognosis, and surgical or oncological management options.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
S2-042	Small Intestine	• Take detailed history for dyspepsia, hematemesis, and melaena. • Perform clinical examination for anemia, abdominal mass, and peritonitis. • Perform focused abdominal examination to assess obstruction, masses, and tenderness • Observe/assist in inserting nasogastric tube. • Counsel patients on H. pylori eradication therapy and lifestyle modifications. • Interpret imaging studies (X-ray, CT, enteroclysis) for small bowel obstruction and other small intestine lesions. • Observe/assist in biopsy procedures and ensure proper specimen handling and labeling. • Follow ICU and OT protocols in the management of small bowel emergencies.
S2-043	Large Intestine	• Take focused history for altered bowel habits, rectal bleeding, and abdominal pain. • Demonstrate thorough abdominal and per rectal examination, including digital rectal exam. • Interpret colonoscopy and barium enema findings. • Observe/assist in colonoscopy or biopsy procedures and ensure proper specimen labeling. • Assist in providing pre- and post-operative care for patients undergoing colectomy or other colorectal surgeries.

		• Counsel patients regarding IBD management, colorectal cancer, and lifestyle modifications. • Follow OT protocols for bowel preparation, sterile technique, and specimen handling
S2-044	Intestinal Obstruction	• Take focused history for bowel obstruction, including abdominal pain, vomiting, and constipation. • Perform abdominal examination to assess distension, peristaltic activity, and tenderness. • Interpret imaging studies, including X-rays, for air- fluid levels and obstruction patterns. • Observe/assist in NG tube insertion for decompression and monitor its effectiveness. • Assist in initiating IV fluid resuscitation and monitor electrolytes and hemodynamic status. • Observe/assist in laparotomy or other surgical interventions for intestinal obstruction. • Counsel patients and attendants regarding the risks and postoperative expectations of emergency surgery. • Follow ICU protocols for postoperative care, monitoring for complications, and early recognition of recurrence.
S2-045	Appendicitis	• Take focused history for acute abdominal pain suggestive of appendicitis. • Perform McBurney's point tenderness, Rovsing's sign, and Psoas sign. • Interpret imaging findings from ultrasound and CT to confirm diagnosis. • Observe/assist in open and laparoscopic appendectomy, ensuring safe operative technique. • Assist in post-operative care, including wound care and drain monitoring.

		• Counsel patients regarding the procedure, post-operative recovery, and follow-up. • Follow OT protocols and ensure proper specimen handling and labeling.
S2-046	Anal canal	• Take history for rectal pain, bleeding, discharge, or perianal swelling. • Perform clinical examination, including inspection, digital rectal exam, and proctoscopy. • Observe/assist in procedures such as hemorrhoid banding, sclerotherapy, and surgical hemorrhoidectomy. • Observe/assist in fistula-in-ano and pilonidal sinus surgeries, ensuring safe operative technique. • Assist in providing post-operative care, including wound care, dressing changes, and monitoring for complications. • Counsel patients on hygiene, diet, and long-term follow-up to prevent recurrence. • Ensure proper handling and labeling of surgical specimens for biopsy.

HERNIA

Theory

Sr.No.	Topics	Specific Learning Objectives
S2-047	Hernia formation	• Explain the mechanical and biological processes that weaken the abdominal wall and lead to hernia formation. • Describe the rectus sheath, linea alba, inguinal canal, and weak areas important in hernia formation and repair.
S2-048	Inguinal hernia	• Identify the clinical signs and symptoms of inguinal hernia.

		• Differentiate between direct and indirect inguinal hernias. • Explain possible complications. • Describe surgical and non-surgical management.
S2-049	Femoral hernia	• Identify the clinical features of femoral hernia. • Explain the risks and potential complications associated with femoral hernia. • Describe the principles of surgical and non-surgical management.
S2-050	Ventral hernias	• Identify types of ventral hernias. • Describe the clinical features of each type of ventral hernia (umbilical, incisional, parastomal, and traumatic hernias). • Explain the risks and potential complications associated with ventral hernias. • Outline the principles of surgical management for ventral hernias.
S2-051	Peritonitis	• Enlist the etiology of peritonitis. • Outline the clinical features and diagnostic evaluation, including laboratory tests and imaging. • Outline the surgical and supportive management plan in acute peritonitis. • Discuss the prognosis and factors influencing patient outcomes in peritonitis. • Identify the major complications associated with untreated or severe peritonitis.
S2-052	Intraperitoneal abscess	• Describe the clinical presentation and common sites of intraperitoneal abscesses. • Describe the diagnostic role of laboratory tests and imaging modalities. • Explain the procedure of abscess drainage, including percutaneous and surgical approaches.

S2-053	Adhesions & torsion	• Explain the pathophysiology of intra-abdominal adhesions and torsion. • Describe the clinical presentation and complications associated with adhesions and torsion. • Plan the surgical management for adhesions and torsion.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
S2-054	Clinical examination of hernia	• Perform clinical examination of the abdominal wall and common hernia sites. • Examine groin of a patient to distinguish inguinal from femoral hernias through inspection, palpation, cough impulse, deep ring and femoral canal palpation, Valsalva maneuver, and assessment of reducibility. • Identify the signs of obstruction and strangulation during patient assessment. • Assist in open and laparoscopic hernia repair procedures. • Observe and assist in handling and fixing surgical mesh safely. • Counsel patients regarding elective versus emergency hernia surgery. • Follow operating theatre protocols, including proper handling of specimens from strangulated bowel.
S2-055	Peritonitis	• Perform abdominal examination for guarding, rigidity, ascites, masses. • Observe/assist in ascitic tap. • s in post-op care for peritonitis and septic patients in ICU.

