



STUDY GUIDE

BLOCK - B

Surgery & Allied

for

Final Year MBBS

Department of Medical Education, AFMDC

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1. Introduction to Study Guide

The study guide serves several crucial purposes:

1. Communicating information on the organization and management of the module:

This aids students in identifying the appropriate point of contact in case they encounter any difficulties during the semester.

2. Defining the objectives expected to be achieved by the end of the module:

It outlines clear learning goals, ensuring that students understand what is expected of them academically.

3. Identifying the learning strategies employed to achieve module objectives:

These strategies may encompass various methods such as lectures, small group sessions, clinical skills practice, demonstrations, tutorials, and case-based learning.

4. Providing a list of learning resources:

Students are offered a comprehensive list of resources, including books, computer-assisted learning programs, web links, and journals. These resources empower students to maximize their learning potential.

5. Highlighting information on the contribution of continuous assessment and semester examinations:

This section emphasizes the significance of ongoing assessments and final exams in determining a student's overall performance in the module.

6. Including information on assessment methods:

Details about the various assessment methods employed to evaluate students' progress in achieving the objectives are outlined.

7. Focusing on examination policies, rules, and regulations:

This section clarifies the policies and regulations governing examinations, ensuring that students are well-informed about the rules they must adhere to during their assessments.

By providing students with this comprehensive guide, educational institutions aim to enhance their learning experience, facilitate effective academic management, and foster compliance with academic standards and regulations.



2. Implementation Team for 5th Professional MBBS

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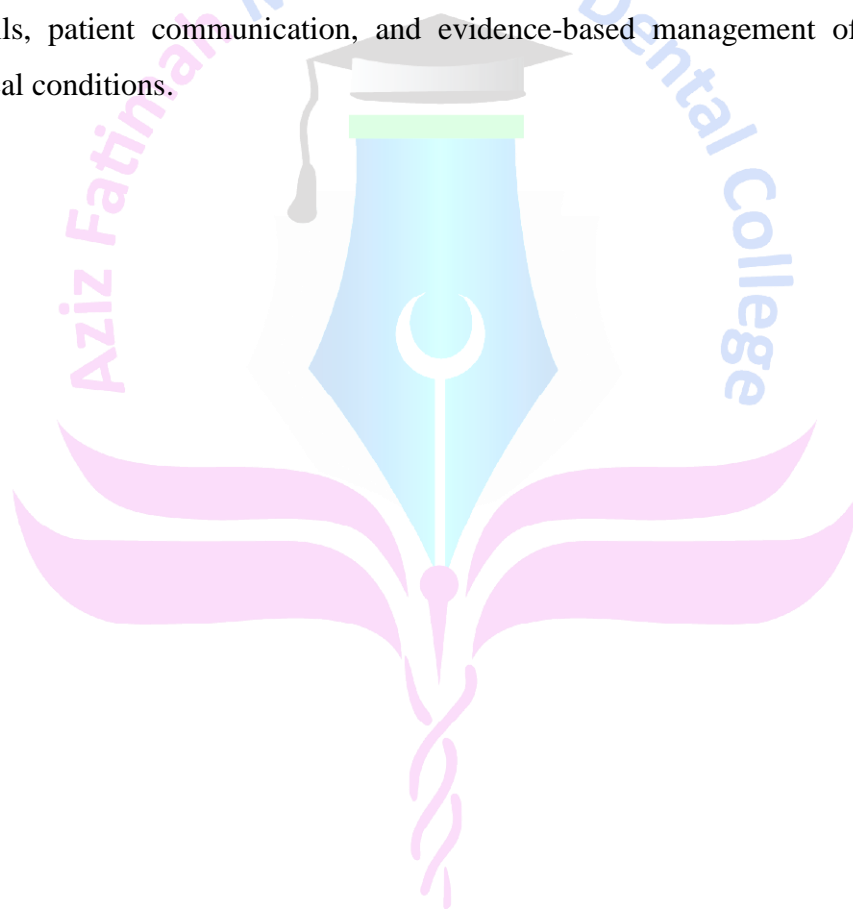
3. Introduction of BLOCK B

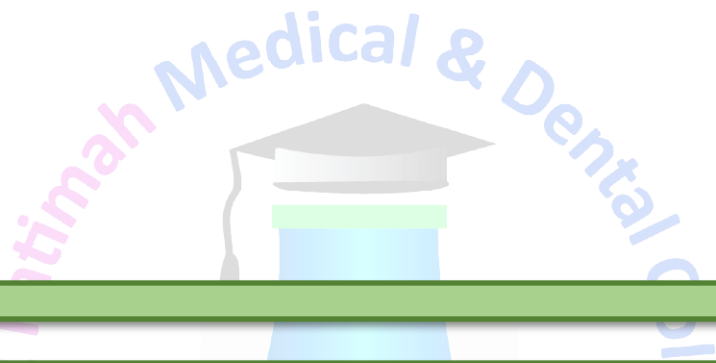
1. Surgery

The surgery clerkship focuses on the assessment and management of common surgical conditions. Students gain experience in preoperative evaluation, operative principles, and postoperative care, while developing skills in clinical examination, procedural assistance, and patient safety.

2. Gynecology & Obstetrics

This rotation provides comprehensive exposure to women's health, including antenatal care, labor and delivery, gynecological disorders, and reproductive health. Emphasis is placed on clinical skills, patient communication, and evidence-based management of obstetric and gynecological conditions.





SURGERY I



3. Surgery I

3.1 Module Outcomes

- Identify life-threatening surgical emergencies such as trauma, intestinal obstruction, perforation, and hemorrhage, and initiate prompt resuscitation and referral.
- Take focused surgical histories, perform thorough physical examinations (including system-specific exams), and interpret bedside findings accurately.
- Interpret essential laboratory, radiological, and endoscopic investigations relevant to surgical diseases.
- Practice ethical principles, use informed consent processes, maintain confidentiality, and follow safety checklists to ensure patient safety in clinical and operative settings.
- Participate in preoperative preparation, intraoperative assistance, and postoperative care, including fluid management, pain control, infection prevention, and recognition of complications.
- Communicate effectively with patients, families, and healthcare teams, and contribute to multidisciplinary decision-making.
- Identify human factors in surgical errors, report adverse events appropriately, and contribute to clinical audit and quality improvement processes.
- Demonstrate accountability, engage in self-directed learning, and reflect on clinical experiences to prepare for safe, independent practice.

3.2 Learning Objectives

3.2.1 Knowledge

SURGERY I

PREOPERATIVE ASSESSMENT OF SURGICAL PATIENT		
Code	Topic	Learning Objectives
S1-001	Pre-operative evaluation	<ol style="list-style-type: none"> 1. Discuss the steps of preoperative history-taking, physical examination, and baseline investigations in surgical patients 2. 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	<ol style="list-style-type: none"> 1. Enlist the pre-operative investigations. 2. Interpret common abnormalities in lab reports relevant to surgical patients. 3. Explain the role of blood glucose monitoring in ensuring perioperative safety. 4. Interpret ECG and chest X-ray in surgical patients.
S1-003	High-risk patient	<ol style="list-style-type: none"> 1. Describe risk stratification tools in surgery, including POSSUM, RCRI, and ACS-NSQIP, and their role in predicting perioperative morbidity and mortality
S1-004	Optimization	<ol style="list-style-type: none"> 1. Discuss strategies to reduce perioperative morbidity and mortality in high-risk surgical patients.
S1-005	Consent for surgery (integrate with	<ol style="list-style-type: none"> 1. Explain the process of taking informed consent in surgical practice and its medico-legal

	Forensic Medicine)	significance.
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POSTOPERATIVE CARE

Code	Topic	Learning Objectives
S1-007	Immediate recovery care	<ol style="list-style-type: none"> 1. Describe monitoring standards in post-anesthesia care unit (PACU). 2. Describe the role of nurses, physiotherapists, and ICU team in post-op care. 3. Explain the use of repeat labs and imaging to detect complications early.
S1-008	Postoperative complications	<ol style="list-style-type: none"> 1. List common respiratory, cardiac, renal, and neurological complications encountered during postoperative care. 2. Describe strategies for prevention and immediate management of postoperative complications.
S1-009	Post-operative wound care	<ol style="list-style-type: none"> 1. Outline wound assessment, steps of wound dressing, and infection control in post-operative care.

NUTRITION, FLUID, ELECTROLYTE AND ACID-BASE BALANCE

Code	Topic	Learning Objectives
S1-011	Malnutrition in surgical patients	<ol style="list-style-type: none"> 1. Enlist the causes of malnutrition in surgical patients. 2. Describe the consequences of malnutrition in surgical patients. 3. Identify the risk groups prone to malnutrition.
S1-012	Nutritional assessment	<ol style="list-style-type: none"> 1. Explain the role of BMI in assessing nutritional status and surgical risk.

		<ol style="list-style-type: none"> 2. Describe the use of anthropometric measurements in evaluating malnutrition in surgical patients. 3. Explain the significance of serum proteins in predicting surgical outcomes. 4. Describe key clinical indicators of malnutrition relevant to perioperative assessment.
S1-013	Nutritional support	<ol style="list-style-type: none"> 1. Compare enteral vs. parenteral nutrition. 2. Describe complications.
S1-014	Fluid & electrolytes	<ol style="list-style-type: none"> 1. Describe the body fluid compartments and their relevance in surgical patients. 2. Explain the daily fluid and electrolyte requirements in the perioperative period. 3. Identify and describe insensible fluid losses and their significance in surgical management.
S1-015	Perioperative fluid management	<ol style="list-style-type: none"> 1. Explain maintenance versus replacement fluid therapy and their roles in perioperative fluid management. 2. Describe the differences between crystalloids and colloids and their appropriate use in surgical patients.
S1-016	Acid-base balance	<ol style="list-style-type: none"> 1. Identify the types of acid-base disorders seen in surgical patients. 2. Interpret arterial blood gas (ABG) results to identify the underlying disturbance. 3. Describe the basic management principles for correcting acid–base imbalances in the perioperative setting.

SHOCK, HEMMORRHAGE, AND WOUND

Code	Topic	Learning Objectives
S1-018	Metabolic response to injury	<ol style="list-style-type: none"> 1. Define homeostasis. 2. List the mediators of response and describe their actions. 3. Describe “ebb & flow” phases.
S1-019	Shock	<ol style="list-style-type: none"> 1. Classify types of shock. 2. Discuss cardiovascular and metabolic features of shock. 3. Identify the signs of severity. 4. Outline principles of IV fluid replacement, blood, and blood component therapy.
S1-020	Blood transfusion (See Annexure-I)	<ol style="list-style-type: none"> 1. Classify hemorrhage. 2. List the indications for blood transfusion. 3. Describe transfusion reactions and management. 4. Identify avoidable factors that worsen injury response. 5. Describe the hazards of massive transfusion.
S1-021	Wound management	<ol style="list-style-type: none"> 1. Describe the steps of acute wound care. 2. Describe different types of dressings and their indications based on wound characteristics. 3. Explain chronic wound management. 4. Describe the rationale and indications for contracture release and strategies to prevent recurrence.
S1-022	Compartment syndrome	<ol style="list-style-type: none"> 1. Explain the pathophysiology of compartment syndrome. 2. Identify the clinical features. 3. Describe the surgical management, including indications for and steps of fasciotomy. 4. Identify early warning signs to prevent irreversible tissue damage.

		5. Describe postoperative care and monitoring after fasciotomy.
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SURGICAL INFECTIONS		
Code	Topic	Learning Objectives
S1-024	Risk factors and sources	<ol style="list-style-type: none"> 1. Describe causative organisms, endogenous and exogenous sources leading to surgical infections. 2. Explain host and procedural factors influencing infection risk.
S1-025	Surgical site infections (SSI)	<ol style="list-style-type: none"> 1. Define SSI 2. Differentiate major vs. minor infections 3. Discuss “decisive period.”
S1-026	Specific wound infections	<ol style="list-style-type: none"> 1. Describe gas gangrene, necrotizing fasciitis, cellulitis with their management.
S1-027	Systemic infections	<ol style="list-style-type: none"> 1. Define bacteremia and describe its clinical significance and laboratory investigations. 2. Explain septicemia, its pathophysiology, clinical features, and potential complications. 3. Identify the criteria for SIRS and differentiate it from infectious and non-infectious causes. 4. Define sepsis, identify its clinical manifestations, and explain its progression from infection to organ dysfunction.
S1-028	Viral infections in surgery	<ol style="list-style-type: none"> 1. Describe the transmission routes of HIV in surgical settings and outline standard precautions to prevent infection. 2. Describe the transmission routes of Hepatitis B and C in surgical settings and outline standard precautions to prevent infection.
S1-029	Hospital-acquired	<ol style="list-style-type: none"> 1. Identify the clinical features, diagnostic

	& tropical infections	<p>methods, and surgical relevance of tuberculosis in abdominal and other organ involvement.</p> <p>2. Describe the clinical manifestations, complications, and surgical considerations of typhoid infection, amoebiasis, ascariasis, and hydatid disease.</p>
S1-030	Prevention & treatment	<p>1. Discuss the aseptic techniques and protocols in surgical and clinical procedures to prevent infection.</p> <p>2. Explain the principles and indications of antimicrobial prophylaxis in surgery.</p> <p>3. Demonstrate rational use of antibiotics, including g selection, dosing, and duration, to prevent resistance and optimize patient outcomes.</p>

PRINCIPLES OF ANESTHESIA AND ANALGESIA

Code	Topic	Learning Objectives
S1-032	General Anesthesia	<p>1. Enlist the indications.</p> <p>2. Describe the phases of general anesthesia.</p> <p>3. Explain airway management during general anesthesia.</p> <p>4. Discuss principles of muscle relaxation and artificial ventilation during general anesthesia.</p> <p>5. Identify the causes of failure to awake after anesthesia.</p> <p>6. Discuss the complications with their management.</p>
S1-033	Regional Anesthesia	<p>1. Classify the types of regional anesthesia with indications. Identify the contraindications to</p>

		<p>spinal/epidural anesthesia.</p> <ol style="list-style-type: none"> Differential between spinal and epidural anesthesia. Describe complications and their management.
S1-034	Pain Management	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> Discuss indications for ICU admission. Explain basic ICU monitoring. Describe principles of ICU care.

PRINCIPLES OF RADIOLOGY

Code	Topic	Learning Objectives
S1-037	Chest X-ray	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> Identify normal abdominal anatomy and projections. Detect renal and urinary tract stones, gallstones, and other calcifications. Identify free gas under the diaphragm indicating perforation.

		4. Identify radiological signs of hepatomegaly and splenomegaly.
S1-040	Spine X-ray	1. Identify normal spinal anatomy and projections. 2. Identify disc space reduction and vertebral collapse.
S1-041	Barium Studies	1. Identify normal anatomy and projections on barium meal and double-contrast studies. 2. Interpret radiological features of gastric outlet obstruction, filling defects, stomach masses, esophageal varices and strictures. 3. Identify intussusception, colonic defects, malabsorption patterns, strictures, ulcerative colitis, and ulcers.
S1-042	Specialized Imaging	1. Identify hydronephrosis and renal masses on Intravenous Urogram (IVU). 2. Identify vesicoureteric reflux on Micturating Cyst urethrogram (MCU). 3. Identify gall bladder diseases and gallstones on 4. Cholecystogram.
S1-043	Advanced Imaging	1. Interpret basic echocardiography reports. 2. Interpret basic CT scan reports relevant to common clinical conditions. 3. Describe the basic principles of MRI and interpret simple MRI reports.

BURN INJURIES

Code	Topic	Learning Objectives
S1-044	Assessment and Management of Burn Injuries	1. Define burn injury and classify burns according to cause and depth. 2. Describe the pathophysiology of burn injuries.

		<ol style="list-style-type: none"> 3. Explain assessment of burn patients, including severity and extent of burns. 4. Describe the Rule of Nines for estimation of total body surface area (TBSA) involved in burns. 5. Discuss initial management of burn injuries. 6. Explain principles of fluid resuscitation in burn patients. 7. Describe local wound management in burns. 8. Identify complications of burn injuries. 9. Explain basic principles of rehabilitation and prevention of burn injuries.
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RECONSTRUCTIVE AND PLASTIC SURGERY

Code	Topic	Learning Objectives
S1-046	Basics of Plastic Surgery	<ol style="list-style-type: none"> 1. Describe the basic anatomy and physiology of tissues used in reconstruction. 2. Explain principles of wound healing relevant to reconstructive surgery. 3. Describe the types of grafts used in surgery and discuss their clinical uses. 4. Explain the types of flaps used in reconstructive surgery and discuss their indications. 5. Discuss the role of plastic and reconstructive surgery in the management of difficult and complex tissue loss.

PRINCIPLES OF LAPAROSCOPIC AND ROBOTIC SURGERY

Code	Topic	Learning Objectives
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S1-047	Minimally Invasive Surgery	<ol style="list-style-type: none"> 1. Describe the physics of pneumoperitoneum in laparoscopic surgery. 2. Compare laparoscopy and robotic surgery with open surgery regarding technique, benefits, and outcomes. 3. Enlist the common intraoperative risks in minimally invasive surgery. 4. Identify common procedures suitable for laparoscopic and robotic approaches. 5. Explain the principles of postoperative care in surgical patients. 6. Describe the benefits of early mobilization, effective pain management, and strategies to achieve faster recovery.
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SURGICAL ETHICS & PATIENT SAFETY

Code	Topic	Learning Objectives
S1-049	Surgical ethics	<ol style="list-style-type: none"> 1. Describe the process and importance of obtaining informed consent in surgical practice. 2. Discuss the significance of confidentiality in patient care. 3. Explain the impact of communication and teamwork on surgical safety and outcomes. 4. Describe how fatigue and stress contribute to surgical errors and strategies to mitigate them.
S1-050	Patient safety	<ol style="list-style-type: none"> 1. Explain the purpose and components of the WHO Surgical Safety Checklist in reducing operative risks. 2. Describe key infection control measures in the surgical environment.

		<ol style="list-style-type: none"> 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)	<ol style="list-style-type: none"> 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

Code	Topic	Learning Objectives
S1-052	Limb ischemia (acute and chronic)	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> Describe the signs and symptoms of varicose veins.

		2. Discuss potential complications and outline the management.
S1-055	Venous thromboembolism	<ol style="list-style-type: none"> 1. Identify risk factors for deep vein thrombosis and pulmonary embolism. 2. Diagnose deep vein thrombosis and pulmonary embolism based on signs and symptoms. 3. Describe potential complications of venous thromboembolism. 4. Explain strategies for prevention. 5. Outline the emergency management.
S1-056	Peripheral nerve injuries	<ol style="list-style-type: none"> 1. Enlist the causes of peripheral nerve injuries. 2. Outline the basic principles of management of peripheral nerve injuries.

