****

**STUDY GUIDE**

**DEPARTMENT OF MEDICINE**



**LAHORE MEDICALAND DENTAL COLLEGE**

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**INTRODUCTION**

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

**PURPOSE OF GUIDE:** To facilitatelearning of the studentby enlightening about organization of the learning program, facilitate students in managing their studies through the academic year and guidance on assessments methods, exam rules and regulations.

**TARGET AUDIENCE**

3RD, 4TH and 5th year MBBS students

**LEARNING OBJECTIVES *(knowledge, skills, attitude)***

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

**TEACHING METHODOLOGIES FOR MEDICINE**

1. Interactive Lectures
2. Tutorials
3. Case based learning(CBL)
4. Essential Skills to be learned in the skills lab
5. Power point presentations by students
6. Small group discussions
7. Clinical ward rotations
8. CPC’s – using modern audio-visual techniques, distant learning using electronic devices and current Information technology facilities
9. Journal Club meetings
10. Self-directed learning is the most vital part of this module to solve problematic cases, go through different learning resources and discuss with peers and the faculty to clarify difficult concepts

**ATTENDANCE REQUIREMENT FOR MEDICINE AND ALLIED**

1. Students are expected to attend all scheduled teaching sessions and examinations
2. Attendance in lectures, tutorials, and wards is mandatory. Absence from these sessions will make the students ineligible to sit the final summative assessment.
3. A minimum of 75 % attendance in the lectures and wards is mandatory to appear in the summative UHS examination
4. Attendance will be recorded through a log-in/log-out biometrics system
5. Absence due to illness must be certified appropriately by the General Physician

**DURATION OF SESSION:** December 2018- September 2019

**DEAPRTMENTAL STAFF HIERARCHY/ PLAN**

 **Medicine department teaching staff consists of**

* + - 1. **Prof Wasim Amer (Head of Department)**
			2. **Prof Shamail Zafar (Prof of Medicine)**
			3. **Prof Asad ullah Ijaz (Prof of Medicine)**
			4. **Dr Sarah Shoaib (Associate prof)**
			5. **Dr Sohail Nasir (Associate prof)**
			6. **Dr Mehrin Farooq (Associate prof)**
			7. **Dr Khurram Shehzad (Assistant prof)**
			8. **Dr AbuBakar Malik (Assistant prof)**
			9. **Dr Arsalan Butt (SR)**
			10. **Dr Sana Aslam (SR)**

**COURSE TO BE STUDIED (syllabus)**

The course outline is as follows:

By the end of five years, medical students should be able to identify and discuss the common causes of common clinical presentations. Causes in detail can be discussed under various other headings.