PANCREAS		
Theory		
Sr.No.	Topics	Specific Learning Objectives
S2-056	Pancreatitis (acute and chronic)	- Identify the major etiological factors contributing to pancreatitis. - Explain the pathophysiological mechanisms leading to pancreatic inflammation. - Identify the key clinical features and diagnostic criteria of pancreatitis. - Outline essential investigations used to confirm diagnosis and assess severity. - Discuss potential complications and their clinical implications. - Plan medical and supportive management.
S2-057	Pancreatic cancer	- Identify the major risk factors associated with pancreatic cancer. - Describe its clinical presentation. - Discuss the factors influencing prognosis in pancreatic cancer. - Outline the main treatment modalities, including surgical, medical, and palliative options. - Identify important neighbouring structures at surgical risk during pancreatic procedures.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
S2-058	Clinical skills-pancreatic diseases	Perform focused history-taking for abdominal pain, jaundice, and weight loss. Conduct abdominal examination to assess epigastric tenderness, masses, and ascites. Interpret CT and USG findings related to pancreatitis

		and pancreatic tumors. • Observe/assist in biopsy procedures and ensure accurate specimen labeling. • Manage the initial care of acute pancreatitis, including fluids, analgesia, and monitoring. • Assist in providing post-operative care for pancreatic surgery patients, with emphasis on drain monitoring and nutritional support. • Counsel patients regarding lifestyle modifications such as alcohol and smoking cessation in chronic pancreatitis.
SPLEEN		
Theory		
Sr.No.	Topics	Specific Learning Objectives
S2-059	Splenic trauma & rupture	• Identify the common mechanisms of splenic injury. • Identify the clinical features and complications associated with splenic trauma. • Outline investigations for diagnosis and assessment of splenic injury. • Describe the surgical and non-surgical management of splenic rupture.
S2-060	Splenomegaly & hypersplenism	• Identify the common causes and systemic effects of splenomegaly and hypersplenism. • Outline the appropriate investigations for diagnosis and assessment.
S2-061	Neoplasms	• Differentiate between benign and malignant tumors of the spleen based on clinical and pathological features. • Recognize the key diagnostic approaches, including imaging and laboratory evaluation. • Discuss the principles of management for splenic

		neoplasms, including surgical options.
S2-062	Splenectomy	- List the common indications for splenectomy. - Identify the major structures at risk during splenic surgery. - Describe the surgical procedure and important operative considerations. - List the potential complications. - Describe overwhelming post-splenectomy infection (OPSI). - Outline preventive measures.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
S2-063	Clinical skills-splenic diseases	Perform abdominal examination for splenomegaly. Interpret USG and CT findings for splenic trauma, enlargement, or pathology. Assist in providing initial care of splenic trauma. Observe/assist in splenectomy and ensure proper specimen handling and labeling. Counsel patients on appropriate vaccinations and preventive care post-splenectomy. Follow ICU and OT protocols in the management of splenic emergencies.
GALLBLADDER AND BILE DUCTS		
Theory		
Sr.No.	Topics	Specific Learning Objectives
S2-064	Cholelithiasis	- Identify major risk factors contributing to gallstone development. - Describe the common complications, including cholecystitis and choledocholithiasis.

S2-065	Acute and chronic cholecystitis	- List common causes and risk factors of cholecystitis - Describe clinical features and basic diagnostic evaluation - Outline principles of medical and surgical management, including cholecystectomy - Identify potential complications and basic preventive measures
S2-066	Cholecystectomy	- Identify the indications for cholecystectomy. - Describe the surgical anatomy relevant to cholecystectomy, including Calot's triangle and variations of the cystic duct and artery. - Outline the steps of open and laparoscopic cholecystectomy. - List intraoperative and postoperative complications. - Identify key structures to preserve during cholecystectomy.
S2-067	Tumors of biliary tree	- Differentiate between benign and malignant tumors of the biliary tree based on clinical and pathological features. - Describe the staging systems and their relevance to prognosis and treatment planning. - Discuss the principles of management, including surgical resection and palliative options.

Clinical Skills

Sr.No.	Topic	Clinical Methods/Skills
S2-068	Clinical Skills - Gallbladder and Bile Duct Surgery	Take focused history for biliary colic, jaundice, pruritus, and weight loss. Perform abdominal examination to assess gallbladder disease and signs of obstructive jaundice. Interpret imaging findings from USG, MRCP, and ERCP for biliary pathology. Observe/assist in laparoscopic cholecystectomy and

		ensure proper specimen handling. • Assist in providing initial management for post-cholecystectomy complications. • Counsel patients regarding gallstone prevention, life-style modifications, and risks of malignancy. • Follow OT and ICU protocols during management of obstructive jaundice and biliary surgery.
LIVER		
Theory		
Sr.No.	Topics	Specific Learning Objectives
S2-069	Liver Trauma	• Enlist common causes and types of liver injury. • Describe clinical features and initial assessment (including hemodynamic status). • Outline principles of management, including conservative and surgical approaches. • Identify possible complications and basic preventive measures.
S2-070	Obstructive jaundice	• Diagnose obstructive jaundice based on clinical presentation and investigations. • List the investigations (LFTs, USG, MRCP, and ERCP) in diagnosis and evaluation. • Outline the management plan.
S2-071	Liver abscess	• Differentiate amoebic and pyogenic liver abscesses. • List the investigations to reach the diagnosis. • Outline the management plan.
S2-072	Hydatid disease	• Explain the life cycle, clinical features, imaging findings, and surgical management of hydatid secondary disease.

