KARACHI INSTITUTE OF MEDICAL SCIENCES

KIMS

LEARN TO SERVE

STUDY GUIDE – 2025-2026

5TH YEAR MBBS

BATCH 06 (2022-2026)

Study Guide is a tool to facilitate and support students' learning, provide guidance and highlight required information to students. It aims to maximize the personal benefit each individual can attain from the academic program.

The Guide Provides:

- Information on organization and management of the academic year. This will help you contact the right individual in case you have any difficulty
- Course objectives which you will be expected to achieve at the end of each course
- Information on learning methods that you will experience during the course
- Learning resources available for the sessions. These include books, computer assisted learning programs, videos and others
- Information on the methods of assessment including formative and summative assessment

Curriculum Framework

- The Fifth-Year MBBS KIMS curriculum follows a discipline-based traditional approach, where teaching and learning are organized according to individual clinical disciplines.
- Each subject is taught independently with emphasis on acquiring in-depth knowledge and skills specific to that specialty.
- Clinical exposure and skill development are structured within the respective departments while ensuring alignment with overall program objectives.
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Discipline-Based Traditional Curriculum

- A discipline-based traditional curriculum is organized around individual clinical subjects, such as Surgery, Medicine, Obstetrics & Gynaecology, Pediatrics, and allied specialties.
- Teaching focuses on systematic coverage of subject-specific knowledge, clinical examination, diagnostic reasoning, and procedural skills relevant to each discipline.
- Basic sciences are applied during clinical teaching through bedside teaching, ward rounds, tutorials, and case presentations, reinforcing previously learned concepts.
- Learning activities include didactic lectures, clinical demonstrations, case discussions, and supervised skills acquisition in skills laboratories, ensuring progressive development of clinical competence.

Academic Calendar for Final Year MBBS

Events	From	To
43 weeks teaching & 06 weeks leave Total 49 weeks		
NUMS Starting Date	**20 Oct 2025**	2 weeks late
KIMS Starting, Duration of Teaching (18/39 weeks)	03 Nov 2026	06 March 2026
Eid-ul-Fitr* Vacation (17 days)	**07 March 2026**	**23 March 2026**
Duration of Teaching (02/39 weeks)	24 March 2026	01 April 2026
Sports week (01 Week)	02 April 2026	06 April 2026
Duration of Teaching (07/39 weeks)	07 April 2026	22 May 2026
Eid-ul-Azha * & Summer Vacation (16 days)	**23 May 2026**	**07 June 2026**
Duration of Teaching (8/39 weeks)	08 June 2026	02 Aug 2026
Pre-Annual Exam (04/39 weeks)	**03 Aug 2026**	**31 Aug 2026**
Prep Leave for Annual Exam (04/10 weeks)	**01 Sept 2026**	**27 Sept 2026**
Annual Exam		**28 Sep 2026**

*Subject to moon sighting & as per approval from the Principal

*Exams plan will be provided by Examination department

Holiday Calendar
Year 2026

EVENTS	DATE & DAY
Kashmir Solidarity Day	5th February, Wednesday
Jumma-Tul-Vida	20th March, Friday
Eid ul-Fitr	21st March – Saturday 22nd March – Sunday 23rd March – Monday
Pakistan Day	23rd March, Monday
Labor Day	1st May, Thursday
Summer break	23rd May – 7th June
Eid ul-Adha	27th May – Wednesday 28th May – Thursday 29th May – Friday
Ashura	25th June- Thursday 26th June – Friday
Independence Day Of Pakistan	14th August, Friday
12 Rabiul Awal	25th August, Tuesday
Iqbal Day	9th November , Monday
Quaid-E-Azam's Birthday/Christmas Day	25th December, Friday

Departmental Teams

Team of Medicine & Allied Department	
Positions	**Name**
Head of the Department	Prof Dr. Arshad Ali
Subject Representative for 5TH Year	Dr. Ajmal Jami

Team of Surgery & Allied Department	
Positions	**Name**
Head of the Department	Prof. Dr. Arshad Malik
Subject Representative for 5TH Year	Dr. Nida Ahmed

Team of Obstetrics & Gynecology Department	
Positions	**Name**
Head of the Department	Prof. Dr Sughra Abbasi
Subject Representative for 5TH Year	Dr Ambreen Naz

Team of Paediatrics Department	
Positions	**Name**
Head of the Department	Prof. Arshad Ali
Subject Representative for 5TH Year	Dr. Erum Saboohi

Team of Medical Education Department	
Positions	**Name**
Head of the Department	Dr. Ruqayyah Q. Hashmi
Subject Representative for 5TH Year	Dr. Tanzeela Shaikh

Study Guide Compiled By:

Dr. Tanzeela Shaikh

Assistant Professor

Department of Medical Education

VISION

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

MISSION

KIMS aims to produce ethical, knowledgeable, skilled professionals, enhancing community health services, through leadership, evidence-based practice and innovative research.

PROGRAM OUTCOMES

1. Utilize knowledge of basic and clinical sciences for patient care.
2. Take appropriate decisions based on focused history, physical examination, and management plan for common health problems.
3. Demonstrate effective communication with patients, as part of a team and with other healthcare service providers.
4. Demonstrate professional behaviors that embodies lifelong learning by using self-directed learning skills.
5. Identify problems, critically review literature, conduct research and disseminate knowledge
6. Demonstrate leadership and management skills with other team members as per situational needs for quality health service.
7. Apply evidence-based practices for protecting, maintaining and promoting the health of individuals, families and community.

SEVEN STAR PMDC COMPETENCIES

The expected generic competencies in a medical graduate are grouped together under the umbrella of seven-star doctor and are as follows:

1. Knowledgeable
2. Skillful
3. Professional
4. Scholar & Researcher
5. Critical thinker
6. Leader & Role model
7. Community Health Promotor

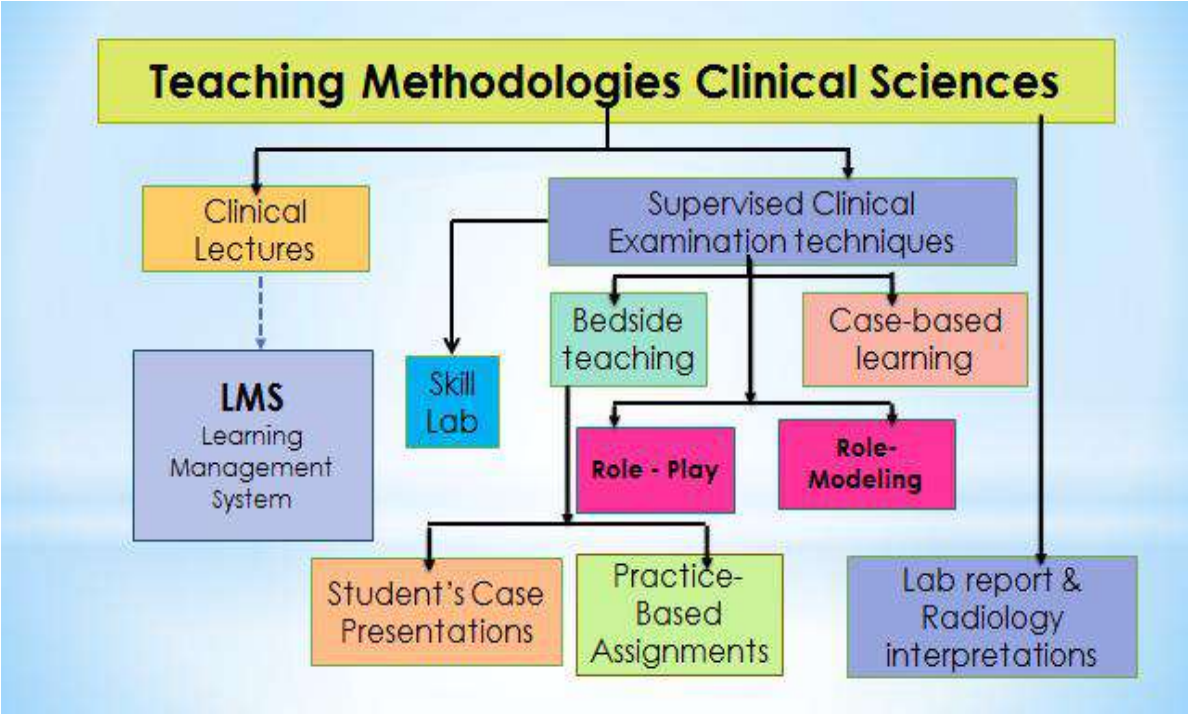
A ‘seven-star doctor’ Pakistani medical graduate should be able to demonstrate various attributes as detailed under each competency. These attributes are minimum and not exhaustive by any means.

FINAL YEAR MBBS YEARLY OUTCOMES

By the end of the Clerkship/Final Year, students will be able to:

- Manage common medical, surgical, gynaecological, and paediatric conditions in outpatient and ward settings under supervision.
- Respond effectively to emergencies and trauma by thinking critically and acting decisively.
- Communicate empathetically and professionally with patients and families while discussing diagnoses and treatment plans.
- Collaborate with multidisciplinary healthcare teams to deliver comprehensive patient care.
- Apply principles of evidence-based medicine in clinical decision-making and remain updated with current guidelines.
- Demonstrate proficiency in basic clinical techniques, aseptic practices, and proper instrument handling.
- Present clinical cases clearly, reflecting sound clinical reasoning and presentation skills.
- Decide and refer appropriately to specialists when indicated, ensuring patient safety and continuity of care.

Teaching and Learning Methods



Learning Methodologies: The following teaching / learning methods are used to encourage self-directed learning of students
• Small Group Discussions (Tutorials/ Case- Based Learning) • Skills session • Bed-Side Teaching • e-Learning through LMS • Teaching Ward Rounds • Case presentations • Case based Discussion • Short cases in OPD • Bedside Discussions

Small Group Discussions

Tutorials is a participative teaching learning method which promotes discussion and better understanding of a topic. Tutorial classes for medical students are imparted to develop and test their own ideas, clarify material presented in lectures, apply general concepts to the solution of specific problems, define new problems and seek solutions to them, hone problem-solving skills and encourage students in self-learning

Case based learning (CBL):

Focuses on specific patient cases to identify learning objectives. It is also taught using small groups with a tutor to guide group discussions. Uses real or simulated cases that help students to apply theoretical knowledge to practical situations promoting integration of basic and clinical sciences, CBL encourages critical thinking, problem-solving, and decision-making

Skill Sessions: The aim of these sessions is to support students to develop skills and awareness of skills that have been identified by employers as crucial to the workplace and successful recruitment.

Bed-Side Teaching Bedside teaching is a specialized form of small group teaching that takes place in the presence of the patient. It improves students' history taking, examination skills, and knowledge of clinical ethics, can teach them professionalism, and can foster good communication and role modelling skills.

Journal Club

A journal club is an educational meeting in which a group of individuals discuss published articles, to keep themselves abreast of new knowledge, promoting in them the awareness of current research findings.

Role-Play

Role play is a learning structure that allows students to immediately apply content as they are put in the role of a decision maker who must make a decision regarding a policy, resource allocation, or some other outcome.

Role-Modelling

Role Role modeling is a powerful teaching tool for passing on the knowledge, skills, and values of the medical profession, but its net effect on the behavior of students is often negative rather than positive

Clinicopathological Conference (CPC)
A structured teaching session where clinical cases are presented and discussed, linking clinical findings with pathological evidence to enhance diagnostic reasoning and integrative learning.

Simulations
An interactive learning approach using mannequins, standardized patients, or virtual tools to replicate real-life clinical scenarios, allowing students to practice skills and decision-making in a safe, controlled environment.

Morning Reports
Regular departmental discussions where students and faculty review recent or interesting clinical cases, emphasizing clinical reasoning, diagnostic approach, and patient management.

Self-Directed Learning (SDL)
A process where students take initiative in identifying their learning needs, resources, and strategies, promoting independent and lifelong learning skills essential for medical practice.

Reflective Writings
A learning activity encouraging students to analyze and reflect on their clinical experiences, challenges, and personal growth to foster critical thinking and professional development.

Case Presentations
Structured presentations of patient cases where students demonstrate their ability to collect data, formulate differential diagnoses, discuss management plans, and apply theoretical knowledge to clinical practice.

Case-Based Discussion (CbD)
A method in which a faculty member engages a student in a structured discussion about a real or observed clinical case to evaluate their clinical reasoning, decision-making, and application of knowledge. It focuses on individual reflection and feedback, helping identify strengths and areas for improvement in clinical competence.

E-Learning through LMS
E-learning is web-*based training* delivered *via* the internet or a corporate intranet. A *learning management system (LMS)* is a software application or web-*based* technology used to plan, implement and assess a specific learning process.

Introduction to Learning Management System

A Learning Management System (LMS) is a web-based platform (also available as software application) which is designed to facilitate the delivery of educational content. LMS is used to streamline the learning process and manage educational resources efficiently.

Key features of LMS at KIMS include:

Lectures:

Content include lecture slides, recorded video lectures and YouTube links of related content (for animated videos).

Assessment and Evaluation:

LMS include quizzes, assessments, and assignments.

Automated grading and feedback help in evaluating the learners' progress.

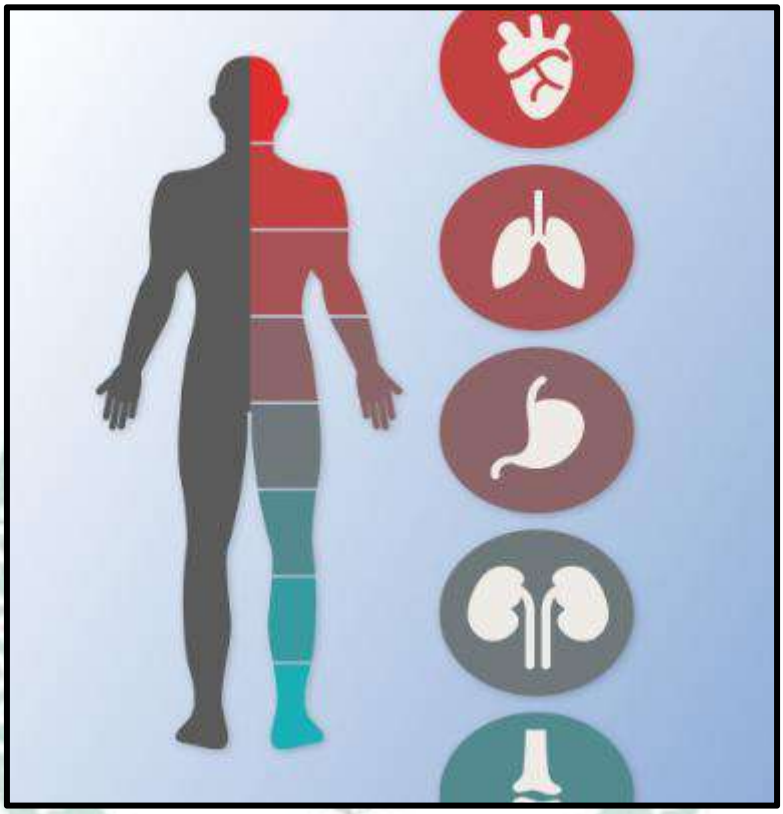
Communication and Collaboration:

LMS include discussion forums to facilitate interaction between learners and instructors.

SUBJECTS

1. **General Medicine & Allied**
2. **General Surgery & Allied**
3. **Pediatrics**
4. **Obstetrics & Gynecology**

GENERAL MEDICINE & ALLIED



Introduction

Medicine is a broad-based specialty dedicated to providing primary and specialized care to adults. Therefore, it forms a key component of the undergraduate curriculum and is taught throughout the five years with increased emphasis in last three years. Its primary focus is on building knowledge, skills and attitudes of the students for the practice of medicine not only at the primary care level but to advance to postgraduate studies for clinical practice, medical education and research. Our aim is to prepare future doctors for independent practice after graduation as a general practitioner who can provide patient centered medical care with highest standards of professionalism

Learning Outcome

At the end of final year, students will be able to:

a) Diagnose common medical problems, suggest and interpret appropriate investigation, rationalize treatment plan and if appropriate, refer patient for specialist opinion/ management.

b) Suggest preventive measures for the common Public Health Problem in the community.

c) Perform relevant procedures.

d) Convey relevant information and explanations accurately to patients,families, colleagues and other professionals.

e) Understand medical ethics and its application pertaining to medicine and maintain the confidentiality of the patient.

f) Adapt research findings appropriately to the individual patient situation or relevant patient population.

Disciplines Involved:

- Cardiology
- Endocrinology (& Genetic Disorders)
- Gastroenterology
- Haematology
- Infectious Diseases
- Internal Medicine
- Family Medicine
- Nephrology
- Neurology
- Oncology
- Pulmonology
- Rheumatology
- Toxicology & Environmental Medicine

GENERAL MEDICINE & ALLIED

INTRODUCTION TO MEDICINE		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Symatomatology	• Identify symptomatology of the following: • CVS • GI diseases • CNS diseases • CNS diseases • Locomotor diseases • Renal diseases • Common endocrine diseases • Correlate clinical findings to anatomical structures. • Correlate clinical features to etiologies. • Take history. Perform clinical examination. • Perform systemic examination of different systems. Show empathy and sympathy while examining the patient. • Recognize the right to consent and privacy of the patient • Present finding of the history and examination in logical order verbally and in written form	**Bedside**
Common clinical presentations	• Approach to patients with: • Fever • Headache • Cyanosis • Jaundice • Chest pain • Unconsciousness • Dyspnea • Dyspepsia • Hematemesis • Bleeding per rectum • Malena • Vomiting • Diarrhea • Fits	**Bedside**

	• Anorexia and weight loss • Oedema • Acute poisoning • Ascites • Anemia • PUO • Critically ill patient.	