|  |
| --- |
| **General Medicine** |
| Fever |
| Edema |
| Headache |
| Drowsiness and unconsciousness |
| Clubbing |
| Cough |
| Sputum and haemoptysis |
| Chest pain. |
| Dyspnea |
| Shock |
| Painful and difficult swallowing |
| Anorexia, nausea and vomiting |
| Abdominal pain |
| Diarrhea and constipation |
| Urination abnormalities |
| High colored urine |
| Cachexia |
| o Involuntary movements |
| o Seizures |
| o Paresis and paralysis |
| o Numbness and paresthesias |
| Weakness and lassitude |
| o Dizziness and vertigo |
| o Joint pains |
| Nutrition (re-enforcement) |
| Geriatrics |
| End-of-Life Care |
| Preventive aspects |
| Ethical problems |
| Communication Skills |
| **GASTROENTEROLOGY** |
| Oral Cavity Presentations: |
| o Aphthous Ulcers\*6, Pigmentation (Addison‟s), Gingivitis, Glossitis\* (Candida, Plummer-Winson Syndrome, Vitamin B2 and folate deficiency). |
|  Nausea/Vomiting |
| o Hepatitis\*\*, Gastro-enteritis\*\*, Bacterial food poisoning, Acid peptic disease\*\* |
|  Indigestion/Flatulence |
| o Diet, Irritable Bowel Syndrome and Gastroparesis |
|  Dysphagia\*\* |
| o Of Solids: Carcinoma Esophagus (with cachexia)\* and Achalasia\*. |
| o Of Liquids: Psychogenic and Neuro-Muscular Disorders (Dementia, Bulbar Palsy and Scleroderma) |
|  Heartburn and/or Epigastric pain |
| o Gastro Esophageal Reflux Disease\*\*, Peptic ulcer and Gastritis\*\*. |
|  Diarrhea |
| o Acute Diarrhea due to Acute Gastro-enteritis: Viral\*\*, |
| Shigellosis\*\*, Salmonellosis\*\*, Traveler‟s diarrhea\*\* |
| o Chronic Diarrhea: Amebiasis\*\*, Giardiasis\*, Malabsorption syndromes like Celiac Disease\* and Tropical Sprue |
| o With Haematochezia Inflammatory bowel diseases: Ulcerative colitis\* and Crohn‟s Disease\* |
| o Irritable bowel syndrome\*. |
|  Constipation\*. |
| o Irritable Bowel Syndrome, Diet and sedentary life style, Hypothyroidism, Carcinoma descending colon |
|  Ascites\*\*. |
| o Chronic Liver Disease\*\*, Malignancy\*, Abdominal tuberculosis\*\*. |
|  Jaundice\*\*. |
| o Congenital hyperbilirubinemia (Gilbert Syndrome and Dubin Johnson Syndrome) |
| o Wilson‟s Disease |
| o Haemolytic: Malaria, Auto-immune, Hypersplenism |
| o Differentiate from Obstructive (Re-enforcement) \*: Gall Stones, Carcinoma Pancreas, Cholangitis, Obstructive phase of Hepatitis |
| o Hepatitic\*\*: Viral\*\* (acute and chronic), Toxic and Drugs). |
|  Haematemesis and / or Melena\*\*. |
| o Esophageal varices\*, Mallory Weiss Syndrome, Carcinoma Stomach, Cirrhosis of Liver\*\* and Bleeding peptic ulcer\*\*. |
|  Bleeding per rectum\*. |
| o Bacillary dysentery, Inflammatory Bowel Disease, Hemorrhoids\*, and Amoebic dysentery\*\*. |
|  Abdominal Pain |
| o Acid peptic Disease\*\*, Irritable Bowel Syndrome\*, Carcinoma stomach, Pancreatitis\* and Porphyria |
|  Abdominal Mass: Visceromegaly |
| o Liver: Hepatitis\*\*, Liver abscess\*, Hydatid Cyst, Congested Liver\*, and Carcinoma (Primary and Secondary) |
| o Spleen: Portal Hypertension, Chronic Malaria, Chronic Myeloid Leukemia, and Myelofibrosis |
| o Splenomegaly with fever\*\*: Malaria\*\*, Typhoid\*\*, Infective\* endocarditis and Miliary tuberculosis\*, Visceral Leishmaniasis, |
| o Kidney (see below) |
| o Abdominal Aneurysm |
|  Altered Mentation: Hepatic Encephalopathy\*\* and other causes of altered mentation. |
| o Drugs Contraindicated in Liver Diseases\*. |
| **KIDNEY AND GENITOURINARY SYSTEM** |
|  Lumbar pain\*\*. |
| o Acute pyelonephritis\*\*, Acute papillary necrosis, Renal Infarction, Perinephric abscess (Surgery) \* and Urolithiasis (Surgery). |