S2-073	Liver malignancies	- Describe clinical features and basic diagnostic evaluation, including imaging and tumor markers. - Outline principles of surgical and non-surgical management - Identify potential complications and basic preventive measures
S2-074	Management principles	- Discuss the role of investigations such as LFTs, USG, CT, MRI, and tumor markers (AFP) in liver pathology. - Outline management principles, including indications for surgery, drainage, resection, and palliative care.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
S2-075	Clinical examination-liver	Take focused history for fever, jaundice, abdominal pain, and weight loss. Perform abdominal examination to assess hepatomegaly, tenderness, and palpable masses. Interpret imaging findings from USG and CT for liver abscesses, hydatid cysts, and tumors. Observe/assist in percutaneous drainage of liver abscesses. Observe/assist in surgical procedures for hydatid cyst removal and liver resection. Counsel patients regarding prevention of hydatid disease and lifestyle modifications in liver malignancy. Follow OT and ICU protocols for safe perioperative care in liver surgery.

ORTHOPEDIC AND TRAUMA		
Theory		
Sr.No.	Topics	Specific Learning Objectives
S2-076	Bone Fractures and Complications	- Describe the types and classification of bone fractures. - Explain the pathophysiology and healing of fractures. - Discuss the clinical features, diagnosis, and complications of fractures. - Explain basic principles of fracture management, including conservative and surgical approaches.
S2-077	Injuries of Tendons and Bursae	- Describe common tendon and bursal injuries. - Explain their clinical presentation and evaluation. - Discuss principles of management, including conservative and surgical treatment.
S2-078	Arthritis	- Describe the types of arthritis affecting joints. - Explain clinical features, basic investigations, and radiological findings. - Discuss principles of medical and surgical management of arthritis.
S2-079	Spinal Trauma Spinal Deformities	- Describe types and mechanisms of spinal injuries. - Explain clinical features and neurological assessment. - Discuss imaging modalities used in spinal trauma. - Explain basic principles of management, including immobilization and surgery. - Describe common spinal deformities (scoliosis, kyphosis, lordosis). - Explain their clinical assessment and radiological evaluation. - Discuss management options, including conservative and surgical approaches.

S2-080	Bone and Cartilage Tumors Spinal Tumors	• Classify bone and cartilage tumors into benign and malignant. • Describe clinical features and basic diagnostic approach. • Discuss general principles of management and complications of bone and cartilage tumors. • Classify spinal tumors. • Describe clinical presentation and neurological signs. • Explain diagnostic approach, including imaging. • Discuss principles of management and potential complications.
S2-081	Medico legal aspects of trauma	See annexure-II (Forensic Medicine)
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
S2-082	Clinical skills-Orthopedics and trauma	• Take focused history from patients with bone fractures, tendon/bursa injuries, arthritis, bone/cartilage tumors, spinal trauma, spinal tumors, and spinal deformities. • Perform clinical examination, including inspection, palpation, range of motion, neurovascular assessment, and special tests for joints, bones, and spine. • Interpret X-rays of fractures, joint diseases, bone/cartilage tumors, and spinal deformities.



**MBBS
Final Year**

GYNECOLOGY

**ACADEMIC
YEAR 2025-2026**

BASICS OF FEMALE REPRODUCTIVE SYSTEM		
Theory		
Sr.No.	Topic	Specific Learning Objectives
Gyn-001	Genitourinary development	- Describe the embryological development of female genitourinary structures. - Explain the process of sexual differentiation in early embryonic life. - Identify common congenital anomalies resulting from Müllerian tract developmental disorders
Gyn-002	Female abdominal-pelvic anatomy	- Identify the layers and boundaries of the abdominal and pelvic walls. - Describe the blood supply, lymphatic drainage, and innervation of the pelvis and perineum. - Identify key anatomical landmarks in the abdomen, pelvis, and perineum. - Identify anatomical structures that are vulnerable during common gynecological surgical procedures.
Gyn-003	Normal puberty	- Describe the hormonal regulation and physiological changes during puberty. - Identify the sequence and timing of secondary sexual characteristics, including breast development, pubic and axillary hair growth, and menarche. - Differentiate variations of normal puberty from abnormal puberty. - Discuss psychosocial aspects and health implications associated with pubertal development.
Gyn-004	Precocious puberty	- Define precocious puberty and differentiate between central and peripheral causes. - Describe the hormonal and physiological mechanisms leading to early pubertal onset.