PEDIATRIC SURGERY

Code	Topic	Learning Objectives
S1-058	Cleft Lip	<ol style="list-style-type: none"> 1. Describe cleft lip with embryological basis. 2. Enumerate clinical features. 3. Outline timing of repair and treatment plan
S1-059	Cleft Palate	<ol style="list-style-type: none"> 1. Describe cleft palate with embryological basis. 2. Enumerate complications of non-treatment. 3. Outline management principles with referral for treatment to Pediatric Surgical Setting
S1-060	Clubfoot (Congenital Talipes Equinovarus)	<ol style="list-style-type: none"> 1. Describe the clinical features. 2. Outline principles of management, including conservative and surgical options 3. Identify possible complications and importance of 4. long-term follow-up
S1-061	Anorectal Malformation	<ol style="list-style-type: none"> 1. Identify the spectrum of anorectal anomalies with embryologic basis.

	(ARM)	<ol style="list-style-type: none"> 2. Identify associated anomalies in ARM. 3. Describe typical presentations such as absence of anal opening and failure to pass meconium. 4. Discuss principles of diagnosis, need for careful perineal examination, and referral for surgical planning.
S1-062	Hirschsprung's Disease	<ol style="list-style-type: none"> 1. Define Hirschsprung's disease as congenital aganglionosis of the bowel. 2. Explain pathophysiology and its functional effects leading to obstruction. 3. Enlist key clinical features. 4. Outline diagnostic investigations and treatment plan.
S1-063	Umbilical hernia, Umbilical anomalies, granuloma/adenoma	<ol style="list-style-type: none"> 1. Differentiate umbilical hernia and granuloma / adenoma. 2. Describe etiology and natural history. 3. Enumerate clinical features. 4. Identify indications for surgical intervention.
S1-064	Gastroschiasis and Omphalocele.	<ol style="list-style-type: none"> 1. Differentiate gastroschisis and omphalocele with embryological origin. 2. Enumerate clinical features. 3. Identify complications of mis/non treatment. 4. Outline steps of resuscitation.
S1-065	Intussusception and causes of intestinal obstruction in children	<ol style="list-style-type: none"> 1. Define intussusception. 2. Classify types of intussusception and pathophysiology with common age group and etiology. 3. Describe the classical triad of symptoms. 4. Outline diagnostic methods and management plan.
S1-066	Infantile Hypertrophic pyloric stenosis	<ol style="list-style-type: none"> 1. Describe etiopathogenesis of infantile hypertrophic pyloric stenosis. 2. Describe the classical clinical features.

	(IHPS)	<ol style="list-style-type: none"> Identify importance and correction of metabolic abnormalities. Outline the management plan.
S1-067	Esophageal atresia and Tracheoesophageal fistula (TOF)	<ol style="list-style-type: none"> Define esophageal atresia and tracheoesophageal fistula. Classify types and pathophysiology of esophageal atresia. Identify clinical features. Outline management plan.

UROGENITAL CONDITIONS

Code	Topic	Learning Objectives
S1-069	Renal calculi	<ol style="list-style-type: none"> Identify causes and types of renal calculi. Explain clinical features and sequelae. Describe basic principles of diagnosis and management.
S1-070	Enlarged Prostate	<p>Benign Prostatic Hyperplasia (BPH)</p> <ol style="list-style-type: none"> Describe benign prostatic hyperplasia and its pathophysiology. Explain its clinical features and complications. Describe investigations and basic principles of management. <p>Prostate Cancer</p> <ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> Describe causes of scrotal and testicular

	Testicular Swellings	<p>swellings.</p> <ol style="list-style-type: none"> 2. Explain clinical features and evaluation of scrotal and testicular swellings. 3. Describe basic principles of management of scrotal and testicular swellings.
S1-072	Bladder lesions	<ol style="list-style-type: none"> 1. Explain common bladder lesions, including cystitis, bladder stones, and bladder tumors. 2. Discuss the clinical presentation of bladder diseases (e.g., hematuria, dysuria, urinary frequency). 3. Explain the principles of diagnosis, including urine analysis, imaging, and cystoscopy. 4. Discuss basic management principles of bladder conditions, including medical and surgical approaches. 5. Identify potential complications of bladder diseases and their management.

3.1.1 Clinical Rotations

SURGERY I

PREOPERATIVE ASSESSMENT OF SURGICAL PATIENT		
Code	Topic	Learning Objectives
S1-006	Pre-operative evaluation	<ol style="list-style-type: none"> 1. Take pre-operative history. 2. Perform systemic examination. 3. Record and interpret ECG in a patient. 4. Assist in obtaining arterial blood gases and interpreting results. 5. Counsel patients for necessary investigations 6. Assess airway and anesthetic risk. 7. Calculate ASA grade and surgical risk scores.

		<ol style="list-style-type: none"> 8. Communicate patients/families for informed consent. 9. Document comorbidities and prior surgical history. 10. Identify and refer high-risk patients for specialist optimization. 11. Follow OT protocols for patient preparation (e.g., fasting, medications, marking surgical site).
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POSTOPERATIVE CARE

Code	Topic	Learning Objectives
S1-010	Post-operative Care & ICU	<ol style="list-style-type: none"> 1. Monitor vital signs and fluid balance post-surgery. 2. Assess post-op airway and breathing of a patient. 3. Examine the surgical wounds. 4. Identify and assist in immediate management of hemorrhage, shock, DVT, PE. 5. Apply wound dressings. 6. Remove drains/catheters under supervision. 7. Counsel patient and relatives regarding complications and progress. 8. Follow ICU and OT protocols in the post-op setting.

NUTRITION, FLUID, ELECTROLYTE AND ACID-BASE BALANCE

Code	Topic	Learning Objectives
S1-017	Perioperative Care	<ol style="list-style-type: none"> 1. Perform nutritional assessment at bedside (BMI, mid-arm circumference, skin fold).

		<ol style="list-style-type: none"> 2. Calculate fluid and electrolyte requirements. 3. Observe/assist in setting up IV fluids correctly and monitor input/output. 4. Identify signs of dehydration, fluid overload, and electrolyte imbalance. 5. Interpret serum electrolyte abnormalities and their clinical significance in surgical patients. 6. Observe/assist in collection and interpretation of arterial blood gases (ABG). 7. Counsel patient/family about nutritional support and risks.
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SHOCK, HEMMORRHAGE, AND WOUND

Code	Topic	Learning Objectives
S1-023	Critical Care Skills in Shock Management	<ol style="list-style-type: none"> 1. Perform clinical assessment of patient in shock (airway, breathing, circulation). 2. Record vital signs, urine output, and fluid balance charting. 3. Monitor IV fluids, central lines, and blood transfusion. 4. Identify signs of transfusion reaction and observe/assist in initiating the immediate management. 5. Counsel patient/family regarding consent for blood transfusion. 6. Follow OT and ICU protocols for perioperative resuscitation.

SURGICAL INFECTIONS

Code	Topic	Learning Objectives
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S1-031	Infection control and management of infected wounds	<ol style="list-style-type: none"> 1. Examine wound for signs of infection. 2. Collect wound swab/aspirate for culture & sensitivity. 3. Observe/assist in wound debridement and abscess drainage. 4. Follow protocols for safe handling of infected material and proper specimen labeling. 5. Counsel and take consent from patients regarding HIV/Hepatitis testing. 6. Follow infection control measures in OT and ICU including hand hygiene, PPE, sterilization.
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PRINCIPLES OF ANESTHESIA AND ANALGESIA

Code	Topic	Learning Objectives
S1-036	Patient preparation and anesthesia fitness	<ol style="list-style-type: none"> 1. Interpret relevant investigation reports for anesthesia fitness (under supervision). 2. Observe/assist in preparing patient for general anesthesia. 3. Observe/assist in mask ventilation and endotracheal intubation 4. Identify landmarks for spinal or epidural anesthesia.

BURN INJURIES

Code	Topic	Learning Objectives
S1-045	Burn management	<ol style="list-style-type: none"> 1. Observe/assist in: <ul style="list-style-type: none"> ➤ Initial burn care, including airway support and oxygen administration. ➤ Fluid resuscitation for burn patients under supervision.

		<ul style="list-style-type: none"> ➤ Wound cleaning and dressing of burn injuries using aseptic technique. ➤ Monitoring vital signs and urine output in burn patients.
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PRINCIPLES OF LAPAROSCOPIC AND ROBOTIC SURGERY

Code	Topic	Learning Objectives
S1-048	Minimally Invasive Surgery	<ol style="list-style-type: none"> 1. Assist in laparoscopic procedures (camera holding, basic instrument handling). 2. Identify and assist in safe handling of laparoscopic ports, trocars, and robotic arms. 3. Observe setting up laparoscopic tower (light source, insufflator, and camera). 4. Counsel a patient about minimally invasive vs. open approach and take consent.

VASCULAR AND NERVE DISORDERS

Code	Topic	Learning Objectives
S1-057	Clinical assessment of arterial disease	<ol style="list-style-type: none"> 1. Palpate peripheral pulses (femoral, popliteal, dorsalis pedis, posterior tibial). 2. Examine varicose veins through inspection, palpation, and special tests e.g., Trendelenburg. 3. Perform bedside assessment of ischemia (capillary refill, temperature, Doppler signals). 4. Demonstrate application of compression bandaging/stockings. 5. Demonstrate the clinical differentiation between arterial and venous ulcers through inspection, palpation, and assessment of local signs.

		<ol style="list-style-type: none"> 6. Assist in wound care for gangrene and pre/post-op care. 7. Counsel patients/families regarding limb salvage vs. amputation. 8. Follow OT and ICU protocols for vascular emergencies.
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PEDIATRIC SURGERY

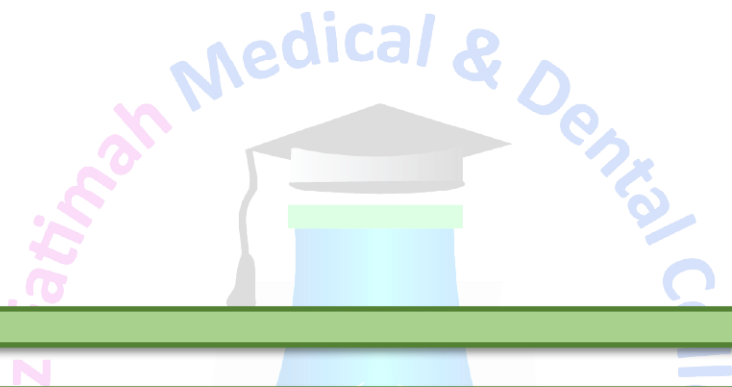
Code	Topic	Learning Objectives
S1-068	Clinical skills- Pediatric Surgery	<ol style="list-style-type: none"> 1. Take history and perform focused clinical examination in newborns and children presenting with common pediatric surgical conditions (e.g., cleft lip and palate, umbilical anomalies, gastroschisis, omphalocele, genitourinary anomalies, hydrocephalus, spina bifida, CTEV, DDH). 2. Observe/assist in OT procedures. 3. Identify indications for referral, counsel caregivers regarding timing of surgery, contraindications, and follow-up.

UROGENITAL CONDITIONS

Code	Topic	Learning Objectives
S1-073	Clinical skills- Urology	<ol style="list-style-type: none"> 1. Take focused history from patients with renal calculi, bladder lesions, enlarged prostate (BPH and prostate cancer), and scrotal/testicular swellings. 2. Perform physical examination of the abdomen, genitourinary system, prostate (digital rectal exam), and scrotum/testes.

		<ol style="list-style-type: none">3. Interpret laboratory investigations, including urinalysis, urine culture, and relevant blood tests.4. Interpret imaging investigations, including ultrasound, X-ray KUB, CT scan, and cystoscopy.5. Observe/assist in the operating theatre (OT) during urological procedures such as cystoscopy, bladder tumor resection, prostate surgery, and scrotal/testicular surgery.
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SURGERY-II

4. Surgery-II

4.1 Module Outcomes

- Identify life-threatening surgical emergencies such as trauma, intestinal obstruction, perforation, and hemorrhage, and initiate prompt resuscitation and referral.
- Take focused surgical histories, perform thorough physical examinations (including system-specific exams), and interpret bedside findings accurately.
- Interpret essential laboratory, radiological, and endoscopic investigations relevant to surgical diseases.
- Practice ethical principles, use informed consent processes, maintain confidentiality, and follow safety checklists to ensure patient safety in clinical and operative settings.
- Participate in preoperative preparation, intraoperative assistance, and postoperative care, including fluid management, pain control, infection prevention, and recognition of complications.
- Communicate effectively with patients, families, and healthcare teams, and contribute to multidisciplinary decision-making.
- Identify human factors in surgical errors, report adverse events appropriately, and contribute to clinical audit and quality improvement processes.
- Demonstrate accountability, engage in self-directed learning, and reflect on clinical experiences to prepare for safe, independent practice.

4.2 Learning Objectives

4.2.1 Knowledge

SURGERY II

HEAD, FACE, AND NECK SURGERY		
Code	Topic	Learning Objectives
S2-001	Head injuries	<ol style="list-style-type: none"> 1. Outline the principles of management of head injuries. 2. Enlist the common complications of head injuries.
S2-002	Diseases of oral cavity	<ol style="list-style-type: none"> 1. Identify leukoplakia, erythroplakia, and oral lichen planus. 2. Outline the risk factors associated with these oral premalignant lesions. 3. Describe the clinical features of oral cavity malignancies. 4. Explain the investigations used for diagnosis and assessment. 5. Outline the staging systems for oral cavity cancers. 6. Discuss the treatment options, including surgical, radiotherapy, and multidisciplinary approaches 7. Discuss etiology, clinical features, investigations, and management of tongue ulcer
S2-003	Salivary gland disorders	<ol style="list-style-type: none"> 1. Differentiate benign and malignant diseases of parotid, submandibular, sublingual glands.
S2-004	Neck lumps	<ol style="list-style-type: none"> 1. Identify lymph node enlargements in the neck. 2. Differentiate common surgical causes of cervical lymphadenopathy.

		<ol style="list-style-type: none"> 3. Outline the principles of surgical evaluation of cervical lymph nodes. 4. Classify thyroid swellings. 5. Identify clinical features suggestive of benign and malignant thyroid disease. 6. Outline indications for surgical management of thyroid disorders. 7. Describe causes of parathyroid enlargement. 8. Recognize clinical features of hyperparathyroidism relevant to surgery. 9. Outline indications for surgical management of parathyroid disease.
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BREAST SURGERY		
Code	Topic	Learning Objectives
S2-006	Surgical anatomy	<ol style="list-style-type: none"> 1. Describe surgical anatomy and lymphatic drainage of breast.
S2-007	Triple assessment	<ol style="list-style-type: none"> 1. Describe the signs and symptoms assessed during clinical examination of the breast in suspected malignancy. 2. Explain the role of imaging, including ultrasound and mammography, in breast evaluation. 3. Discuss tissue sampling techniques such as fine-needle aspiration and core biopsy for diagnosis.
S2-008	Benign breast diseases	<ol style="list-style-type: none"> 1. Tabulate benign breast diseases to compare clinical presentation, common age group, investigations, and management for fibro adenoma, breast cysts, mastitis, and gynecomastia.

S2-009	Malignant breast disease	<ol style="list-style-type: none"> 2. Describe the clinical signs and symptoms of malignant breast disease. 3. Explain the staging systems used for breast cancer. 4. Discuss prognostic factors influencing outcomes. 5. Outline the treatment options, including surgical, medical, and radiotherapy approaches. 6. Outline indications and types of breast reconstruction. 7. Identify features, staging, and treatment of male breast carcinoma.
S2-010	Nipple and areola diseases	<ol style="list-style-type: none"> 1. Identify common nipple and areola pathologies, including eczema, duct ectasia, and Paget's disease. 2. Describe the clinical features of these conditions. 3. Outline management strategies for each pathology.

THORACIC DISEASES

Code	Topic	Learning Objectives
S2-012	Surgical Anatomy	<ol style="list-style-type: none"> 1. 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	<ol style="list-style-type: none"> 1. Differentiate between blunt and penetrating injuries. 2. Outline initial assessment and stabilization. 3. Identify common complications and their basic

		management.
S2-014	Lung Abscess	<ol style="list-style-type: none"> 1. Enlist common causes and risk factors of lung abscess. 2. Describe clinical features and basic diagnostic approach. 3. Outline principles of medical and surgical management. 4. Identify possible complications and their prevention.
S2-015	Empyema Thoracis	<ol style="list-style-type: none"> 1. Enlist common causes and predisposing conditions of empyema. 2. Describe clinical presentation and diagnostic methods. 3. Outline principles of management, including drainage and supportive care. 4. Enlist the complications.
S2-016	Lung Tumors	<ol style="list-style-type: none"> 1. Describe the clinical features, diagnostic evaluation, and general management of common benign thoracic tumors. 2. Explain the staging, prognostic indicators, and treatment modalities for malignant thoracic tumors, including primary lung cancer and mediastinal masses. 3. Outline the indications, operative techniques, and postoperative complications associated with lung- resection procedures.

GASTROINTESTINAL SURGERY

Code	Topic	Learning Objectives
S2-018	Surgical Anatomy	<ol style="list-style-type: none"> 1. Identify key structures that must be preserved during gastrointestinal surgery.

S2-019	Esophageal obstruction	<ol style="list-style-type: none"> 2. Enlist common benign and malignant causes of esophageal obstruction. 3. Describe clinical features and basic diagnostic approach. 4. Outline principles of surgical and non-surgical management 5. Identify possible complications and basic preventive measures. 6. Discuss causes, clinical signs, and surgical management of esophageal perforation.
S2-020	Peptic Ulcers	<ol style="list-style-type: none"> 1. Identify clinical features, diagnostic methods, complications, and treatment options. 2. Describe the role of H. pylori in gastritis and peptic ulcer disease.
S2-021	Gastric volvulus and perforation	<ol style="list-style-type: none"> 1. Diagnose gastric volvulus through clinical signs and imaging findings. 2. Describe the causes, presentation, and diagnosis of gastric perforation. 3. Plan the surgical management for gastric volvulus and perforation.
S2-022	Gastric tumors	<ol style="list-style-type: none"> 1. Explain classification, staging, prognosis, and surgical management. 2. Outline GIST, lymphomas, and benign gastric and duodenal tumors, with surgical relevance.
S2-023	Inflammatory bowel disease	<ol style="list-style-type: none"> 1. Describe the anatomical involvement, pathological features, and complications of Crohn's disease relevant to surgery. 2. Discuss the diagnostic approaches, including imaging and endoscopic findings that guide surgical decision-making. 3. Outline the indications, principles, and techniques of surgical management, including resection, stricturoplasty, and management of

		fistulas or abscesses.
S2-024	Tuberculosis	<ol style="list-style-type: none"> 1. Describe the clinical presentation and imaging features of intestinal tuberculosis. 2. Discuss surgical principles, including indications for resection or stricturoplasty.
S2-025	Diverticula	<ol style="list-style-type: none"> 1. Differentiate congenital (Meckel's) and acquired diverticula. 2. List the complications. 3. Discuss surgical management strategies for complicated diverticula.
S2-026	Intestinal Obstruction	<ol style="list-style-type: none"> 1. List the common causes of intestinal obstruction. 2. Define intussusception and volvulus. 3. Explain the pathophysiology of obstruction and potential progression to strangulation. 4. Identify key clinical features. 5. List the investigations required to reach the diagnosis. 6. Outline initial management including resuscitation, NG decompression, fluid and electrolyte replacement, and antibiotics. 7. Describe surgical indications. 8. List the complications.
S2-027	Stomas	<ol style="list-style-type: none"> 1. Describe types of stomas (ileostomy, jejunostomy) and indications. 2. List common complications and principles of stoma care.
S2-028	Fistulas	<ol style="list-style-type: none"> 1. Identify causes and clinical presentation of enterocutaneous fistulas. 2. Discuss diagnostic approaches and surgical management principles.
S2-029	Short Bowel Syndrome	<ol style="list-style-type: none"> 3. Describe etiologies and nutritional consequences of short bowel syndrome.