|  Oliguria/Anuria: Acute Kidney Injury\*\*: |
| o Nephritides\*\*, Acute Tubular Necrosis\*\*, Drug-induced\* (analgesic), Hypersensitivity nephropathy\*, Contrast Induced\* and (brief) Haemolytic-uremic syndrome |
|  Polyuria / nocturia |
| o Diabetes mellitus\*\*, Diabetes insipidus, Hypercalcaemia\*\*, |
| o Chronic Kidney Disease: Glomerulopathies\*\*, Nephrotic Syndrome\*\*, Hyperuricemia, Drug-induced and Hemolytic uremic syndrome (brief) |
| o Psychogenic\*. |
|  Dysuria\*: With and without frequency of Micturition (Urinary Tract infection) \*\* |
|  Hematuria with Dysuria\*. |
| o Cystic infection of the bladder\*\*, Urethritis and Urolithiasis |
| o Painless Hematuria\*: Renal Tuberculosis\*, Renal Cell Carcinoma\* and Bladder carcinoma |
|  Urinary incontinence |
| o Urge Incontinence (Urinary infection\* and Bladder neck problems) and Stress |
|  Urinary retention |
| o Prostatic Enlargement\* and Neurogenic bladder |
|  Impotence |
| o Diabetes mellitus and Psychogenic |
|  Renal glycosuria\*. |
| **RESPIRATORY SYSTEM** |
|  Shortness of Breath |
| o Episodic: Bronchial Asthma\*\* |
| o Acute: Pneumothorax\*\*, Pulmonary Thrombo-embolism\*\* / Acute Cor Pulmnale, Adult respiratory distress syndrome, Acute respiratory failure\* (Type I and II) and Mechanical ventilation |
| o Chronic: Chronic obstructive airway diseases\*\*, Pleural Effusion\*\*, Environmental and Occupational lung diseases (in brief: Asbestosis, Silicosis, Bagassosis, Byssinosis and Pneumoconiosis), Hypersensitivity pneumonitis and Interstitial lung disease. |
|  Fever with Cough |
| o Upper respiratory tract infection\*\* |
| o Lower respiratory tract infection: Acute and chronic Bronchitis\*\* |
| o Pneumonias\*\*: Community acquired, Nosocomial, Lobar and Bronchopneumonia. |
|  Cough with Sputum: Bronchiectasis\* Hemoptysis: Carcinoma lung\* and Tuberculosis\*\* |
|  Respiratory Distress |
| o Type-I Respiratory Failure: Pneumonia\*\*, Pulmonary Edema\*\* and Pulmonary Embolism \*\* |
| o Type-II Respiratory Failure: Chronic Obstructive Pulmonary Disease (COPD) \*\* |
| **CARDIOVASCULAR SYSTEM** |
| Fever with Murmur\* |
| Rheumatic fever\*\* and Infective endocarditis\*\* |
| Shortness of breath wi th Murmur |
| Mitral, Aortic and Pulmonary valve diseases |
| Palpitations |
| Sinus tachycardia\*, Paroxysmal Supraventricular Tachycardia\*\*, Acute atrial Fibrillation and atrial flutter\*\*, and Premature atrial and ventricular contractions\*\* |
| Chest Pain\*\* |
| Angina\*\*, Myocardial infarction\*\*, Constrictive pericarditis, and Pericardial effusion |
| Shortness of breath\* |
| Orthopnea and/or Paroxysmal Nocturnal Dyspnea\*\*, Left Ventricular Failure\*\*, Congestive Cardiac Failure\*\*, Corpulmonale and Congenital heart diseases (brief): atrial septal defect, patent ductus arteriosus and ventricular septal defect |
| Hypertension\*\* |
| Atherosclerosis/Arteriosclerosis\*\* and Lipid Disorders\*\* |
| Secondary Hypertension\*: Renal Causes\* (Polycystic Kidney, Renal Artery Stenosis, Renal Parenchymal Diseases) and Endocrine Disorders\*\* (Gigantism, Acromegaly, Cushing‟s\*, Hyperthyroidism and Pheochromocytoma) |
| Postural Hypotension\*. |
| Autonomic neuropathy (Diabetes mellitus) and Drug-induced (Antihypertensives, Loop diuretics\* and Nitrates) |
| Claudication: Peripheral vascular disease and Ischemia |
| Shock\*\*: Arrhythmias (ventricular tachycardia, fibrillation) and asystole. |