		- Identify clinical features that suggest precocious puberty. - Discuss investigations, including hormonal assays and imaging, to evaluate early puberty. - Explain management strategies, including medical and psychosocial interventions. (integrate with Psychiatry)
Gyn-005	Delayed puberty	- Define delayed puberty and distinguish between hypogonadotropic and hypergonadotropic causes. - Describe the hormonal and physiological mechanisms underlying delayed onset of puberty. - Identify clinical features indicative of delayed puberty. - Discuss investigations, including hormonal and imaging studies, to determine the cause. - Explain management strategies, including medical treatment and counseling.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
Gyn-006	Pelvic anatomy & surgical risk	Identify major pelvic organs, vessels, nerves, and relevant anatomical variations, including Müllerian anomalies (on anatomical models, diagrams, or imaging). Trace the course of the ureters, uterine arteries, and pelvic ligaments on models or simulators to identify structures at risk during gynecologic procedures.
MENSTRUAL CYCLE		
Theory		
Sr.No.	Topic	Specific Learning Objectives
NORMAL MENSTRUAL CYCLE		
Gyn-007	Physiology of menstrual cycle	- Describe the hypothalamic–pituitary–ovarian (HPO) axis and the hormonal regulation of the menstrual cycle. - Explain the phases of the menstrual cycle and correlate

		hormonal changes with endometrial, cervical, and ovarian responses. • Explain the physiology of ovulation, fertilization, implantation, and early pregnancy. • Describe the normal physiological variations in the menstrual cycle and interpret their clinical relevance, including conditions such as anovulation, luteal phase defects, and menopause.
MENSTRUAL DISORDERS		
Gyn-008	Abnormal uterine bleeding	• Describe the causes, pathophysiology, and clinical features of abnormal uterine bleeding. • List the relevant investigations for diagnosis. • Plan the management considering both medical and surgical options. • Describe patient counseling points regarding treatment choices, fertility implications, and follow-up.
Gyn-009	Dysmenorrhea	• Define dysmenorrhea, etiology, and its types. • List investigations to confirm the diagnosis. • Outline management strategies for symptom relief and fertility preservation, including medical and surgical options.
Gyn-010	Endometriosis, Adenomyosis	• Describe the etiology, pathophysiology, and common sites of endometriosis/adenomyosis. • Identify the clinical features of endometriosis/adenomyosis. • Describe the possible underlying mechanisms showing association of endometriosis with infertility. • Differentiate adenomyosis from other causes of abnormal uterine bleeding and pelvic pain. • Discuss the role of imaging and histopathology in diagnosis. • Outline management strategies, including medical and surgical options. • Explain patient counseling points regarding treatment options, symptom management, and fertility considerations.

Gyn-011	Amenorrhea	• Differentiate between primary and secondary amenorrhea List the aetiology. • List the relevant investigations to find out the cause. • Explain management strategies based on etiology and fertility considerations. • Describe patient counseling points regarding prognosis and psychosocial support. • Describe Asherman syndrome.
Gyn-012	Polycystic ovarian syndrome	• Describe the etiology and underlying pathophysiology of PCOS. • Diagnose PCOS based on the clinical manifestations and ultrasound criteria. • List differential diagnoses for hyperandrogenism and menstrual irregularities. • Outline management plan considering lifestyle modification, medical therapy, and fertility treatment.
Gyn-013	Postmenopausal bleeding	• Identify potential causes, emphasizing malignancy exclusion. • Establish the differential diagnosis based on signs and symptoms. • List the investigations to reach the diagnosis. • Plan the management including referral for surgical evaluation when indicated. • Describe patient counseling points regarding findings, treatment options, and follow-up care.
Gyn-014	Premenstrual syndrome (PMS)	• Describe clinical features, diagnostic criteria, and pathophysiology of PMS. • Explain the impact of symptoms on daily activities. • Plan the management. • Describe patient counseling points regarding symptom recognition, coping strategies, and treatment adherence.
PERIMENOPAUSE AND MENOPAUSE		
Gyn-015	Menopause	• Define menopause and differentiate it from perimenopause and premature ovarian failure.

		• Describe the physiological changes during menopause. • Identify clinical features. • List complications associated with menopause. • Outline investigations to evaluate menopausal status and exclude other causes of symptoms. • Plan management including lifestyle modifications, hormone replacement therapy (HRT), non-hormonal pharmacologic options, and preventive care. • Describe patient counseling points on symptom management, long-term health risks, and healthy aging strategies.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
Gyn-016	Gynaecological history	Take a structured gynecological history covering: • Patient's biodata. • Presenting complaint: onset, duration, severity, and progression of symptoms • Menstrual history: age of menarche, cycle regularity, flow, LMP, pattern of bleeding, amount of blood loss, intermenstrual/post-coital bleeding, period related pain, and medications. • Vaginal discharge: amount, colour, odour, presence of blood. • Cervical screening. • Obstetric history: pregnancies, outcomes, complications, and fertility issues • Gynecological symptoms: abnormal bleeding, pelvic pain, vaginal discharge dyspareunia • Sexual and contraceptive history: sexual activity, contraception, STIs, fertility desires • Past gynecological and surgical history • Relevant medical, family, drug, and allergy history • Social and lifestyle factors influencing reproductive health • Psychosocial factors affecting menstrual or reproductive well-

		being Demonstrate professional, empathetic, and culturally sensitive communication throughout the history-taking process.
Gyn-017	Abdominopelvic examination	Perform a systematic abdominal and pelvic examination through following methods: • Inspect to assess abdominal contour, scars, masses, perineal and external genitalia • Palpate abdominal organs, pelvic masses, uterine size, adnexal tenderness • Percuss to assess organ size and fluid collections • Auscultate for bowel sounds and vascular bruits • Observe/assist in speculum examination for visualization of vagina and cervix, collection of samples if indicated • Observe/assist bimanual pelvic examination for uterine position, size, mobility, adnexa. • Identify important anatomical landmarks and structures relevant to gynecologic assessment • Demonstrate proper technique ensuring patient comfort, privacy, and cultural sensitivity
GENITAL INFECTIONS		
Theory		
Sr.No.	Topic	Specific Learning Objectives
LOWER GENITAL TRACT INFECTIONS		
Gyn-018	Vulvovaginal candidiasis	• Describe the etiology, risk factors, and pathophysiology. • Identify clinical features. • List differential diagnoses • Select appropriate investigations. • Outline management strategies and preventive measures.
Gyn-019	Trichomonas	• Describe the etiology, transmission, and pathophysiology.