		4. Outline medical, nutritional, and surgical management strategies.
S2-030	Small Intestinal Tumors	<ol style="list-style-type: none"> 1. Differentiate benign (adenomas, lipomas) from malignant (adenocarcinoma, lymphoma, sarcoma) small intestine tumors. 2. Discuss diagnostic workup and surgical management plan.
S2-031	Ulcerative colitis	<ol style="list-style-type: none"> 1. Describe pathological features, extent of disease, and mucosal involvement. 2. Describe clinical features, complications (toxic mega colon, bleeding), and indications for surgery. 3. Outline the management plan including surgical options, including colectomy and ideal pouch-anal anastomosis.
S2-032	Vascular lesions	<ol style="list-style-type: none"> 1. Diagnose angiodysplasia and ischemic colitis clinically and on imaging. 2. Discuss plan of surgical and endoscopic management.
S2-033	Large Intestine Tumors	<ol style="list-style-type: none"> 1. Differentiate benign polyps/adenomas from malignant adenocarcinoma. 2. Discuss staging, prognosis, and surgical management options.
S2-034	Acute and chronic Appendicitis	<ol style="list-style-type: none"> 1. Identify classical signs of acute appendicitis. 2. Describe atypical presentations. 3. 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. 4. List the investigations to reach diagnosis. 5. Identify complications of appendicitis.

S2-035	Appendix Tumors	<ol style="list-style-type: none"> 1. Differentiate benign (mucinous cystadenoma) and malignant (carcinoid, adenocarcinoma) tumors. 2. Describe surgical approaches and extent of resection based on tumor type and size.
S2-036	Appendectomy	<ol style="list-style-type: none"> 1. Outline indications for appendectomy in acute and chronic appendicitis. 2. Describe the steps of open and laparoscopic appendectomy. 3. List post-operative complications.
S2-037	Hemorrhoids	<ol style="list-style-type: none"> 1. Explain pathophysiology and classification. 2. Diagnose hemorrhoids based on clinical features, complications, and indications for surgery. 3. Outline the management plan.
S2-038	Anal Fissure	<ol style="list-style-type: none"> 1. Differentiate acute and chronic fissures. 2. Discuss conservative and surgical treatment (lateral internal sphincterotomy). 3. List complications and describe preventive strategies.
S2-039	Fistula-in-Ano	<ol style="list-style-type: none"> 1. Describe etiology and common classification (Park's classification). 2. Outline surgical plan including fistulotomy, Seton placement, and sphincter preservation.
S2-040	Pilonidal Sinus	<ol style="list-style-type: none"> 1. Describe the clinical features and differentiate from sebaceous cyst, gluteal/perianal abscess, and dermoid cyst. 2. List common complications. 3. Describe surgical management.
S2-041	Anal Canal Tumors	<ol style="list-style-type: none"> 1. Differentiate benign (papilloma, adenoma) and malignant tumors (squamous cell carcinoma, adenocarcinoma). 2. Discuss staging, prognosis, and surgical or

		Oncological management options.
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HERNIA		
Code	Topic	Learning Objectives
S2-047	Hernia formation	<ol style="list-style-type: none"> 1. Explain the mechanical and biological processes that weaken the abdominal wall and lead to hernia formation. 2. Describe the rectus sheath, linea Alba, inguinal canal, and weak areas important in hernia formation and repair.
S2-048	Inguinal hernia	<ol style="list-style-type: none"> 1. Identify the clinical signs and symptoms of inguinal hernia. Differentiate between direct and indirect inguinal hernias. 2. Explain possible complications. 3. Describe surgical and non-surgical management.
S2-049	Femoral hernia	<ol style="list-style-type: none"> 1. Identify the clinical features of femoral hernia. 2. Explain the risks and potential complications associated with femoral hernia. 3. Describe the principles of surgical and non-surgical management.
S2-050	Ventral hernias	<ol style="list-style-type: none"> 1. Identify types of ventral hernias. 2. Describe the clinical features of each type of ventral hernia (umbilical, incisional, parastomal, and traumatic hernias). 3. Explain the risks and potential complications associated with ventral hernias. 4. Outline the principles of surgical management for ventral hernias.
S2-051	Peritonitis	<ol style="list-style-type: none"> 1. Enlist the etiology of peritonitis. 2. Outline the clinical features and diagnostic

		<p>evaluation, including laboratory tests and imaging.</p> <ol style="list-style-type: none"> 3. Outline the surgical and supportive management plan in acute peritonitis. 4. Discuss the prognosis and factors influencing patient outcomes in peritonitis. 5. Identify the major complications associated with untreated or severe peritonitis.
S2-052	Intraperitoneal abscess	<ol style="list-style-type: none"> 1. Describe the clinical presentation and common sites of intraperitoneal abscesses. 2. Describe the diagnostic role of laboratory tests and imaging modalities. 3. Explain the procedure of abscess drainage, including percutaneous and surgical approaches.
S2-053	Adhesions & torsion	<ol style="list-style-type: none"> 1. Explain the pathophysiology of intra-abdominal adhesions and torsion. 2. Describe the clinical presentation and complications associated with adhesions and torsion. 3. Plan the surgical management for adhesions and torsion.

PANCREAS

Code	Topic	Learning Objectives
S2-056	Pancreatitis (acute and chronic)	<ol style="list-style-type: none"> 1. Identify the major etiological factors contributing to pancreatitis. 2. Explain the pathophysiological mechanisms leading to pancreatic inflammation. 3. Identify the key clinical features and diagnostic criteria of pancreatitis.

		<ol style="list-style-type: none"> 4. Outline essential investigations used to confirm diagnosis and assess severity. 5. Discuss potential complications and their clinical implications. 6. Plan medical and supportive management.
S2-057	Pancreatic cancer	<ol style="list-style-type: none"> 1. Identify the major risk factors associated with pancreatic cancer. 2. Describe its clinical presentation. 3. Discuss the factors influencing prognosis in pancreatic cancer. 4. Outline the main treatment modalities, including surgical, medical, and palliative options. 5. Identify important neighbouring structures at surgical risk during pancreatic procedures.

SPLEEN

Code	Topic	Learning Objectives
S2-059	Splenic trauma & rupture	<ol style="list-style-type: none"> 1. Identify the common mechanisms of splenic injury. 2. Identify the clinical features and complications associated with splenic trauma. 3. Outline investigations for diagnosis and assessment of splenic injury. 4. Describe the surgical and non-surgical management of splenic rupture.
S2-060	Splenomegaly & Hypersplenism	<ol style="list-style-type: none"> 1. Identify the common causes and systemic effects of splenomegaly and Hypersplenism. 2. Outline the appropriate investigations for diagnosis and assessment.
S2-061	Neoplasms	<ol style="list-style-type: none"> 3. Differentiate between benign and malignant

		<p>tumors of the spleen based on clinical and pathological features.</p> <ol style="list-style-type: none"> Recognize the key diagnostic approaches, including imaging and laboratory evaluation. Discuss the principles of management for splenic neoplasms, including surgical options.
S2-062	Splenectomy	<ol style="list-style-type: none"> 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.

GALLBLADDER AND BILE DUCTS

Code	Topic	Learning Objectives
S2-064	Cholelithiasis	<ol style="list-style-type: none"> Identify major risk factors contributing to gallstone development. Describe the common complications, including cholecystitis and Choledocholithiasis.
S2-065	Acute and chronic cholecystitis	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Identify the indications for cholecystectomy. 2. Describe the surgical anatomy relevant to cholecystectomy, including Calot's triangle and variations of the cystic duct and artery. 3. Outline the steps of open and laparoscopic cholecystectomy. 4. List intraoperative and postoperative complications. 5. Identify key structures to preserve during cholecystectomy.
S2-067	Tumors of biliary tree	<ol style="list-style-type: none"> 1. Differentiate between benign and malignant tumors of the biliary tree based on clinical and pathological features. 2. Describe the staging systems and their relevance to prognosis and treatment planning. 3. Discuss the principles of management, including surgical resection and palliative options.

LIVER

Code	Topic	Learning Objectives
S2-069	Liver Trauma	<ol style="list-style-type: none"> 1. Enlist common causes and types of liver injury. 2. Describe clinical features and initial assessment (including hemodynamic status). 3. Outline principles of management, including conservative and surgical approaches. 4. Identify possible complications and basic preventive measures.
S2-070	Obstructive	<ol style="list-style-type: none"> 1. Diagnose obstructive jaundice based on

	jaundice	<p>clinical presentation and investigations.</p> <ol style="list-style-type: none"> List the investigations (LFTs, USG, MRCP, and ERCP) in diagnosis and evaluation. Outline the management plan.
S2-071	Liver abscess	<ol style="list-style-type: none"> Differentiate amoebic and pyogenic liver abscesses. List the investigations to reach the diagnosis. Outline the management plan.
S2-072	Hydatid disease	<ol style="list-style-type: none"> Explain the life cycle, clinical features, imaging findings, and surgical management of hydatid secondary disease.
S2-073	Liver malignancies	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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.

ORTHOPEDIC AND TRAUMA

Code	Topic	Learning Objectives
S2-076	Bone Fractures and Complications	<ol style="list-style-type: none"> Describe the types and classification of bone fractures. Explain the pathophysiology and healing of fractures.

		<ol style="list-style-type: none"> 3. Discuss the clinical features, diagnosis, and complications of fractures. 4. Explain basic principles of fracture management, including conservative and surgical approaches.
S2-077	Injuries of Tendons and Bursae	<ol style="list-style-type: none"> 1. Describe common tendon and bursal injuries. 2. Explain their clinical presentation and evaluation. 3. Discuss principles of management, including conservative and surgical treatment.
S2-078	Arthritis	<ol style="list-style-type: none"> 1. Describe the types of arthritis affecting joints. 2. Explain clinical features, basic investigations, and radiological findings. 3. Discuss principles of medical and surgical management of arthritis.
S2-079	Spinal Trauma Spinal Deformities	<ol style="list-style-type: none"> 1. Describe types and mechanisms of spinal injuries. 2. Explain clinical features and neurological assessment. 3. Discuss imaging modalities used in spinal trauma. 4. Explain basic principles of management, including immobilization and surgery. 5. Describe common spinal deformities (scoliosis, kyphosis, and lordosis). 6. Explain their clinical assessment and radiological evaluation. 7. Discuss management options, including conservative and surgical approaches.
S2-080	Bone and Cartilage Tumors Spinal Tumors	<ol style="list-style-type: none"> 1. Classify bone and cartilage tumors into benign and malignant. 2. Describe clinical features and basic diagnostic approach.

		<ol style="list-style-type: none"> 3. Discuss general principles of management and complications of bone and cartilage tumors. 4. Classify spinal tumors. 5. Describe clinical presentation and neurological signs. 6. Explain diagnostic approach, including imaging. 7. Discuss principles of management and potential complications.
S2-081	Medico legal aspects of trauma	<ol style="list-style-type: none"> 1. See annexure-II (Forensic Medicine)

4.2.2 Clinical Rotations

SURGERY II

HEAD, FACE, AND NECK SURGERY		
Code	Topic	Learning Objectives
S2-005	Clinical examination- Head, face, and neck	<ol style="list-style-type: none"> 1. Take a focused history for oral/tongue ulcers and suspicious lesions. 2. Examine oral cavity, lips, and palate for lesions. 3. Examine salivary glands through inspection, palpation, and functional tests. 4. Perform head and neck lymph node examination. 5. Perform clinical examination of thyroid gland (inspection, palpation, auscultation). 6. Assist in biopsy specimens' collection and ensuring proper labeling. 7. Counsel patients about risk factors (tobacco, alcohol, poor oral hygiene).

BREAST SURGERY		
Code	Topic	Learning Objectives
S2-011	Clinical examination of breast	<ol style="list-style-type: none"> 1. Demonstrate breast examination through inspection, palpation, and lymph node exam. 2. Observe/assist in fine-needle aspiration cytology (FNAC) and core biopsy. 3. Interpret mammography and ultrasound reports under supervision. 4. Counsel patients regarding benign vs malignant breast conditions. 5. Practice communication skills for delivering sensitive information. 6. Follow OT protocols for breast surgery and specimen labeling.

THORACIC DISEASES		
Code	Topic	Learning Objectives
S2-017	Respiratory system examination and surgical skills	<ol style="list-style-type: none"> 1. Perform a structured respiratory examination, including inspection, palpation, percussion, and auscultation. 2. Interpret findings on chest X-rays and CT scans relevant to common thoracic conditions. 3. Observe/Assist in thoracentesis and chest-drain insertion under supervision. 4. Observe and record key steps of bronchoscopy procedures. 5. Monitor post-thoracotomy care, including chest-drain function, pain control, and respiratory physiotherapy. 6. Counsel patients on smoking cessation and

		risks associated with lung cancer. 7. Follow ICU postoperative protocols for patients after thoracic surgery.
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GASTROINTESTINAL SURGERY		
Code	Topic	Learning Objectives
S2-042	Small Intestine	<ol style="list-style-type: none"> 1. Take detailed history for dyspepsia, hematemesis, and melaena. 2. Perform clinical examination for anemia, abdominal mass, and peritonitis. 3. Perform focused abdominal examination to assess obstruction, masses, and tenderness 4. Observe/assist in inserting nasogastric tube. 5. Counsel patients on H. pylori eradication therapy and lifestyle modifications. 6. Interpret imaging studies (X-ray, CT, enteroclysis) for small bowel obstruction and other small intestine lesions. 7. Observe/assist in biopsy procedures and ensure proper specimen handling and labeling. 8. Follow ICU and OT protocols in the management of small bowel emergencies.
S2-043	Large Intestine	<ol style="list-style-type: none"> 1. Take focused history for altered bowel habits, rectal bleeding, and abdominal pain. 2. Demonstrate thorough abdominal and per rectal examination, including digital rectal exam. 3. Interpret colonoscopy and barium enema findings. 4. Observe/assist in colonoscopy or biopsy procedures and ensure proper specimen

		<p>labeling.</p> <ol style="list-style-type: none"> 5. 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. 6. Follow OT protocols for bowel preparation, sterile 7. technique, and specimen handling
S2-044	Intestinal Obstruction	<ol style="list-style-type: none"> 1. Take focused history for bowel obstruction, including abdominal pain, vomiting, and constipation. 2. Perform abdominal examination to assess distension, peristaltic activity, and tenderness. 3. Interpret imaging studies, including X-rays, for air- fluid levels and obstruction patterns. 4. Observe/assist in NG tube insertion for decompression and monitor its effectiveness. 5. Assist in initiating IV fluid resuscitation and monitor electrolytes and hemodynamic status. 6. Observe/assist in laparotomy or other surgical interventions for intestinal obstruction. 7. Counsel patients and attendants regarding the risks and postoperative expectations of emergency surgery. 8. Follow ICU protocols for postoperative care, monitoring for complications, and early recognition of recurrence.
S2-045	Appendicitis	<ol style="list-style-type: none"> 1. Take focused history for acute abdominal pain suggestive of appendicitis. 2. Perform McBurney's point tenderness, Rovsing's sign, and Psoas sign. 3. Interpret imaging findings from ultrasound and

		<p>CT to confirm diagnosis.</p> <ol style="list-style-type: none"> 4. Observe/assist in open and laparoscopic appendectomy, ensuring safe operative technique. 5. Assist in post-operative care, including wound care and drain monitoring. Counsel patients regarding the procedure, post-operative recovery, and follow-up. 6. Follow OT protocols and ensure proper specimen handling and labeling.
S2-046	Anal canal	<ol style="list-style-type: none"> 1. Take history for rectal pain, bleeding, discharge, or perianal swelling. 2. Perform clinical examination, including inspection, digital rectal exam, and proctoscopy. 3. Observe/assist in procedures such as hemorrhoid banding, sclerotherapy, and surgical hemorrhoidectomy. 4. Observe/assist in fistula-in-ano and pilonidal sinus surgeries, ensuring safe operative technique. 5. Assist in providing post-operative care, including wound care, dressing changes, and monitoring for complications. 6. Counsel patients on hygiene, diet, and long-term follow-up to prevent recurrence. 7. Ensure proper handling and labeling of surgical specimens for biopsy.

HERNIA

Code	Topic	Learning Objectives
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S2-054	Clinical examination of hernia	<ol style="list-style-type: none"> 1. Perform clinical examination of the abdominal wall and common hernia sites. 2. 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. 3. Identify the signs of obstruction and strangulation during patient assessment. 4. Assist in open and laparoscopic hernia repair procedures. 5. Observe and assist in handling and fixing surgical mesh safely. 6. Counsel patients regarding elective versus emergency hernia surgery. 7. Follow operating theatre protocols, including proper handling of specimens from strangulated bowel.
S2-055	Peritonitis	<ol style="list-style-type: none"> 1. Perform abdominal examination for guarding, rigidity, ascites, and masses. 2. Observe/assist in ascetic taps in post-op care for peritonitis and septic patients in ICU.

PANCREAS

Code	Topic	Learning Objectives
S2-058	Clinical skills-pancreatic diseases	<ol style="list-style-type: none"> 1. Perform focused history-taking for abdominal pain, jaundice, and weight loss. 2. Conduct abdominal examination to assess epigastric tenderness, masses, and ascites. 3. Interpret CT and USG findings related to pancreatitis and pancreatic tumors.

		<ol style="list-style-type: none"> 4. Observe/assist in biopsy procedures and ensure accurate specimen labeling. 5. Manage the initial care of acute pancreatitis, including fluids, analgesia, and monitoring. 6. Assist in providing post-operative care for pancreatic surgery patients, with emphasis on drain monitoring and nutritional support. 7. Counsel patients regarding lifestyle modifications such as alcohol and smoking cessation in chronic pancreatitis.
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SPLEEN

Code	Topic	Learning Objectives
S2-063	Clinical skills- splenic diseases	<ol style="list-style-type: none"> 1. Perform abdominal examination for splenomegaly. 2. Interpret USG and CT findings for splenic trauma, enlargement, or pathology. 3. Assist in providing initial care of splenic trauma. 4. Observe/assist in splenectomy and ensure proper specimen handling and labeling. 5. Counsel patients on appropriate vaccinations and preventive care post-splenectomy. 6. Follow ICU and OT protocols in the management of splenic emergencies.

GALLBLADDER AND BILE DUCTS

Code	Topic	Learning Objectives
S2-068	Clinical Skills - Gallbladder and	<ol style="list-style-type: none"> 1. Take focused history for biliary colic, jaundice, pruritus, and weight loss.