NEUROLOGY		
Headache	• Do the assessment of the patient with headache. • Take history. • Perform clinical examination. • Know Differential diagnosis of Headache. • Discuss the investigations. • Outline management plan.	**Bedside**
Unconsciousness	• Do the assessment of the patient with unconsciousness. • Take history. Perform clinical examination. • Generate Differential diagnosis of unconscious patient. Justify utility of (GCS) Glasgow coma scale. • Discuss the investigations. Outline emergency management plan.	**Bedside**
Gait / movement disorder	• Identify, know, distinguish and differentiate between clinical and laboratory features of Parkinsons disease, essential tremor, Huntington's disease, tics, medication induced dyskinesia. • Take history. Perform clinical examination of patient with gait disorder. • Outline treatment plan of PD. • Establish pathophysiological basis of Myasthenia Gravis. • Take history. • Perform clinical examination of patient with Myasthenia Gravis and dystrophy. • Diagnose various stages of Myasthenia gravis. Develop management plan.	**Bedside**
	• Assess the patient with Myelitis. Suggest investigations for Myelitis and evaluate treatment options for Myelitis.	**Bedside**

Spinal cord disorders		
Cerebrovascular accident	• Classify stroke and identify Transient ischemic attack. • Corelate pathophysiology of Stroke. • Emphasize the importance of early symptom recognition and prompt reaction. • Evaluate Stroke risk after TIA. • Order investigations, complications of stroke. • Take history. Perform clinical examination of patient. Identify prevention strategies. Outline management plan.	**Bedside**
Seizures/Epilepsy	• Identify Epilepsy. • Various seizures type including Adult versus pediatric seizures. Epilepsy Management issues. • Medically refractory epilepsy. • Epilepsy in elderly and pregnant women, patient with hepatic and renal insufficiency. • Differentiate between different kind of seizures. Identify the cause and trigger factors associated. • Outline the management of status epilepticus. • List the investigations. • Outline the short term / acute and long-term management of seizures both medical and surgical.	**Bedside**
Infections of CNS	• Identify Meningitis, Encephalitis and Brain Abscess. • Differentiate among them. • Take history. • Perform clinical examination of patient. • Identify etiologies and know the clinical features and presentation. • Outline the modalities of investigations and medical management of CNS infections.	**Bedside**

Other diseases / Multiple sclerosis	• Provide pathophysiologic basis. • Diagnose MS on the basis of clinical features. • Develop plan for workup and management including therapeutic options. • Propose plan for treatment of acute relapse, prevention of future relapses, treatment of complications and management of disability. • Provide pathophysiologic basis of poor prognosis of MS.	**Bedside**
NUTRITION/OBESITY/ CHOLESTEROL RELATED & GENETIC DISORDERS		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Nutrition	• Identify Vit B 12 Deficiency • Folic acid deficiency • Metabolic syndrome • Assess the patient. Propose investigations modalities. • Treatment options for nutritional deficiencies. • Take history. • Perform general and relevant clinical examination of patient. •	**Besdside**
Obesity	• Assess the patient with Nutrition disorders • Discuss the investigation modalities and Diagnosis. • Discuss the treatment options available.	**Bedside**
Cholesterol related disorders	• Identify Dyslipidemia • Discuss the investigations and treatment modalities.	**Bedside**
Genetic Disorders	• Identify Hemoglobinopathies, Sickle cell Syndromes, and Thalassemias • Classify Hemoglobinopathies on the basis of basic defects in structure and formation. • Identify each type • Establish clinical basis of diagnosis of each one of them. • Take history. • Perform general and relevant clinical examination of patient.	**Bedside**

	• Discuss treatment modalities.	

POISONING & ANIMAL BITES		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Animal bites / Snake bites	• Classify snake bite, based on Animal, time duration and type of wound. • • List the immediate management and long-term management. • Discuss the antivenom type and dosing and criteria to administer antivenom. • Enumerate various complications.	**CBL/ Bedside**
Poisoning	• Identify paracetamol poisoning. • Diagnose on the basis of clinical presentation. • Take history. • Perform general and relevant clinical examination of patient. • Apply the concepts of mode of management on reversal. • List the complications. •	**Bedside**
LIVER & PANCREAS		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Chronic liver disease Ascites, Cirrhosis of liver	• Ascites and management. • Elaborate the causes of Ascites. • Outline the management and prognosis. • Describe the causes and pathology of Cirrhosis of liver. • Take history. • Perform general and relevant clinical examination of patient. • Council a cirrhotic patient	**BEDSIDE/ CPC**

	• Clinical features of hepatic cirrhosis • Explain pathogenic mechanism • Discuss the management and prognosis	
Portal hypertension And complications	• Classify portal hypertension according to site of vascular obstruction • Evaluate management and prognosis	**BEDSIDE CBL**
Hepatic encephalopathy	Correlate the causes and pathology of hepatic encephalopathy Outline the management and prognosis	**BEDSIDE**
Hepatitis Hepatitis B and C Infections Other forms of Hepatitis Autoimmune hepatitis	• Classify viral hepatitis • Differentiate between different types of hepatitis • Interpret investigations for diagnosis • Discuss their mode of transmission • Outline treatment plan and prognosis • List complications	**CBL**
Pancreatitis Acute and chronic pancreatitis	• Elaborate the pathophysiology • Diagnose the patient on the basis of signs, symptoms and investigations • Outline the treatment plan List its complications • Take history and perform clinical examination of patient	**BEDSIDE**
Investigation & imaging of GI ,liver and pancreatic disorder	• Interpret investigations for the diagnosis of GI, liver and pancreatic disorder	**BEDSIDE**
Hemochromatosis	• Define hemochromatosis and classify it (primary vs secondary) • Describe iron metabolism and pathophysiology • Identify common clinical features (fatigue, diabetes, cirrhosis, skin pigmentation) • Interpret relevant investigations (serum ferritin, transferrin saturation, LFTs) • Outline basic management principles including phlebotomy • Recognize complications and indications	**CBL**

Wilsons disease	• Define Wilson's disease and explain its genetic basis • Describe copper metabolism and pathophysiology • Recognize hepatic, neurological, and psychiatric manifestations • Identify key diagnostic tests (ceruloplasmin, urinary copper, Kayser–Fleischer rings) • Outline treatment options (chelating agents, zinc therapy) • Recognize when liver transplantation is indicated	**BEDSIDE**
SBP/HRS	• Define SBP and HRS and identify at-risk patients • Recognize clinical presentation in patients with chronic liver disease • Interpret ascitic fluid analysis (PMN count, culture) • Outline initial management of SBP and prevention strategies • Explain the diagnostic criteria and types of HRS • Describe basic management and referral indications	**CBL**
Diseases of liver	• Classify liver diseases (infective, metabolic, autoimmune, alcoholic, drug-induced) • Identify causes and complications of cirrhosis • Perform focused history and examination in liver disease • Interpret LFTs, viral markers, and imaging findings • Assess severity using Child–Pugh score • Outline principles of management and follow-up	**BEDSIDE**
Liver abscess	• Differentiate between amoebic and pyogenic liver abscess • Identify common etiologies and risk factors • Recognize clinical features and complications • Interpret laboratory tests and imaging findings • Outline management including antibiotics and drainage • Recognize indications for surgical referral	**CBL**

• Hepatocellular Carcinoma (HCC)	• Identify risk factors for HCC • Recognize clinical presentation and red-flag symptoms • Interpret AFP levels and imaging findings • Outline screening strategies in chronic liver disease • Describe basic treatment options and referral pathways • Recognize prognosis and palliative care considerations	**BEDSIDE**
Carcinoma of Pancreas	• . Identify risk factors and common sites of pancreatic cancer • Recognize clinical features including painless jaundice • Interpret basic investigations and imaging findings • Outline staging and management options • Recognize poor prognostic factors • Describe the role of palliative care	**BEDSIDE**
Abdominal TB	• Describe types of abdominal TB • Recognize clinical features and differential diagnoses • Interpret relevant investigations (imaging, ascitic fluid, biopsy) • Outline anti-tuberculous treatment regimen • Recognize complications and referral indications	**BEDSIDE**
Ampullary Carcinoma	• Define ampullary carcinoma and differentiate it from pancreatic cancer • Recognize presenting symptoms • Identify diagnostic investigations (endoscopy, imaging) • Outline principles of management	**CBL**

Dysphagia and Its Evaluation	• Define dysphagia and classify it (oropharyngeal vs esophageal) • Identify common causes of dysphagia • Perform focused history and examination • Outline stepwise evaluation including endoscopy and imaging • Recognize red-flag symptoms requiring urgent referral	**CBL**
Other hepatobiliary and pancreatic disorders	• Describe initial management principles • Compare prognosis with pancreatic carcinoma	**BEDSIDE**
ONCOLOGY , DISEASES OF LYMPH NODES & BONE MARROW		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
• White blood cells tumours • • Lymphoma.	• Corelate abnormalities in the immune system and its processes to occurrence of lymphoma and its associated clinical presentation. • Identify organs associated with Lymphoma. • Delineate the diagnostic criteria of various stages on time based Characteristic features. • Propose diagnostic • modalities and treatment options. • Take history of a patient • Perform clinical examination of a patient with Lymphoma	**BEDSIDE**
• Bone marrow tumors • Acute Leukemia • Chronic Leukemia	• Classify various forms of acute and chronic Leukemia. • Differentiate between Symptoms and signs, and characteristic features of acute and chronic Leukemia • Diagnose various stages of leukemia • Propose appropriates Investigations, diagnostic modalities and • treatment options.	**BEDSIDE**
• Multiple Myeloma	• Define the pathological basis of Multiple myeloma • Classify various stages based on clinical presentation • Justify the role of laboratory investigations and	**BEDSIDE**

	various treatment Options •	
• Myeloproliferative Disorders	• Classify various forms of Myeloproliferative disorders based on Clinical Presentation. • Diagnoses various stages of the disease. • Propose appropriate Investigations diagnostic modalities and treatment options.	**BEDSIDE**
RHEUMATOLOGY		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Inflammation of joints Rheumatoid arthritis	• Discuss etiology, Symptoms and signs of the disease • Diagnose the patient on the basis of presenting complaints and clinical examination. • Take history of a patient • Perform clinical examination of a patient	**BEDSIDE/CBL**
Osteoarthritis	• Diagnose the patient on the basis of presenting complaints and clinical examination • Determine causes of osteoarthritis established through Investigations and laboratory findings. • Manage complications of the disease • Take history of a patient with joint disease • Perform clinical examination of a patient.	**BEDSIDE/CBL**
• Seronegative Poly Arthritis •	• Define diagnostic criteria for Seronegative Poly Arthritis • Correlate etiology of the disease to its presentation. • Diagnose the patient on the basis of presenting complaints and clinical examination • Propose appropriate Investigations and laboratory findings to establish diagnosis. • Manage complications of the Disease • Take history of a patient • Perform clinical examination of a patient with Polyarthritis	**BEDSIDE/CBL**

Arthritis/ ankylosing spondylitis	• Diagnose the disease on the basis of clinical Presentation and investigations. • Correlate clinical signs with radiological findings. • Suggest appropriate diagnostic modalities and • treatment options. • Take history of a patient • Perform clinical • examination of a patient with Arthritis/ ankylosing spondylitis.	**BEDSIDE/ CBL**
Gout	• Give pathological basis of Gout • Differentiate between acute and chronic disease based on presentation, investigations and treatment options • Diagnose the disease based on clinical presentation and investigations. • Discuss the association of disease with other diseases • Manage the • complications of disease • Take history of a patient • Perform clinical examination of a patient with gout	**BEDSIDE/ CBL**
Polymalgia rheumatica	• Define Polymalgia rheumatica • Develop therapeutic plan for the disease after diagnosing based on clinical presentation of various stages, and investigations • Diagnosing. • Take history of a patient • Perform clinical examination of a patient with Polymalgiar heumatica	**BEDSIDE/ CBL**
Systemic disorders involving joints/SLE	• Define diagnostic criteria Seronegative SLE • Suggest therapeutic options and investigations after establishing diagnosis based on etiology, clinical Presentation and investigations Manage complications. • Take history of a patient • Perform clinical examination of a patient with SLE.	**BEDSIDE/ CBL**

	• MCTD • Vasculitis (Small, Medium and Large) • Dermatomycosis /Polymyosities • Scleroderma/Ra ynaud Phenomenon and Syndrome • Systemic Sclerosis • Sjorgen syndrome/Kerat oconjuncitives • Sicca • Suggest therapeutic options and investigations after establishing diagnosis based on etiology, clinical Presentation and investigations. • Take history of a patient • Perform clinical examination of a patient	**BEDSIDE/ CBL**

GASTROENTROLOGY		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Dyspepsia/ Indigestion	• Identify the causes of Dyspepsia, GERD and Peptic Ulcer • Generate differential diagnosis of Dyspepsia, GERD and Peptic Ulcer • Establish definitive diagnosis based on laboratory investigations Develop treatment plan for Dyspepsia, GERD and Peptic Ulcer • Evaluate prognosis of the patient of Dyspepsia, GERD • and Peptic Ulcer. • Take history of a patient • Perform clinical examination of patient with dyspepsia • Counseling of patients with GERD & Peptic ulcer about the outcomes of diseases and how to prevent them	**Bedside**
Gastrointestinal Bleeding	Differential diagnosis of Upper GI Bleeding	**Bedside/ CBL**

	Lower GI Bleeding Clinical assessment, and signs and symptoms Management. • Differentiate between upper and lower GI bleeding • Assess the patient on the basis of signs and symptoms • Outline the management plan • Outline the risk factors for death in Upper GI bleeding. • Take history of a patient Perform clinical examination of patient. Risk factors for death in Upper GI bleeding Prognosis	
Diarrhea	• Acute and chronic diarrhea • Inflammatory Bowel Disease • Ulcerative colitis • Crohn's disease • Irritable Bowel Syndrome • Clinical features, signs and symptoms • Management • Malabsorption • Sprue Tropical • Coeliac Disease • Differentiate between Acute and Chronic Diarrhoea on the basis of its etiology • Outline the risk factors for Acute and Chronic Diarrhoea • Assess the patient on the basis of signs and symptoms • Outline the investigations and management plan • Discuss the Prognosis • Discuss the Prognosis. • Take history of a patient • Perform clinical examination of patient with diarrhea	**Bedside/CBL**

Tumors	• Diagnose Upper GI Malignancy • Diagnose Lower GI Malignancy • Classify Upper and lower GI tumours • Differentiate between benign and malignant tumours on the basis of its etiology and clinical features • List risk factors • Outline investigations and management of Tumours • Take history of a patient • Perform clinical examination of patient with GI tumors.	**Bedside**
Chronic Liver disease	• Ascites and Management • Elaborate the causes of Ascites • Outline the • management and prognosis • Cirrhosis of Liver	**Bedside/CBL**
Hepatic Cirrhosis	• Describe the causes pathology and clinical features of Hepatic Cirrhosis • Explain the pathogenic mechanism of Hepatic Fibrosis • Discuss the Management and prognosis of the • condition	**Bedside/CBL**

Portal Hypertension	• Portal Hypertension/ Sequalae • Aetiology and pathogenesis • Clinical features • Investigations and management • Complications of Portal • Hypertension • ClassifiyPortal Hypertension according to site of vascular obstruction • Evaluate Management and prognosis of the condition • Hepatic Encephalopathy • Correlate the causes and pathology of hepatic encephalopathy to its clinical features • Outline the management and prognosis	**Bedside/CBL**
Hepatitis	Hepatitis B and C Infections Other Forms of Hepatitis (A, D and E) • **Autoimmune Hepatitis** • Classify viral Hepatitis • Differentiate between different types of Hepatitis • Interpret investigations for diagnosis of Hepatitis B and C • Discuss their modes of transmission • Outline the treatment plan and • Prognosis. • Take history of a patient • Perform clinical examination of patient with hepatitis	**Bedside/CBL**
ENDOCRINOLOGY		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Disorders of pituitary gland and hypothalamus	• Acromegaly/growth hormone deficiency • Define criteria for diagnosing acromegaly, clinical presentation of acromegaly/growth hormone deficiency • Identify pathophysiology of central precocious puberty, acromegaly and growth hormone deficiency	**BEDSIDE**

	• Discuss functions of anterior and posterior pituitary hormones and hypothalamic hormones • Suggest investigations for diagnosis by oral glucose tolerance test and GH levels • Propose surgical, medical and radiotherapy management	
Diabetes insipidus /Addisons's Disease	• Correlate pathophysiology of diabetes insipidus /SIADH to its clinical manifestations • Relate the effect of device plan for diagnosis and clinical management of SIADH/diabetes insipidus • Take history and perform clinical examination of a patient with diabetes insipidus	**BEDSIDE**
Hypothyroidism / Addison's disease	Correlate the pathophysiologic basis of various etiological factors in clinical manifestation of disease Determine the diagnostic criteria Outline the management disease	**BESDSIDE**
Acute Addisonian crisis	• Outline the management of the disease	**BESDSIDE CBL**
Disorders of thyroid gland Hyperthyroidism	• Correlate pathophysiological basis of various etiological factors to clinical •	**BESDSIDE**
Hypothyroidism.	• Correlate pathophysiological basis of various etiological factors to clinical manifestations of hypothyroidism. • Classify hypothyroidism. • Interpret investigations for diagnosis including thyroid function tests. • Outline management including drug therapy and regular • follow up.	**CBL**