	vaginalis infection	• Identify signs and symptoms. • List investigations to confirm diagnosis. • Outline management plan.
Gyn-020	Bacterial vaginosis	• List the etiology of bacterial vaginosis. • Identify clinical features and list differential diagnoses. • Outline management plan.
Gyn-021	Gonorrhea	• Describe the etiology, transmission, and complications. • Identify clinical features. • List differential diagnoses. • Outline investigations and management plan.
Gyn-022	Genitourinary chlamydia	• Describe the modes of transmission of Chlamydia trachomatis with the characteristic clinical features. • Identify asymptomatic presentation and its clinical significance. • Explain potential complications. • List appropriate diagnostic tests. • Outline recommended antibiotic treatment regimens and partner therapy.
Gyn-023	Genital Herpes Simplex	• Name the causative agents and describe mode of transmission. • Describe the typical clinical features. • Differentiate genital herpes from other causes of vulvar ulcers. • Identify appropriate diagnostic methods. • Outline the principles of management for primary, recurrent, and suppressive therapy. • Discuss complications in pregnancy and summarize recommendations for delivery planning in women with active lesions.
Gyn-024	Human Papillomavirus (HPV) Infection	• Describe the types of HPV and modes of transmission. • Identify the clinical manifestations, including genital warts and asymptomatic infection. • Explain the natural history of HPV infection and its role in cervical dysplasia and cervical cancer. • Identify appropriate screening methods.

		Outline preventive strategies.
Gyn-025	Syphilis	- Describe the modes of transmission of syphilis. - Identify the clinical features. - Discuss available diagnostic tests and their interpretation. - Outline treatment options. - Describe potential complications of untreated syphilis in women.
Gyn-026	Urinary Tract Infection (UTI) in Women	- Describe the etiology and pathophysiology of UTIs in women. - List risk factors for lower and upper urinary tract infections. - Identify the typical clinical features. - Differentiate UTIs from lower genital tract infections presenting with similar symptoms. - List appropriate investigations for diagnosis. - Outline management strategies. - Discuss potential complications.
UPPER GENITAL TRACT INFECTIONS		
Gyn-027	Pelvic inflammatory disease	- Describe the etiology including common causative organisms and pathophysiology of PID. - Diagnose based on signs, symptoms, and lab findings. - List the differential diagnosis. - List the appropriate investigations for a definitive diagnosis. - Outline management strategies, including outpatient versus inpatient antibiotic therapy, surgical intervention when necessary, and supportive care. - Describe patient counseling points regarding sexual transmission, partner treatment, prevention of recurrence, and potential complications (infertility, chronic pelvic pain, ectopic pregnancy). - Discuss the complications if left untreated.

Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
Gyn-028	Clinical examination for genitourinary infections	• Perform pelvic examination under supervision and observe/assist in collecting swabs (vaginal, endocervical) while keeping the patient comfortable and informed. • Counsel the patient regarding treatment of genitourinary infection including medicine use, partner treatment (when needed), abstinence until treatment is completed, hygiene, and when to return. • Maintain respectful, non-judgmental communication, protect privacy, and reassure the patient. • Demonstrate how to explain the correct use of antifungal treatment to the patient, including where and how the medicine is applied/taken with appropriate counseling points.
CONTRACEPTION		
Theory		
Sr.No.	Topic	Specific Learning Objectives
Gyn-029	Barrier methods of contraception	• Describe methods of natural contraception with success and failure rate. • Classify the types of barrier methods. • Explain the mechanism of action, effectiveness, advantages, and limitations. • Identify contraindications and common issues.
Gyn-030	Hormonal contraception	• Describe combined hormonal contraceptives, progestin-only pills, injectables, implants, patch, and vaginal ring. • Explain mechanisms of action, effectiveness, advantages, and side effects. • Identify contraindications and special considerations.
	Intrauterine contraception	• Classify intrauterine devices (IUDs).

Gyn-031		• Explain mechanism of action, effectiveness, advantages, complications, and follow-up requirements. • Identify indications and contraindications.
Gyn-032	Emergency contraception	• Describe types of emergency contraception. • Explain timing, effectiveness, and indications for use. • Identify situations requiring follow-up.
Gyn-033	Sterilization	• Describe female sterilization and male sterilization. • Explain mechanism, effectiveness, indications, and complications. • Discuss irreversible nature and need for informed consent.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
Gyn-034	Clinical assessment and counseling in contraceptive care	• Take a focused contraceptive history, including previous methods, preferences, menstrual pattern, sexual activity, and medical conditions. • Narrate proper use of hormonal methods and guide patients on adherence, missed doses, and side effects. • Demonstrate counseling about IUD insertion, post-insertion care, and warning signs. • Counsel regarding emergency contraception use, including timing, effectiveness, and follow-up if menstruation is delayed. • Demonstrate counseling about permanent contraception (tubal ligation, vasectomy), highlighting irreversible nature, post-procedure care, and follow-up. • Counsel all patients respectfully and non-judgmentally about method choice, side effects, adherence, partner involvement, and safe sex practices. • Maintain patient privacy, comfort, and cultural sensitivity during history-taking, demonstration, and counseling.