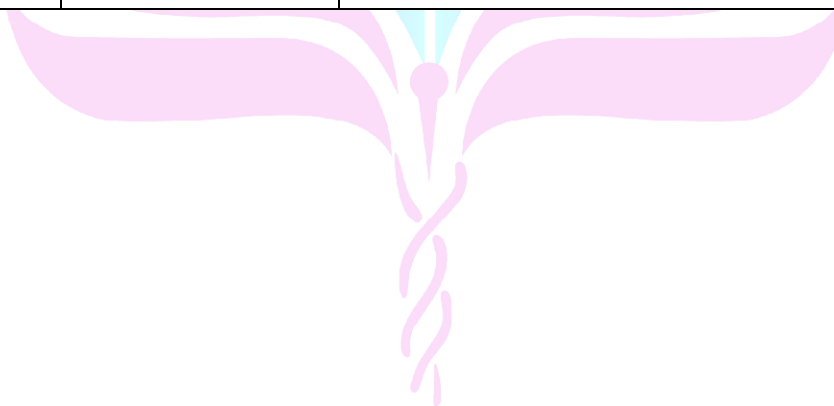
	Bile Duct Surgery	<ol style="list-style-type: none"> 2. Perform abdominal examination to assess gallbladder disease and signs of obstructive jaundice. 3. Interpret imaging findings from USG, MRCP, and ERCP for biliary pathology. 4. Observe/assist in laparoscopic cholecystectomy and ensure proper specimen handling. 5. Assist in providing initial management for post- cholecystectomy complications. 6. Counsel patients regarding gallstone prevention, lifestyle modifications, and risks of malignancy. 7. Follow OT and ICU protocols during management of obstructive jaundice and biliary surgery.
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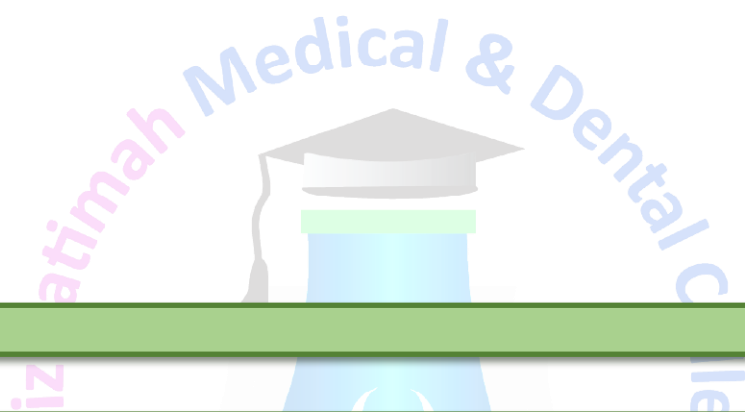
LIVER		
Code	Topic	Learning Objectives
S2-075	Clinical examination-liver	<ol style="list-style-type: none"> 1. Take focused history for fever, jaundice, abdominal pain, and weight loss. 2. Perform abdominal examination to assess hepatomegaly, tenderness, and palpable masses. 3. Interpret imaging findings from USG and CT for liver abscesses, hydatid cysts, and tumors. 4. Observe/assist in percutaneous drainage of liver abscesses. 5. Observe/assist in surgical procedures for hydatid cyst removal and liver resection. 6. Counsel patients regarding prevention of

		<p>hydatid disease and lifestyle modifications in liver malignancy.</p> <p>7. Follow OT and ICU protocols for safe perioperative care in liver surgery.</p>
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ORTHOPEDIC AND TRAUMA

Code	Topic	Learning Objectives
S2-082	Clinical skills- Orthopedics and trauma	<ol style="list-style-type: none"> 1. Take focused history from patients with bone fractures, tendon/bursa injuries, arthritis, bone/cartilage tumors, spinal trauma, spinal tumors, and spinal deformities. 2. Perform clinical examination, including inspection, palpation, and range of motion, neurovascular assessment, and special tests for joints, bones, and spine. 3. Interpret X-rays of fractures, joint diseases, bone/cartilage tumors, and spinal deformities.





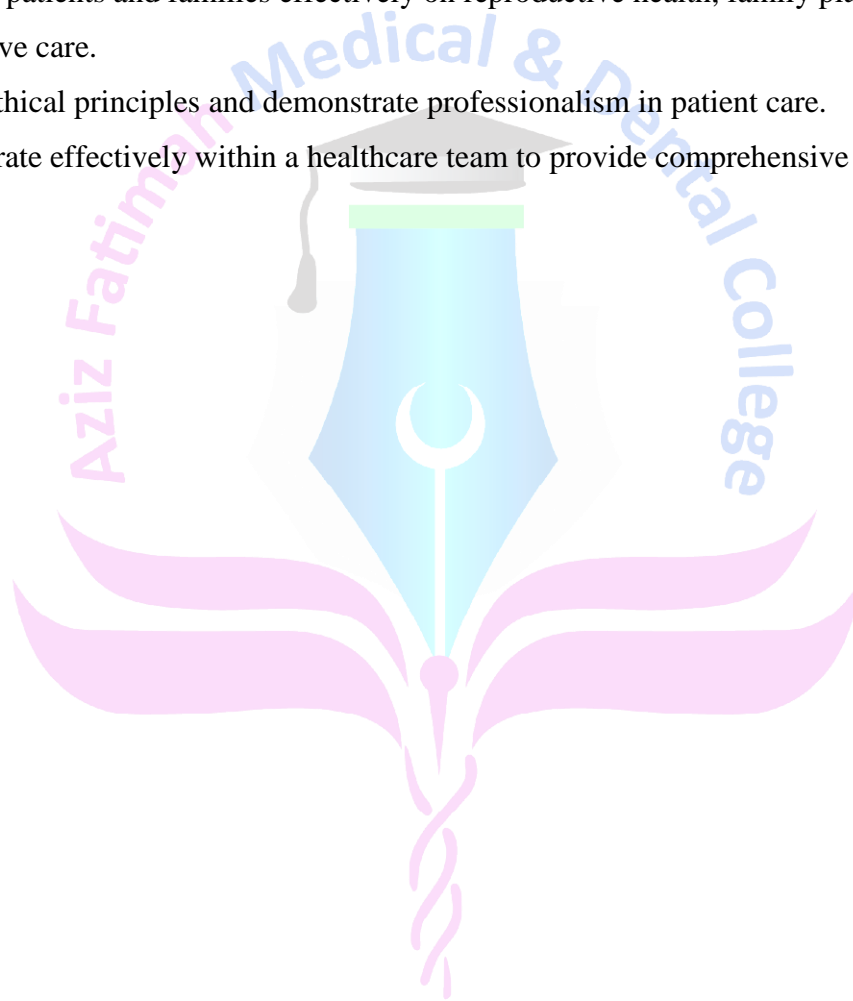
**GYNECOLOGY &
OBSTETRICS**



5. Gynecology

5.1 Module Outcomes

- Identify common obstetric and gynecological diseases and their clinical presentations.
- Formulate differential diagnoses based on history and examination findings.
- Interpret relevant investigations to aid diagnosis and management.
- Outline the management plans for common Gynecological and Obstetrics conditions, including emergencies.
- Counsel patients and families effectively on reproductive health, family planning, and preventive care.
- Apply ethical principles and demonstrate professionalism in patient care.
- Collaborate effectively within a healthcare team to provide comprehensive patient care.



5.2 Learning Objectives

5.2.1 Knowledge

GYNECOLOGY

BASICS OF FEMALE REPRODUCTIVE SYSTEM		
Code	Topic	Learning Objectives
Gyn-001	Genitourinary development	<ol style="list-style-type: none"> 1. Describe the embryological development of female genitourinary structures. 2. Explain the process of sexual differentiation in early embryonic life. 3. Identify common congenital anomalies resulting from Müllerian 4. tract developmental disorders
Gyn-002	Female abdominal-pelvic anatomy	<ol style="list-style-type: none"> 1. Identify the layers and boundaries of the abdominal and pelvic walls. 2. Describe the blood supply, lymphatic drainage, and innervation of the pelvis and perineum. 3. Identify key anatomical landmarks in the abdomen, pelvis, and perineum. 4. Identify anatomical structures that are vulnerable during common gynecological surgical procedures.
Gyn-003	Normal puberty	<ol style="list-style-type: none"> 1. Describe the hormonal regulation and physiological changes during puberty. 2. Identify the sequence and timing of secondary sexual characteristics, including breast development, pubic and axillary hair growth, and menarche. 3. Differentiate variations of normal puberty from abnormal puberty. 4. Discuss psychosocial aspects and health implications associated with pubertal

		development.
Gyn-004	Precocious puberty	<ol style="list-style-type: none"> 1. Define precocious puberty and differentiate between central and peripheral causes. 2. Describe the hormonal and physiological mechanisms leading to early pubertal onset. Identify clinical features that suggest precocious puberty. 3. Discuss investigations, including hormonal assays and imaging, to evaluate early puberty. 4. Explain management strategies, including medical and psychosocial interventions. (integrate with Psychiatry)
Gyn-005	Delayed puberty	<ol style="list-style-type: none"> 1. Define delayed puberty and distinguish between hypogonadotropic and hypergonadotropic causes. 2. Describe the hormonal and physiological mechanisms underlying delayed onset of puberty. 3. Identify clinical features indicative of delayed puberty. 4. Discuss investigations, including hormonal and imaging studies, to determine the cause. 5. Explain management strategies, including medical treatment and counseling.

MENSTRUAL CYCLE

Code	Topic	Learning Objectives
NORMAL MENSTRUAL CYCLE		
Gyn-007	Physiology of menstrual	1. Describe the hypothalamic–pituitary–

	cycle	<p>ovarian (HPO) axis and the hormonal regulation of the menstrual cycle.</p> <ol style="list-style-type: none"> 2. Explain the phases of the menstrual cycle and correlate hormonal changes with endometrial, cervical, and ovarian responses. 3. Explain the physiology of ovulation, fertilization, implantation, and early pregnancy. 4. 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	<ol style="list-style-type: none"> 1. Describe the causes, pathophysiology, and clinical features of abnormal uterine bleeding. 2. List the relevant investigations for diagnosis. 3. Plan the management considering both medical and surgical options. 4. Describe patient counseling points regarding treatment choices, fertility implications, and follow-up.
Gyn-009	Dysmenorrhea	<ol style="list-style-type: none"> 1. Define dysmenorrhea, etiology, and its types. 2. List investigations to confirm the diagnosis. 3. Outline management strategies for symptom relief and fertility preservation, including medical and surgical options.
Gyn-010	Endometriosis,	<ol style="list-style-type: none"> 1. Describe the etiology, pathophysiology,

	Adenomyosis	<p>and common sites of endometriosis/adenomyosis.</p> <ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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

		<p>irregularities.</p> <p>4. Outline management plan considering lifestyle modification, medical therapy, and fertility treatment.</p>
Gyn-013	Postmenopausal bleeding	<p>1. Identify potential causes, emphasizing malignancy exclusion.</p> <p>2. Establish the differential diagnosis based on signs and symptoms.</p> <p>3. List the investigations to reach the diagnosis.</p> <p>4. Plan the management including referral for surgical evaluation when indicated.</p> <p>5. Describe patient counseling points regarding findings, treatment options, and follow-up care.</p>
Gyn-014	Premenstrual syndrome (PMS)	<p>1. Describe clinical features, diagnostic criteria, and pathophysiology of PMS.</p> <p>2. Explain the impact of symptoms on daily activities.</p> <p>3. Plan the management.</p> <p>4. Describe patient counseling points regarding symptom recognition, coping strategies, and treatment adherence.</p>
PERIMENOPAUSE AND MENOPAUSE		
Gyn-015	Menopause	<p>1. Define menopause and differentiate it from perimenopause and premature ovarian failure. Describe the physiological changes during menopause.</p> <p>2. Identify clinical features.</p> <p>3. List complications associated with menopause.</p> <p>4. Outline investigations to evaluate menopausal status and exclude other</p>

		<p>causes of symptoms.</p> <p>5. Plan management including lifestyle modifications, hormone replacement therapy (HRT), non-hormonal pharmacologic options, and preventive care.</p> <p>6. Describe patient counseling points on symptom management, long-term health risks, and healthy aging strategies.</p>
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GENITAL INFECTIONS

Code	Topic	Learning Objectives
LOWER GENITAL TRACT INFECTIONS		
Gyn-018	Vulvovaginal candidiasis	<ol style="list-style-type: none"> 1. Describe the etiology, risk factors, and pathophysiology. 2. Identify clinical features. 3. List differential diagnoses 4. Select appropriate investigations. 5. Outline management strategies and preventive measures.
Gyn-019	Trichomonas vaginalis infection	<ol style="list-style-type: none"> 1. Describe the etiology, transmission, and pathophysiology. Identify signs and symptoms. 2. List investigations to confirm diagnosis. 3. Outline management plan.
Gyn-020	Bacterial vaginosis	<ol style="list-style-type: none"> 1. List the etiology of bacterial vaginosis. 2. Identify clinical features and list differential diagnoses. 3. Outline management plan.
Gyn-021	Gonorrhoea	<ol style="list-style-type: none"> 1. Describe the etiology, transmission, and complications. 2. Identify clinical features.

		<ol style="list-style-type: none"> 3. List differential diagnoses. 4. Outline investigations and management plan.
Gyn-022	Genitourinary chlamydia	<ol style="list-style-type: none"> 1. Describe the modes of transmission of Chlamydia trachomatis with the characteristic clinical features. 2. Identify asymptomatic presentation and its clinical significance. 3. Explain potential complications. 4. List appropriate diagnostic tests. 5. Outline recommended antibiotic treatment regimens and partner therapy.
Gyn-023	Genital Herpes Simplex	<ol style="list-style-type: none"> 1. Name the causative agents and describe mode of transmission. 2. Describe the typical clinical features. 3. Differentiate genital herpes from other causes of vulvar ulcers. 4. Identify appropriate diagnostic methods. 5. Outline the principles of management for primary, recurrent, and suppressive therapy. 6. Discuss complications in pregnancy and summarize recommendations for delivery planning in women with active lesions.
Gyn-024	Human Papillomavirus (HPV) Infection	<ol style="list-style-type: none"> 1. Describe the types of HPV and modes of transmission. 2. Identify the clinical manifestations, including genital warts and asymptomatic infection. 3. Explain the natural history of HPV infection and its role in cervical dysplasia and cervical cancer.

		<ol style="list-style-type: none"> 4. Identify appropriate screening methods. Outline preventive strategies.
Gyn-025	Syphilis	<ol style="list-style-type: none"> 1. Describe the modes of transmission of syphilis. 2. Identify the clinical features. 3. Discuss available diagnostic tests and their interpretation. 4. Outline treatment options. 5. Describe potential complications of untreated syphilis in women.
Gyn-026	Urinary Tract Infection (UTI) in Women	<ol style="list-style-type: none"> 1. Describe the etiology and pathophysiology of UTIs in women. 2. List risk factors for lower and upper urinary tract infections. 3. Identify the typical clinical features. 4. Differentiate UTIs from lower genital tract infections presenting with similar symptoms. 5. List appropriate investigations for diagnosis. 6. Outline management strategies. 7. Discuss potential complications.
UPPER GENITAL TRACT INFECTIONS		
Gyn-027	Pelvic inflammatory disease	<ol style="list-style-type: none"> 1. Describe the etiology including common causative organisms and pathophysiology of PID. 2. Diagnose based on signs, symptoms, and lab findings. 3. List the differential diagnosis. 4. List the appropriate investigations for a definitive diagnosis. 5. Outline management strategies, including outpatient versus inpatient antibiotic

		<p>therapy, surgical intervention when necessary, and supportive care.</p> <p>6. Describe patient counseling points regarding sexual transmission, partner treatment, prevention of recurrence, and potential complications (infertility, chronic pelvic pain, ectopic pregnancy).</p> <p>7. Discuss the complications if left untreated.</p>
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CONTRACEPTION		
Code	Topic	Learning Objectives
Gyn-029	Barrier methods of contraception	<ol style="list-style-type: none"> 1. Describe methods of natural contraception with success and failure rate. 2. Classify the types of barrier methods. 3. Explain the mechanism of action, effectiveness, advantages, and limitations. 4. Identify contraindications and common issues.
Gyn-030	Hormonal contraception	<ol style="list-style-type: none"> 1. Describe combined hormonal contraceptives, progestin-only pills, injectable, implants, patch, and vaginal ring. 2. Explain mechanisms of action, effectiveness, advantages, and side effects. 3. Identify contraindications and special considerations.
Gyn-031	Intrauterine contraception	<ol style="list-style-type: none"> 1. Classify intrauterine devices (IUDs). 2. Explain mechanism of action, effectiveness, advantages, complications, and follow-up requirements. 3. Identify indications and contraindications.
Gyn-032	Emergency	<ol style="list-style-type: none"> 1. Describe types of emergency

	contraception	<p>contraception.</p> <ol style="list-style-type: none"> 2. Explain timing, effectiveness, and indications for use. 3. Identify situations requiring follow-up.
Gyn-033	Sterilization	<ol style="list-style-type: none"> 1. Describe female sterilization and male sterilization. 2. Explain mechanism, effectiveness, indications, and complications. 3. Discuss irreversible nature and need for informed consent.

SUBFERTILITY

Code	Topic	Learning Objectives
Gyn-035	Female subfertility	<ol style="list-style-type: none"> 1. Define female subfertility and distinguish it from infertility. Enlist and describe causes. 2. Explain the role of investigations such as hormonal assays, ultrasound, hysterosalpingography (HSG), hysteroscopy, and laparoscopy. 3. Discuss basic management strategies including artificial reproductive techniques (ART). 4. Explain patient counseling points.
Gyn-036	Male subfertility	<ol style="list-style-type: none"> 5. Define male subfertility and distinguish it from infertility. 6. Enlist the causes leading to male subfertility. 7. Explain indications and interpretation of investigations: semen analysis, hormonal assays, scrotal ultrasound, and genetic tests.

		<p>8. Describe normal semen parameters and clinical significance of abnormal results.</p> <p>9. Discuss basic management strategies.</p> <p>10. Explain counseling points.</p>
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PROBLEMS IN EARLY PREGNANCY		
Code	Topic	Learning Objectives
Gyn-039	Ectopic pregnancy	<ol style="list-style-type: none"> 1. Describe the risk factors, common sites, and pathophysiology of ectopic pregnancy. 2. Identify key clinical features. 3. Differentiate ectopic pregnancy from other causes of early pregnancy bleeding and acute abdomino-pelvic pain. 4. Interpret essential investigations: urine/serum β-hCG, transvaginal ultrasound findings, and discriminatory zone concepts. 5. Outline management options: expectant, medical, and surgical approaches. 6. Describe the complications of ectopic pregnancy. 7. Explain counseling points regarding fertility impact, recurrence risk, and follow-up with serial β-hCG.
Gyn-040	Gestational trophoblastic disorders (GTD)	<ol style="list-style-type: none"> 1. Classify Gestational Trophoblastic Disorders. 2. Describe the risk factors of molar pregnancy and other GTDs. 3. Identify clinical features. 4. Interpret investigations: β-hCG levels, transvaginal ultrasound findings, chest

		<p>imaging, and staging criteria. Outline management options.</p> <ol style="list-style-type: none"> 5. Discuss post-treatment surveillance, including β-hCG monitoring, contraception advice, and recurrence risk. 6. Describe the complications.
Gyn-041	Miscarriage	<ol style="list-style-type: none"> 1. Define miscarriage and classify types. 2. List the causes and risk factors. 3. Tabulate the clinical presentation and ultrasound findings of each type of miscarriage. 4. List appropriate investigations. 5. Outline management strategies including expectant, medical, surgical, and counselling services. 6. Explain potential complications.