• Disorders of Parathyroid gland Parathyroid disorders.	Identify the hormones produced by the parathyroid and their functions. • Correlate pathophysiological basis of various etiological factors to clinical manifestations of parathyroid endocrine disorder. • Devise plan for diagnosis and clinical management of each parathyroid disorder. • Take history of a patient • Perform clinical examination of a patient with parathyroid disorder •	**BESDSIDE**
Disorders of Adrenal Gland	• Cushing Syndrome • Pheochromocyt oma • Aldosterone & related conditions Justify abnormalities in the hormones produced by the adrenal glands and their functions resulting in Cushing Syndrome / Pheochromocytoma • Aldosterone & related conditions • Propose management of Cushing Syndrome after establishing • clinical diagnosis. •	**CBL**
MEN-I and II MEN-I and II	• Outline management plan of MEN-I and II	**BESDSIDE**
Diabetes mellitus Diabetes mellitus type -1 Diabetes mellitus type-2	• Acute Complication of Diabetes Mellitus- DKA/HHS/Hypoglycemia • Chronic complications of diabetes mellitus Differentiate between type 1 and type 2 diabetes on the basis of pathophysiology, etiology, • Prevalence and incidence, risk factors, manifestations and complications. • Identify abnormalities in investigations for blood sugar levels including HbA1c. • Propose diagnostic tests used for screening, diagnosis and monitoring of diabetes mellitus. • Emphasize implications of insulin used to treat patients of DM-1& II. • Identify maternal and fetal risks or complications associated with diabetes in pregnancy. • Identify the warning signs of insulin- dependent and	**CBL**

	non- insulin-dependent diabetes mellitus. • Compare prevalence of diabetes mellitus among different ethnic groups. • Identify risk factors for developing diabetes and its complications. • Devise Management plan for acute Complication of Diabetes Mellitus- DKA/HHS/Hypoglycemia Describe the major microvascular, macrovascular and neuropathic complications of diabetes and self-care behavior that are important in • their prevention. and oral hypoglycemic agents	
HAEMATOLOGY		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Anemia	Differentiate between various types of anemia Iron deficiency • Megaloblastic B- 12 deficiency • Take history of a patient	**BEDSIDE**
Pancytopenia clinical approach	Folic acid deficiency Anemia of chronic disorder Hemolytic anaemia Hereditary Acquired Aplastic anemia etiology and presentation list Causes • Management based on etiology, underlying pathology, symptoms and signs • Evaluate the patient on the basis of signs and symptoms and differential diagnosis • Interpret appropriately ordered laboratory investigation to reach a final diagnosis • Devise plan for treatment of disease and complications of the condition if it remains untreated • Monitor treatment of anemia	**BEDSIDE**

Transfusion Transfusion – Blood groups and blood transfusion. Reactions & Management	• Elaborate the generic prerequisites and modes of transfusion. • Correlate the pathophysiology of blood reactions to the Requirement & safety protocol • Follow through step by step management of different types of transfusion reactions •	**CBL/ BEDSIDE**
Generalized Lymphadenopathy Differential diagnosis of Generalized Lymphadenopathy	• Outline the approach to a patient with generalized lymphadenopathy • to identify its cause. • Take history and perform clinical exam on patient	**CBL/ BEDSIDE**
Haemoglobinopathies. *Also included in genetic disorders	• Sickle cell syndromes • Thalassaemias Classify hemoglobinopathies based on abnormalities in structure and formation of Hb. • Differentiate between different hemoglobinopathies based on characteristic features, signs and symptoms treatment modalities and diagnostic approach. • Take history of a patient • Perform clinical examination of a patient with hemoglobinopathies •	**BEDSIDE**
Bleeding Disorders ITP/ Bleeding Disorders/ DIC	• Correlate abnormalities in physiology of coagulation with. • etiology, Symptoms and signs of ITP/ Bleeding Disorders/ DIC • Devise plan for investigating, diagnosing and treating Bleeding disorders and their complications. •	**BEDSIDE/CBL**
CARDIOVASCULAR		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**

Hypertension Diagnosis and Management.	• Hypertension: Causes, Types, Define diagnostic criteria for hypertension. • Take history of a patient with hypertension. • Provide pathophysiological basis of hypertension. • Propose Life style modifications and non-pharmacological options for patients with hypertension. • Diagnose primary hypertension from secondary hypertension • Rationalize the need for achieving recommended BP goals in treatment of hypertension. • Classify antihypertensive drugs • Choose appropriate antihypertensive drug considering their indications for use. • Recognize types of hypertension, hypertensive urgency and • emergency.	**BEDSIDE**
Ischaemic heart Disease ACS/MI: Diagnosis, complications and Management	• Define Acute coronary syndrome (ACS) • Angina • Unstable angina pectoris (UA) • Non-ST segment elevation myocardial infarction(NSTEMI) • ST segment elevation myocardial infarction • Provide pathophysiological basis of cardiac ischemia. • Diagnose ACS and MI. • List complications of MI • Analyze the pharmacological management in the treatment of ACS. • Differentiate between male and female signs and symptoms of ACS.	**BEDSIDE**

	• Examine ACS modifiable and non- modifiable risk factors. • Discuss coronary revascularization procedures and nursing care. • Take history of a patient with ACS/MI • Perform clinical examination of a patient with ACS/MI	
Heart failure LVF CCF Cor-pulmonale	• Define Heart failure • Provide pathophysiological basis of Heart failure. • Diagnose Heart failure. • List complications of Heart failure • Analyze the pharmacological management in the treatment of Heart failure • Take history of a patient • Perform clinical examination of a patient with Heart failure	**BEDSIDE**
Endocardial Diseases Infective endocarditis.	• Identify signs/symptoms of infective endocarditis. • Differentiate between types of IE • in relation to its pathophysiology • Diagnose suspected and confirmed IE on the basis of criteria used • Manage infective endocarditis • List its complications • Take history of a patient with infective endocarditis. • Perform clinical examination of a patient with	**BEDSIDE**

Constrictive Pericardial diseases pericarditis Pericardial effusion	• Differentiate between types of Pericarditis on the basis of its etiology and pathophysiology • Identity acute and chronic complications of Pericarditis • Identify the clinical manifestation of Pericarditis with diagnostic approach of Pericarditis. • State principles of management of Pericarditis. • List common causes and understand mechanism of pericardial effusion • Recognize early signs of pericardial tamponade • Justify the role of echocardiography in the diagnosis of pericardial effusion	**CBL/ BEDSIDE**
Cyanotic heart disease Congenital heart diseases (brief). Atrial Septal Defect Ventricular Septal Defect Patent Ductus Arteriosus Fallot's tetralogy Other causes of cyanosis	• Identify common etiologies and risk factors for cyanotic heart defects. • Diagnose cyanotic heart defects based on clinical • manifestations and appropriate diagnostic methods • Explain the pathophysiology, manifestations, diagnosis and management of a cyanotic congenital cardiac anomalies. • Elaborate the pathophysiology, manifestations, diagnosis and management of obstructive congenital anomalies. • Explain the pathophysiology, manifestations, diagnosis and management of cyanotic heart disease. • Identify the implications of cardiac anomalies for respiratory care.	**CBL**
Valvular Heart Disease Mitral valve. disease	• Rheumatic fever- Diagnosis and treatment. Illustrate clinical features of rheumatic fever • Diagnose Rheumatic fever on the basis of its Pathogenesis	**BEDSIDE**

Aortic valve disease	• Devise the prevention and treatment plan of rheumatic fever.	
	• list causes of Valvular Heart Disease • Describe Etiology, pathogenesis and hemodynamics of mitral/aortic valve disease. • Outline management plan • Causes of Valvular Heart Disease • Etiology, pathogenesis and hemodynamics of Valvular Heart Disease • Clinical finding, • treatment of Valvular Heart Disease • Assessment, diagnosis and management of the patient with Valvular Heart Disease • Take history of a patient with valvular disease. • Perform clinical examination of a patient with valvular disease.	**CBL/ BEDSIDE**
Cardiomyopathies	Cardiomyopathies- Brief review • Identify signs/symptoms of Cardiomyopathies. • List its relevant investigations, treatment plan and its complications • Take history of a patient with rheumatic fever • Perform clinical examination of a patient with rheumatic fever • Take history of a patient • Perform clinical examination.	**BEDSIDE**
Investigations ECG	• Review the electrophysiology of the heart as it relates to the ECG • Interpret normal ECGs. • Identify common errors in ECG recording. • Recognize common characteristics of abnormal heart rhythms. • Identify abnormal heart rhythms. • Differentiate between life threatening and non-life-threatening EKG rhythms • Identify components of the ECG waveform. • Employ a systematic process to evaluate and analyze ECG rhythm strips. • Recognize common ECG dysrhythmias. • List the common causes, consequences and patient	**CBL**

	management strategies for ECG dysrhythmias. • Provide physiological basis of the rate, rhythm and axis of ECG.	
ETT, ECHO, CT-Angiography and cardiac catheterization-Overview	• Plan patient preparation for ECG • Select clinical protocol • Explain the role of a pre-contrast scan • Outline a contrast administration protocol • Identify access site anatomy, including femoral artery and vein, internal jugular vein, and brachial artery • List disease conditions (and surgical correction) involving these anatomic structures • Appreciate atherosclerotic disease of the ileo- femoral system and knowledge of surgical revascularization anatomy, including Aorto-bifemoral graft, Fem-fem bypass, and Fem- pop bypass. • Demonstrate understanding of basic aspects of cardiac ultrasound, including physical principles, instrumentation, cardiovascular anatomy, cardiovascular physiology, and cardiovascular pathophysiology. • Give an overview of cardiac CT angiography acquisition. • List the indications and C/I of cardiac investigations	**CBL/ BEDSIDE**
PULMONOLOGY		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Interstitial lung Diseases ILD/DPLD/EAA/ IPF	• Determine the evaluation plan of patients with DPLD including exposure history, signs and symptoms, and results of diagnostic tests. • Critique current treatment of the DPLDs and their side effects • Take history and Perform clinical examination of patient with ILD/DPLD	**CBL BEDSIDE**

Sarcoidosis	• Review the epidemiology of sarcoidosis. • Recognize diverse clinical presentations of sarcoidosis on the basis of its pathophysiology • Describe the clinical predictors for disease progression and outcomes. • Devise a diagnostic pathway from a differential diagnosis. • Propose plan for drug therapy and investigating the disease. • Take history of a patient • Perform clinical examination of patient	**CBL BEDSIDE**
Tuberculosis Diagnosis, Treatment 9DS-TB, MDR- TB, XDR- TB	• Review etiology, pathogenesis, risk factors and clinical features of TB • Identify the components of a clinical evaluation of a patient with TB • Advise lab investigations like Chest X-ray, Monteux test • Prioritize the objectives of TB case management • Outline control and prevention modalities • List drug therapy and side effects of first and 2nd line anti tuberculosis drugs • List DOTS • Define diagnostic criteria of MDR TB • Devise treatment of multidrug resistant (MDR) and extensively drug- resistant tuberculosis (XDR TB) • Evaluate the prognosis of TB and treatment of opportunistic infections • List the aims of treatment of recommended doses of first-line anti-TB drugs for adults; • Develop treatment regimens for new and	**CBL BEDSIDE**

	previously treated patients taking into consideration • Significance of standard regimens for defined patient groups, including • Special populations like pregnant women, children, and HIV infected patients. • Manage drug therapy and its complications.	
Pnuemonia	• Diagnose Pneumonia on the basis of its clinical features and presentation relating to its etiology and pathophysiology • Advise relevant investigations • Devise management plan • Propose plan for prevention and follow up • Take history of a patient • Perform clinical examination of patient with pneumonia Definition, Etiological classification and risk factors predisposing to pneumonia Pathophysiology and progression of disease Clinical features and presentation of disease Clinical evaluation and Investigations for diagnosis Assessment of disease severity- CURB65 List of differential diagnosis Management of disease and its complications Antibiotic therapy and Supportive treatment Pneumonias in specific populations: • Immunocompromsed and hospital acquired pneumonias	**CBL BEDSIDE**
Lung Abscess	• Provide pathophysiological basis of lung abscess due to various etiological factors. • Diagnose lung abscess based on clinical presentation • Generate differential diagnosis based on clinical assessment of patient • Suggest appropriate lab investigations	**CBL BEDSIDE**

	including chest X ray, sputum examination and hematological studies. • Devise plan for drug therapy, drainage and surgical intervention for management of lung abscess. • Take history of a patient • Perform clinical examination of patient with lung abscess	
Obstructive airway diseases COPD	• Provide pathophysiological basis of COPD due to various etiological factors • clinical presentation • Generate differential diagnosis based on clinical assessment of patient • Suggest appropriate lab investigations including chest X ray, sputum examination and hematological • studies. •	**CBL**
Respiratory Emergencies	• Adult respiratory distress syndrome. Pulmonary thromboembolism/ Acute cor pulmonale. • Diagnose the patient on the basis of its clinical features and presentation relating to its etiology and pathophysiology • Advise relevant investigations • Devise management plan • Propose preventive measures and follow up • NIV • Take history of a patient • Perform clinical examination of patient • Provide emergency treatment	**BEDSIDE**
Shortness of breath	• Diagnose the patient on the basis of its clinical features and presentation relating to its etiology and pathophysiology • Advise relevant investigations • Devise management • Plan • Propose preventive measures • Take history of a patient • Perform clinical examination of patient	**CBL**

	• Provide emergency treatment	
Respiratory failure	• Define diagnostic criteria of respiratory failure of varied etiology. • Differentiate between acute, chronic, and postoperative respiratory failure on the basis of • pathophysiology • Recognize the signs and symptoms of respiratory failure. • Apply alveolar gas equation to evaluate respiratory failure. • Recognize the changes in blood gases that accompany respiratory failure and other investigations • Review major treatment strategies for respiratory failure and them monitoring. • Take history of a patient • Perform clinical examination of patient with respiratory failure	**BEDSIDE**
Tumors Carcinoma Lung	• Elaborate plan for diagnosis of common types of lung cancers • based on clinical presentations and • Radiological appearance. • Describe the grading and staging systems for lung Carcinomas • Propose plan for chemotherapy, • Take history of a patient • Perform clinical examination of patient with Ca lung surgical interventions and radiotherapy for management of lung carcinomas • Suggest alternate treatment modalities like stenting and laser therapy •	**CBL**
Pneumothorax	Evaluate prognosis and need for palliative care • Classify pneumothorax based on etiological factors • Provide Pathophysiological basis of clinical	**CBL**

	manifestations and differential diagnosis of pneumothorax. • Develop plan for diagnosing and • managing a patient of pneumothorax, including emergency treatment • Identify measures for prevention of Recurrence	
Bronchiectasis	•Analyze the etiology and pathogenesis of bronchiectasis • Diagnose bronchiectasis based on clinical features radiological and lab investigations • Generate Differential Diagnosis Develop plan for diagnosing and managing a patient of bronchiectasis, including drug therapy, surgical intervention and physiotherapy • Assess prognosis required measures for prevention	**BEDSIDE**
Pulmonary Embolism	Elaborate, epidemiology and risk factors and preventive measures for pulmonary embolism • Recognize the clinical features and presenting symptoms of pulmonary embolism • Evaluate various modalities of investigations for diagnosis and differential diagnosis • Develop plan for pharmacological and surgical management of a patient with pulmonary Embolism	**CBL**
Pleural effusion types & causes	Apply basic concepts of important anatomic features and physiologic function of the visceral and parietal pleural membranes to explain occurrence of pleural effusions • Differentiate between transudative and exudative effusions based on etiology, pathophysiology and risk factors. • Diagnose effusion based on clinical features and investigations. • Manage effusion appropriate to the	**BEDSIDE**

	underlying cause	
Examination of Chest Chest Auscultation	Justify Significance of chest auscultation in clinical examination • Apply basic concepts of anatomy and physiology of heart and lungs and related structures in relation to auscultation • Correlate biological changes of the aging process to the altered physical findings on chest and lung examination • Perform the correct procedure for carrying out chest auscultation • recognize normal breath sounds • identify Adventitious lung sounds: Wheezes, Crackles, Squeak, Pleural rub and Stridor	**CBL**
Investigations Chest X- ray Arterial blood Gases Therapy Oxygen Therapy: Various means & implications	• •Identify anatomical features of heart and lungs on a chest x-ray • interpret Arterial Blood Gases findings • Learn the concept of atelectasis and the ability to identify on chest x ray • Appreciate the appearance of pulmonary edema and the differences between cardiogenic and noncardiogenic causes • Recognize atelectasis on a chest x-ray • Appreciate the difference findings of atelectasis and pneumonia •Recognize pleural effusions and pneumothorax appear on CXR •Recognize the signs of COPD •Recognize the signs of a benign pulmonary nodule •Recognize the signs of COPD •Recognize the signs of a benign pulmonary nodule •Differentiate between ventilation, internal	**CBL** **BEDSIDE**

