Syllabus

Program Objective

The MD Medicine program aims to train competent internal medicine specialists capable of providing high-quality healthcare, engaging in meaningful research, and contributing to medical education with ethical integrity and clinical acumen.

Core Competency Domains

A. Cognitive (Knowledge-Based)

Postgraduates are expected to acquire in-depth knowledge in:

1. **Basic Sciences**
    - Applied anatomy, physiology, pathology, microbiology, pharmacology, and biochemistry relevant to internal medicine.
    - Understanding of disease mechanisms, rational pharmacotherapy, and toxicology.
    - Biostatistics, epidemiology, research methodology, and national health programs.
2. **Systemic Medicine**
   Comprehensive training across all major disciplines:
    - **Cardiovascular diseases** (e.g., CAD, arrhythmias, heart failure, hypertension)
    - **Respiratory system** (e.g., COPD, asthma, pneumonia, sleep apnea)
    - **Nephrology** (e.g., AKI, CKD, acid-base and electrolyte disorders)
    - **Gastroenterology & Hepatology** (e.g., liver cirrhosis, hepatitis, pancreatitis)
    - **Hematology & Oncology** (e.g., anemia, leukemia, lymphomas, chemotherapy)
    - **Endocrinology** (e.g., diabetes, thyroid, adrenal, pituitary disorders)

- **Rheumatology** (e.g., SLE, RA, spondyloarthropathies)
- **Neurology** (e.g., stroke, seizures, meningitis, neuropathies)
- **Infectious diseases** (e.g., TB, HIV, malaria, dengue, sepsis)
- **Geriatrics, dermatology, nutrition, genetics, and preventive medicine**

3. **Recent Advances** in all subspecialties are emphasized throughout the training.

B. Affective (Attitudes & Communication)

Residents are trained to:

- Demonstrate professionalism and empathy
- Communicate effectively with patients, families, and teams
- Uphold ethical principles and patient rights
- Develop teaching and leadership skills

C. Psychomotor (Clinical & Procedural Skills)

Residents are expected to gain hands-on proficiency in:

- **History taking and physical examination**
- **Bedside and ICU procedures** (e.g., LP, pleural tap, central line, ABG, intubation)
- **Advanced diagnostics** (e.g., ECG, echo, endoscopy, nerve conduction studies, EEG)
- **Critical care management** including CPR, defibrillation, ventilator use
- **Sampling and biopsy techniques** (e.g., bone marrow, liver, FNAC)
- **Interpretation of laboratory and imaging data** (X-rays, CT, MRI, USG)

Training Approach

- Structured rotations in **general medicine and allied specialties** (e.g., cardiology, neurology)

- Active participation in **bedside teaching, grand rounds, case discussions**
- Exposure to **research methodology**, **academic writing**, and **conference presentations**
- Hands-on learning via **skills lab, clinical simulation, and supervised practice**

Assessment Scheme

Formative Assessment (Quarterly):

- Journal clubs, skill performance, thesis progress, clinical knowledge, CME participation

Summative Examination:

1. **Thesis** (mandatory submission and acceptance)
2. **Theory** (4 papers):
    - Paper I: Basic sciences
    - Paper II: Medicine & allied specialties
    - Paper III: Tropical & infectious diseases
    - Paper IV: Recent advances
3. **Practical/Viva**:
    - Long & short cases
    - OSCE stations
    - Viva voce
    - Logbook review

Recommended Resources

- **Textbooks**: Harrison's, Davidson's, API, Oxford Textbook of Medicine

- **Reference Books**: Hurst, Braunwald, Williams Endocrinology, Manson's Tropical Diseases
- **Clinical Methods**: Hutchinson's, Macleod's
- **Journals**: Minimum 3–5 indexed (national/international)