SUBFERTILITY		
Theory		
Sr.No.	Topic	Specific Learning Objectives
Gyn-035	Female subfertility	- Define female subfertility and distinguish it from infertility. - Enlist and describe causes. - Explain the role of investigations such as hormonal assays, ultrasound, hysterosalpingography (HSG), hysteroscopy, and laparoscopy. - Discuss basic management strategies including artificial reproductive techniques (ART). - Explain patient counseling points.
Gyn-036	Male subfertility	- Define male subfertility and distinguish it from infertility. - Enlist the causes leading to male subfertility. - Explain indications and interpretation of investigations: semen analysis, hormonal assays, scrotal ultrasound, and genetic tests. - Describe normal semen parameters and clinical significance of abnormal results. - Discuss basic management strategies. - Explain counseling points.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
Gyn-037	Female Subfertility- History & Examination	Take history related to subfertility: occupation, length of time spent trying to conceive, menstrual pattern, ovulatory symptoms, sexual history, past pregnancies, contraception, previous history of pelvic inflammatory disease, fertility treatment, surgeries, and systemic illnesses, cervical smear history, screen for history of thyroid disorders. Perform abdominal and bimanual pelvic examination to assess: - Uterine size and tenderness

		▪ Adnexal masses or tenderness ▪ Pelvic organ mobility ▪ Signs of endometriosis or pelvic infection • Maintain privacy, dignity, and cultural sensitivity during history-taking and examination. • Communicate empathetically and non-judgmentally
Gyn-038	Male Subfertility-History & Examination	• Take history related to subfertility: Occupation, length of time spent trying for pregnancy, fathered any previous pregnancies, history of mumps, measles, testicular trauma, medical and surgical history. • Perform testicular examination for testicular volume, consistency, masses, absence of vas deferens, varicocele, evidence of surgical scars.(Surgery)

PROBLEMS IN EARLY PREGNANCY

Theory

Sr.No.	Topic	Specific Learning Objectives
Gyn-039	Ectopic pregnancy	• Describe the risk factors, common sites, and pathophysiology of ectopic pregnancy. • Identify key clinical features. • Differentiate ectopic pregnancy from other causes of early pregnancy bleeding and acute abdomino-pelvic pain. • Interpret essential investigations: urine/serum β-hCG, transvaginal ultrasound findings, and discriminatory zone concepts. • Outline management options: expectant, medical, and surgical approaches. • Describe the complications of ectopic pregnancy. • Explain counseling points regarding fertility impact, recurrence risk, and follow-up with serial β-hCG.

Gyn-040	Gestational trophoblastic disorders (GTD)	- Classify Gestational Trophoblastic Disorders. - Describe the risk factors of molar pregnancy and other GTDs. - Identify clinical features. - Interpret investigations: β-hCG levels, transvaginal ultrasound findings, chest imaging, and staging criteria. - Outline management options. - Discuss post-treatment surveillance, including β-hCG monitoring, contraception advice, and recurrence risk. - Describe the complications.
Gyn-041	Miscarriage	- Define miscarriage and classify types. - List the causes and risk factors. - Tabulate the clinical presentation and ultrasound findings of each type of miscarriage. - List appropriate investigations. - Outline management strategies including expectant, medical, surgical, and counselling services. - Explain potential complications.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
Gyn-042	Clinical assessment of ectopic pregnancy	Take history in patients with early pregnancy bleeding or abdominopelvic pain. Perform abdominal and pelvic examination to assess for tenderness, adnexal mass, and signs of peritoneal irritation. Interpret β-hCG results and transvaginal ultrasound findings in early pregnancy. Observe/assist in emergency assessment and stabilization of patients with suspected ectopic pregnancy. Counsel regarding options, fertility implications, and follow-up with serial β-hCG.
	Clinical assessment of miscarriage	Take history of bleeding, pain, and prior pregnancy outcomes in a patient suspected of miscarriage.

Gyn-043		• Perform abdominal and pelvic examination to identify uterine size, tenderness, and passage of products. • Interpret ultrasound findings for different types of miscarriage. • Counsel patient empathetically about the warning signs and follow-up.
BENIGN AND MALIGNANT DISEASES OF OVARY, UTERUS, AND CERVIX		
Theory		
Sr.No.	Topic	Specific Learning Objectives
Gyn-044	Benign diseases of ovary	• Classify common benign ovarian tumors based on the causes. • Describe risk factor and typical age distribution. • Identify clinical features. • List differential diagnoses of a pelvic mass. • List appropriate investigations. • Outline management plan. • Explain potential complications.
Gyn-045	Benign diseases of uterus	Uterine fibroids • Define uterine fibroids and classify them based on location. • Describe risk factors, pathophysiology, and epidemiology. • Identify common clinical features and complications. • List differential diagnoses. • List appropriate investigations to confirm diagnosis. • Outline management strategies including medical, surgical, and conservative approaches. • Discuss implications for fertility and pregnancy outcomes. Endometrial polyps • Describe the structure and histology of endometrial polyps. • Identify risk factors and causes of endometrial polyps. • List common signs and symptoms. • Select appropriate investigations to diagnose polyps. • Explain indications for removal of endometrial polyps.