Ventilator Techniques different modes and terms used in mechanical ventilation such as IPPV, PCV, PEEP, CPAP, BIPAP, NIPPV,etc	respiration, and external respiration. •Identify the major muscles of respiration. •Identify factors affecting external and internal respiration. •Define hypoxemia and hypoxia. •Identify the indications dangers, problems and contraindications for oxygen therapy •elaborate preventive measures for injury Differentiate between low flow and high flow oxygen delivery systems. •Identify different oxygen delivery devices. •Evaluate physiological basis of pulse oximetry, its. •indications and limitations •Emphasize primary objective of airway maintenance •list the indications for mechanical ventilation(MV) •Identify ventilation strategies. •alternative modes of MV and the basic principles of non- invasive ventilation	**CBL** **BEDSIDE**
NEPHROLOGY, DIALYSIS & TRANSPLANT		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Inflammatory Diseases Urinary tract infections Glomerulonephrits Nephrotic syndrome Nephritic syndrome Renal TB Renal artery stenosis Renal tubular Acidosis Nephrolithiasis	• Diagnose the patient on the basis of its clinical features and presentation relating to its etiology and pathophysiology • Advise relevant investigations • Devise management plan • Propose preventive • measures and follow up • Diagnose the patient on the basis of its clinical features and presentation relating to its etiology and pathophysiology	**Bedside/CBL**

	• Advise relevant investigations • Devise management plan • Propose preventive measures and follow up • Take history of a patient • Perform clinical examination of patient • Counsel the patient with renal failure	
Renal failure AKI (Acute renal failure) CKD(Chronic renal failure)	• Diagnose the patient on the basis of its clinical features and presentation relating to its etiology and pathophysiology • Advise relevant investigations • Devise management • plan and follow up	**Bedside/CBL**
Treatment Dialysis Renal Transplant	• List the different causes requiring dialysis • Enumerate steps of • dialysis and its preparation • List the different causes requiring renal transplant	**Bedside/CBL**

INFECTIONS		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Dengue Typhoid/ Paratyphoid Fevers- Diagnosis and management	• diseases Typhoid/ Paratyphoid Fevers- Diagnosis and management • Discuss the etiology and Enumerate the Symptoms and signs of the disease • Elaborate Modes of transmission and •	**Bedside/CBL**
Dengue hemorrhagic fever	• Clinical presentation, and laboratory findings • Evaluate various diagnostic modalities and • treatment options.	**Bedside/CBL**
Common disease syndromes caused by	Pneumococci • Staphylococci. • Streptococci.	**Bedside/CBL**

different bacteria and their drug therapy.•	• Hemophilis influenzae. • Shigella. • Gonococci. • Pseudomonas. • Cholera. • Amoebiasis/Giadiasis • Take history of a patient • Perform clinical examination of a patient	
Septicemia Sepsis /septicemia meningococcemia	Define sepsis Classify sepsis Identify organ involved Evaluate diagnostic modalities Complication of disease • Propose drug treatment of sepsis and measures to prevent its progressions	**Bedside/CBL**
HIV/AIDS	• Acquired Immune deficiency syndrome • Relate the etiology of AIDS • Identify the modes of transmission. • Identify individuals susceptible to the disease. • Take history and perform clinical examination of the patient	**Bedside/ CBL**
FAMILY MEDICINE		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Orientation & Family Medicine Basics	• Comprehend the role of Family Medicine and family practitioner in a community • Describe 4 domains of consultation i.e. data gathering, examination, counselling and management o Demonstrate skills for patient centred consultation and referral • Counsel the patient while breaking bad news	Bedside/CBL
Chest Pain	▪ Approach to Chest Pain in Family Medicine ▪ Identify red flags and criteria for referral	

	▪ Perform chest examination for cardiovascular assessments ▪ Give differential diagnosis and management plan of Chest Pain ▪ Give intravascular/ intramuscular injection ▪ Insert cannula • Interpret ECG to recognize any abnormality	Bedside/CBL
Geriatrics	▪ Approach to diseases related to aging ▪ Perform examination to identify any abnormality ▪ Discuss differentials ▪ Suggest management plan ▪ Apply Wound dressing ▪ Use glucometer to check blood sugar level **<u>Nutrition</u>** ▪ Suggest nutritional plan for aged patients • Counsel for nutrition	Bedside/CBL
Mental health	• Approach to patient with mental health issues • Perform examination (Mental health assessment in primary care, PHQ9 questionnaire) • Counsel patient • Suggest management plan • Perform consultation incorporating empathy and patient centered approach	Bedside/CBL
Joint pain	▪ Approach to Joint Pain in Primary Care (Inflammatory vs. Non-Inflammatory) ▪ Identify **common causes** of joint pain (OA,RA, Gout) ▪ Assess the **functional disability** related to shoulder, knee, hip and back ▪ Discuss relevant investigation. ▪ Perform GPE and joint examination (Shoulder, Spine, Hip, Knee and Hands)	Bedside/CBL

	▪ Discuss differentials • Suggest management	
Generalized weakness and weight loss	▪ Approach to Generalized Weakness and Weight Loss (Endocrine, Malignancy, Infections) ▪ Discuss differentials Suggest management plan	Bedside/CBL
Weakness of a limb	▪ Approach to patient with weakness of limb in Family Medicine ▪ Perform GPE and CNS examination (Higher cortical function, motor, sensory, cranial nerves and cerebellar examination) Discuss differentials ▪ Suggest management plan • Demonstrate foot examination in a patient with neuropathy (use of monofilament, tuning fork and tendon hammer)	Bedside/CBL
Urogenital (Men)	▪ Approach to **various types of incontinence** in males in family Medicine ▪ Identifying red flags and when to refer ▪ Perform Urogenital examination ▪ Discuss differentials • Suggest management plan	Bedside/CBL
Cough	• Approach to Cough in Family Medicine • Identify red flags and criteria for referral • Perform chest examination for pulmonary assessments o Give differential diagnosis and management plan of cough • Interpret common X-ray findings • Counsel for inhaler technique • Guide patients how to use inhaler Demonstrate the use of Peak flow meter	Bedside/CBL
Headaches/ Confusion	• Approach to Headaches in Family Medicine (Migraine, Tension, Red Flags)	Bedside/CBL

	• Advise screening for dangerous causes (e.g., Subarachnoid Hemorrhage, Tumors) • **P**erform Neurological Examination • Give differential diagnosis and management plan of Headache • Measure blood pressure	
Abdominal pain	▪ Approach to the patient with abdominal pain in Family Medicine ▪ Identify common causes of **abdominal pain** (GERD, Gastric/Duodenal Ulcer, Hepatitis, Cholecystitis, Oesophageal Ca, Colorectal Ca, Acute Appendicitis, Ovarian Cyst, Testicular Torsion, Cholecystitis, UTI, Intestinal Obstruction, GERD, PUD) ▪ Perform GPE and Abdominal Examination ▪ Discuss common differentials of abdominal pain in general practice ▪ Suggest management of common causes of abdominal pain ▪ Perform consultation incorporating empathy and patient centered approach Provide initial management of acute abdomen before referral to surgical specialist	Bedside/CBL
Unwell child	▪ Approach to the Unwell Child in Family Medicine ▪ Identify red flags for serious illness in children (e.g., sepsis, meningitis) ▪ Assess sick child and elicit history from parent (BIND: Birth, Immunization status, Nutrition, Development) (Fever, Malnutrition, Dehydration, Pneumonia, Gastroenteritis, Inconsolable crying baby) ▪ Perform examination of an unwell child ▪ Discuss differentials ▪ Suggest management **<u>Malnutrition</u>**	Bedside/CBL

	▪ Discuss the causes **of malnutrition** and its management ▪ Discuss **developmental milestones** ▪ Counsel for nutrition **<u>Immunization</u>** ▪ Give injection to child following childhood **immunization regimen** Counsel for immunization	
Urogenital (Women)	▪ Approach to patient with abnormal PV bleeding ▪ Perform GPE and PV examination ▪ Discuss differentials ▪ Suggest management **<u>Family Planning</u>** ▪ Discuss methods of contraception Counsel for contraception	Bedside/CBL
Skin Conditions	▪ Approach to patient presenting with common dermatological conditions ▪ Perform dermatological examination ▪ Counsel patient ▪ Suggest management plan ▪ Demonstrate hygiene and hand washing skills Perform consultation incorporating empathy and patient centered approach	Bedside/CBL
Common eye ailments	▪ Approach to patient with common eye ailments ▪ Demonstrate the use of ophthalmoscope Suggest management plan	Bedside/CBL
Common ear ailments	▪ Approach to patient with common ear ailments ▪ Demonstrate the use of Otoscope Suggest management plan	Bedside/CBL

Simulations / Skills Lab	
Topics of the Module	**Objectives: By the end of the module the students will be able to:**
BLS	• Identify the importance and early response • Recognize emergency. Take control of the situation\

	• Activate emergency response • Perform high quality CPR • Use and AED • Team work • Protect the brain
Lumber puncture	• Identify Lumbar puncture needle • Discuss its indications, contra -indications, complications. • Know the method to perform the procedure and know hands on.
Nasogastric tube	• Identify N/G tube. Its usage according to its size. • Discuss and know indications, contra -indications, complications. • Perform the procedure with aseptic measures.
Foleys catheter	• Identify Foleys catheter and its sizes. • Discuss its indications, contra -indications, complications. • Perform hands-on after taking aseptic measures.
Insulin delivery	• Identify different methods, tools and instruments in delivery of insulin. • Identify Inulin syringe. • Discuss its indications, contra -indications, complications. • Perform Hands-on

SMALL GROUP DISCUSSION/TUTORIALS	
Topics of the Module	**Objectives: By the end of the module the students will be able to:**
ECG	• Identify normal ECG. • Recognize abnormalities in ECG. • Recognize different ECG abnormal strips.
X RAYS	• Identify normal Chest X ray • Identify Abnormal Chest X rays
ASTHMA	• Definition of Asthma. • Severity Management and complications.
PARKINSON	• Pathophysiology Clinical features management and progression of disease.
Epilepsy	• Different types of Epilepsy • Investigations and Management.
Gait disorders	• Types of Gait disorders.
Complications of Diabetes mellitus	• Microvascular • Macrovascular • Metabolic

	• Neuropathies • Diabetic foot.	
Cushing Syndrome	• Etiology clinical features	*
Dementia	• Different types of dementia.	

INFECTION CONTROL

Introduction

At KIMS, Infection Control training during MBBS Year-V is delivered through structured clinical clerkships. Emphasis is placed on practical application of infection prevention and control measures in real patient-care environments. Students integrate IPC principles into daily clinical practice across Medicine, Surgery, Pediatrics, and Obstetrics & Gynecology to ensure patient and healthcare worker safety.

Course Objectives :

By the end of the Infection Control clerkship at KIMS, students will:

- Apply infection prevention principles during clinical care.
- Prevent healthcare-associated infections through adherence to IPC protocols.
- Demonstrate professional responsibility toward patient and staff safety.
- Integrate infection control practices across all clinical disciplines.

Learning Outcomes :

At the end of MBBS Year-V at KIMS, students will be able to:

- Apply standard and transmission-based precautions in wards, OPDs, emergency units, and operating theaters.
- Perform effective hand hygiene and use PPE based on clinical risk.
- Identify and manage infection risks related to invasive procedures and medical devices.
- Prevent common HAIs including surgical site infections, CAUTI, CLABSI, and HAP.
- Demonstrate safe injection practices and sharps management.
- Ensure proper biomedical waste disposal.
- Recognize and report suspected healthcare-associated infections.
- Apply IPC principles in Medicine, Surgery, Pediatrics, and Obstetrics & Gynecology.
- Participate in audits, ward rounds, and discussions related to infection prevention.
- Maintain professionalism and compliance with institutional IPC policies

• PATIENT SAFETY

Introduction:

Patient Safety is a core clinical competency for Final Year MBBS students, who are actively involved in patient care under supervision. During this rotation, students are expected to apply patient safety principles in real clinical settings, including wards, OPDs, emergency units, operation theatres, and procedure rooms. The rotation emphasizes error prevention, safe clinical decision-making, effective communication, teamwork, infection control, and ethical responsibility, preparing students for safe independent practice as house officers.

Course Objectives:

By the end of the Patient Safety rotation, Final Year MBBS students will be able to:

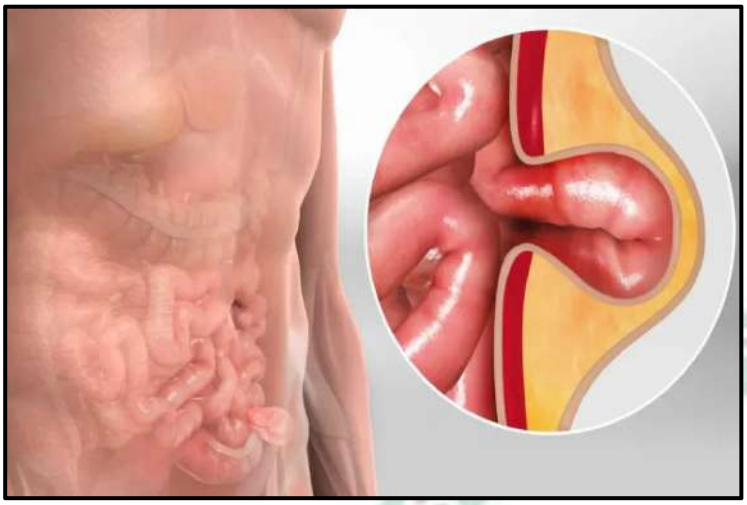
- Apply patient safety principles during direct patient care
- Identify and mitigate patient safety risks in clinical environments
- Demonstrate safe clinical practices during procedures and patient management
- Communicate effectively with healthcare teams to ensure continuity and safety of care
- Recognize system-based causes of medical errors and adverse events
- Practice ethical, professional, and accountable behavior in patient care

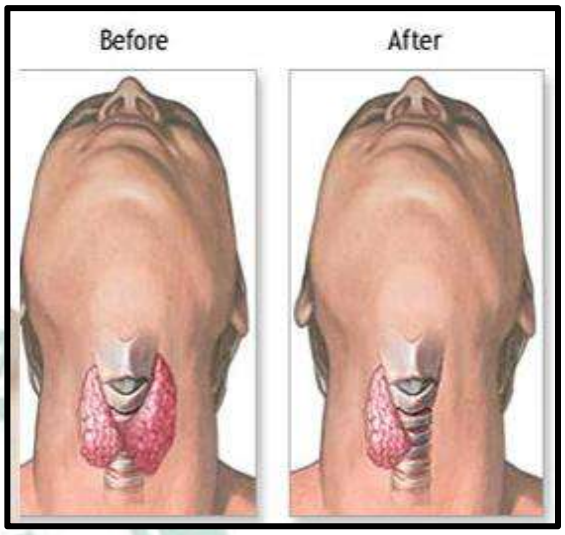
Learning Outcomes:

At the completion of the rotation, students will be able to:

- Identify, report, and appropriately respond to adverse events and near-misses
- Demonstrate correct patient identification, consent, and documentation practices
- Apply infection prevention and control measures consistently
- Perform safe prescribing practices under supervision
- Communicate effectively during patient handovers, referrals, and emergencies
- Participate in basic root cause analysis and morbidity & mortality discussions
- Recognize personal limitations and seek senior assistance to ensure patient safety
- Demonstrate professionalism, accountability, and respect for patient rights

GENERAL SURGERY





INTRODUCTION

Surgery is an important part of the undergraduate curriculum and is taught throughout the five years with increased emphasis in last two years. It focuses on building basics of surgical practice as much as relevant for general practitioner and is built upon an understanding of anatomical structure and functions and its clinical surgical relevance.

Aim is to provide state of the art educational programs in all areas of clinical surgery and in the biologic basis of surgical illness with a special emphasis on research which will. Moreover, to provide the best possible care to patients who require surgical services. contribute to the practical solutions and theoretical structure of future surgical practice

LEARNING OUTCOME

At the end of final year, student will be able to:

a. Diagnose common Surgical problems, suggest and interpret appropriate investigation, rationalize treatment plan and if appropriate, refer patient for specialist opinion/ management.

b. Suggest preventive measure for the common Public Health Problem in the community

c. Perform relevant procedures

d. Convey relevant information and explanations accurately to patients, families, colleagues and other professionals

e. Understand medical ethics and its application pertaining to surgery and maintain the confidentiality of the patient.

f. Adapt research findings appropriately to the individual patient situation or relevant patient population

Departments Involved:

1. Anesthesia and Critical Care
2. General Surgery
3. Neurosurgery
4. Orthopedic Surgery and Trauma
5. Pediatric Surgery
6. Plastic Surgery
7. Urology
8. Vascular Surgery

GENERAL SURGERY & ALLIED

General Surgery Group (GSG) and Allied Surgery Group (ASG)

Cycles: C1, C2, C3 and D1, D2, D3

1. How the Groups Are Organized

Your entire final-year class is divided into two major blocks:

1. General Surgery Group (GSG)

Students in this block spend six weeks rotating through core General Surgery activities.

2. Allied Surgery Group (ASG)

Students in this block spend six weeks in the allied specialties such as Orthopaedics, Urology, Neurosurgery, Plastic Surgery, Anaesthesia and Radiology.

After six weeks, the two blocks swap.

So, every student completes:

• 6 weeks GSG

• 6 weeks ASG

Total: 12 weeks.

2. What C1, C2, C3 Mean

C1 (Weeks 1–2)

Foundation cycle in General Surgery.

Students learn ward routines, OPD flow, basics of surgical assessment and participate in OT and emergency coverage.

C2 (Weeks 3–4)

Intermediate cycle.

Students build on clinical judgment, assist more confidently in OT, clerk emergency patients, and participate in CBL/TBL sessions.

C3 (Weeks 5–6)

Advanced cycle.