| Syncope\*: Arrhythmias, Vasovagal attack and Heat syncope |
| **CENTRAL NERVOUS SYSTEM** |
|  Headache\*\*. |
| o Acute Severe: Sinusitis\*\* and Subarachnoid and Intra-cerebral Hemorrhage\*\*. |
| o Periodic: Refractive errors, Migraine\* and Tension Headaches\* |
| o Progressive: Space-occupying lesion |
| o With Fever\*\*: Meningitis\*\* (Bacterial, Tuberculosis and Viral), Encephalitis\*\* and Brain abscess. |
| o Nuchal headaches/Neck pain: Muscle spasm (Tension, Postural) and Cervical spondylosis\*. |
|  Facial Pain: Trigeminal neuralgia |
|  Squint: Cranial nerves III, IV and VI (Cavernous sinus thrombosis) |
|  Intellectual Impairment |
|  Impaired Memory and Dementia\* |
|  Confusional states/Delirium/Encephalopathy\*\*: Substance abuse, Toxins and Poisons |
|  Paralysis\*. |
| Hemiplegia/hemiparesis/monoplegia/quadriplegia\*\*: Thrombotic, |
| Hemorrhagic and Embolic |
| Paraplegia/paraparesis/quadriplegia\*: Spinal cord compression, Secondaries in the spine, Transverse Myelitis\*, Tuberculous spine\*, Syringomyelia and Syringobulbia |
| Focal Neurological Deficit: Multiple sclerosis, Space occupying lesion and Mononeuritis multiplex |
|  Facial Weakness: Bell‟s Palsy\*\* |
| o Ptosis: Myasthenia Gravis, Horner‟s Syndrome and III nerve palsy |
| o Transient Ischemic Attack\*\* |
|  Speech disturbances |
|  Hypertonia: Myotonia Dystrophica and Parkinsonism \* |
|  Hypotonia and muscle wasting: Lower motor neuron disease,\* |
|  Muscle cramps: Metabolic, Overexertion and Idiopathic |
|  Movement Disorders: |
| o Hyperkinesia: Tremors\* (Hyperthyroidism\*\*, Anxiety\*, Druginduced, Parkinsonism, Cerebellar\*) |
| o Fasciculations: Motor neuron disease and Myokymia, |
| o Others: Athetosis, Chorea, Hemiballismus, Ballismus, Myoclonus and Carpopedal Spasm (tetany)\* |
| o Hypokinesia: Parkinson‟s Disease and Drug induced |
| o Gait abnormalities: |
| Ataxic: Cerebellar disorder\* |
| Shuffling gait: Parkinsonism\* |
| Scissor Gait: Cerebral palsy |
| Lurching gait: Post Cerebro-vascular accidents |
| Waddling gait: Proximal myopathy (Thyroid disease, Cushing‟s disease, Vitamin deficiency, steroids |
|  Convulsions/Fits\*\*: Tetanus, Epilepsy\*, Space-occupying lesion, Head injury and Cerebro-vascular accidents |
|  Coma/ Stupor / drowsiness\*\*: Metabolic\*\*, Trauma, Infection\*\* (Meningitis and Encephalitis), Poisoning, Substance abuse (alcohol), Toxins and Cerebrovascular accidents |
|  Dizziness: Malignant Hypertension and Anxiety |
|  Vertigo: Benign Positional Vertigo\*, Meniere‟s disease, Labyrinthitis, Upper Respiratory Tract Infections and Vertebro-basilar insufficiency |
|  Congenital Deafness (ENT) |
|  Blindness / Blurring of Vision: |
| Occipital Infarction /Hemorrhage, Head injury / Traumatic, Visual |
| Field Defects (pituitary lesions), Malignant hypertension, Transient mono-ocular blindness (Amaurosis fugax), Multiple sclerosis (associated with more deficits), Snake-bite (neurotoxins) and Druginduced |
|  Paraesthesias: Polyneuropathy / Peripheral neuropathies |
| o Hypoesthesia: Diabetes mellitus\*\*, Vitamin deficiencies (B6 and B12) \*, Mono neuritis multiplex\*, and Drug induced (INH) \* |
| o Hyperesthesia: Diabetic Burning feet syndrome and Restless leg syndrome |
|  Muscular Weakness: |
| o Acute: Periodic Paralysis and Guillain Barre Syndrome\* |
| o Chronic: Toxic/ Drug Induced, Hypothyroidism and Hyperthyroidism, Vitamin D deficiency\*, Motor-neuron disease |
| o Myasthenia Gravis. |
| **MUSCULOSKELETAL SYSTEM** |