		• Discuss potential complications and outcomes of untreated polyps. • Discuss implications for fertility and pregnancy outcomes.
Gyn-046	Benign diseases of cervix	Cervical ectropion • Define cervical ectropion and describe its pathophysiology. • Identify risk factors and common causes. • List clinical features and appropriate investigations. • Plan the management and list potential complications and follow-up requirements. Cervical stenosis • Define cervical stenosis and describe its pathophysiology. • Identify causes, including congenital, post-surgical, or post-radiation. • List clinical features. • Select appropriate investigations. • Outline management strategies and discuss potential complications and implications for fertility.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
Gyn-047	Clinical assessment for benign gynecological disorders	• Take a focused gynecological and reproductive history, including menstrual pattern, bleeding, pain, infertility, and prior procedures. • Perform abdominal and bimanual pelvic examination to assess uterine size, contour, adnexal masses, tenderness, and cervical changes. • Perform speculum examination for cervical assessment when indicated. • Interpret relevant imaging or diagnostic findings, including ultrasound, MRI, hysteroscopy, and Pap smear/colposcopy. • Counsel patient regarding management options, potential complications, fertility implications, and follow-up.

Gyn-048	Malignant ovarian tumours (Epithelial ovarian cancer, sex cord stromal tumours, germ cell tumours)	• Classify malignant ovarian tumors based on cell origin. • Describe risk factors, pathophysiology, and epidemiology. • Identify common clinical features and warning signs. • List differential diagnoses for ovarian masses. • Select appropriate investigations, including tumor markers, imaging, and biopsy. • Outline management strategies, including surgical, chemotherapeutic, and palliative options. • Discuss prognosis, complications, and follow-up requirements.
Gyn-049	Endometrial cancer	• Describe endometrial hyperplasia and its types. • Describe the etiology and pathophysiology of endometrial cancer. • Identify risk factors and common clinical features. • Select appropriate investigations for diagnosis. • Explain the FIGO staging system and interpret staging criteria. • Outline management strategies for each stage, including surgical options and conservative approaches when indicated. • Describe adjuvant treatment modalities. • Discuss prognosis, potential complications, and follow-up care.
Gyn-050	Premalignant disease of cervix	• Define premalignant cervical lesions and classify them. • Describe risk factors and pathophysiology, including HPV infection and other contributing factors. • Identify clinical features. • Select appropriate investigations (PAP smear/ liquid based cytology, visual inspection with acetic acid, colposcopy). • Plan management based on lesion grade. • Discuss follow-up protocols, screening guidelines, and prevention strategies. • Describe potential progression to invasive cervical cancer and complications.

Gyn-051	Malignant disease of cervix	- Describe risk factors and pathophysiology. - Describe clinical presentation. - Select appropriate investigations for diagnosis and staging. - Explain staging and prognosis of cervical cancer (FIGO). - Outline management strategies. - Discuss prognosis, complications, and follow-up protocols.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
Gyn-052	Clinical assessment for malignancies	Take a focused gynecological history, including symptoms such as abnormal bleeding, pelvic/abdominal pain, bloating, menstrual changes, infertility, and relevant risk factors or family history. Perform abdominal, bimanual, and speculum examinations to assess for pelvic masses, uterine enlargement, cervical lesions, tenderness, or nodal involvement. Interpret relevant investigations. Demonstrate counseling skills regarding diagnosis, management options, follow-up care, prognosis, and fertility implications where relevant.
VULVOVAGINAL DISORDERS		
Theory		
Sr.No.	Topic	Specific Learning Objectives
Gyn-053	Bartholin Gland Cyst / Abscess	- Describe the anatomy, etiology, and pathophysiology. - Recognize clinical features and differentiate cyst from abscess. - List diagnostic methods. - Outline management options, including conservative care, incision and drainage, and marsupialization. - Discuss patient counseling regarding recurrence prevention and

		follow-up.
Gyn-054	Vulval intraepithelial neoplasia (VIN)	- Define VIN. - Identify the risk factors and clinical features. - Outline diagnostic methods. - Discuss management principles and follow-up.
Gyn-055	Vulvar squamous cell carcinoma	- Describe epidemiology, risk factors, and clinical presentation. - Outline diagnostic workup and staging. - Discuss treatment principles and follow-up.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
Gyn-056	Clinical assessment of vulvovaginal disorders	Take a focused history from a female patient presenting with vulvovaginal complaints, including: - Nature, duration, and severity of symptoms (pruritus, discharge, pain, bleeding). - Menstrual, sexual, obstetric, and medical history relevant to vulvovaginal disorders. - Medication use, hygiene practices, and prior infections. Perform a systematic vulvar examination for: - Skin changes such as erythema, lichenification, lesions, warts, ulcers. - Swelling or masses. - Signs of atrophy or inflammation Observe/assist in a speculum examination to inspect the vagina and cervix safely. Assist in collection of appropriate specimens (vaginal swabs, endocervical swabs) for laboratory investigation. Demonstrate proper infection control and patient comfort measures, including: - Hand hygiene and use of gloves. - Ensuring patient privacy, consent, and comfort during examination.