Students focus on decision-making, pre- and post-operative care, and advanced bedside skills. Performance in this cycle reflects readiness for finals.

3. What D1, D2, D3 Mean

D1 (Weeks 1–2)

Introductory exposure to allied specialties.

D2 (Weeks 3–4)

Intermediate level exposure across Orthopaedics, Urology, Anaesthesia, Radiology depending on week plan.

D3 (Weeks 5–6)

Advanced cycle. Specialty OTs, case presentations, final assessments.

4. Complete 12-Week Study Guide

Each week includes:

• Morning academic hour (8:30–9:30)

• OPD/Ward/ICU/OT postings (10:15–13:00)

• CBL/TBL/Presentations (13:30–15:00)

• Evening duties where applicable (16:00–22:00)

• Friday Skill Lab (8:30–10:30)

WEEKS 1–6: GENERAL SURGERY GROUP (C1–C3)

C1 — Week 1

Learning Focus: Surgical history and examination, fluids, infection control.

Clinical Exposure: Ward rounds, OPD, OT etiquette.

Afternoon: CBL Dysphagia, Breast Lump, Acute Abdomen.

C1 — Week 2

Learning Focus: Abdomen exam, acute abdomen, imaging principles.

Clinical Exposure: Hernia list, cholecystectomy, ICU.

Afternoon: CBL Appendicitis, Hernias.

C2 — Week 3

Learning Focus: ATLS, soft tissue infections.

Clinical Exposure: Trauma bay, emergency referrals.

Afternoon: CBL Thoracic trauma.

C2 — Week 4

Learning Focus: Breast diseases, thyroid diseases.

Clinical Exposure: Breast clinic, thyroid OT.

Afternoon: CBL Breast cancer, Thyroid swelling.

C3 — Week 5

Learning Focus: Hepatobiliary, pancreas, obstruction.

Clinical Exposure: ERCP, laparoscopic lists.

Afternoon: CBL Gallstones, Pancreatitis.

C3 — Week 6

Learning Focus: Vascular diseases, DVT, varicose veins.

Clinical Exposure: Duplex ultrasound, vascular OT.

Afternoon: CBL Varicose veins, ALI.

WEEKS 7–12: ALLIED SURGERY GROUP (D1–D3)

D1 — Week 7

Orthopaedics foundations, fracture types, limb exam.

Clinical : Fracture Clinic, internal fixation.

Afternoon: CBL Fracture neck femur.

D1 — Week 8

Urology foundations, hematuria, AUR.

Clinical: Cystoscopy, prostate clinic.

Afternoon: CBL Hematuria.

D2 — Week 9

Anaesthesia basics, airway, spinal.

Clinical: Intubation, recovery room.

Afternoon: Airway workshop.

D2 — Week 10

Neurosurgery, head injury, spine.

Clinical: OT, neurosurgery clinic.

Afternoon: CBL Head injury.

D3 — Week 11

Plastic surgery, burns.

Clinical: Burn dressings, grafts.

Afternoon: CBL Burns.

D3 — Week 12

Radiology integration, X-ray, CT, MRI.

Clinical: Radiology OT, reporting.

Afternoon: Imaging exam, reflection.

Summary:

• C1–C3: General Surgery

• D1–D3: Allied Surgery

• All cycles are 2 weeks each (total 12 weeks)

• Includes OPD, OT, CBLs, duties, and skill lab

GENERAL SURGERY & ALLIED

C1 - Weeks 1 & 2		
Topics	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Surgical ward workflow and assessment, history-taking, fluid/electrolytes, shock, acute abdomen, OT etiquette.•	• Understand surgical basics, perform focused exams, recognize early shock, follow OT protocols, identify acute abdomen patterns.	•Bedside teaching, demonstrations, mini-cases, videos,CBL, small group discussion
Teaching Sessions: Morning theory, ward rounds, OPD, OT observation, skills lab,CBL		
C2 –Weeks 3 & 4		
Hernias, intestinal obstruction, peritonitis, bowel perforation, imaging principles	Evaluate abdominal pain, interpret imaging, recognize emergencies, understand operative decisions.	Bedside teaching, demonstrations, mini-cases, videos,CBL, small group discussion
Teaching Sessions: Interactive +small group discussion + CBL, radiology session, ward assessments, OT, skills lab.		
C3 - Weeks 5 &6		

Hepatobiliary disorders, pancreatitis, upper GI bleed, colorectal diseases, and laparoscopy.	Recognise hepatobiliary/colorectal conditions, manage UGIB, understand laparoscopy, participate in operative discussions.	Case-anchored lectures, video walkthroughs, simulation, presentations
Teaching Sessions: Structured talks, specialty clinics, OT participation, skills lab.		
D1- Weeks 1 & 2		
Orthopedic trauma, fractures, dislocations, compartment syndrome.	Assess limb injuries, apply splints, perform primary surveys, identify emergencies.	Bedside teaching, demonstrations, mini-cases, videos,CBL, small group discussion
Teaching Sessions: Trauma lecture, clinics, OT, splinting skills lab.		
D2 – Weeks 3 & 4		
Hematuria, renal colic, obstruction, scrotal/testicular emergencies, BPH.	• Evaluate hematuria, manage retention, differentiate emergencies, perform catheterization.	Procedure demos, mini-CBLs, ultrasound interpretation.
Teaching Sessions: Urology lectures, OPD, OT, catheterisation skills lab.	•	

D3 – Weeks 5 & 6		
Head injury, raised ICP, burns, wound management, airway, radiology.	Identify neurosurgical emergencies, manage burns, handle airway skills, interpret common imaging.	Airway training, imaging small groups, ICU scenarios, wound-care practice.
TeachingSessions: Morning sessions, OT/ICU rounds, airway/burn skills lab, radiology demos	•	

Basic Principles of Surgery		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Metabolic response to injury	○ Describe the major fluid compartments of the body, the effect of osmolality ○ Explain what may happen in common conditions (eg acute blood loss, dehydration, excessive fluid replacement). ○ Recognize the different types of fluid used for optimization, especially Hartmann's, Normal 0.9% Saline and Dextrose. ○ List the physiological effects of protein–calorie malnutrition. ○ Identify the different types of nutritional support – oral, nasogastric, gastro/jejunotomy and parenteral. ○ Describe what total parenteral nutrition (TPN) entails, its associated risks	**CBLS** **Ward Teaching** **Reflective writing**
Perioperative Care	• Rationalize routine intravenous fluid replacement in surgical patients • Identify the commonly prescribed intravenous fluids. • Optimize management of co morbid. • Describe important complications of common	**CBLS**

	operations	
Shock & Blood transfusion	• Discuss the protocols of blood transfusion • Elaborate principles of blood transfusion of a surgical patient	**Ward Teaching**
Wound, healing and tissue repair	• Describe the process and stages of wound healing. • State primary, secondary and tertiary wound healing. • Justify the reasons for conducting a wound assessment. • Summarize pressure ulcer classification. • State the need to assess pain in wound care. • Explain extrinsic and intrinsic factors which impact on wound healing eg nutrition. • State the basic principles of wound dressing. • Identify patients at risk of pressure sore development	**Reflective writing**
Surgical infections	• Define the following terms: systemic inflammatory response syndrome (SIRS), sepsis, severe sepsis, septic shock, MOFS and acute respiratory distress syndrome(ARDS). • Differentiate between SIRS, sepsis, severe sepsis and septic shock on the basis of signs, symptoms, vital signs, hemodynamic measures and laboratory tests • Explain the seriousness of sepsis • Describe the microbiological causes of sepsis. • Describe the pathophysiology and mechanism of sepsis. • Prioritize for treatment of sepsis. • Explain the role of vasoactive agents in supporting the physiological function of a patient with sepsis. • Select appropriate agent, given details of a patient's condition. • Develop an appropriate monitoring program for patients with sepsis. • List the principles of diagnosis and management of sepsis. • State when to involve the infection control team. State when to take appropriate microbiological	**CBLS**

	specimens.	
Skin & Subcutaneous tissue		
Skin swellings and lumps	• Classify lumps in skin & subcutaneous tissue • Differentiate between benign and malignant tumors • List the principles of diagnosis and management of lumps in skin & subcutaneous tissues	**Reflective writing**
Sinuses and fistulas	• List the principles of diagnosis and management of sinuses and fistula on the basis of its etiology. • Take proper history of patient presenting with sinuses and fistula • Perform clinical examination of patient presenting with sinuses and fistula	**CBLS**
Burn	• Apply basic concepts of burn injury and pathophysiology to the evaluation, resuscitation, clinical management and rehabilitation of the burned patient. • Evaluate a burned patient • Develop an initial treatment plan for stabilization and fluid replacement using basic • principles of burn management. • Assess the appearance of the burn wound in relation to its depth, bacteriologic condition, healing potential and requirement for intervention.	**Ward Teaching**
Ulcer Classification and Management	• List the principles of diagnosis and management of ulcers on the basis of its pathophysiology. • Take proper history of patient presenting with ulcer • Perform clinical examination of patient presenting with ulcer	**Reflective writing**
TRAUMA		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Trauma and tissue response	• Describe the physiological response to injury. • State the principles of surgical treatment in a multi-injured patient. • Assess priorities during all phases of management following *ATLS* principles. • Justify the importance of re-assessment of the patient with regards to earlier interventions. • Emphasize the significance of a patient with polytrauma. • Discuss issue of missed injuries, management and documentation.	**CBLS**

	• Differentiate between primary and secondary survey. • Define triage and its importance. • State the importance of analgesia in the management of these patients. • Differentiate between blunt, penetrating, crush, blast injuries on the basis of mechanisms of trauma • List the interventions that may be required for head injury. • Explain the importance of nerve or vessel injury in trauma. • Elaborate the importance of a continuum of care for the injured patient by a multidisciplinary team • Explain the importance of the *ATLS* strategy and systematic approach. • Explain the role of radiological investigations (eg CT scanning) and interventions. • Identify the role of investigation and treatment dependent on the hemodynamic status of the	
Trauma to regions	• Differentiate between different types of chest injuries based on mechanism of pathophysiology findings, and management • Elaborate upon abdominal/ genitourinary injuries reference to causes, signs, symptoms diagnosis, management predisposing factor, complications and preventions • Discuss various causes of abdominal injury/ genitourinary trauma	**Ward Teaching** **Reflective writing**
Chest Trauma Broken ribs Abdominal Injury Pneumothorax		

Radiological Investigations and Diagnosis		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Conventional Radiology **Advanced techniques**	• Demonstrate knowledge, clinical and technical skills and decision-making capabilities with respect to diagnostic imaging pertinent to the practice of General Surgery • State the basic principles of radiation protection and law in relation to use of ionizing radiation • Justify use of relevant imaging techniques in various clinical scenarios reference to advantages and disadvantages.	**CBLS**

CT scan & MRI	• Compare the benefits and limitations of different radiologic modalities including CT and MRI • List risks associated with radiation exposure • Describe the impact of patient age on radiation sensitivity • Compare the relative radiation dose delivered by different imaging modalities • Discuss the potential complications of intravenous contrast administration for CT and • MR exams and identify predisposing risk factors	**Ward Teaching**

PAEDIATRIC SURGERY		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Congenital Deformities	• Relate embryological formation of face/ lip and palate to congenital anomalies • Detail signs, symptoms, treatment options, complications and management of Cleft Lip & palate • Take history of a patient with Cleft Lip & palate/CTEV	**CBLS**
	• Relate embryological formation of hip joint, foot and palate to congenital anomalies • Detail signs, symptoms, treatment options, complications and management of CTEV and Dysplasia of hip joint • Perform clinical examination of a patient with Cleft Lip & palate/DTEV/ Dysplasia of hip joint	**Ward Teaching**
Congenital anomalies- Skull/Meninges	• Describe the common symptoms, signs and management of hydrocephalus and meningocele.	**Reflective writing**
Congenital anomalies- upper GI	• Correlate the embryological origin of upper GI tract with Pathophysiology of Esophageal atresia, pyloric stenosis, Hirschsprung's Disease • Differentiate between the Clinical presentation of Esophageal atresia, pyloric stenosis, Hirschsprung's Disease, biliary atresia • Propose diagnostic investigations and treatment options in Esophageal atresia, pyloric stenosis, Hirschsprung's Disease, biliary atresia • Develop management plan for Complications Esophageal atresia, pyloric stenosis, • Hirschsprung's Disease	**CBLS**

Congenital anomalies- lower GI	• Correlate defects in embryologic developments to the causes, types and clinical features, radiological findings of neonatal intestinal obstruction. • illustrate the contribution of different imaging modalities in diagnosis of neonatal intestinal obstruction. • Develop an approach to the management of neonatal obstruction involving clinical and imaging data. • Identify the surgical intervention and post- surgical complications for neonatal intestinal obstruction. • identify embryological defect that leads to imperforate anus. • Demonstrate approach to diagnosis of imperforate anus. • Develop a treatment plan for Imperforate anus based on diagnostic classification and clinical presentation.	**CBLS**
Congenital anomalies- Urogenital system	• Correlate defects in the embryological origin of testes to classification of Undescended testis and its clinical presentation. • Suggest Diagnostic investigations and treatment options of Undescended testis • Elaborate management plan for possible complications of Undescended testis	**Ward Teaching**

ORTHOPEDIC SURGERY		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Congenital Deformities	• Relate embryological formation of face/ lip and palate to congenital anomalies • Detail signs, symptoms, treatment options, complications and management of Cleft Lip & palate • Take history of a patient with Cleft Lip & palate/CTEV •	**CBLS**
	• Relate embryological formation of hip joint, foot and palate to congenital anomalies • Detail signs, symptoms, treatment options, complications and management of CTEV and Dysplasia of hip joint • Perform clinical examination of a patient with Cleft Lip & palate/DTEV/ Dysplasia of hip joint	**Ward Teaching**

Congenital anomalies- Skull/Meninges	• Describe the common symptoms, signs and management of hydrocephalus and meningocele.	**CBLS**
Congenital anomalies- upper GI	• Correlate the embryological origin of upper GI tract with Pathophysiology of Esophageal atresia, pyloric stenosis, Hirschsprung's Disease • Differentiate between the Clinical presentation of Esophageal atresia, pyloric stenosis, Hirschsprung's Disease, biliary atresia • Propose diagnostic investigations and treatment options in Esophageal atresia, pyloric stenosis, Hirschsprung's Disease, biliary atresia • Develop management plan for Complications Esophageal atresia, pyloric stenosis, • Hirschsprung's Disease	**Ward Teaching**
Congenital anomalies- lower GI	• Correlate defects in embryologic developments to the causes, types and clinical features, radiological findings of neonatal intestinal obstruction. • illustrate the contribution of different imaging modalities in diagnosis of neonatal intestinal obstruction. • Develop an approach to the management of neonatal obstruction involving clinical and imaging data. • Identify the surgical intervention and post- surgical complications for neonatal intestinal obstruction. • identify embryological defect that leads to imperforate anus. • Demonstrate approach to diagnosis of imperforate anus. • Develop a treatment plan for Imperforate anus based on diagnostic classification and clinical presentation.	**Reflective writing**
Congenital anomalies- Urogenital system	• Correlate defects in the embryological origin of testes to classification of Undescended testis and its clinical presentation. • Suggest Diagnostic investigations and treatment options of Undescended testis • Elaborate management plan for possible complications of Undescended testis	**CBLS**
Injuries of Upper limb	• Identify anatomical features of bones and joints of upper and lower limbs • State the general principles of fracture	**CBLS**

Injuries of Lower limb	management. • Classify different types of fractures. • State radiological principles in fracture diagnosis. • List complications from fractures. • Describe the basic surgical management of fractures, including femoral neck fractures.	
Open Fracture	• Justify the management of open fractures and soft- tissue injury through surgery • Take history of a patient with open fracture • Perform clinical examination of a patient with open • fracture	**Ward Teaching**
Fractures without Displacement	• Describe the cellular process of fracture healing. • State the principles of general management of a fracture. • Differentiate the differences between different types of displaced fractures • Summarize the concept of 'stability' of a fracture • Describe the soft tissue component of a fracture • Identify risk factors for fractures • Classify fractures using different methods including Garland classification • Identify the clinical features requiring emergency management • Suggest appropriate investigations • Elaborate principles of management through open and closed reduction including follow up plan • List potential complications associated with supracondylar fracture	**Reflective writing**
Joints- Abnormalities	• Describe the management of a dislocated joint • Take history of a patient with dislocated joint Perform clinical examination of a patient with dislocated • joint	**CBLS**
Infections – bone & joint /Soft tissue	• Classify pathophysiology signs & symptoms, medical and surgical types of infections of bones and soft joint tissues of Osteomyelitis • Discuss the clinical presentation of osteomyelitis • List the diagnostic and treatment modalities for osteomyelitis.	**Ward Teaching**
Tumors	• classify benign and malignant tumors and soft tissue sarcomas • Choose best diagnostic strategies for appropriate treatment.	**Reflective writing**

	• Elaborate the surgical interventions for bone tumors and soft tissue sarcomas.	