|  Joint pain and/or Joint swelling: |
| o Monoarthritis\* or Polyarthritis\* |
| o Large Joint involvement: Osteoarthritis, Septic arthritis\*, Haemarthrosis and polyarthritis migricans\* (Rheumatic fever) |
| o Small joint involvement (Inflammatory): Rheumatoid Arthritis\*, Systemic Lupus Erythematosus\* and Gout\* |
|  Easy Fractures: Osteoporosis\* |
|  Bone Pain: |
| Osteomalacia\*, Osteomyelitis, Hyperparathyroidism, Malignancy (Multiple Myeloma, Osteosarcoma, Secondaries in the bone and Leukemias) |
|  Neck Pain: Cervical spondylosis\* and Tension |
|  Dorsal Pain: Tuberculosis\* |
|  Low back pain: Sciatica (Herniated disc) \*, Inflammatory (Ankylosing spondylitis and Sacro-iliitis), Secondaries, Lumbar spondylosis, |
| Mechanical/postural, Vertebral Collapse (Tuberculosis and Osteoporosis) |
|  Claudication: Spinal stenosis\*\* |
|  Increased skin elasticity and hypermobility of joints: Ehler Danlos syndrome and Marfan's Syndrome |
|  Muscle stiffness and pain: Depression, Anti-psychotic drugs and Fibromyalgia |
| **BLOOD** |
| Pallor: Anaemias. |
|  Microcytic Hypochromic (Iron deficiency)\*\*: Increased Loss and Decreased uptake (Malabsorption, Tuberculous and Hookworms) |
|  Macrocytic Megaloblastic\*\* (B-12 deficiency and Folic acid deficiency), |
|  Normocytic normochromic\*: Anemia of chronic inflammation, Malignancies and Renal failure |
|  Hemolytic anemia\*: Hereditary (Thalassemia\*, Sickle cell anemia, |
| Hereditary spherocytosis), Acquired (Blood Transfusion |
| incompatibility, Autoimmune and Valve replacement) |
|  Intra-corpuscular: G6P Deficiency, Malaria, Sickle cell syndromes |
| (brief) and Thalassaemias |
|  Extra-corpuscular Intravascular |
| o Aplastic anemia: Myelofibrosis and Drug-induced |
| Hepatosplenomegaly (Myeloproliferative diseases). |
|  With pallor: Chronic myeloid leukemia and Kala Azar |
|  Without pallor: Polycythemia rubra vera, Essential thrombocytosis |
| Pallor with Lymphadenopathy and/or lassitude |
|  Leukemias\*\*: Acute and Chronic and |
|  Lymphomas\*\*: Non-Hodgkin‟s and Hodgkin‟s. |
| Blood groups and blood transfusion\*\*. |
| Fever with lymphadenopathy: Infectious mononucleosis |
| Bleeding and / purpura |
|  Clotting Disorders: Decreased production and increased destruction |
| o Von Willebrand’s disease, |
| o Disseminated intravascular coagulation (DIC)  |
| o Hemophilia |
| o Vitamin K deficiency |
| o Anticoagulant Therapy: Injectable and oral including anti-platelet agents |
|  Bleeding Disorders: Epistaxis (Hypertension), Thrombocytopenia |
| (Immune/ Idiopathic and Acquired Thrombocytopenic purpura), |
| Vessel wall disorders, Thrombocytic Dysfunction and Drug-induced |
| bleeding (Polypharmacy). |
| METABOLIC AND ENDOCRINAL DISORDERS |
| Generalized Pigmentation |
|  Endocrinal: Addison‟s Disease, with Diabetes Mellitus |
| (Haemochromatosis in brief) |
|  Drug-induced: Chloroquine, Heavy Metals and Chemotherapy |
| Polyuria and Polydipsia: Diabetes mellitus\*\*\* and hyperglycemic states\*\*. |
| Growth Abnormalities: |
|  Tall stature: Gigantism and Acromegaly |
|  Short Stature: Hypothyroidism\*\*, Obesity: Cushing‟s syndrome and Hypothyroidism\*\* |
|  Infertility: Hypogonadism, Primary Ovarian failure and Sheehan‟s Syndrome |
|  |
| INFECTIOUS DISEASES  · Common infections in the organ-systems listed above, · With emphasis on those common in Pakistan: Tuberculosis, Malaria, Typhoid, Dengue, Pneumonias, Meningitides and encephalitides, Infectious mononucleosis and · Those of global importance  |