UROGYNAECOLOGY		
Theory		
Sr.No.	Topic	Specific Learning Objectives
Gyn-057	Urinary incontinence	- Define urinary incontinence and classify its types. - Describe the pathophysiology and common causes. - Describe typical symptoms and clinical features. - List key investigations including urinalysis, urine culture, post-void residual. - Describe basic management strategies. - Discuss preventive measures.
Gyn-058	Pelvic organ prolapse	- Define pelvic organ prolapse. - Classify prolapse according to affected compartment. - Describe pathophysiology and risk factors. - Identify clinical features and symptoms. - Outline steps of clinical evaluation. - List relevant investigations. - Describe grading systems for prolapse severity. - Outline management strategies (conservative and surgical). - Discuss preventive measures.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
Gyn-059	History and examination of urogynaecological disorders	Take a focused urogynaecological history, including urinary, prolapse, bowel, and sexual symptoms. Perform a systematic pelvic examination to assess: - Urethral support and bladder neck mobility - Presence and compartment of prolapse (anterior, posterior, apical) - Signs of urinary or fecal dysfunction Demonstrate simple bedside evaluation of urinary incontinence

		(cough stress test, post-void residual assessment). Instruct on pelvic floor muscle exercises for both UI and POP. Demonstrate correct urine sample collection for urinalysis and culture. Observe/assist in pessary fitting and provide patient counseling where indicated. Communicate respectfully and non-judgmentally with patients regarding diagnosis, management options, and preventive measures.
GYNAECOLOGICAL SURGERIES		
Theory		
Sr.No.	Topic	Specific Learning Objectives
Gyn-060	Infection prevention techniques	• Explain the principles of asepsis and their importance in preventing surgical site infections. • Describe the steps of hand washing, scrubbing sequence, and duration according to standard protocols. • Differentiate between closed and open gloving techniques and identify common breaches and necessary precautions. • Discuss the role of pre-operative area preparation, including sterilization procedures and use of prophylactic antibiotics. • Outline the essential components of pre-operative, intra-operative, and post-operative care. • Discuss the importance of maintaining sterility during wound handling and parenteral drug administration.
Gyn-061	Pre and post op care of patient & dealing with specimen	• Describe WHO safety checklist relevant to pre, intra- and post-operative surgery. • Explain the principles and importance of universal precautions for infection prevention and control. • Interpret relevant postoperative investigations and analyze findings to recognize normal and abnormal postoperative courses.
Gyn-062	Common surgical procedures as (endometrial	• Explain the fundamental principles of basic surgical skills relevant to obstetrics and gynecology.

	sampling dilatation and curettage, laparoscopy, hysteroscopy, colposcopy and hysterectomy)	- Explain the regional anatomical structures and their clinical importance in performing common obstetric and gynecological procedures - Outline the sequential steps of commonly performed procedures in obstetrics and gynecology. - Discuss potential complications, their prevention, and management strategies
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
Gyn-063	Gynaecological surgeries	Identify relevant regional anatomical structures and their clinical significance for each procedure. Observe/assist in proper patient positioning, preparation, and surgical procedure for endometrial sampling/D&C, laparoscopy, hysteroscopy, colposcopy, hysterectomy in OT. Identify potential intraoperative complications. Maintain asepsis and infection control throughout all procedural steps. Document procedural steps, findings, and patient outcomes accurately. Demonstrate correct collection, labeling, and safe handling of biopsy specimens in the operating theatre, ensuring asepsis and accurate patient identification.
ETHICS AND GENDER-BASED VIOLENCE		
Theory		
Sr.No.	Topic	Specific Learning Objectives
Gyn-064	Medical ethics, patient safety and quality care	- Discuss the legal and ethical considerations of informed consent, confidentiality, and data protection. - Identify the professional responsibilities and boundaries in the use of social media and the role of the doctor in maintaining professionalism - Explain the importance of respecting patients' cultural and

		religious beliefs in providing equitable and compassionate care
Gyn-065	Gender based violence (<i>integrate with Forensic Medicine</i>).	- Describe various forms and nature of gender-based violence and their impact on women's health and well-being. - Diagnose case of domestic violence based on different injuries sustained by the victim, - Relate injuries as per Qisas and Diyat act. - Prepare medicolegal certificate according to situation. - Explain the process of collection and preservation of samples to be sent for investigations.
Gyn-066	Criminal Abortion & Infanticide (<i>integrate with Forensic Medicine</i>).	- Describe criminal abortion. - Explain the method to assess the age and viability by examining the aborted material. - Apply relevant section of Qisas and Diyat act. - Define infanticide. - Differentiate between still born and dead born infant based on autopsy findings. - Assess the age and cause of death.
Clinical Skills		
Sr.No.	Topic	Clinical Methods/Skills
Gyn-067	Managing the cases of gender based violence (<i>integrate with Forensic Medicine</i>)	Identify the signs of gender-based violence, sexual assault, and female genital mutilation (FGM) in patients. Conduct sensitive history-taking and physical examination of survivors, ensuring patient comfort and safety. Observe/assist in proper collection, labeling, and handling of forensic evidence (e.g., rape kit) in collaboration with forensic services (<i>if a relevant case is encountered; otherwise, understand the steps through video demonstration, lecture, or illustrative pictures</i>). Document findings for medicolegal purposes in cases of rape or gender-based violence accurately and sensitively, including history, examination, and evidence.

		• Provide immediate supportive care and referrals while maintaining privacy and respect. • Counsel patients regarding medical, psychological, and legal options available.
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Counselling

a. Career Guidance

To facilitate students in determining their career path and relevant education based on their personality, a type of counseling is undertaken by professionals to identify and explore the most suitable careers and occupations to start their career in the right direction

b. Psychosocial Counselling

The goal is to help overcome students any kind of obstacle in life. Sessions are private and all information between students and professional stay confidential. Students can ask for help, whenever they experience emotional distress.

NOMINATED FACULTY MEMBER

Dr. Sidra Shoaib Qureshi

Associate Professor surgery

Dr.Kiran Iqbal

Associate Professor Gynaecology