BENIGN AND MALIGNANT DISEASES OF OVARY, UTERUS, AND CERVIX

Code	Topic	Learning Objectives
Gyn-044	Benign diseases of ovary	<ol style="list-style-type: none"> 1. Classify common benign ovarian tumors based on the causes. 2. Describe risk factor and typical age distribution. 3. Identify clinical features. 4. List differential diagnoses of a pelvic mass. 5. List appropriate investigations. 6. Outline management plan. 7. Explain potential complications.
Gyn-045	Benign diseases of uterus	<p>Uterine fibroids</p> <ol style="list-style-type: none"> 1. Define uterine fibroids and classify them based on location.

		<ol style="list-style-type: none"> 2. Describe risk factors, pathophysiology, and epidemiology. 3. Identify common clinical features and complications. 4. List differential diagnoses. 5. List appropriate investigations to confirm diagnosis. 6. Outline management strategies including medical, surgical, and conservative approaches. 7. Discuss implications for fertility and pregnancy outcomes. <p>Endometrial polyps</p> <ol style="list-style-type: none"> 8. Describe the structure and histology of endometrial polyps. 9. Identify risk factors and causes of endometrial polyps. 10. List common signs and symptoms. 11. Select appropriate investigations to diagnose polyps. 12. Explain indications for removal of endometrial polyps. 13. Discuss potential complications and outcomes of untreated polyps. 14. Discuss implications for fertility and pregnancy outcomes.
Gyn-046	Benign diseases of cervix	<p>Cervical Ectropion</p> <ol style="list-style-type: none"> 1. Define cervical ectropion and describe its pathophysiology. 2. Identify risk factors and common causes. 3. List clinical features and appropriate investigations. 4. Plan the management and list potential

		<p>complications and follow-up requirements.</p> <p>Cervical stenosis</p> <ol style="list-style-type: none"> 1. Define cervical stenosis and describe its pathophysiology. 2. Identify causes, including congenital, post-surgical, or post-radiation. 3. List clinical features. 4. Select appropriate investigations. 5. Outline management strategies and discuss potential complications and implications for fertility.
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VULVOVAGINAL DISORDERS		
Code	Topic	Learning Objectives
Gyn-053	Bartholin Gland Cyst / Abscess	<ol style="list-style-type: none"> 1. Describe the anatomy, etiology, and pathophysiology. 2. Recognize clinical features and differentiate cyst from abscess. 3. List diagnostic methods. 4. Outline management options, including conservative care, incision and drainage, and marsupialization. 5. Discuss patient counseling regarding recurrence prevention and follow-up.
Gyn-054	Vulval intraepithelial neoplasia (VIN)	<ol style="list-style-type: none"> 1. Define VIN. 2. Identify the risk factors and clinical features. 3. Outline diagnostic methods. 4. Discuss management principles and follow-up.
Gyn-055	Vulvar squamous cell	<ol style="list-style-type: none"> 1. Describe epidemiology, risk factors, and

	carcinoma	<p>clinical presentation.</p> <ol style="list-style-type: none"> 2. Outline diagnostic workup and staging. 3. Discuss treatment principles and follow-up.
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UROGYNAECOLOGY		
Code	Topic	Learning Objectives
Gyn-057	Urinary incontinence	<ol style="list-style-type: none"> 1. Define urinary incontinence and classify its types. 2. Describe the pathophysiology and common causes. 3. Describe typical symptoms and clinical features. 4. List key investigations including urinalysis, urine culture, and post-void residual. 5. Describe basic management strategies. 6. Discuss preventive measures.
Gyn-058	Pelvic organ prolapse	<ol style="list-style-type: none"> 1. Define pelvic organ prolapse. 2. Classify prolapse according to affected compartment. 3. Describe pathophysiology and risk factors. 4. Identify clinical features and symptoms. 5. Outline steps of clinical evaluation. 6. List relevant investigations. 7. Describe grading systems for prolapse severity. 8. Outline management strategies (conservative and surgical). 9. Discuss preventive measures.

GYNAECOLOGICAL SURGERIES		
Code	Topic	Learning Objectives
Gyn-060	Infection prevention techniques	<ol style="list-style-type: none"> 1. Explain the principles of asepsis and their importance in preventing surgical site infections. 2. Describe the steps of hand washing, scrubbing sequence, and duration according to standard protocols. 3. Differentiate between closed and open gloving techniques and identify common breaches and necessary precautions. 4. Discuss the role of pre-operative area preparation, including sterilization procedures and use of prophylactic antibiotics. 5. Outline the essential components of pre-operative, intra- operative, and post-operative care. 6. 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	<ol style="list-style-type: none"> 1. Describe WHO safety checklist relevant to pre, intra- and post- operative surgery. 2. Explain the principles and importance of universal precautions for infection prevention and control. 3. Interpret relevant postoperative investigations and analyze findings to recognize normal and abnormal postoperative courses.
Gyn-062	Common surgical procedures as	<ol style="list-style-type: none"> 1. Explain the fundamental principles of basic surgical skills relevant to obstetrics

	(endometrial sampling dilatation and curettage, laparoscopy, hysteroscopy, colposcopy and hysterectomy)	<p>and gynecology. Explain the regional anatomical structures and their clinical importance in performing common obstetric and gynecological procedures</p> <ol style="list-style-type: none"> 2. Outline the sequential steps of commonly performed procedures in obstetrics and gynecology. 3. Discuss potential complications, their prevention, and management strategies
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ETHICS AND GENDER-BASED VIOLENCE

Code	Topic	Learning Objectives
Gyn-064	Medical ethics, patient safety and quality care	<ol style="list-style-type: none"> 1. Discuss the legal and ethical considerations of informed consent, confidentiality, and data protection. 2. Identify the professional responsibilities and boundaries in the use of social media and the role of the doctor in maintaining professionalism 3. Explain the importance of respecting patients' cultural and religious beliefs in providing equitable and compassionate care
Gyn-065	Gender based violence (integrate with Forensic Medicine).	<ol style="list-style-type: none"> 1. Describe various forms and nature of gender-based violence and their impact on women's health and well-being. 2. Diagnose case of domestic violence based on different injuries sustained by the victim, 3. Relate injuries as per Qisas and Diyat act. 4. Prepare medico legal certificate according to situation.

		5. Explain the process of collection and preservation of samples to be sent for investigations.
Gyn-066	Criminal Abortion & Infanticide (integrate with Forensic Medicine).	<ol style="list-style-type: none"> 1. Describe criminal abortion. 2. Explain the method to assess the age and viability by examining the aborted material. 3. Apply relevant section of Qisas and Diyat act. 4. Define infanticide. 5. Differentiate between still born and dead born infant based on autopsy findings. 6. Assess the age and cause of death.

5.2.2 Clinical Rotations

GYNECOLOGY

BASICS OF FEMALE REPRODUCTIVE SYSTEM		
Code	Topic	Learning Objectives
Gyn-006	Pelvic anatomy & surgical risk	<ol style="list-style-type: none"> 1. Identify major pelvic organs, vessels, nerves, and relevant anatomical variations, including Müllerian anomalies (on anatomical models, diagrams, or imaging). 2. 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 x		
Code	Topic	Learning Objectives

Gyn-016	Gynecological history	<ol style="list-style-type: none"> 1. Take a structured gynecological history covering: 2. Patient's biodata. 3. Presenting complaint: onset, duration, severity, and progression of symptoms 4. 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. 5. Vaginal discharge: amount, colour, odour, presence of blood. 6. Cervical screening. 7. Obstetric history: pregnancies, outcomes, complications, and fertility issues 8. Gynecological symptoms: abnormal bleeding, pelvic pain, vaginal discharge dyspareunia 9. Sexual and contraceptive history: sexual activity, contraception, STIs, fertility desires 10. Past gynecological and surgical history 11. Relevant medical, family, drug, and allergy history 12. Social and lifestyle factors influencing reproductive health 13. Psychosocial factors affecting menstrual or reproductive well-being 14. Demonstrate professional, empathetic, and culturally sensitive communication throughout the history-taking process.
Gyn-017	Abdominopelvic examination	<p>Perform a systematic abdominal and pelvic examination through following methods:</p> <ul style="list-style-type: none"> ➤ Inspect to assess abdominal contour, scars, masses, perineal and external genitalia

		<ul style="list-style-type: none"> ➤ 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
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GENITAL INFECTIONS

Code	Topic	Learning Objectives
Gyn-028	Clinical examination for genitourinary infections	<ol style="list-style-type: none"> 1. Perform pelvic examination under supervision and observe/assist in collecting swabs (vaginal, end cervical) while keeping the patient comfortable and informed. 2. 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. 3. Maintain respectful, non-judgmental communication, protect privacy, and reassure the patient.

		4. 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.
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CONTRACEPTION

Code	Topic	Learning Objectives
Gyn-034	Clinical assessment and counseling in contraceptive care	<ol style="list-style-type: none"> 1. Take a focused contraceptive history, including previous methods, preferences, menstrual pattern, sexual activity, and medical conditions. 2. Narrate proper use of hormonal methods and guide patients on adherence, missed doses, and side effects. 3. Demonstrate counseling about IUD insertion, post-insertion care, and warning signs. 4. Counsel regarding emergency contraception use, including timing, effectiveness, and follow-up if menstruation is delayed. 5. Demonstrate counseling about permanent contraception (tubal ligation, vasectomy), highlighting irreversible nature, post-procedure care, and follow-up. 6. Counsel all patients respectfully and non-judgmentally about method choice, side effects, adherence, partner involvement, and safe sex practices. 7. Maintain patient privacy, comfort, and cultural sensitivity during history-taking, demonstration, and counseling.

SUBFERTILITY		
Code	Topic	Learning Objectives
Gyn-037	Female Subfertility- History & Examination	<ol style="list-style-type: none"> 1. 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. 2. Perform abdominal and bimanual pelvic examination to assess: <ul style="list-style-type: none"> ➤ Uterine size and tenderness ➤ Adnexal masses or tenderness ➤ Pelvic organ mobility ➤ Signs of endometriosis or pelvic infection 3. Maintain privacy, dignity, and cultural sensitivity during history-taking and examination. Communicate empathetically and non-judgmentally
Gyn-038	Male Subfertility- History & Examination	<ol style="list-style-type: none"> 1. 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. 2. Perform testicular examination for testicular volume, consistency, masses, absence of vas deferens, varicocele, evidence of surgical scars.(Surgery)

PROBLEMS IN EARLY PREGNANCY

Code	Topic	Learning Objectives
Gyn-042	Clinical assessment of ectopic pregnancy	<ol style="list-style-type: none"> 1. Take history in patients with early pregnancy bleeding or abdominopelvic pain. 2. Perform abdominal and pelvic examination to assess for tenderness, adnexal mass, and signs of peritoneal irritation. 3. Interpret β-hCG results and transvaginal ultrasound findings in early pregnancy. 4. Observe/assist in emergency assessment and stabilization of patients with suspected ectopic pregnancy. 5. Counsel regarding options, fertility implications, and follow-up with serial β-hCG.
Gyn-043	Clinical assessment of miscarriage	<ol style="list-style-type: none"> 1. Take history of bleeding, pain, and prior pregnancy outcomes in a patient suspected of miscarriage. 2. Perform abdominal and pelvic examination to identify uterine size, tenderness, and passage of products. 3. Interpret ultrasound findings for different types of miscarriage. 4. Counsel patient empathetically about the warning signs and follow-up.

BENIGN AND MALIGNANT DISEASES OF OVARY, UTERUS, AND CERVIX

Code	Topic	Learning Objectives
Gyn-047	Clinical assessment for benign gynecological disorders	<ol style="list-style-type: none"> 1. Take a focused gynecological and reproductive history, including menstrual pattern, bleeding, pain, infertility, and prior procedures. 2. Perform abdominal and bimanual pelvic examination to assess uterine size, contour,

		<p>adnexal masses, tenderness, and cervical changes.</p> <ol style="list-style-type: none"> 3. Perform speculum examination for cervical assessment when indicated. 4. Interpret relevant imaging or diagnostic findings, including ultrasound, MRI, hysteroscopy, and Pap smear/colposcopy. 5. 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)	<ol style="list-style-type: none"> 1. Classify malignant ovarian tumors based on cell origin. 2. Describe risk factors, pathophysiology, and epidemiology. 3. Identify common clinical features and warning signs. 4. List differential diagnoses for ovarian masses. Select appropriate investigations, including tumor markers, imaging, and biopsy. 5. Outline management strategies, including surgical, chemotherapeutic, and palliative options. 6. Discuss prognosis, complications, and follow-up requirements.
Gyn-049	Endometrial cancer	<ol style="list-style-type: none"> 1. Describe endometrial hyperplasia and its types. 2. Describe the etiology and pathophysiology of endometrial cancer. 3. Identify risk factors and common clinical features. 4. Select appropriate investigations for diagnosis. 5. Explain the FIGO staging system and interpret staging criteria. 6. Outline management strategies for each stage,

		<p>including surgical options and conservative approaches when indicated.</p> <ol style="list-style-type: none"> 7. Describe adjuvant treatment modalities. 8. Discuss prognosis, potential complications, and follow-up care.
Gyn-050	Premalignant disease of cervix	<ol style="list-style-type: none"> 1. Define premalignant cervical lesions and classify them. 2. Describe risk factors and pathophysiology, including HPV infection and other contributing factors. 3. Identify clinical features. 4. Select appropriate investigations (Pap smear/ liquid based cytology, visual inspection with acetic acid, colposcopy). 5. Plan management based on lesion grade. 6. Discuss follow-up protocols, screening guidelines, and prevention strategies. 7. Describe potential progression to invasive cervical cancer and complications.
Gyn-051	Malignant disease of cervix	<ol style="list-style-type: none"> 1. Describe risk factors and pathophysiology. 2. Describe clinical presentation. 3. Select appropriate investigations for diagnosis and staging. 4. Explain staging and prognosis of cervical cancer (FIGO). 5. Outline management strategies. 6. Discuss prognosis, complications, and follow-up protocols.
Gyn-052	Clinical assessment for malignancies	<ol style="list-style-type: none"> 1. 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.

		<ol style="list-style-type: none"> 2. Perform abdominal, bimanual, and speculum examinations to assess for pelvic masses, uterine enlargement, cervical lesions, tenderness, or nodal involvement. 3. Interpret relevant investigations. 4. Demonstrate counseling skills regarding diagnosis, management options, and follow-up care, prognosis, and fertility implications where relevant.
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VULVOVAGINAL DISORDERS

Code	Topic	Learning Objectives
Gyn-056	Clinical assessment of vulvovaginal disorders	<ol style="list-style-type: none"> 1. Take a focused history from a female patient presenting with vulvovaginal complaints, including: <ul style="list-style-type: none"> ➤ 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. 2. Perform a systematic vulvar examination for: <ul style="list-style-type: none"> ➤ Skin changes such as erythema, lichenification, lesions, warts, ulcers. ➤ Swelling or masses. ➤ Signs of atrophy or inflammation 3. Observe/assist in a speculum examination to inspect the vagina and cervix safely. 4. Assist in collection of appropriate specimens (vaginal swabs, end cervical swabs) for laboratory investigation.

		<p>5. Demonstrate proper infection control and patient comfort measures, including:</p> <ul style="list-style-type: none"> ➤ Hand hygiene and use of gloves. ➤ Ensuring patient privacy, consent, and comfort during examination.
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UROGYNAECOLOGY

Code	Topic	Learning Objectives
Gyn-059	History and examination of urogynaecological disorders	<ol style="list-style-type: none"> 1. Take a focused urogynaecological history, including urinary, prolapse, bowel, and sexual symptoms. 2. Perform a systematic pelvic examination to assess: <ul style="list-style-type: none"> ➤ Urethral support and bladder neck mobility ➤ Presence and compartment of prolapse (anterior, posterior, apical) ➤ Signs of urinary or fecal dysfunction 3. Demonstrate simple bedside evaluation of urinary incontinence (cough stress test, post-void residual assessment). 4. Instruct on pelvic floor muscle exercises for both UI and POP. Demonstrate correct urine sample collection for urinalysis and culture. 5. Observe/assist in pessary fitting and provide patient counseling where indicated. 6. Communicate respectfully and non-judgmentally with patients regarding diagnosis, management options, and preventive measures.

GYNAECOLOGICAL SURGERIES

Code	Topic	Learning Objectives
Gyn-063	Gynecological surgeries	<ol style="list-style-type: none"> 1. Identify relevant regional anatomical structures and their clinical significance for each procedure. 2. Observe/assist in proper patient positioning, preparation, and surgical procedure for endometrial sampling/D&C, laparoscopy, hysteroscopy, colposcopy, and hysterectomy in OT. 3. Identify potential intraoperative complications. 4. Maintain asepsis and infection control throughout all procedural steps. Document procedural steps, findings, and patient outcomes accurately. 5. 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

Code	Topic	Learning Objectives
Gyn-067	Managing the cases of gender based violence (integrate with Forensic Medicine)	<ol style="list-style-type: none"> 1. Identify the signs of gender-based violence, sexual assault, and female genital mutilation (FGM) in patients. 2. Conduct sensitive history-taking and physical examination of survivors, ensuring patient comfort and safety. 3. Observe/assist in proper collection, labeling, and handling of forensic evidence (e.g., rape kit) in collaboration with forensic services (if a

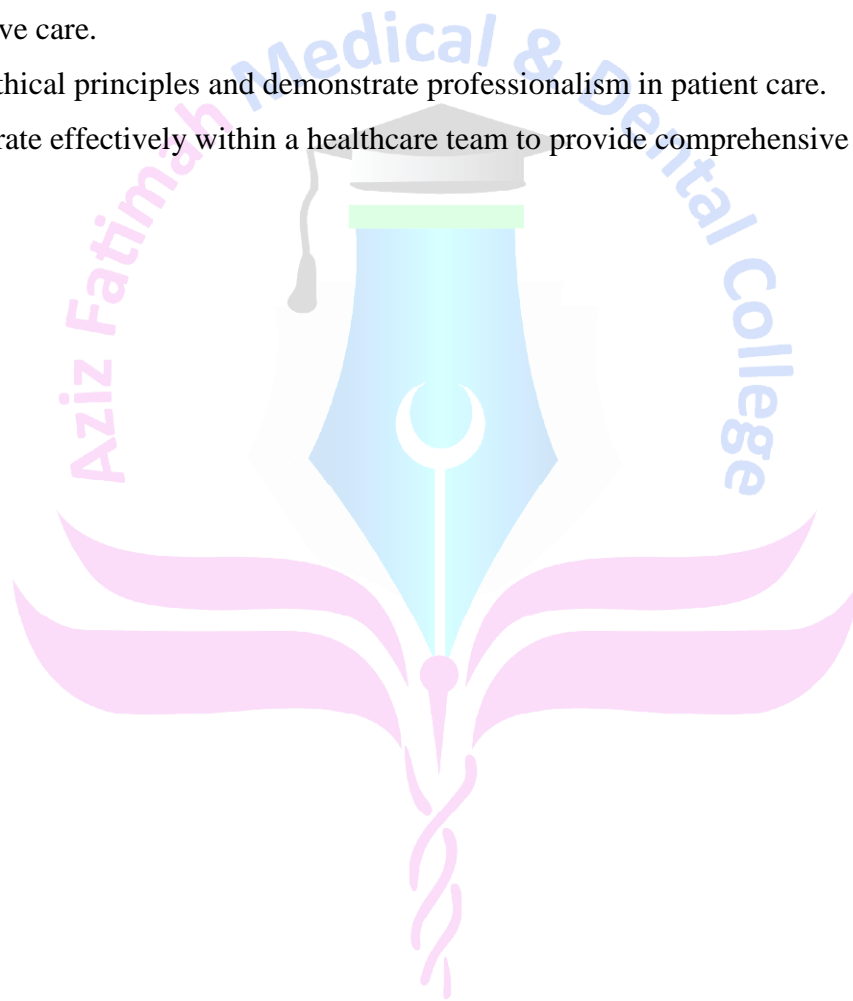
		<p>relevant case is encountered; otherwise, understand the steps through video demonstration, lecture, or illustrative pictures).</p> <ol style="list-style-type: none">4. Document findings for medico legal purposes in cases of rape or gender-based violence accurately and sensitively, including history, examination, and evidence.5. Provide immediate supportive care and referrals while maintaining privacy and respect.6. Counsel patients regarding medical, psychological, and legal options available.
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6. Obstetrics

6.1 Module Outcomes

- Identify common obstetric and gynecological diseases and their clinical presentations.
- Formulate differential diagnoses based on history and examination findings.
- Interpret relevant investigations to aid diagnosis and management.
- Outline the management plans for common Gynecological and Obstetrics conditions, including emergencies.
- Counsel patients and families effectively on reproductive health, family planning, and preventive care.
- Apply ethical principles and demonstrate professionalism in patient care.
- Collaborate effectively within a healthcare team to provide comprehensive patient care.