 **ALIGNMENT OF EDUCATION WITH STUDY HOURS (5th year MBBS )**

1. **FOURTH AND FINAL YR TEACHING GUIDE (SEE ATTACHED EXCEL)**
2. **STUDY HOURS TOTAL MEDICINE (SEE ATTACHED EXCEL)**
3. **STUDY GUIDE 3rd Year**

**SEE ATTACHED POWER POINT (3rd Year Teaching Guide)**

1. **1st/2nd year MBBS (Medicine) Teaching guide**

****  **1st/2nd Year MBBS (Medicine)**

 **Early Clinical Exposure**

**OPD**

Students will be able to know

* What is Medical OPD?
* How it is different from Medical Indoor?
* OPD Team & their functions
* Doctors
* Receptionist
* Peon
* Who comes to Medical OPD?
* 1st time comers / Follow-up cases
* Layout of OPD
* Table
* Stool
* Cabin
* Issuance of OPD Slip
* Approach to Patients
* History / Examination/Investigations
* Provisional Diagnosis and treatment prescribed
* Patient counseling
* Follow-up
* Service of admission to wards

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**1st Year MBBS (Medicine)**

 **Early Clinical Exposure**

**Diabetic OPD**

* Learning process on this day should include.
* To know how to diagnose diabetes.
* To know the symptoms with which diabetic patients can present in OPD
* To know why it is important to control diabetes.
* To know the diet modification for a diabetic patient.

**** **1st Year MBBS (Medicine)**

 **Early Clinical Exposure**

**Male Wards**

* To know the procedure for admission in the wards.
* To briefly know about history taking.
* During the rotation student should learn about
	+ History and Examination
	+ Progress notes
	+ Medication Chart
	+ Nursing Charts
	+ Investigation File

**1st Year MBBS (Medicine)**

 **Early Clinical Exposure**

**Female Wards**

* To know the functioning of the wards.
* To know how to record Blood Pressure, Pulse, Temperature & Respiratory rate.
* During the rotation the learning process should include
	+ Introduction to Ward Staff
	+ How to take informed Consent
	+ How to write Medicine in the Chart
	+ Recording vital signs

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**1st Year MBBS (Medicine)**

**Early Clinical Exposure**

**ICU**

* Objective for ICU separate from wards
* Protocol for entering ICU (Proper dress and hygiene care)
* Introduction to emergency medical equipment
	+ ECG monitor
	+ Defibrillator
	+ Ventilators
	+ O2 Delivery methods, uses and disadvantages
* Care of unconscious patient

** 1st Year MBBS (Medicine)**

**Early Clinical Exposure**

**Emergency**

* Patient reception and emergency personnel
* Triage – according to:
	+ Vitals
	+ Patient’s clinical condition
* Routes of Medicine administration ( Oral, intravenous, subcutaneous, intramuscular, through NG, inhalation)
* Indwelling lines and catheters (IV Branula, CV Line, NG tube, ETT, Foley’s catheter)
* Introduction to emergency medical equipment
	+ ECG machine
	+ Defibrillator
	+ O2 Cylinder / O2 inhalation
	+ Nebulizer

**** **1st Year MBBS (Medicine)**

**Early Clinical Exposure**

**Lab Orientation**

* Introduction to the Lab
* Different areas, personnel & instruments used in Lab
* Tests available in Lab
* Collection of appropriate samples
* Report collection

**HANDS ON PRACTICE**

** 1st Year MBBS (Medicine)**

 **Early Clinical Exposure**

**Male Medical Ward**

Pt. Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Age:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Sex:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Ward Registration No:\_\_\_\_\_\_\_\_\_\_\_\_\_ Weight:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Height:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Address:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Previous Hospitalization**

Date of Admission:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Diagnosis:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Operations:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Family History**

Married/ Unmarried/ Widow/ Children

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**Diseases in family**

Diabetes Mellitus (DM), Hypertension, Ischemic Heart Disease (IHD), Asthma, Hepatitis, Blood dyscrasia, Tuberculosis (TB)., Cancer

**Reason for Hospitalization**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Doctor Incharge’s Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 ** 1st Year MBBS (Medicine)**

 **Early Clinical Exposure**

**Female Medical Ward**

Pt. Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Age:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Sex:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Ward Registration No:\_\_\_\_\_\_\_\_\_\_\_\_\_ Weight:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Height:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Address:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Previous Hospitalization**

Date of Admission:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Diagnosis:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Operations:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Family History**

