

## **MEDICINE DEPARTMENT**

Medicine is the science and practice of caring for a patient, including diagnosing, prognosis, prevention, treatment, palliation, and encouraging their health. Medicine is a broad term that refers to a multitude of health-care methods that have emerged to preserve and restore health through illness prevention and treatment. Modern medicine uses biomedical sciences, biomedical research, genetics, and medical technology to diagnose, treat, and prevent injury and disease, usually with pharmaceuticals or surgery, but also with psychotherapy, external splints and traction, medical devices, biologics, and ionizing radiation, among other things.

We have following branches of medicine:

1. Cardiology - Coronary angioplasty, Coronary angioplasty and stent implantation
2. Gastroenterology – Barium Swallow, Upper GI Endoscopy Liver Biopsy etc are done
3. Nephrology – Kidney Dialysis, Kidney Biopsies, Imaging tests of kidney are done
4. Neurology
5. Dermatology – Skin Biopsy, Cryotherapy are done
6. Psychiatry

### **Mode of Teaching: (contact hours = 35)**

- Lectures
- Case Based Learning (CBL)
- Video Clips

### **FACULTY AT KIMS**

- Professor
  - Prof. Dr. Arshad Ali (Head of Medicine Department)
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- Senior Registrar
  - Dr. Fatima Aiman

### **BOOKS OF MEDICINE**

- Davidson Principles & Practice of Medicine
- Hutchison's Clinical Methods
- Kumar & Clark's Clinical Medicine
- Macleod's Clinical Examination

# MEDICINE

## (Block 01)

- Medicine Block-I topics will take 8 lectures to complete 4 systems of 1<sup>st</sup> Year MBBS that are given below.

### **I. FOUNDATION MODULE**

- Introduction to medicine & related specialties
  - History of Medicine
1. Recognize the importance of Medicine in human life
  2. Understand the evolution of modern medicine
  3. Comprehend functioning of various disciplines in medicine

### **II. CELL STRUCTURE & FUNCTION**

- Chromosomal aberrations
1. Clinical presentation of following syndromes preferably via digital media:
    - a. Down's
    - b. Klinefelter
    - c. Turner
    - d. Prader Willi

### **III. MUSCULOSKELETAL SYSTEM**

- Myasthenia gravis
1. Introduction to Myasthenia gravis
  2. Correlate the lack of transmission at neuromuscular junction (NMJ) with its clinical presentation
  3. Lambert-Eaton syndrome

### **IV. HAEMATOLOGY AND IMMUNOLOGY**

- Anemia
- Leucocytosis/Leucopenia
- Bleeding & Coagulation disorders
- Transfusion reactions
- Introduction to anaemia
  - a. Normocytic/ Microcytic anaemia
  - b. Macrocytic anaemia
  - c. Hemolytic & Aplastic anaemia

1. Interpret the significance of altered level of leucocytes
2. Correlate decreases in platelet count/ functional defects of platelets and bleeding diathesis (ITP)
3. Correlate deficiencies of clotting factors VIII & IX with its varied clinical manifestations (Hemophilia)
4. Relate the denovo synthesis of hemoglobin and its manifestations in the patients of thalassemia and sickle cell anemia.

## **MEDICINE TOPICS**

### **(Block 02)**

- Medicine Block-II topics will take 5 lectures to complete Cardiovascular system of 1<sup>st</sup> Year MBBS as given below.

#### **V. CARDIOVASCULAR SYSTEM**

- Hypertension
  - IHD
  - CCF
  - Heart Arrhythmias & Blocks
  - BLS
1. Correlate the increase in peripheral vascular resistance being manifested in the form of high blood pressure
  2. Causes of hypertension
  3. Relate the common presentation of IHD with its causes
  4. Explain the abnormalities in systole & diastole (cardiac cycle) in the patients of CCF
  5. Correlate cardiac cycle with ECG
  6. Clinical presentation of CCF
  7. Correlate the common abnormalities in the heart rhythm on ECG.
  8. Follow the steps of BLS

## **MEDICINE TOPICS**

### **(Block 03)**

- Medicine Block-III topics will take 9 lectures to complete 2 systems of 1<sup>st</sup> Year MBBS that are given below.

#### **VI. RESPIRATORY SYTSEM**

- Asthma
- COPD
- Restrictive Lung Disease/interstitial lung diseases

1. Identify clinical presentation of asthma
2. Correlate Obstructive Airway Way Disease with Clinical Manifestations
3. Correlate Restrictive Lung Disease with Clinical manifestation (dyspnea)

#### **VII. MUSCULOSKELETAL SYTSEM**

- Mountain sickness
- Caisson's disease (Decompression sickness)
- O<sub>2</sub> therapy in respiratory failure
- Poliomyelitis & Gullain Barrie syndrome
- Duchenne muscular dystrophy/Becker's muscular dystrophy
- Gout

1. Correlate adaptive mechanisms of high altitude with clinical manifestations
2. Identify clinical presentation of caisson's disease
3. Comprehend the significance of O<sub>2</sub> therapy in respiratory failure
4. Recognize Poliomyelitis & Gullain Barrie syndrome
5. Recognize Duchenne muscular dystrophy/ Becker's muscular dystrophy
6. Identify clinical presentation of Gout