6.2 Learning Objectives

6.2.1 Knowledge

OBSTETRICS

MATERNAL PHYSIOLOGY FETAL GROWTH & DEVELOPMENT		
Code	Topic	Learning Objectives
Obs-001	Physiological adaptations during pregnancy	<ol style="list-style-type: none"> 1. Describe the major physiological changes in pregnancy across the cardiovascular, respiratory, renal, hematologic, and endocrine systems. 2. Explain the gastrointestinal, musculoskeletal, and dermatologic adaptations that occur during normal pregnancy. 3. Describe the physiological changes in the uterus, cervix, and breasts during pregnancy. 4. Explain how normal pregnancy changes affect maternal care and monitoring.
Obs-002	Fetal growth, development, and abnormalities	<ol style="list-style-type: none"> 1. Describe normal fetal growth and development, including key milestones. 2. Explain fetal growth restriction and its clinical implications. 3. Identify determinants of fetal birth weight. 4. Describe the development of major fetal systems: cardiovascular, respiratory, gastrointestinal, hepatobiliary, renal, and integumentary. 5. Explain the formation and function of the fetal circulation and amniotic fluid. 6. Identify common structural and functional fetal abnormalities.
Obs-003	Twin and multiple	<ol style="list-style-type: none"> 1. Define twins and higher multiple

	gestations	<p>gestations.</p> <ol style="list-style-type: none"> 2. Classify twins based on zygosity and chorionicity. 3. Identify the aetiology and risk factors for multiple gestations. 4. Describe maternal and fetal complications associated with twin and higher-order pregnancies. 5. Recognize antenatal complications specific to multiple gestations. 6. Identify intrapartum complications and their clinical features. 7. Outline principles of antenatal management for twin and higher-order pregnancies. 8. Describe intrapartum management strategies, including monitoring, delivery planning, and mode of delivery considerations. 9. List postpartum complications unique to multiple gestations and their management.
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EARLY PREGNANCY AND ANTENATAL CARE

Code	Topic	Learning Objectives
Obs-006	Confirmation and dating of pregnancy	<ol style="list-style-type: none"> 1. Describe the methods used for confirmation of pregnancy. 2. Explain the physiological basis for confirming early pregnancy and identifying features suggestive of complications. 3. Describe the methods used to determine gestational age.

		<ol style="list-style-type: none"> 4. Interpret findings from early ultrasound to confirm gestational age and viability. 5. List the factors that may affect accurate gestational age.
Obs-007	Antenatal care	<ol style="list-style-type: none"> 1. Explain the significance, objectives, and components of antenatal care across all trimesters in promoting maternal and fetal health. 2. Identify antenatal risk factors and analyze their potential impact on pregnancy outcomes. 3. Discuss strategies to prevent, detect, and manage conditions that may affect maternal or fetal wellbeing. 4. Describe the schedule of antenatal visits and essential assessments at each visit. 5. Describe routine prenatal screening and diagnostic tests, and evaluate their indications, risks, and benefits. 6. Interpret the principles and importance of screening in pregnancy for early identification of complications. 7. Outline routine antenatal investigations and maternofetal monitoring. 8. Identify danger signs requiring urgent referral. 9. Discuss the points of nutritional advice, supplementation, lifestyle counselling, and recommended immunizations. 10. Describe strategies for birth preparedness and complication readiness.
Obs-008	Obstetric ultrasound	<ol style="list-style-type: none"> 1. Describe the main uses of obstetric ultrasound in pregnancy, including

		<p>assessment of fetal growth, anatomy, and well-being.</p> <ol style="list-style-type: none"> 2. Explain the recommended ultrasound scanning schedule during antenatal care. 3. Evaluate fetal well-being using ultrasound, including assessment of amniotic fluid volume and placental function. 4. Interpret cardiograph (CTG) findings to assess fetal status. 5. Apply biophysical profile (BPP) scoring to monitor fetal health. 6. Describe the role of Doppler investigations in evaluating fetal circulation and placental perfusion.
Obs-009	Prenatal diagnosis	<ol style="list-style-type: none"> 1. Describe the purpose and indications of prenatal diagnostic tests. 2. Classify and describe types of prenatal diagnostic tests with examples. 3. Explain the timing and gestational age at which different prenatal diagnostic tests are performed. 4. Describe essential points for effective prenatal counseling.

ANTENATAL OBSTETRIC PROBLEMS

Code	Topic	Learning Objectives
Obs-011	Hyperemesis gravidarum	<ol style="list-style-type: none"> 1. Describe the etiology, risk factors, and pathophysiology of hyperemesis gravidarum. 2. Identify the clinical features and differentiate hyperemesis gravidarum

		<p>from normal nausea, vomiting in pregnancy.</p> <ol style="list-style-type: none"> 3. List important differential diagnoses. 4. List appropriate investigations. 5. Outline management plan. 6. Explain potential maternal and fetal complications.
Obs-012	Musculoskeletal complaints in pregnancy	<ol style="list-style-type: none"> 1. Identify common musculoskeletal complaints in pregnancy. 2. Explain the physiological and anatomical factors contributing to backache, pubic symphysis dysfunction, and carpal tunnel syndrome. 3. Outline management strategies to relieve symptoms of minor musculoskeletal complaints. 4. Identify the warning signs that require further evaluation or specialist referral.
Obs-013	Urinary tract infections (UTI)	<ol style="list-style-type: none"> 1. Describe the common causes and risk factors of urinary tract infections (UTI) in pregnancy. 2. Identify clinical features and complications of UTI in pregnant women. 3. Outline appropriate diagnostic approaches, including urine analysis and culture. 4. Explain the principles of management and treatment of UTI during pregnancy. 5. Apply preventive strategies to reduce the risk of UTI and associated complications
Obs-014	Abdominal pain in pregnancy	<ol style="list-style-type: none"> 1. Identify common obstetric and non-obstetric causes of abdominal pain in pregnancy.

		<ol style="list-style-type: none"> 2. Apply appropriate assessment and diagnostic strategies to evaluate abdominal pain in pregnant women. 3. Outline initial management approaches and indications for referral or urgent intervention.
Obs-015	Oligohydramnios and polyhydramnios	<ol style="list-style-type: none"> 1. Define oligohydramnios and polyhydramnios based on amniotic fluid assessment criteria. 2. Identify maternal, fetal, and placental causes of oligohydramnios and polyhydramnios. 3. Describe the clinical features and ultrasound findings. 4. List investigations to determine the underlying etiology. 5. Outline management strategies according to severity and gestational age. 6. Explain potential maternal and fetal complications and their impact on pregnancy outcomes.
Obs-016	Rhesus iso-immunization	<ol style="list-style-type: none"> 1. Explain how rh iso-immunization occurs and its impact on the fetus. 2. List the potential sensitizing events for rhesus disease. 3. List the key screening tests. 4. Explain the role of anti-d immunoglobulin in preventing rh iso-immunization and when it should be given. 5. Outline the basic management of an affected pregnancy.
Obs-017	Prolonged pregnancy & Post term pregnancy	<ol style="list-style-type: none"> 1. Differentiate prolonged pregnancy from post-term pregnancy and formulate

		<p>appropriate management plans.</p> <ol style="list-style-type: none"> 2. Define post-term pregnancy and identify associated maternal and fetal risks. 3. List the common causes and contributing factors leading to prolonged pregnancy. 4. Describe the clinical features and complications. 5. Outline recommended surveillance methods. 6. List indications for immediate induction of labour or delivery post-dates.
Obs-018	Infections in pregnancy	<ol style="list-style-type: none"> 1. Explain the pathophysiology and implications of common viral and bacterial infections in pregnancy on both the mother and fetus. 2. Discuss the maternal and fetal consequences of infections during pregnancy. 3. Formulate appropriate management plans for common infections encountered in pregnancy.
Obs-019	Perinatal infections	<ol style="list-style-type: none"> 1. Define perinatal infections and explain their timing, transmission routes, and relevance to maternal and neonatal health. 2. Identify common perinatal infections including torch infections, group B Streptococcus, Listeria, HIV, Hepatitis B and their epidemiology. 3. Describe maternal, fetal, and neonatal clinical manifestations of perinatal infections. 4. Explain diagnostic approaches, including serology, cultures, and PCR-based tests.

		<ol style="list-style-type: none"> 5. Discuss maternal and neonatal complications associated with untreated perinatal infections. 6. Outline preventive strategies, including maternal vaccination, screening, prophylaxis, hygienic practices, and per partum management.
Obs-020	Pregnancy induced hypertension	<ol style="list-style-type: none"> 1. Define pregnancy-induced hypertension and differentiate it from other hypertensive disorders of pregnancy. 2. Identify risk factors and possible etiological factors associated with PIH. 3. Describe clinical features and diagnostic criteria for PIH. 4. Explain necessary investigations to assess maternal and fetal status. 5. Outline management strategies. 6. Discuss maternal and fetal complications associated with PIH. 7. Describe preventive measures and follow-up recommendations for high-risk women.
Obs-021	Gestational diabetes	<ol style="list-style-type: none"> 1. Define gestational diabetes. 2. Identify risk factors and predisposing conditions for GDM. 3. Describe the pathophysiology and metabolic changes leading to glucose intolerance in pregnancy. 4. Explain screening methods and diagnostic criteria used for GDM. 5. Recognize clinical features and potential maternal and fetal implications. 6. Outline management strategies.

		<ol style="list-style-type: none"> 7. Discuss short-term and long-term complications for both mother and baby. 8. Describe preventive measures and postpartum follow-up, including screening for type 2 diabetes.
Obs-022	Anemia in pregnancy	<ol style="list-style-type: none"> 1. Identify risk factors and common causes of anemia in pregnancy. 2. Identify clinical signs and symptoms. 3. List diagnostic investigations. 4. Describe management strategies. 5. Discuss maternal and fetal complications, including preterm birth and low birth weight. 6. Emphasize preventive measures.

LABOUR

Code	Topic	Learning Objectives
Obs-026	Fetal and maternal anatomy relevant to labour	<ol style="list-style-type: none"> 1. Differentiate the main types of female pelvis and their obstetric relevance. 2. Describe the main bones, sutures, fontanelles, and diameters of the fetal skull. 3. Explain how the relationship between pelvic and fetal skull diameters influences the process of spontaneous vaginal delivery.
Obs-027	Process of labour	<ol style="list-style-type: none"> 1. Explain the physiology and mechanisms of labour and delivery. 2. Describe the maternal and fetal anatomical adaptations relevant to the process of labour. 3. Discuss the stages and mechanisms of

		<p>normal labor, and interpret the use of the partogram and who labor care guide (LCG) in monitoring progress.</p> <ol style="list-style-type: none"> 4. Identify various methods for induction of labor and analyze their indications, contraindications, and potential complications. 5. Explain the principles, methods, indications, and side effects of different pain relief techniques used during labor. 6. Describe the pharmacology, indications, and safe administration of oxytocin (syntocinon) in labor management.
Obs-028	Cardiotopograph	<ol style="list-style-type: none"> 1. Explain the principles and physiological basis of cardiopograph (CTG). 2. Describe the components of CTG, including fetal heart rate tracing and uterine contractions. 3. Define the parameters of a fetal heart trace and state the normal ranges for fetal heart rate and number of uterine contractions per 10 minutes. 4. Correlate various fetal heart rate trace parameters with fetal well-being and labor progress. 5. Differentiate between normal and abnormal CTG patterns. 6. Classify CTG traces into relevant categories and interpret their clinical significance in labor management. 7. Discuss the role of CTG in antenatal and intrapartum fetal surveillance. 8. List the limitations of CTG in assessing

		fetal well-being
Obs-029	Abnormal labour	<ol style="list-style-type: none"> 1. Explain the contributing factors leading to abnormal labor. 2. Recognize prolonged and obstructed labor based on history, examination, and interpretation of the partogram. 3. Identify various types of malposition's and malpresentation during labour. 4. Describe the diagnosis and management principles of malpresentation and malposition. 5. Outline the physiology and management of the third stage of labor, including prevention and management of perineal 6. injuries
Obs-030	Fetal malpresentation	<ol style="list-style-type: none"> 1. Define fetal malpresentation and identify the main types. 2. Describe breech presentation, including its types and predisposing factors. 3. Outline the antenatal assessment and management of breech presentation. 4. Explain the principle of external cephalic version (ECV), including indications, contraindications, and risks. 5. Discuss management options when ECV fails, including selection of mode of delivery. 6. Identify the prerequisites for safe vaginal breech delivery. 7. Describe the technique of vaginal breech delivery, including delivery of buttocks, shoulders, and head. 8. List common complications associated

		<p>with breech delivery.</p> <p>9. Describe transverse and oblique lie, their causes, and risks.</p> <p>10. Outline appropriate management strategies for transverse, oblique, and unstable lie to ensure safe delivery.</p>
Obs-031	Preterm labour	<p>1. Define preterm labour.</p> <p>2. Identify its risk factors and causes.</p> <p>3. Describe types of preterm labour.</p> <p>4. Diagnose spontaneous preterm labour based on signs and symptoms and investigations.</p> <p>5. Develop management plan of spontaneous preterm labour.</p> <p>6. Define preterm pre-labour rupture of membranes (PPROM).</p> <p>7. Identify the clinical features.</p> <p>8. Outline basic principles of management of PPRM.</p>

PUERPERIUM

Code	Topic	Learning Objectives
Obs-033	Introduction to puerperium	<p>1. Define puerperium and outline its duration.</p> <p>2. Describe the normal physiological changes occurring in the mother during the puerperal period.</p> <p>3. Explain the hormonal, hematologic, uterine, and breast changes after childbirth.</p>
Obs-034	Puerperal disorders	<p>Perineal complications</p> <p>1. Identify common perineal complications</p>

		<p>(tears, episiotomy issues, hematoma, and wound infection).</p> <ol style="list-style-type: none"> 2. Recognize clinical features and risk factors. 3. Outline recommended management and preventive measures. <p>Secondary postpartum hemorrhage</p> <ol style="list-style-type: none"> 4. Define secondary PPH and list common causes. 5. Recognize warning signs and symptoms. 6. Describe diagnostic evaluation and management strategies. <p>Obstetric palsy</p> <ol style="list-style-type: none"> 1. Explain the mechanisms leading to obstetric palsy. 2. Recognize signs and symptoms of nerve injuries after childbirth. 3. Outline management and rehabilitation principles. <p>Pubic symphysis diastasis</p> <ol style="list-style-type: none"> 1. Define pubic symphysis diastasis and explain mechanisms and risk factors. 2. Recognize clinical presentation. 3. Describe diagnostic methods and outline conservative and supportive management.
Obs-035	Puerperal pyrexia	<ol style="list-style-type: none"> 1. Define puerperal pyrexia. 2. List common causes and risk factors. 3. Identify common sites of infection. 4. Diagnose based on clinical presentation. 5. Describe investigations for suspected puerperal infection. 6. Outline the management plan including antimicrobial and supportive management.

		7. Discuss measures for prevention of puerperal sepsis.
Obs-036	Breast disorders in the puerperium	<ol style="list-style-type: none"> 1. Identify common breast problems (engorgement, cracked nipples, mastitis, and abscess). 2. Describe signs and symptoms of each condition. 3. Outline management strategies and breastfeeding support techniques. 4. Explain preventive measures for breastfeeding-related complications.
Obs-037	Mental health in the puerperium (integrate with Psychiatry)	<p>Postpartum blues</p> <ol style="list-style-type: none"> 1. Define postpartum blues and describe typical symptoms. 2. Identify risk factors. 3. Outline supportive management and expected course. <p>Postpartum depression</p> <ol style="list-style-type: none"> 1. Define postpartum depression and distinguish it from postpartum blues and postpartum psychosis. 2. Identify major risk factors, including psychosocial, biological, and obstetric contributors. 3. Describe the key clinical features and screening indicators of postpartum depression. 4. List appropriate screening tools and interpret their significance in clinical practice. 5. Outline management options, including psychological therapies, pharmacologic treatment, and referral pathways.

		<p>6. Explain the consequences of untreated postpartum depression for the mother, infant, and family, emphasizing the importance of early detection and support.</p> <p>Puerperal psychosis</p> <ol style="list-style-type: none"> 1. Define puerperal psychosis and differentiate it from postpartum blues and depression. 2. Identify early warning signs and symptoms. 3. List major risk factors. 4. Describe emergency management and referral pathways.
Obs-038	Neonatal care (integrate with Pediatrics)	<ol style="list-style-type: none"> 1. Explain the principles of essential neonatal care and the management of common neonatal problems. 2. Describe the key steps, indications, and rationale of neonatal resuscitation. 3. Discuss the importance of breastfeeding, proper positioning, and attachment techniques. 4. Explain the concept, procedure, and benefits of kangaroo mother care (KMC). 5. Outline the management approach for newborns with congenital anomalies.

OBSTETRIC EMERGENCIES

Code	Topic	Learning Objectives
Obs-040	Preeclampsia and eclampsia	<ol style="list-style-type: none"> 1. Define preeclampsia and describe its diagnostic criteria. 2. Identify risk factors and possible causes of preeclampsia.