SPINE SURGERY		
Topics of the Module	**Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Backache	• Relate functional anatomy to mechanisms for pain production. • Differentiate between different types of low back pain based on signs and symptoms • Develop management plan for a patient with a Lower back pain. • Justify physical therapy as management option.	**CBLS**
	• Describe the pathogenesis and natural history of degenerative disease of spine. • Select appropriate diagnostic tools to interpret the results • Identify the patient problems using appropriate clinical examination and radiological studies. • Apply evidence based decision making for the management of the patient.	**Ward Teaching**
TB spine	• Describe the etiology, epidemiology and pathophysiology of inflammatory infectious conditions of the spinal column. • Suggest appropriate investigations and laboratory work up to establish case based differential diagnosis. • Formulate appropriate evidence based medical and surgical management strategies for inflammatory and infectious disorders of the spinal column, including indication and techniques for urgent surgical intervention. • Describe spinal TB its causes, pathophysiology, investigations and treatment options	**Reflective writing**
Spinal Tumour	• Differentiate between various types of spinal tumors. • Assess the patient clinically for accurate treatment and about Post-surgical complications.	**CBLS**
NEUROSURGERY		

Topics of the Module	• **Objectives: By the end of the module the students will be able to:**	Teaching Strategies
Tumours Brain	• State relative incidence and location of the major types of primary and secondary brain tumors and space occupying lesions • Differentiate between clinical presentations of brain tumors based on their locations: Cerebellum, Brainstem and Pituitary etc. • Describe the surgical indications for the most common benign and malignant tumors and also space occupying lesions of brain.	**CBLS**
Head Injury	• List the interventions that may be required for head injury. • Explain the importance of nerve or vessel injury in trauma. • Correlate types of head injury to their pathophysiology. • Review the GLASSGOW COMA SCALE • Recognize signs in neurologically deteriorating patient. • Demonstrate the ABCDE approach and its relation to the avoidance of secondary neurological damage after head injury. • Discuss the surgical treatment and complications	**Ward Teaching**
VASCULAR SURGERY		
Topics of the Module	• **Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Ischaemia	• Identify clinical manifestations and etiology of acute limb ischemia • Take history of a patient with ischaemia • Relate the major risk factors to the etiology and pathophysiology of acute limb ischemia. • Elaborate differential diagnosis of acute limb ischemia. • Suggest appropriate investigations to make the diagnosis. • Discuss the medical and surgical management of acute limb ischemia. • Plan appropriate nursing care for the patient of acute limb ischemia.	**CBLS**

Peripheral Vascular Disease	• Elaborate clinical presentation, etiology and pathophysiology of varicose veins. • Suggest differential diagnosis based on assessment of patient. • Classify varicose veins. • Rule out the diagnosis of DVT using appropriate investigations. • Suggest conservative or surgical management of varicose veins where indicated.	**Ward Teaching**
THORACIC SURGERY		
Topics of the Module	• **Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
Infection	• differentiate between types of para pneumonic abscess on the basis of etiology. • Generate differential diagnosis of empyema thoracic • Understand the role of radiographic, endoscopic and laboratory evaluation in the diagnosis • Devise a proper management plan including pharmacotherapy and need for surgical intervention • Discuss the complications of disease and of surgical procedures for empyema thoracic	**CBLS**
SOLs – Mediastinum	• Generate differential diagnosis of mediastinal mass based on signs and symptoms • Devise a management plan for the treatment and diagnosis of mediastinal mass.	**Ward Teaching**
Oesophagus	• Identify factors in the patient history that are useful in diagnosing the etiology of dysphagia. • List symptoms that suggest oropharyngeal dysfunction. • List valuable tests in the diagnostic evaluation of dysphagia. • Specify diagnostic tools for dysphagia • Suggest common food and liquid modification practices in dysphagia management. • Apply basic concepts to propose management for dysphagia • Explain the intended application/benefit for various swallowing maneuvers and postural adjustments employed in traditional dysphagia management. • Demonstrate understanding of basic exercise principles as applied to dysphagia management.	**Reflective writing**

Tumors lungs	• identify the causes and risk factors for lung cancer • Advocate measures and guidelines to decrease risk for developing lung cancer and its screening • Discuss the prognostic factors of Ca lung. • Classify tumors based on types, staging and grading • justify the role of radiographic, endoscopic and laboratory evaluation in the diagnosis	**CBLS**
Anesthesia		
Topics of the Module	• **Objectives: By the end of the module the students will be able to:**	**Teaching Strategies**
General Anaesthesia	• Differentiate between different techniques of anesthesia and airway maintenance • Elaborate the methods of providing pain relief • Devise a plan for management of chronic pain and pain from malignant disease	**CBLS**
Regional & Spinal Anaesthesia	• Discuss the local and regional anesthesia techniques • List the various techniques for regional anesthesia administration • Choose appropriate type of anesthesia for various surgical procedures • Discuss the pre-anesthesia workup required for regional/spinal anesthesia • list the complications resulting from regional/spinal anesthesia	**Ward Teaching**
Pain Relief	• Relate different types of pain to its pathophysiology. • Outline various methods for pain relief in benign and malignant diseases • Discuss the various methods used for pain relief in different diseases	**Reflective writing**

SKILLS LAB/SIMULATIONS		
Skill	**Level of Performance**	**Learning Objectives**
Chest Tube Insertion	Assists	• Describe indications, contraindications, and complications of chest tube insertion. • Assist in patient positioning, preparation, and maintenance of asepsis. • Assist during the procedure and monitor for immediate complications.
Venous Cut Down	Assists	• Explain indications and anatomical landmarks for venous cut down. • Assist in preparation, exposure, and identification of vein. • Observe aseptic technique • Recognize its complications.
FNAC / Tru-cut Biopsy	Assists	• Describe indications, contraindications, and complications of FNAC and Tru-cut biopsy. • Assist in patient positioning, preparation, and sample handling. • Ensure asepsis and patient safety during the procedure.
Lumbar Puncture / Spinal Anaesthesia	Assists	• Describe anatomy, indications, and complications. • Assist in patient positioning and maintenance of aseptic precautions. • Monitor patient vitals and recognize adverse events.
Stitching of Wounds	Assists	• Explain principles of wound healing and suturing techniques. • Identify suturing instruments and materials. • Assist in suturing while maintaining aseptic technique.
Taking Blood Samples	Assists	• Describe indications and complications of venipuncture. • Assist in blood sample collection ensuring patient safety. • Ensure proper labeling and handling of samples.
Removal of Surgical Drains	Assists	• Describe indications and precautions for drain removal. • Assist in removal using aseptic technique. • Observe wound site and identify complications.
Ingrowing Toe Nail	Assists	• Explain indications and steps of management of ingrowing toe nail. • Assist in preparation, local anesthesia, and procedure. • Observe aseptic precautions and post-procedure care.

SKILLS LAB/SIMULATIONS		
Skill	**Level of Performance**	**Learning Objectives**
Circumcision	Assists	• Describe indications, contraindications, and complications of circumcision. • Assist in preparation, draping, and instrumentation. • Ensure patient safety and postoperative care principles.
Excision Biopsy under Local Anaesthesia	Assists	• Explain indications and principles of excision biopsy. • Assist in local anesthesia, lesion excision, and specimen handling. • Maintain asepsis and recognize complications.
Contrast X-ray Studies	Assists	• Describe indications and contraindications of contrast studies. • Assist in patient preparation and procedure. • Recognize adverse reactions to contrast media.
Application of POP (Plaster of Paris)	Performs under Direct Supervision	• Explain indications, contraindications, and complications of POP application. • Perform proper application and molding under supervision. • Monitor neurovascular status and provide patient instructions.
Endotracheal Intubation (Mannequin)	Performs under Direct Supervision	• Describe indications, contraindications, and complications of intubation. • Perform endotracheal intubation on mannequin correctly. • Confirm tube placement and manage basic airway safety.
Intravenous Line Insertion	Performs under Direct Supervision	• Explain indications and complications of IV cannulation. • Perform IV line insertion using aseptic technique. • Secure cannula and dispose biomedical waste appropriately.
Foley's Catheterization	Performs under Direct Supervision	• Describe indications, contraindications, and complications. • Perform catheterization maintaining asepsis and patient dignity. • Identify and prevent catheter-related complications.
Passage of Nasogastric Tube	Performs under Direct Supervision	• Explain indications, contraindications, and complications of NG tube insertion. • Perform NG tube insertion correctly under supervision. • Confirm placement and ensure patient comfort.

PEADIATRICS

Introduction

Paediatrics is an integral part of the undergraduate curriculum. Basics of paediatrics is established in the initial years through contribution from basic sciences. It has been taught as a major subject in last two years.

Aim is to equip the average student with minimum essential knowledge, skill and attitude to enable them to manage patients appropriately.

Course Outcomes

To equip them with essential knowledge, skill and attitude in order to enable them to:

a. Diagnose common Pediatric problems, suggest and interpret appropriate investigation, rationalize treatment plan and if appropriate, refer patient for specialist opinion/ management.

b. Suggest preventive measure for the common public health problem in the community

c. Perform relevant procedures

d. Convey relevant information and explanations accurately to patients, families, colleagues and other professionals

e. Participate effectively and appropriately in an inter professional health care team

f. Understand medical ethics and its application pertaining to paediatrics and maintain the confidentiality of the patient.

g. Adapt research findings appropriately to the individual patient situation or relevant patient population

PEADIATRICS

Topics of the Module	Objectives: By the end of the module the students will be able to:	Teaching Strategies
Immunization	• • Discuss the importance of immunization in healthcare field and identify vaccine preventable diseases. • Tabulate the EPI immunization schedule • Recognize important global vaccine preventable diseases. • Discuss the childhood immunization plan according to age of child.	Demo in the vaccination center followed by hand on practice
Nutrition	• Assess nutritional status based on feeding history and clinical examination • Interpret anthropometry,basic hematological and biochemical indices to identify basic dietary deficiency. • Identify the causes, clinical presentation of child with PEM. • Discriminate the assessment findings and laboratory. findings of kwashiorkor and marasmus. • Formulate the treatment plan for PEM. • Identify the causes and clinical signs of micronutrient deficiency	Bedside Teaching CBL, CBD
Genetics	• • Recall Patterns of inheritance • Diagnose Down Syndrome • Diagnose common malformation.	CBL
Growth and development	• • Recognize growth development and maturation. • Justify use the tools for measuring growth and development. • Identify the genetic,nutritional and environmental factors that can influence child growth and development	Demo in OPD, hands on practice, CBL
Respiratory Disease	• Discuss the clinical presentation and common etiology of acute respiratory infections. • Generate differential diagnosis and choose appropriate lab investigations for acute respiratory infections. • Devise management plan for pneumonia, para pneumonic effusions and empyema.	CBL, bedside teaching, oxygen therapy

	• Justify factors that predispose children to TB. • Interpret laboratory diagnosis and investigations for diagnosing TB. • Manage the Complications of TB in children. • Differentiate between pertussis and diphtheria. • Diagnose acute exacerbations of asthma • Propose management plan for acute exacerbation of asthma. • • Discuss the steps of asthma management according to GINA guidelines	
Infections	• Recognize the incidence and etiology of Measles, Mumps and Rubella. • Identify the clinical presentation of Enteric fever. • Develop management plan for enteric fever • Develop management plan for Encephalitis, Poliomyelitis, Croup,Tetanus and AGE • Develop management plan for suspected Enteric fever • Elaborate complications and Preventive measures of Enteric fever. • Correlate pathological changes induced by malarial parasite to the clinical presentation and complications of different types of malaria in children. • Develop management plan for Malaria in children • Identify the clinical presentation of HIV infection in children	CBL, bedside teaching
Gastroenterology	• Identify signs and symptoms of hepatitis and hepatic encephalopathy • Identify the clinical presentation of malabsorption. • Identify the signs and symptoms of gluten enteropathy/ coeliac disease • Identify the clinical presentation of Worms infestation, Giardia and Amoebiasis • Describe the treatment options of Worms infestation, Giardia and Amoebiasis Correlate the common causes of diarrhoea to the pathophysiological changes seen in acute and chronic diarrhoea	CBL, OPD, bedside teaching
Neonatology	• • Demonstrate understanding of the normal growth of newborn • Identify need for resuscitation in newborn and risks of birth asphyxia • Explain APGAR scoring	CBL, NRP workshop

	system • Recognize signs and symptoms of neonatal jaundice. • Plan treatment of neonatal jaundice and its complications of neonatal jaundice • Devise treatment plan for neonatal convulsions based on the etiology.	
Congenital and Acquired Heart Disease	• Correlate pathophysiology of pediatric CCF to its clinical presentation. • Identify common pediatric cardiac failure syndromes • Discuss the treatment of CCF. • Identify clinical features of rheumatic heart disease	CBL, bedside teaching

CNS Diseases	• • Identify diagnostic criteria for febrile, afebrile seizures and status epilepticus. • Recognize trends related to epilepsy and seizure management. • Identify different types of CP • Identify various causes of meningitis in different age groups • Plan management of meningitis in children • Recognize various forms of acute flaccid paralysis • Identify Ataxia & movement disorders, Neuromuscular disorders and Neurodegenerative disorders • Recognize hypotonia in children To enlist causes of hypotonia in children	CBL, bedside teaching
Psychological Paediatrics	• Recognize these disorders in children • To enlist causes of these disorders in children.	CBL
Endocrinology	• Identify common endocrinological diseases Develop management plans of short stature due to various causes.	CBL, bedside teaching
Hematology	• Explain classification and causes of anaemias. • Classify bleeding disorders in children. • • Generate differential diagnosis based on Interpretion of investigations Discuss management of anemias with special reference to nutritional rehabilitation.	CBL, bedside teaching
Malignancies of childhood	• Describe the epidemiology of childhood malignancies • Identify different types of malignancies in children • Recognize the clinical presentation of the most	CBL

	common pediatric cancers • Interpret laboratory findings indicative of a possible cancer diagnosis • Determine the approaches to cancer treatment. •	
Renal Diseases	• Differentiate nephrotic and nephritic syndromes • Manage nephrotic and nephritic syndrome according to Interpretation of initial investigations. • • Recognize complications of common renal diseases in children	CBL, bedside teaching, hands on practice
Childhood Poisoning	• Differentiate the various types of poisoning and their signs and symptoms • Define the goals of treatment.	CBL, bedside teaching
Bone and Rheumatologic disorders	• Diagnose and manage case of Rheumatological and bones disorders. • Classify the rheumatological and bones disorders. • Identify the clinical features of rheumatological and bones disorders • Formulate management plan for rheumatological and bones disorders.	CBL

Clinicopathological Conference (CPC)	
Topics of the Module	**Objectives: By the end of the module the students will be able to:**
Diarrhea	• Classify diarrhea based on symptoms and duration (IMNCI) • List key signs of dehydration and assess hydration status. • Formulate lab workup for diarrhea. • Develop a management plan for a diarrhea case. • Identify clinical and biochemical complications of diarrhea
Pneumonia	• To manage a case of pneumonia • Predict its complication and manage them accordingly. • Recognize the possible causative organism at different ages and choose antibiotic accordingly.

	• Diagnose and manage a case of pleural effusion
Malnutrition	• Assess nutritional status based on feeding history and clinical examination. • Classify malnutrition based on cause and severity, impact of malnutrition on child's physical and mental growth. • Identify the causes, clinical presentation of child with PEM. • Differentiate Kwashiorkor from Marasmus • Identify life threatening complications of malnutrition. • Manage case of malnutrition.
UTI	• Identify predisposing conditions of UTI. • Recognize clinical features of Cystitis and Pyelonephritis. Investigate, diagnose case of UTI
TOF	• List cyanotic congenital heart diseases • Describe the clinical features of tetralogy of Fallot. • Discuss the diagnosis of tetralogy of Fallot. • Discuss the management outline of tetralogy of Fallot. • Discuss Tet spell and its management. Discuss the complications and prognosis of tetralogy of Fallot
VSD	• Classify acyanotic CHD. • Discuss the clinical manifestations of acyanotic CHD. • List the relevant laboratory workup of acyanotic CHD. • Outline treatment options for acyanotic CHD. • List the complications of acyanotic CHD.
AGN	• Recognize clinical features of ASPGN. • Diagnose and manage case of ASPGN.
Nephrotic Syndrome	• Identify features of Nephrotic Syndrome. • Diagnose and manage case of nephrotic syndrome. • Recognize complications of Nephrotic Syndrome • Differentiate nephrotic and nephritic syndromes.
Neonatal Sepsis	• Recognize signs and symptoms of Neonatal sepsis. • Understand pathophysiology of Early and late onset NNS. • Identify predisposing factors of NEC. • Understand pathophysiology of NEC. • Diagnose and manage NEC based of clinical findings and investigations.

Morning Reports/ Reflections	
Topics of the Module	**Objectives: By the end of the module the students will be able to:**
Enteric Fever	• Clinical findings • Diagnosis • Management

	• Course of illness • Outcome (discharge, referred, LAMA, death)
Diarrhea	• Clinical findings • Diagnosis • Management • Course of illness • Outcome (discharge, referred, LAMA, death)
Pneumonia	• Clinical findings • Diagnosis • Management • Course of illness • Outcome (discharge, referred, LAMA, death)
Asthma	• Clinical findings • Diagnosis • Management • Course of illness 1. Outcome (discharge, referred, LAMA, death)
Dengue	• Clinical findings • Diagnosis • Management • Course of illness 2. Outcome (discharge, referred, LAMA, death)
Malaria	• Clinical findings • Diagnosis • Management • Course of illness 3. Outcome (discharge, referred, LAMA, death)
UTI	• Clinical findings • Diagnosis • Management • Course of illness 4. Outcome (discharge, referred, LAMA, death)
Acute Viral Hepatitis	• Clinical findings • Diagnosis • Management • Course of illness 5. Outcome (discharge, referred, LAMA, death)

Simulations / Skills Lab	
Topics of the Module	**Objectives: By the end of the module the students will be able to:**
Techniques Of	• Describe the indications and contraindications of IV cannulation.