Married/ Unmarried/ Widow/ Children

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Diabetes Mellitus (DM), Hypertension, Ischemic Heart Disease (IHD), Asthma, Hepatitis, Blood dyscrasia, Tuberculosis (TB)., Cancer

**Reason for Hospitalization**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Vitals**

Pulse Blood Pressure (BP) Respiratory rate Temperature

Doctor Incharge’s Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **** **1st Year MBBS (Medicine)**

 **Early Clinical Exposure**

**OPD**

Pt. Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Age:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Sex:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Ward Registration No:\_\_\_\_\_\_\_\_\_\_\_\_\_ Weight:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Height:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Address:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Previous Hospitalization**

Date of Admission:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Diagnosis:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Operations:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Family History**

Married/ Unmarried/ Widow/ Children

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Diseases in family**

Diabetes Mellitus (DM), Hypertension, Ischemic Heart Disease (IHD), Asthma, Hepatitis, Blood dyscrasia, Tuberculosis (TB)., Cancer

**Reason for visiting OPD**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Vitals**

Pulse Blood Pressure (BP) Respiratory rate Temperature

Doctor Incharge’s Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **** **1st Year MBBS (Medicine)**

 **Early Clinical Exposure**

**DIABETIC OPD**

Pt. Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Age:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Sex:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Ward Registration No:\_\_\_\_\_\_\_\_\_\_\_\_\_ Weight:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Height:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Address:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Previous Hospitalization**

Date of Admission:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Diagnosis:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Previous Operations:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Family History**

Married/ Unmarried/ Widow/ Children

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Diseases in family**

Diabetes Mellitus (DM), Hypertension, Ischemic Heart Disease (IHD), Asthma, Hepatitis, Blood dyscrasia, Tuberculosis (TB)., Cancer

**Diabetic for -----------------Years/months**

**Presenting symptoms with duration**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Vitals**

Pulse Blood Pressure (BP) Respiratory rate Temperature

Doctor Incharge’s Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

** 1st Year MBBS (Medicine)**

**Early Clinical Exposure**

**Emergency Ward**

Doctor Incharge

Name: Age: Sex:

Address of the Patient:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Reason for admission:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Underlying illness:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Vital Statistics:**

Pulse:

Blood Pressure

Respiratory rate:

Temperature

Patient Clinical Condition:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Doctor Incharge’s Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

** 1st Year MBBS (Medicine)**

 **Early Clinical Exposure**

**ICU**

Doctor Incharge:

Patient Name: Age/Sex:

Disease: **Mental State (Tick appropriate box)**

 Conscious

 Drowsy

 Unconscious

**Vitals:**

Pulse.

Blood Pressure.

Respiratory rate.

Temperature.

Patient Clinical Condition:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Gadget used:

Doctor Incharge’s Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**ASSESSMENT METHODOLOGY**

***Formative***

**Theory,** single best multiple choice question and SEQ test at the end of each topic finished and all topics tests at end of session

**Clinical ward test,** comprising of one long case (90 marks) and two short cases(120 marks) and one OSCE comprising of 13 stations (65 marks), 25 marks contributed by ward attendance and histories taken

Total marks= 300

**Summative UHS examination (to be held at the end of 5th year MBBS)**

Paper-I All except Paper-II

Paper-II will include: 1.Infectious Diseases 2.Endocrinology including Diabetes 3.Metabolic Diseases 4.Genitourinary System 5.Immunology 6. Genetics 7.Oncology 8.Water and Electrolyte Balance 9. Acid and Base Balance 10.Psychiatry 11.Dermatology

**Summative examination details**



**LEARNING RESOURCES**

***Recommended books***

1. Davidson’s Principals and Practices of Medicine.
2. Kumar and Clark’s Clinical Medicine
3. Current medical diagnosis and therapeutics
4. Hutchison’s clinical methods
5. Online Journals and Reading Materials through HEC Digital Library Facility.

***Technologies to be used***

1. Textbooks are the most important part of student learning for this subject
2. Bed side learning with patients
3. Hands-on activities and practical sessions to enhance the learning.
4. Skills lab will be used for simulated learning of the basic skills related to the gastrointestinal system
5. Videos from different web portals to familiarize the students with the procedures and protocols.
6. Computer and Internet resources are essential to gather the latest information about a specific disease.