		<ol style="list-style-type: none"> 3. Explain the pathophysiology and clinical features of preeclampsia. 4. Outline appropriate investigations for diagnosis. 5. Describe management strategies, including antihypertensives, seizure prophylaxis, and timing of delivery. 6. Discuss maternal and fetal complications. 7. Explain screening and preventive measures for high-risk pregnancies. 8. Define eclampsia and differentiate it from preeclampsia. 9. Identify risk factors and triggers for eclampsia. 10. Recognize clinical presentations, especially seizures. 11. Explain immediate investigation priorities. 12. Describe emergency management, including seizure control and maternal stabilization. 13. Outline indications for urgent delivery. 14. Discuss maternal and fetal complications associated with eclampsia.
Obs-040	Shoulder dystocia	<ol style="list-style-type: none"> 1. Define shoulder dystocia and describe it as an obstetric emergency. 2. Identify risk factors and predisposing conditions. 3. Describe the mechanism of shoulder dystocia during vaginal delivery. 4. Identify clinical signs indicating shoulder dystocia. 5. Explain preventive strategies during labor and delivery.

		<ol style="list-style-type: none"> 6. Describe stepwise management maneuvers. 7. Outline potential maternal and neonatal complications. 8. Discuss documentation, medico legal considerations, and team communication during management.
Obs-041	Umbilical cord prolapse	<ol style="list-style-type: none"> 1. Define umbilical cord prolapse and differentiate between types. 2. List risk factors and predisposing conditions. 3. Diagnose based on clinical signs and symptoms. 4. Explain immediate assessment and diagnosis. 5. Describe emergency management steps to relieve cord compression and stabilize the fetus. 6. Outline indications for urgent delivery. 7. Discuss maternal and fetal complications associated with cord prolapse. 8. Emphasize documentation, team communication, and medico legal considerations in obstetric emergencies.
Obs-042	Uterine rupture	<ol style="list-style-type: none"> 1. Define uterine rupture and differentiate it from uterine dehiscence. 2. List risk factors and predisposing conditions. 3. Describe the pathophysiology and mechanism of uterine rupture. 4. Diagnose based on clinical signs and symptoms. 5. Explain diagnostic methods and

		<p>monitoring.</p> <ol style="list-style-type: none"> 6. Describe emergency management, including maternal stabilization, surgical repair, or hysterectomy. 7. Discuss maternal and fetal complications. 8. Emphasize preventive strategies, labor monitoring, and timely decision-making.
Obs-043	Venous thromboembolism	<ol style="list-style-type: none"> 1. Describe the physiological changes in pregnancy that increase the risk of venous thromboembolism. 2. Identify risk factors for deep vein thrombosis (DVT) and pulmonary embolism (PE) in pregnancy and the postpartum period. 3. Identify the clinical features of DVT and Pe in pregnant patients. 4. Select appropriate diagnostic investigations for suspected VTE in pregnancy. 5. Outline management strategies for VTE during pregnancy and postpartum. 6. Explain preventive measures in high-risk pregnant women.
Obs-044	Amniotic fluid embolism	<ol style="list-style-type: none"> 1. Define amniotic fluid embolism and describe its pathophysiology. 2. Identify risk factors and predisposing conditions 3. Describe clinical presentation. 4. Explain diagnostic criteria and differential diagnoses. 5. Describe immediate emergency management. 6. Outline potential maternal and fetal

		<p>complications.</p> <p>7. Emphasize rapid recognition, team coordination, and documentation in managing obstetric emergencies.</p>
Obs-045	Antepartum hemorrhage	<ol style="list-style-type: none"> 1. Define antepartum hemorrhage. 2. Classify the major causes of APH. 3. List important risk factors leading to APH. 4. Describe the types of placenta Previa and explain their clinical presentation and diagnostic criteria. 5. Explain the placenta accrete spectrum, including its risk factors, ultrasound/MRI features, and obstetric significance. 6. Describe placental abruption with its risk factors, clinical features, complications, and management. 7. Describe vasa Previa and identify features suggestive of fetal vessel rupture. 8. Outline the essential steps in initial assessment and stabilization of a patient presenting with APH. 9. Select appropriate investigations and justify their use in APH. 10. Develop a management plan. 11. Explain indications for expectant management versus urgent delivery. 12. Identify major maternal and fetal complications of APH.
Obs-046	Postpartum hemorrhage	<ol style="list-style-type: none"> 1. Define postpartum hemorrhage and classify it. 2. Identify risk factors and causes 3. Describe clinical signs and symptoms of PPH.

		<ol style="list-style-type: none"> 4. Explain methods for early recognition and assessment. 5. Outline preventive strategies. 6. Describe emergency management, including pharmacologic treatment, non-surgical interventions, and surgical options. 7. Discuss maternal complications and strategies for stabilization and transfusion. 8. Explain follow-up care and counseling for women at risk of recurrence.
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OPERATIVE INTERVENTIONS

Code	Topic	Learning Objectives
Obs-051	Episiotomy	<ol style="list-style-type: none"> 1. Define episiotomy and describe its purpose. 2. Identify indications and contraindications for performing an episiotomy. 3. Describe the types of Episiotomy. 4. Explain the steps and technique of performing a safe episiotomy. 5. Recognize maternal and fetal complications associated with episiotomy. 6. Outline proper repair techniques and post-procedure care. 7. Explain the pain management and infection prevention strategies following episiotomy.
Obs-052	Perineal trauma and repair	<ol style="list-style-type: none"> 1. Define perineal trauma and classify its types and degrees. 2. List risk factors and causes of perineal trauma during childbirth.

		<ol style="list-style-type: none"> 3. Describe clinical features of perineal tears. 4. Outline principles and techniques of perineal repair for different degrees of tears. 5. Explain pain management and infection prevention in perineal trauma. 6. Explain postpartum care, including wound care, follow-up, and counseling. 7. List potential complications of perineal trauma and repair and their management.
Obs-053	Assisted vaginal delivery	<ol style="list-style-type: none"> 1. Define assisted vaginal delivery and differentiate it from spontaneous vaginal delivery. 2. Identify indications and contraindications for assisted vaginal delivery. 3. Describe the types of instruments used, including forceps and Vento use (vacuum extractor), and their appropriate selection. 4. Explain the steps and correct technique for performing assisted vaginal delivery using forceps or Vento use. 5. List maternal and fetal complications associated with assisted vaginal delivery. 6. Discuss principles of patient preparation, monitoring, and obtaining consent for assisted vaginal delivery. 7. Outline post-delivery care and follow-up for mother and Newborn 8. Describe the prerequisites for safe instrumental delivery
Obs-054	Caesarean section	<ol style="list-style-type: none"> 1. Identify indications and contraindications for caesarean section. 2. Describe types of caesarean section

		<p>incisions and approaches.</p> <ol style="list-style-type: none"> 3. Explain preoperative preparation, including maternal assessment, consent, and anesthesia considerations. 4. Outline the steps and surgical technique of caesarean section. 5. List intraoperative and postoperative maternal and fetal complications. 6. Discuss principles of postoperative care, including wound care, pain management, and monitoring. 7. Explain strategies to prevent complications and ensure maternal and neonatal safety.
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6.2.2 Clinical Rotations

OBSTETRICS

MATERNAL PHYSIOLOGY FETAL GROWTH & DEVELOPMENT		
Code	Topic	Learning Objectives
Obs-004	Obstetric history taking skills	<ol style="list-style-type: none"> 1. Obtain informed consent and establish rapport with the pregnant patient. 2. Record 3. The chief complaint and reason for the visit accurately. 4. The detailed menstrual history, including last menstrual period, cycle regularity, and flow. 5. Previous obstetric history, including gravida, parity, previous pregnancies, outcomes, and complications. 6. Relevant medical and surgical history,

		<p>including chronic illnesses, medications, and allergies.</p> <ol style="list-style-type: none"> 7. Family history for genetic disorders and congenital anomalies. 8. Social and lifestyle factors, including nutrition, substance use, occupation, and support systems. 9. Current pregnancy status, including gestational age, fetal movements, symptoms, antenatal care, and supplementation. 10. Medical and surgical history 11. Obstetric risk factors and formulate appropriate questions to elicit them. 12. Calculate expected date of delivery (EDD) from last menstrual period (LMP) and duration of pregnancy. 13. Adapt questioning techniques to respect cultural and psychosocial considerations. 14. Document findings systematically to guide diagnosis, risk assessment, and management planning.
Obs-005	Obstetric examination	<ol style="list-style-type: none"> 1. Measure maternal weight and height, blood pressure. 2. Perform a general physical examination and abdominal through inspection, palpation (symphysis-fundal height measurement, fetal lie, presentation, and engagement), fetal heart auscultation in pregnancy. 3. Identify the circumstances in which pelvic examination during pregnancy is necessary. 4. Identify the conditions in which digital examination is contraindicated. 5. Conduct leopold's maneuvers accurately to

		<p>determine fetal lie, presentation, and position.</p> <ol style="list-style-type: none"> 6. Identify normal versus abnormal abdominal examination findings and their implications. 7. Interpret routine antenatal laboratory investigations and gestational ultrasound findings to assess maternal and fetal wellbeing and identify abnormalities. 8. Observe and narrate the clinical techniques for cervical assessment and calculate the bishop score. 9. Demonstrate safe and effective use of instruments for obstetric examination.
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EARLY PREGNANCY AND ANTENATAL CARE

Code	Topic	Learning Objectives
Obs-010	Antenatal care	<ol style="list-style-type: none"> 1. Develop an individualized antenatal care plan guided by gestational milestones and clinical assessment 2. Perform obstetric abdominal examination to identify fetal heart rate, lie, presentation, and measure fundal height accurately. 3. Interpret antenatal records and cards to assess maternal and fetal progress. 4. Formulate a differential diagnosis and outline an appropriate management plan based on clinical findings. 5. Interpret basic ultrasound findings and correlate them with clinical data. 6. Demonstrate effective and empathetic communication when providing information, advice, and reassurance to pregnant women.

		<ol style="list-style-type: none"> 7. Recognize the emotional, physical, and social impact of pregnancy on women and their families. 8. Demonstrate effective communication by providing education, reassurance, and support to pregnant women and their families in a respectful and culturally sensitive manner. 9. Apply standard protocols and professional conduct while observing, interpreting, and reporting obstetric ultrasound findings.
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ANTENATAL OBSTETRIC PROBLEMS

Code	Topic	Learning Objectives
Obs-023	Clinical assessment of hyperemesis gravidarum	<ol style="list-style-type: none"> 1. Take a structured history of nausea, vomiting, weight loss, and hydration status. 2. Assess dehydration status and vital signs. 3. Interpret laboratory results including serum electrolytes. 4. Counsel patient on dietary measures, hydration, warning signs, and follow-up care.
Obs-024	Abdominal pain in pregnancy	<ol style="list-style-type: none"> 1. Conduct systematic abdominal examination, including palpation and fetal assessment. 2. Identify signs suggestive of obstetric versus non-obstetric causes.
Obs-025	Clinical assessment for pregnancy-induced hypertension, gestational diabetes, anemia in	<ol style="list-style-type: none"> 1. Measure and interpret blood pressure in pregnant women. 2. Perform capillary blood glucose testing or glucose tolerance tests. 3. Monitor maternal and fetal parameters related to gestational diabetes. 4. Interpret lab investigations for anemia

	pregnancy	5. Assess for clinical signs of anemia and monitor response to treatment.
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LABOUR		
Code	Topic	Learning Objectives
Obs-032		<ol style="list-style-type: none"> 1. Perform and interpret CTG. 2. Observe/assist in spontaneous vaginal delivery (svd), instrumental delivery, and episiotomy. 3. Identify malpresentation on abdominal examination. 4. Observe and narrate the management of malpresentation and malposition. 5. Demonstrate various malpresentation and malposition using fetal skull and dummy pelvis. 6. Observe and narrate the steps of breech delivery. 7. Exhibit empathy, support, and reassurance throughout the birthing process. 8. Maintain patient privacy, dignity, and comfort at all times. 9. Communicate clearly and effectively, providing instructions in simple, non-medical language. 10. Observe/assist in episiotomy. 11. Demonstrate teamwork with labor ward staff. 12. Follow strict infection prevention protocols, including hand washing, gowning, and gloving. 13. Elicit relevant history, perform examination,

		<p>and justify investigations in cases of preterm labor, prolonged pregnancy, prom, and amniotic fluid abnormalities.</p> <p>14. Assist in the management of preterm labor, prolonged pregnancy, prom, and amniotic fluid abnormalities under supervision.</p> <p>15. Observe and participate in multidisciplinary teamwork, effective communication, and counseling regarding these conditions and their potential complications.</p>
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PUERPERIUM

Code	Topic	Learning Objectives
Obs-039	Postpartum care	<ol style="list-style-type: none"> 1. Perform comprehensive history taking and systematic examination of postpartum patients. 2. Select and justify appropriate investigations based on clinical findings. 3. Formulate an appropriate management plan for common puerperal conditions. 4. Demonstrate correct breastfeeding techniques and assist mothers in initiating and maintaining breastfeeding. 5. Prescribe suitable contraceptive methods for postpartum women based on individual needs and medical eligibility. 6. Observe and participate in measures aimed at preventing perinatal morbidity and mortality. 7. Communicate effectively and provide empathetic counseling to postpartum women and their families.

OBSTETRIC EMERGENCIES		
Code	Topic	Learning Objectives
Obs-047	Managing obstetric emergencies	<ol style="list-style-type: none"> 1. Observe/assist/participate in emergency drills according to ward protocols. 2. Perform rapid maternal and fetal assessment during an obstetric emergency. 3. Apply emergency protocols for maternal stabilization (airway, breathing, circulation, seizure control, hemorrhage control). 4. Observe/assist in stepwise maneuvers for specific emergencies (shoulder dystocia, cord prolapse, PPH). 5. Observe and document the administration of emergency medications safely. 6. Observe/assist in emergency delivery procedures, including operative vaginal delivery and cesarean section. 7. Document interventions, clinical findings, and team communications accurately. 8. Communicate clearly, calmly, and effectively with the multidisciplinary team during emergencies. 9. Demonstrate empathy and provide appropriate counseling to patients and family members under emergency conditions. 10. Exhibit situational awareness, quick decision-making, and leadership in obstetric crises. 11. Maintain professional and ethical behavior while managing high-stress clinical situations.
Obs-048	Managing preeclampsia &	<ol style="list-style-type: none"> 1. Measure and accurately record maternal blood pressure.

	eclampsia	<ol style="list-style-type: none"> 2. Perform focused assessment for edema, reflexes, and neurological status. 3. Interpret laboratory results of proteinuria, renal/liver function tests, and platelet counts. 4. Observe/assist in administration of antihypertensives and seizure prophylaxis safely. 5. Monitor and stabilize a patient during a seizure episode. 6. Prepare and assist in emergency delivery when indicated. 7. Apply emergency protocols for maternal and fetal stabilization.
Obs-049	Shoulder dystocia	<ol style="list-style-type: none"> 1. Identify shoulder dystocia promptly during vaginal delivery. 2. Observe/assist in performing stepwise maneuvers safely. 3. Document events and communicate effectively with the obstetric team.
Obs-050	Umbilical cord prolapse	<ol style="list-style-type: none"> 1. Identify cord prolapse by physical examination and fetal heart rate monitoring. 2. Observe/assist in performing immediate maneuvers to relieve cord compression (manual elevation, maternal positioning). 3. Prepare and assist in emergency cesarean delivery. 4. Apply emergency protocols to stabilize maternal-fetal status.

OPERATIVE INTERVENTIONS

Code	Topic	Learning Objectives
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Obs-055	Operative procedures in obstetrics	<ol style="list-style-type: none"> 1. Demonstrate correct preparation of the patient for operative obstetric procedures, including positioning, asepsis, and anesthesia considerations. 2. Observe/assist in safe and effective episiotomy. 3. Observe/assist/narrate the proper technique for assisted vaginal delivery using forceps or ventouse. 4. Observe/assist in manual removal of placenta and management of retained products of conception. 5. Observe/assist/document the steps of caesarean section including incision, delivery, and closure. 6. Observe/assist in safe handling, monitoring, and immediate care of the newborn during operative procedures.
Obs-056	OT protocols	<ol style="list-style-type: none"> 1. Demonstrate proper hand hygiene and surgical hand scrubbing techniques. 2. Perform correct donning and doffing of sterile gowns, gloves, and masks. 3. Follow aseptic techniques during handling of sterile instruments and materials. 4. Dispose of biomedical waste safely following infection control guidelines. 5. Monitor and maintain sterile field throughout a procedure.

7. Teaching & Learning Methodologies

➤ **Interactive Lectures**

Interactive lecturing involves an increased interchange between teachers, students, and the lecture content. The use of interactive lectures can promote active learning, heighten attention and motivation, give feedback to the teacher and the student, and increase satisfaction for both.

➤ **Small group discussions**

Small-group discussion is a student-centered methodology that allows students to actively involve and be partners in the teaching-learning process. Students interact with peers and instructors, discussing, and sharing ideas. They develop the ability to build consensus in a group.

➤ **Clinical Ward Rotation**

During clinical rotations, students learn history taking and physical examination, recognize common clinical presentations, and get introduced to basic diagnostic procedures and treatment planning. They also develop professional behavior and communication skills essential for patient care.

➤ **Case based Learning**

Case-based learning is a student-centered learning approach where students read and discuss complex situations and apply their knowledge to each situation. Students typically examine the case together as a team and address the problems within the realistic scenario to develop a reasonable conclusion.

➤ **Self-directed learning**

Self-directed learning is an instructional strategy where the students with guidance from the teacher decide what and how they will learn. It can be done individually or with group, learning, but the overall concept is that students take honor ship of their learning

8. Assessment Methodologies

Theory

1. MCQ's

A multiple-choice question (MCQ) is composed of two parts: a stem that identifies the question or problem, and a set of alternatives or possible answers that contain a key that is the best answer to the question, and several distractors that are plausible but incorrect answers to the question.

Practical

1. OSCE

OSCE stands for “Objectively Structured Clinical Examination.” OSCEs are very helpful in medical education because they allow a student to practice and demonstrate clinical skills in a standardized medical scenario.

2. OSVE

OSVE stands for “Objectively Structured Viva Examination”. In the viva you have to answer questions and engage with your examiners.

3. SHORT CASE

A short case is a clinical examination format in which a student assesses a patient in a limited time, focusing on relevant history, physical examination, identification of key findings, and giving a provisional diagnosis.

4. LONG CASE

A long case is a comprehensive clinical examination in which a student takes detailed history, performs a complete physical examination, formulates differential diagnoses, and discusses investigation and management plans, usually within a longer time period.

5. EOR

End-of-Rotation (EOR) assessments are summative evaluations conducted at the conclusion of a clinical rotation or academic module. These assessments aim to measure the knowledge, skills, attitudes, and clinical competencies a student has acquired over the duration of the rotation.