Intravenous Cannulation	• Identify necessary equipment. • Demonstrate aseptic equipment. • Demonstrate the correct steps of IV cannulation.
Techniques Of Nasogastric Intubation	• Describe the indications and contraindications of Nasogastric Intubation. • Identify necessary equipment. • Demonstrate aseptic equipment. • Demonstrate the correct steps of Nasogastric Intubation.
Workshop On NRP	• Describe the indications of NRP. • Identify necessary equipment. • Demonstrate procedure for routine newborn care. • Demonstrate the correct steps of NRP.
Techniques Of Uretheral Catheterization	• Describe the indications and contraindications of Uretheral Catheterization. • Identify necessary equipment. • Demonstrate aseptic equipment. • Demonstrate the correct steps of Uretheral Catheterization.
Techniques Of Lumbar Puncture and CSF Analysis	• Describe the indications, contraindications and observe of Lumbar Puncture and CSF Analysis. • Identify necessary equipment. • Observe aseptic techniques. • Observe the correct steps of Lumbar Puncture and CSF Analysis.
Workshop On Oxygen Therapy	• Identify clinical conditions requiring oxygen therapy. • Compare low-flow oxygen system with high flow oxygen systems. • Write a complete oxygen prescription (flow rete, FiO2, duration). • Recognize complication and safety of oxygen toxicity. 6. Develop a stepwise weaning plan from mechanical ventilation.
Bone Marrow Aspiration	• Describe the indications, contraindications of Bone Marrow Aspiration. • Identify necessary equipment. • Observe aseptic techniques. 7. Observe the correct steps of Bone Marrow Aspiration.
Supra Pubic Puncture	• Describe the indications, contraindications of Supra Pubic Puncture. • Identify necessary equipment. • Observe aseptic techniques. • Observe the correct steps of Supra Pubic Puncture.
Subdural Tap	• Describe the indications, contraindications of Subdural Tap. • Identify necessary equipment. • Observe aseptic techniques. • Observe the correct steps of Subdural Tap.
Thoracocentesis	• Describe the indications, contraindications of Thoracocentesis. • Identify necessary equipment. • Observe aseptic techniques.

	• Observe the correct steps of Thoracocentesis.
Pericardiocentesis	• Describe the indications, contraindications of Pericardiocentesis. • Identify necessary equipment. • Observe aseptic techniques. • Observe the correct steps of Pericardiocentesis.
Liver Biopsy	• Describe the indications, contraindications of Liver Biopsy. • Identify necessary equipment. • Observe aseptic techniques. • Observe the correct steps of Liver Biopsy.
Renal Biopsy	• Describe the indications, contraindications of Renal Biopsy. • Identify necessary equipment. • Observe aseptic techniques. • Observe the correct steps of Renal Biopsy.
Pericardial Tap	• Describe the indications, contraindications of Pericardial Tap. • Identify necessary equipment. • Observe aseptic techniques. • Observe the correct steps of Pericardial Tap.

WORKSHOPS	
Topics of the Module	**Objectives: By the end of the module the students will be able to:**
BLS	• Recognize Cardiac Arrest • Active Emergency Response • Perform High-Quality CPR • Operate an AED • Provide Effective Ventilations
NRP	• Prepare for Delivery • Assess Newborn at Birth • Perform Effective Ventilation • Initiate Chest Compressions • Administer Emergency Medications
Oxygen Therapy	• Identify clinical conditions requiring oxygen therapy. • Compare low-flow oxygen system with high flow oxygen systems. • Write a complete oxygen prescription (flow rete, FiO2, duration). • Recognize complication and safety of oxygen toxicity. • Develop a stepwise weaning plan from mechanical ventilation.

SMALL GROUP DISCUSSION/TUTORIALS	
Topics of the Module	**Objectives: By the end of the module the students will be able to:**
Sign of meningeal irritation	• Identify the sign of meningeal irritation. • Perform Kernig`s, Brudzinski`s sign. • Interpret the finding of Kernig`s, Brudzinski`s sign.
Identification of micro and macro nutrient deficiency	• List major micro and macro nutrients. • Identify the clinical features of micro and macro nutrient deficiencies. • Formulate the micro and macro nutrient deficiencies.
Motor system examination	• Describe the pre-requisites of motor system examination. • List of the components of motor system of upper and lower limbs. • Demonstrate the performance of motor system examination on a Pediatric patient under the supervision. Interpret the findings of motor system examination.
Examination of precordium	• Describe the pre-requisites of examination of precordium. • Demonstrate the performance of examination of precordium on a Pediatric patient under the supervision. • Interpret the findings of examination of precordium.
Cerebral signs	• Describe the pre-requisites of examination of precordium. • Demonstrate the performance of examination of precordium on a Pediatric patient under the supervision. • Interpret the findings of examination of precordium.
Examination of Chest	• Describe the pre-requisites of examination of chest. • Demonstrate the performance of examination of chest on a Pediatric patient under the supervision. • Interpret the findings of examination of chest.

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GYNAECOLOGY
&
OBSTETRICS

Introduction:

Obstetrics and Gynaecology is an integral part of the undergraduate curriculum. Basis of Obstetrics and Gynaecology is established in the initial years through contribution from basic sciences. It is being taught as a major subject in the last two years of undergraduate program. Aim is to train and develop medical students to practice as a safe obstetrician and gynaecologist and to advance in the field of Obstetrics and Gynaecology

Course Outcomes:

- To equip them with essential knowledge, skill and attitude in order to enable them to:
- Diagnose common Obstetric and Gynecological problems, suggest and interpret appropriate investigation, rationalize treatment plan and if appropriate, refer patient for specialist opinion/ management.
- Suggest preventive measures for the common public health problem in the community
- Perform relevant procedures
- Convey relevant information and explanations accurately to patients, families, colleagues and other professionals
- Participate effectively and appropriately in an inter professional health care team
- Understand medical ethics and its application pertaining to Obstetrics and Gynaecology maintain the confidentiality of the patient.
- Adapt research findings appropriately to the individual patient situation or relevant patient population

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GYNAECOLOGY & OBSTETRICS

Topics	Objectives:Bytheend of clerkship students will be able to:	Teaching Strategies
Introduction and bioethics	• Describe the principles of ethics • learn ward ethics • Demonstrate effective communication skills with patients. • Understand the embryology of female genital tract • Understand the internal and external genital tract and abnormalities	**CBL/ Bedside teaching**
Terminologies in gynecology and obstetrics	• Define the terminologies used in obstetrics and gynecology in history taking and document it. • Take a focused history of a pregnant woman and from patients with obstetrical and gynecological problems. • Demonstrate the clinical presentation in the ward	**CBL/ Bedside teaching**
Antenatal care	• Explain principles of routine antenatal care • High risk and low risk pregnancies • Investigation during each trimester and their interpretation • Perform obstetric examination	**CBL/ Bedside teaching**
Preconception counseling	• Describe assessment and counseling required before pregnancy • Discuss the importance in reducing maternal and fetal morbidity • Discuss the role of folic acid • Describe the optimization in high risk group • Identification of risk factors and its preventive measures. • Discuss the safe drugs	**CBL/ Bedside teaching**

Physiologic changes in pregnancy	• Describe the physiologic changes in systems during pregnancy. • Differentiate normal and pathologic changes define describe hyperemesis gravidarum • Define investigation and management	**CBL/ Bedside teaching**
Miscarriages	• Define miscarriage • Classify the types of miscarriages, • Define Etiology • Describe recurrent miscarriages • Discuss the management options • Identify the complications of D&E and instruments	**CBL/ Bedside teaching**
Subfertility	• Define primary and secondary infertility • Describe the relevant investigations and management option • Describe ovulation induction, its methods and side effects. • Know the type of ART and how to individualize the treatment. • Describe the ethical and religious aspects in ART	**CBL/ Bedside teaching**
Contraception	• Describe the classification of contraceptives • Understand their mechanism of actions, side effects and failure rate • Describe WHO Medical Eligibility Criteria • Importance and benefits of family planning • Describe permanent methods of contraception	**CBL/ Bedside teaching**
Early pregnancy loss Ectopic pregnancy	• Define ectopic pregnancy and list common sites • Identify risk factors and clinical presentation • Describe the diagnostic modalities • Describe the management options • Take focused history of abdominal pain, amenorrhea and vaginal bleeding	**CBL/ Bedside teaching**
Perinatal infection	• Define perinatal infection (TORCH, GBS,HIV, HepB,VZV,Syphillis, Parvovirus • Recognize the impact on mother ad fetus	**CBL/ Bedside teaching**

	• Describe screening, diagnosis and preventive measures and vaccination • Understand the transmission route • Discuss management of perinatal infection	
Antepartum hemorrhage	• Define APH and classify placenta preavia and abruption • Identify risk factors and clinical features of placenta preavia and abruption • Interpret ultrasound findings • Describe fetal and maternal complications • Outline the emergency management	**CBL/ Bedside teaching**
Anemia in pregnancy	• Define anemia in pregnancy and classify according to WHO criteria • Discuss hematological changes in pregnancy • Discuss management options • Discuss the management option in iron deficiency anemia (oral, parentral iron, indications for IV iron) indication for blood transfusion •	**CBL/ Bedside teaching**
Hypertensive disorders in pregnancy	• Describe gestational hypertension, preeclampsia eclampsia, chronic hypertension • Describe pathophysiology of preeclampsia • Identify maternal and fetal complications • Describe the management options in mild moderate and severe hypertension • Describe the emergency management in eclampsia	**CBL/ Bedside teaching**
Upper and lower genital tract	• Differentiate between upper and lower genital tract infection • Know the common causative organisms • Outline diagnostic methods including NAAT. • Identify signs and symptoms and complications • Describe treatment options	**Clinical case discussion**
Cardiac disease in pregnancy	• classify cardiac disease relevant to pregnancy • Understand physiologic changes • Identify the high risk group • Outline management of antenatal, intrapartum and postpartum	**Clinical case**

Pelvic organ prolpase And urinary incontinence	• Understand of the pelvic floor anatomy and Pathophysiology pelvic organ Prolpase • Describe concept of POP-Q • Define Urinary incontinence and its types and etiology • Outline management options	**Clinical case discussion**
Abnormal uterine bleeding	• Describe the hormonal changes in menstrual cycle • Define abnormal uterine bleeding • Describe the causes of abnormal uterine bleeding • Outline the management options	**Clinical case discussion**
Fetalsurveillance	• Explain the purpose and importance of fetal surveillance • List the indication for fetal surveillance	**CBL/ Bedside teaching**
Malpresentation and preterm	• Describe different types of malpresentaion • Describe the diagnosis and management • Discuss fetal and maternal outcomes in vaginal breech delivery with elective cesarean section	**CBL/ Bedside teaching**
Labour and its stages Abnormal labour Induction of labur	• Define labour and differentiate from false labour physiology of labour • describe the onset and the stages of labour • mechanism of labour • Understand the bishop score • Monitoring during induction of labour • Maternal and fetal complication	**CBL/ Bedside teaching**
Maternal collpase	• Describe the obstetrical causes of collapse (obstetric hemorrhage, eclampsis, obstructed labour) • Understand the emergency management CPR • Outline the general and specific management	**CBL/ Bedside teaching**
Cord prolpase	• define different types of c pro • describe the emergency treatment option • describe diagnose of cord prolpase	**CBL/ Bedside teaching**
Hydropsfetalis	• Describe hydropsfetalis • Describe immune and non-immunehydropsfetais • Outline the prevention and management of rhesus	**CBL/ Bedside teaching**

	incompatibility	
Oligohydramnios and polyhydramnios	• Define oligohydramnios and polyhydramnios • Recognize maternal and fetal complications • Describe the diagnostic modalities	**CBL/ Bedside teaching**
Cervical cancer and its screening	• Describe the stages of cervical cancer • Describe the clinical features • Describe the management options	**CBL/ Bedside teaching**
Screening for gynecological cancers	• Describe the screening options for gynecological malignancies and their importance	**CBL/ Bedside teaching**
Gynecological cancers and ovarian tumours	• Classify the common gynecological malignancies • Describe the clinical features • Describe the relevant investigation • Early screening and follow up. • Preventive measures	**CBL/ Bedside teaching**
PMB and endometrial cancers	• Define the postmenopausal bleeding • Classify the endometrial cancer and its risk factors • Describe the relevant investigations ad outline management options	**CBL/ Bedside teaching**
Menopause and osteoporosis	• Describe the menopause • Define clinical features • Describe the short and long term consequences of menopause	**CBL/ Bedside teaching**
Menstrual disorders	• Describe the menstrual disorders • Describe the etiology • Describe the management options	**CBL/ Bedside teaching**
Endometriosis and adenomyosis	• Describe the endometriosis and adenomyosis • Describe the pathophysiology of adenomyosis and endometriosis • Describe the clinical features • Describe the management options	**CBL/ Bedside teaching**
Puberty and adolscence	• Define puberty and adolescence • Identify the pubertal tanner stages	**CBL/ Bedside teaching**
Primary amenorrhea	• Define primary amenorrhea • Identify causes of primary amenorrhea • Relevant investigations	**CBL/ Bedside teaching**

	• Outline management options	
Benign ovarian tumours	• Define and classify the ovarian tumors • Differentiate malignant ovarian tumors • Outline diagnostic modalities • Outline management options	**CBL/ Bedside teaching**
Obesity in pregnancy	• Describe obesity and classify on bmi • Describe the risk factors • Describe maternal and fetal complications • Describe management options	**CBL/ Bedside teaching**
Thyroid disorders	• Describe the physiologic changes in thyroid function during pregnancy • Discuss the diagnostic investigations • Outline management options	**CBL/ Bedside teaching**
Intrauterine growth restriction macrosomia	• Define intrauterine growth restriction • Differentiate small for gestation • Define risk factors • Define management options • Define macrosomia and fetal and maternal complications • Etiology of microsomai • •	**CBL/ Bedside teaching**
Premenstrual syndrome	• Define pms • Define pathophysiology • Define clinical features • Outline management options	**CBL/ Bedside teaching**
Preterm	• Define preterm and etiology • Describe management options • Describe the premature rupture of membranes	**CBL/ Bedside teaching**
Multiple pregnancy	• Differentiate between monochorionic and dichorionic twins • Describe the etiology and risk factors • Describe the role of ultrasound • Discuss the antenatal complication in monchorionic twin pregnancy • Describe postnatal complication	**CBL/ Bedside teaching**
Poor pregnancy outcome **IUD**	• Describe the etiology of poor pregnancy outcome and intrauterine death • Discuss the relevant investigations	**CBL/ Bedside teaching**

	• Outline the management options	
Drug and alcohol misuse/smoking	• List the common substance misuse in pregnancy • Describe the fetal and neonatal complications associated with drugs misuse and alcohol and smoking	**CBL/ Bedside teaching**
Pcos hirsutism	Define polycystic ovarian syndrome and hirsutism Identify the risk factors Differentiate diagnosis the hirsutism Describe the management options describe long term complications of pcos	**CBL/ Bedside teaching**
Urinary tract infection	• Describe asymptomatic bacteriuria, and pyelonephritis • Pathophysiology of urinary tract infection in pregnancy • Identify common organism involved • Describe maternal and fetal complications	**CBL/ Bedside teaching**
Respiratory Liver diseases in pregnancy	• Describe the intrahepatic cholestasis of pregnancy, acute fatty liver of pregnancy HELLP syndrome • Describe maternal and fetal complications • Discuss the relevant investigation • Outline the management options	**CBL/ Bedside teaching**
puerperium	• Define puerperium • Describe the common peurperal complications • Identify baby blues, puerperal psychosis, depression • Describe the management options	**CBL/ Bedside teaching**
Procedure in operation theatre	• Perform minor procedures, • Identify the operative instruments their uses and complications • Observe the different anesthesia types • Observe gowning and gloving, • Observe cesarean section procedure • Maintain IV line and administer iv fluids	**CBL/ Bedside teaching**
Procedure in labour room	• Observe amniotomy, management in 1st and second and third stage, normal vaginal delivery	**CBL/ Bedside teaching**

	• Observe episiotomy suturing • Maintain partogram and interpret CTG • observe assisted vaginal delivery • Rectal and vaginal administration of misoprostol an prostaglandins • Observe FHR monitoring	**Labour room**
Procedure in OPD	• Take focused history in obstetrics and gynecology • Perform general physical examination and obstetric examination • Interpret the ultrasound reports • Interpret the antenatal investigations • Observe pap smear, high vaginal, colposcopy • Counsel patient regarding the antenatal care, counseling • Recognize high risk pregnancy	**OPD**
Procedures in ward	• Care of postoperative patients • Administration of IV Drugs, IV Infusion ,parentral iron • Observation blood transfusion protocoal, Perform obstetric examination • Interpret the CTG, • Counseling on contraception and breast feeding • Monitor preoperative and postoperative patients • Care of postnatal patients Present the clinical cases • Demonstrate effective communication skill with patients	**Ward**

Morning Reports/ Reflections	
Topics	**Objectives:Bytheendofthemodulethestudentswillbeableto:**
Follow up of admitted patients	• Follow up antenatal patients admitted in wards •
	• Follow up of postoperative and postnatal patients
	• Interpretation of investigations on daily basis

Simulations / Skills Lab	
Topics	**Objectives:Bytheendofthemodulethestudentswillbeableto:**

Contraception	• IUCD insertion on model
Cervical cancer screening	• Pap smear and Liquid based cytology on models
Fetal surrvellance	• CTG and Partogram filling and maintaince
Skill	• Suturing and catheter insertion on dummy
Labour	• Mechanism of normal labor and instrumental delivery on models