ASSESSMENT POLICY AND TOS OF UHS

9. Exam Regulations by UHS

Regulations

1. Professional examination shall be open to any student who: -
 - a. Has been enrolled/registered and completed one academic year preceding the concerned professional examination in a constituent/affiliated college of the University.
 - b. Has his/her name submitted to the Controller of Examinations, for the purpose of examination, by the Principal of the college in which he / she is enrolled & is eligible as per all prerequisites of the examination?
 - c. Has his/her marks of internal assessment in all the Blocks/Clinical Clerkships sent to the Controller of Examinations through office of the Principal of the concerned college, at the end of each Block/Clinical Clerkships, as well as at the conclusion of the academic session along with the admission form for the professional examination.
 - d. Has been certified by the principal of his/her college:
 - i. of good character;
 - ii. of having attended not less than cumulative 75%* of the full course of lectures delivered, practical and clinical rotations conducted in the particular academic session, while maintaining 75 % attendance in each Block/Clinical Clerkship,
 - iii. of having appeared at the Block/Clinical Clerkship Examinations conducted by the college of enrolment with at least 50 % marks* in each Block/Clinical Clerkship examination, as well as in aggregate score of all Blocks/Clinical Clerkships examinations for the concerned year;
2. Written/Theory paper in all Professional Examinations in Modular Integrated MBBS or BDS Curricula shall consist of MCQs alone, with effect from Annual 2026 Examinations. (Ref: No. UHS/REG-25/2379, dated 17.11.2025)
3. The minimum number of marks required to pass the professional examination for each Block/Clinical Clerkship shall be fifty percent (50%) in Written and fifty percent (50%) in the 'Oral/Practical/Clinical' examinations and fifty percent (50%) in aggregate, independently and concomitantly, at one and the same time.
4. A candidate failing in one or more Blocks/Clinical Clerkships in the annual examination shall be provisionally allowed to join the next professional class till the commencement of supplementary examinations. The candidate, however, shall have to

pass the failed Block/s or Clinical Clerkship in this supplementary examination failing which he / she shall be detained in the professional year. Under no circumstances, a candidate shall be promoted to the next professional class till he/she has previously passed all the Blocks/Clinical Clerkships in the preceding professional examination.

If a student appears in the Supplementary Examination for the first time as he/she did not appear in the annual examination for any reason and failed in any Block/Clinical Clerkship in the Supplementary Examination, he/she will be detained in the same class and will not be promoted to the next class.

*Notification No.UHS/REG-25/2351 Dated 13-11-2025

5. Only one annual and one supplementary of each Professional Examination shall be allowed in a particular academic session. However, in exceptional situations, i.e., national calamities, war or loss of solved answer books in case of accident, special examination may be arranged after having observed due process of law. This will require permission of relevant authorities, i.e., Syndicate and Board of Governors.
6. Any student who fails to clear the First or Second Professional MBBS / First Professional BDS Examination, in four consecutive attempts, each, inclusive of both availed as well as un-availed attempts, after becoming eligible for the examination, and has been expelled on that account shall not be eligible for continuation of studies and shall not be eligible for admission as a fresh candidate in either MBBS or BDS.
7. The application for admission of each candidate to the professional examination shall be submitted to the Controller of Examination, through the Principal of the College, on the prescribed format, as per notified schedule, accompanied by the prescribed fee.
8. The candidates shall pay their fee through the principal of their respective Colleges, who shall forward the Examination Forms along with the duly paid challan of the examination fee generated from the Online Examination Form.
9. The continuous internal assessment through the Block/Clinical Clerkship, conducted by the college of enrollment, shall carry 20% weightage in the total allocated marks for the concerned Block/Clinical Clerkship in the Professional Examination conducted by the university. The score will be equally distributed to the Written and "Oral/Practical/Clinical" Examinations.
10. The marks of internal assessment through Blocks/Clinical Clerkships examination and attendance record shall be submitted to Controller of Examinations, along with question papers and keys for the Block/Clinical Clerkship examination, within two weeks of completion of each Blocks/Clinical Clerkships examination.

Further, parent-teacher meetings shall be arranged by the colleges after every Block/Clinical Clerkship examination to share feedback on the progress of students with their parents. Minutes of parent teacher meetings, academic timetables/schedule of Blocks/Clinical Clerkships and academic year study guides shall be submitted to the Department of Medical Education UHS, as well.

11. It is emphasized that fresh internal assessment or a revision of assessment for supplementary examination shall not be permissible. However, a revised internal assessment for the detained students can be submitted. The internal assessment award in a particular year will not be decreased subsequently detrimental to the detainee candidate. A proper record of the continuous internal assessment shall be maintained by the concerned department/s in the colleges.
12. The colleges may arrange remedial classes and one re-sit for each Block/Clinical Clerkship examination after fulfillment of prescribed requirements given below. The remedial classes and re-sit examination can be conducted during summer vacation/weekends, before or during preparatory leave for the concerned professional examination, subject to the following conditions:

Block/Clinical Clerkship Attendance	Remedial Classes
$<75\%, \geq 50\%$ (50-74%)	<ol style="list-style-type: none"> 1. Principal of the college may conduct remedial classes and submit result to the Examination Department, UHS, independently. 2. Principal of the college may conduct remedial classes for detained students, who have short attendance in the first Block/Clinical Clerkship of a professional year after detention. The college may submit record of the remedial classes to the Examination Department, UHS, independently.
$<50\%$	<ol style="list-style-type: none"> 1. Principal of the college may submit attendance record of such students to Department of Medical Education, UHS, and seeking permission for conduct of remedial Classes. The conduct of remedial classes in such cases shall be

	<p>arranged only after permission from the Competent</p> <ol style="list-style-type: none"> 2. Authority in the university. 3. The colleges shall also have to provide the university with the reasons submitted by the candidates for short attendance along with documentary evidence for the same duly verified by the principal. 4. The following shall be considered as valid reasons for short attendance of the students for consideration of permission for remedial classes: <ol style="list-style-type: none"> a. Illness/accident/surgery of the student or sickness/death of an immediate relative/being afflicted by a natural/man-made calamity or disaster or detained students (missed the first Block/Clinical Clerkship of the year), students clearing their preceding professional examination in supplementary, or late b. admitted students who have been permitted for joining by UHS
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Marks in Block/ Clinical Clerkship Examination	Re-sit Examination
<p><50% Marks/ Absence from Block /Clinical Clerkship Examination</p>	<ol style="list-style-type: none"> 1. Principal of the college may submit record of such students to Department of Medical Education, UHS, and seeking permission for conduct of re-sit examination. 2. The conduct of re-sit examination in all cases shall be arranged only after permission from the Competent Authority in the university. 3. The colleges shall also have to provide the university with the reasons submitted by the candidates for absence from the Block/Clinical Clerkship examination, along with documentary evidence for the same duly verified by the

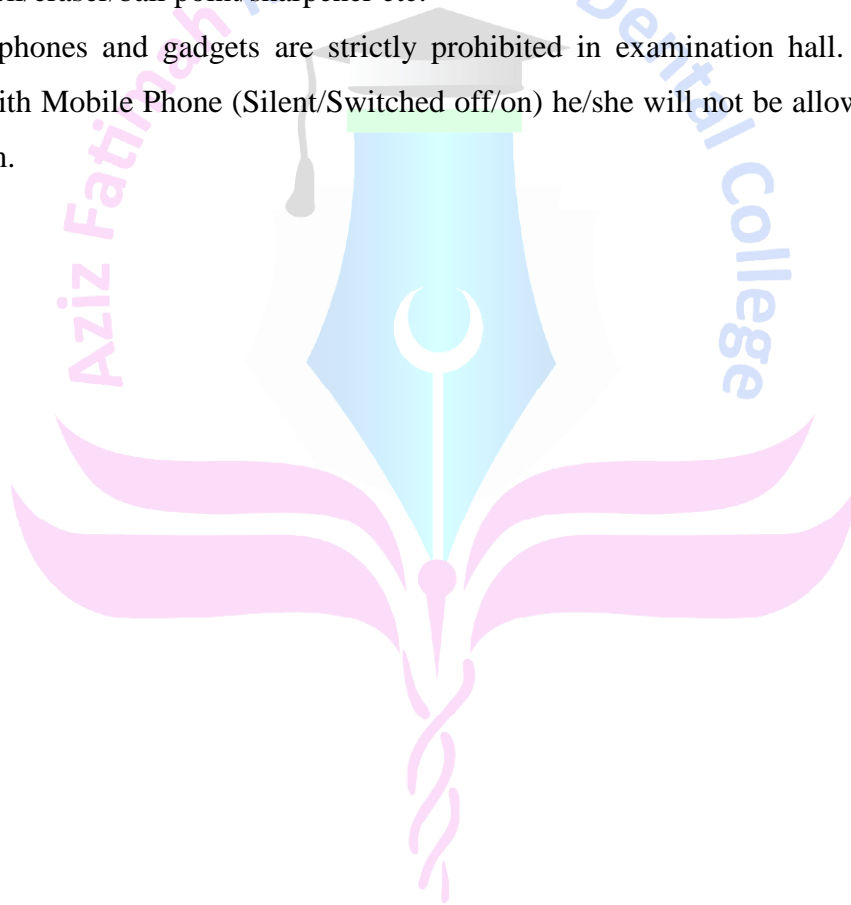
	<p>principal.</p> <p>4. The following shall be considered as valid reasons for absence of a student from Block/Clinical Clerkship examination, and for consideration of permission for re-sit examination:</p> <p>a. Illness/accident/surgery of the student or sickness/death of an immediate relative/being afflicted by a natural/man-made calamity or disaster or detained students (missed the first</p> <p>b. Block/Clinical Clerkship of the year), students clearing their preceding professional examination in supplementary, or late admitted students who have been permitted for joining by UHS</p>
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13. The following policy shall be applicable for transition of students From Traditional Subject-Based Scheme to the Modular Integrated Curriculum Scheme:

- a. The students who fail in all subjects of the professional examination, either by taking the examination or due to non-appearance, and are detained in the respective professional year, shall follow the Modular Integrated Curriculum Scheme for their teaching and assessment.
- b. The students who fail in one or more subjects but not all the subjects of a professional examination, either by taking the examination or due to non-appearance, and are detained in the respective professional year, shall attend classes with students following the Modular Integrated Curriculum Scheme, but they will be examined in the failed subject/s according to their parent scheme, i.e., the Traditional Subject-Based Curriculum Scheme.

10. Examination Rules AFMDC

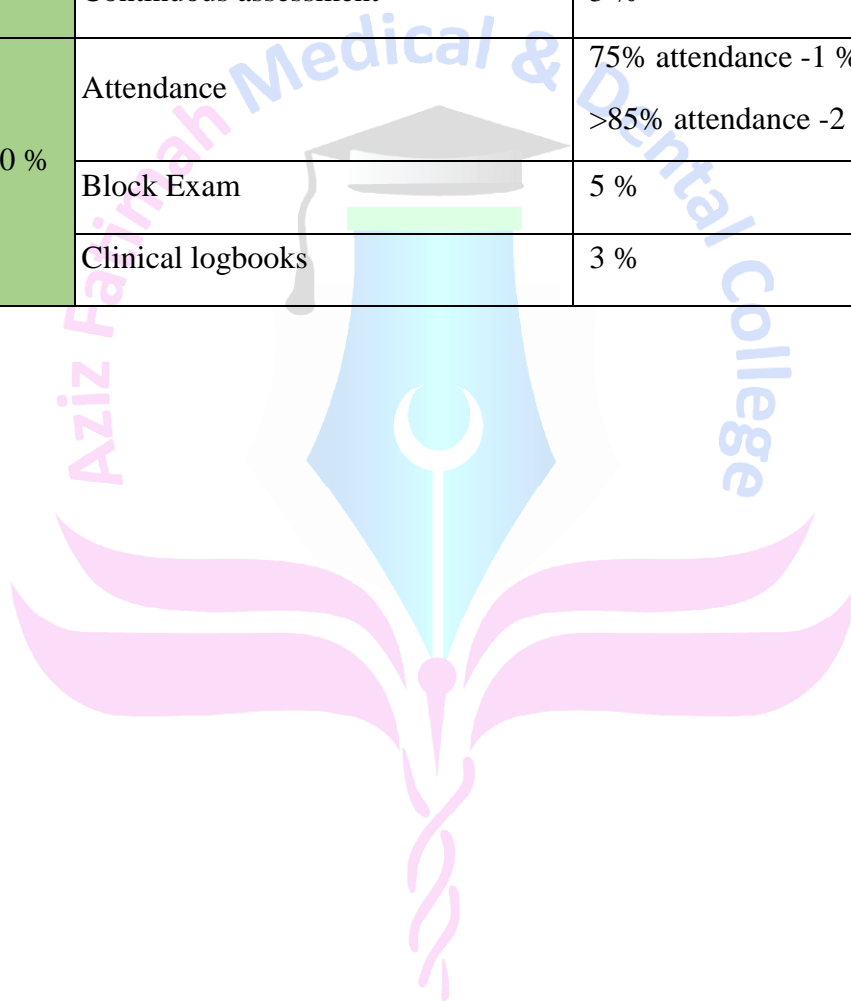
- Students must report to examination hall/ venue at least 30 minutes before the exam.
- Exam will start sharp at time.
- Late comers arriving at the examination hall more than 15 minutes after the start of the paper will not be allowed to enter the examination hall.
- All students should wear Lab coats before appearing in the exam.
- Students are not allowed to take into the examination hall textbooks, notes or manuscript of any kind.
- Students must bring the necessary stationary items for exam with them e.g. pen/pencil/eraser/ball point/sharpener etc.
- Mobile phones and gadgets are strictly prohibited in examination hall. If any student found with Mobile Phone (Silent/Switched off/on) he/she will not be allowed to continue the exam.



11. Internal Assessment Policy (UHS)

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 %



12. Table of Specification (TOS)

FINAL YEAR MBBS

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		
			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						
<p>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.</p>						

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		
			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

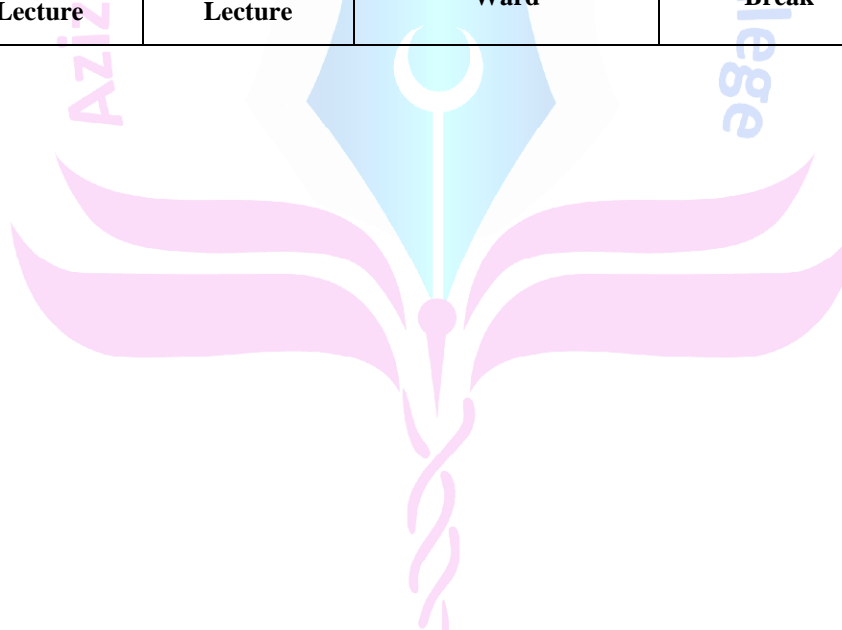
5mins. Clinical Examination

Time duration for each OSCE/OSVE station will be 06 minutes, short case will be 15 minutes and long case will be 30minutes.



13. Frame work of Final Year MBBS Timetable 2025-26

DAY	1 08:00 - 09:00	2 09:00 - 10:00	3 10:00 - 02:00	4 02:00 - 02:30	5 02:30 - 05:30
Monday	Surgery Lecture	Gynae & Obs Lecture	Ward	Break	Evening Ward
Tuesday	Gynae & Obs Lecture	Surgery Lecture	Ward		Evening Ward
Wednesday	Surgery Lecture	Gynae & Obs Lecture	Ward		Evening Ward
Thursday	Surgical Specialities Lecture	Surgery Lecture	Ward		Evening Ward
DAY	1 08:00 - 09:00	2 09:00 - 10:00	3 10:00 - 01:00	4 01:00 - 02:00	5 02:00 - 05:30
Friday	Surgical Specialities Lecture	Surgery Lecture	Ward	Namaz Break/Break	Evening Ward
DAY	1 08:00 - 09:00	2 09:00 - 10:00	3 10:00 - 02:00	4 02:00 - 02:30	5 02:30 - 05:30
Saturday	Gynae & Obs Lecture	Surgery Lecture	Ward	Break	Evening Ward



14. Clinical Ward Rotation of Final Year MBBS 2025-26

Group Wise Distribution of Final Year MBBS for Ward Rotation for Session 2025-2026

Group A	Group B
11096, 15096, 18083	20060, 20096
21001 - 21034	21035 - 21072

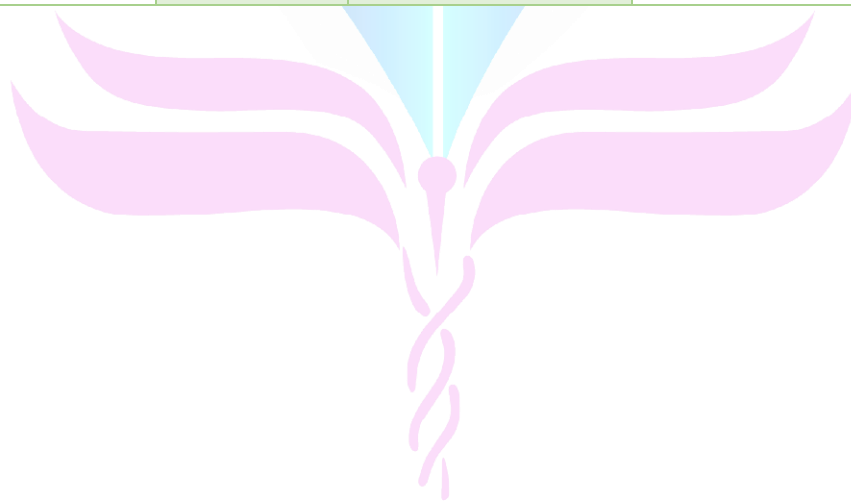
Group C	Group D
21073 - 21112	21113 - 21155

Note: No change in any group is acceptable. Strict Compliance is required.



Group Wise Rotation of Block B - Final Year MBBS

Rotation	Group	Placement	Duration (6+6=12 Weeks)
Rotation 1	C	Surgery	6 weeks
	D	Gynae & Obs	
Rotation 2	D	Surgery	6 weeks
	C	Gynae & Obs	
Rotation	Group	Placement	Duration (02+02=04 Weeks)
Rotation	C	Neurosurgery	2 weeks
	D	Urology	
Rotation	D	Neurosurgery	2 weeks
	C	Urology	





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RESOURCE BOOKS



15. Learning Resources

Surgery	<ol style="list-style-type: none">1. Bailey & Love's Short Practice of Surgery – 28th ed – CRC Press – 2023
Obstetrics and Gynaecology	<ol style="list-style-type: none">1. Gynaecology by Ten Teachers – edited by Ash Monga & Stephen Dobbs – 19th ed – CRC Press – 20112. Obstetrics by Ten Teachers – Louise C. Kenny & Fergus McCarthy (Editors) – 21st ed – CRC Press – 2024