WORKSHOPS	
Topics	**Objectives:Bytheendofthe clerkship the students will be ableto:**
Counseling	• Counselling on contraception- Role paly of communication skills
Journal clubmeeting	• Know Iron deficieny anemia
Journal club meeting	• Know VBAC birth after cesarean section
Counseling	• Breast feeding counseling in postnatal and postoperative patients
Skill	• Perform pap smear on model

SMALL GROUP DISCUSSION/ TUTORIALS	
Topics	**Objectives:By the end students will be able to: understand**
Gynecological malignancies	• Cervical cancer and its screening • Risk factors
Abnormal uterine bleeding	• Fibroid uterus and clinical features • Management options
ovulatory disorders	• Polycystic ovarian syndrome • clinical features • Pathophysiology and outline management options
Medical disorders in pregnancy	• Gestational diabetes mellitus and its complications
Pelvic organ prolpase	• Utero vaginal prolapse and its risk factors
Postpartum hemorrhage	• Postpartum hemorrhage and its active management
Upper and lower genital infection	• The upper and lower genital tract infection and clinical features

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CLINICAL ROTATION SCHEDULE 5TH YEAR

Clinical Rotation Schedule 5th Year MBBS Batch 06 (2022--2026) Class of 2025-26 Ref. No: KIMS/DME/2025/10/						
Clerkships	GP-1	GP-2	GP-3	GP-4	GP-5	GP-6
Clerkship--1	SURGERY (6 weeks)	Surgery & Allied (6 weeks)	Medicine (6 weeks)	MEDICINE & ALLIED (6 weeks)	GYNAE/OBS (6 weeks)	PEDIATRICS (6 weeks)
Clerkship--1	Surgery & Allied (6 weeks)	SURGERY (6 weeks)	MEDICINE & ALLIED (6 weeks)	Medicine (6 weeks)	PEDIATRICS (6 weeks)	GYNAE/OBS (6 weeks)
EOR Exam (Weeks 01/01)	End of Rotation Exam 1 week	End of Rotation Exam 1 week	End of Rotation Exam 1 week	End of Rotation Exam 1 week	End of Rotation Exam 1 week	End of Rotation Exam 1 week
Clerkship--2	Medicine (6 weeks)	MEDICINE & ALLIED (6 weeks)	GYNAE/OBS (6 weeks)	PEDIATRICS (6 weeks)	SURGERY (6 weeks)	Surgery & Allied (6 weeks)
Clerkship--2	MEDICINE & ALLIED (6 weeks)	Medicine (6 weeks)	PEDIATRICS (6 weeks)	GYNAE/OBS (6 weeks	Surgery & Allied (6 weeks)	SURGERY (6 weeks
EOR Exam (Weeks 01/01)	End of Rotation Exam 1 week	End of Rotation Exam 1 week	End of Rotation Exam 1 week	End of Rotation Exam 1 week	End of Rotation Exam 1 week	End of Rotation Exam 1 week
Clerkship--3	GYNAE/OBS (6 weeks)	PEDIATRICS (6 weeks)	SURGERY (6 weeks)	Surgery & Allied (6 weeks)	MEDICINE & ALLIED (6 weeks)	Medicine (6 weeks)
Clerkship--3	PEDIATRICS (6 weeks)	GYNAE/OBS (6 weeks)	Surgery & Allied (6 weeks)	SURGERY (6 weeks)	Medicine (6 weeks)	MEDICINE & ALLIED (6 weeks)
EOR Exam (Weeks 01/01)	End of Rotation Exam 1 week	End of Rotation Exam 1 week	End of Rotation Exam 1 week	End of Rotation Exam 1 week	End of Rotation Exam 1 week	End of Rotation Exam 1 week

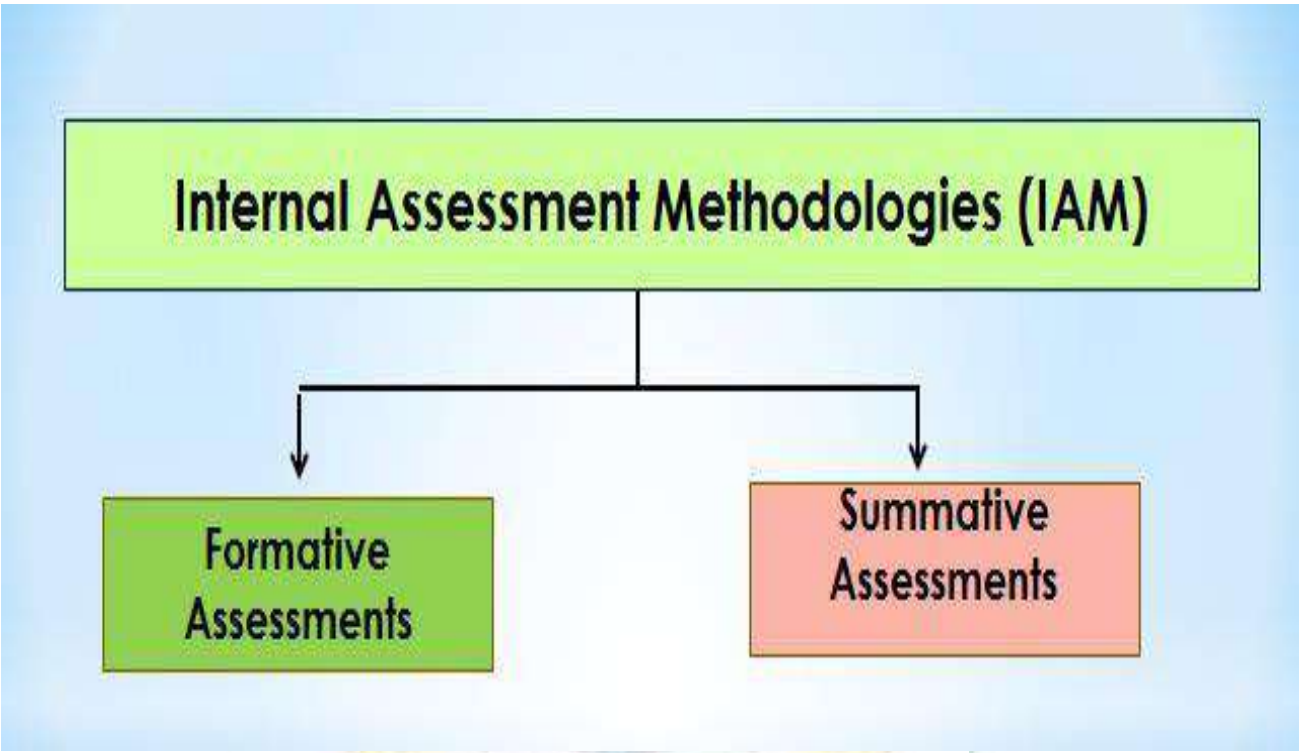
Year V (43 Wks) Clinical Clerkship (min. 45 hrs/ wk)																		
Medicine & Allied							Surgery & Allied							Gynae & Paeds			4 wks
12 +1 = 13 wks (9 hours for 5 days)						EOBExam	12 +1 = 13 wks (9 hours for 5 days)						EOBExam	12 +1 = 13 wks (9 hours for 5 days)		EOBExam	
A1	A2	A3	A4	A5	A6		B1	B2	B3	B4	B5	B6		C1	C2		
2	2	2	2	2	2		2	2	2	2	2	2		6	6		
Gen Med + Neuro	Gen Med + Gastro	Gen Med + Pulmo	Gen Med + Cardio	Gen Med + Nephro	Family Med + Pt Safety + Infection control		Gen Surgery	Orthopaedic & Trauma	Anaesthesia + Gen Surgery	Gen Surgery + Neurosurgery	Gen Surgery + Paed Surgery	Gen Surg + Urology		Gynae	Paeds		Pre Annual Exam
45+45 = 90	45+45 = 90	45+45 = 90	45+45 = 90	45+45 = 90	65+10 +15= 90		90	90	45+45 = 90	45+45 = 90	45+45 = 90	45+45 = 90		270 hrs	270 hrs		
540							540							270+270 = 540			

LEARNING RESOURCES

Medicine	**Text Books**	• Davidson's Principles and Practice of Medicine • Current Medical Diagnosis and Treatment • Oxford Handbook of Clinical Medicine • Macleod Clinical Methods • Hutchinson Clinical Methods
Surgery	**Text Books**	• Bailey & Love 28th edition • Browe's introduction to the signs and symptoms of surgical disease's
Gynecology & Obstetrics	**Text Books**	• Obstetrics by Ten teachers 21st edition • Gynae by ten teachers 21st edition • Dewhurst text book of Obstetrics and gynae
Pediatrics	**Text Books**	• Basis of Pediatrics (Pervaiz Akbar khan) • llustrated textbook of Paediatrics (Haque and Talal) • Current diagnosis and treatment Paediatrics (William W.Hay Jr./Myron J Levin) • •Clinical methods (Macleo`s clinical examination)
Patient Safety	**Text Books**	• Patient Safety: Protect Yourself from Medical Errors – Institute for Healthcare Improvement (IHI) • Essentials of Patient Safety – Charles Vincent
E-Learning Resource		
Learning Management System (LMS) Link	https://kimsmalir.edu.pk/	

EXAMINATION

Each student undergoes internal and external series of examinations at KIMS



Internal Assessment focuses on the process of learning. It gives priority to psychomotor and affective skills. Its results are usually immediately made known to the learner and discussed with him/her to make the process of learning better.

There are two types of internal assessments

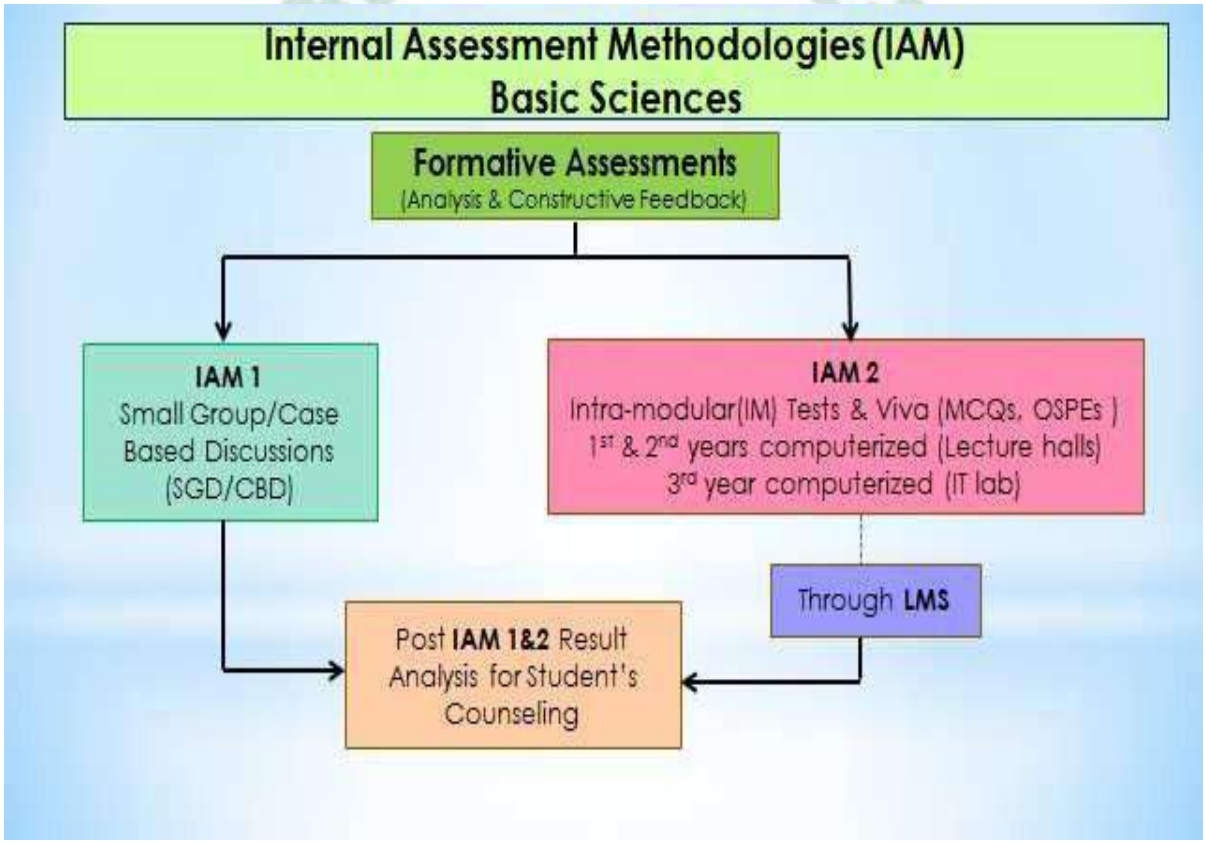
1. Formative Assessment
2. Summative Assessment

Formative Assessment

Formative assessment monitors students' learning and provides ongoing feedback that can be used by teachers to improve their teaching and by students to improve their learning.

They are meant to help students identify their strengths and weaknesses and target areas that need work.

At KIMS students undergo series of written class tests (MCQs, Short Answer Questions), OSPE, Viva Exam and Journal Clubs to enhance their learning experiences.



Internal Assessment. Assessment is an important aspect of any training program which not only includes assessment of students but also of the training program itself. The performance of each student would be marked and counted towards final internal assessment which contributes 20% in final professional MBBS Examination. The following tools/ methods would be used for this purpose:

Internal Assessment Theory (Medicine, Surgery) (2025 -26)

Assessment tool	Year-III	Year-IV	Year-V	Final IA (20%)
Continuous Assessment (Intramodular Exam, EOB)	8%			8%
Pre Annual Exam	-		10%	10%
Attendance Criteria	▪ 95 % = 02 ▪ 90- 94 % = 1.5 ▪ 85 - 89 % = 01			

Internal Assessment Practical (Medicine, Surgery) (2025 -26)

Assessment Tool	Year-III	Year-IV	Year-V	Final IA (20%)
Continuous Assessment				
a. EOR Exam (Ward Test) & (OSCE Viva of EOB – Year V)	1.00%	1.5%	3.5%	5%
b. Logbooks/ Portfolio, Discipline / Attitude, Responsibility and Teamwork	0.4%	0.6%	2%	2%
Pre annual Exam (OSCE/Viva)	-		10%	10%
Attendance Criteria	▪ 95 % = 02 ▪ 90- 94 % = 1.5 ▪ 85 - 89 % = 01			

Internal Assessment Theory (Gynae/ Paeds) (2025 -26)

Assessment Tool	Final IA (20%)
Continuous Assessment (Periodical Class Tests)	**03%**
EOB	**05%**
Pre Annual Exam	**10%**
Attendance Criteria	▪ **95 % = 02** ▪ **90- 94 % = 1.5** ▪ **85 - 89 % = 01**

Internal Assessment Practical (Gynae/Paeds) (2025 -26)

Assessment Tool	Final IA (20%)
a. EOR Exam (Ward Test + OSCE Viva of EOB)	**06%**
b. Logbooks /Portfolio, Discipline / Attitude, Responsibility and Teamwork	**02%**
Pre annual Exam (OSCE/Viva)	**10%**
Attendance	▪ **95 % = 02** ▪ **90- 94 % = 1.5** ▪ **85 - 89 % = 01**

Summative Assessment

The goal of summative assessment is to evaluate student learning at the end of a module by comparing it against some standard or benchmark. Summative assessments are counted in the internal assessment which carries 20% weightage of total exam marks.

Annual Professional Examination.

The University will take the final professional Examination as per PM&DC guidelines at the end of the academic year. Professional Exams will be discipline based. In final Prof, Medicine & Allied, Surgery & Allied, Obstetrics & Gynaecology and Paediatrics will be assessed.

- **Medicine & Surgery**; There will be 300 marks theory paper and 300 marks of practical.
- **Obstetrics & Gynaecology;** There will be 200 marks theory paper and 200 marks of practical.
- **Paediatrics**. There will be 100 marks theory paper and 100 marks of practical.

It is mandatory to secure minimum 50 % Marks, in theory and practical/ clinical component separately, to pass each paper in the Prof Exam. However, in clinical subjects, student should

pass in clinical exams / OSCE (with 50% marks) and unobserved stations (with 50% marks) separately

Summative/Continuous Assessment:

This will include:

1. Module Tests
2. Pre-Prof Examination

The college will send your continuous assessment marks directly to JSMU

Prof-Exam conducted by NUMS will include:

1. Theory paper of One Best Answer
2. OSPE Exam
3. Continuous Assessment results

FEEDBACK AND COUNSELING FACILITIES FOR STUDENTS

A. Senior faculty members of all departments are actively involved in resolving academic and non-academic issues of allocated students and carrier counseling.

B. Psychosocial counseling sessions (life skills) are regularly conducted by qualified student counselor

C. Individual students are also referred to the student counselor, if needed

Robust feedback systems

1. **Feedback on attendance**

Attendance report is forwarded to students and parents on daily basis

2. **Feedback on academic performance**

Academic performance reports are also regularly forwarded to students and parents. Moreover, individual students are given feedback on their academic performance during tutorials. MCQ and SEQ papers are also discussed with students in small groups.

3. **Parents of weak students are regularly contacted (PTM sessions)**

1. Students' feedback on assessment strategies will be taken in a preformed proforma for feedback twice a year i.e., Mid-term and pre-prof exams.

2. Feedback of theory as well as OSPE/OSCE & Viva will be taken.