



**INTEGRAL
UNIVERSITY**



INSPIRING EXCELLENCE

**INTEGRAL INSTITUTE OF MEDICAL
SCIENCES & RESEARCH
(IIMSR)**

**DEPARTMENT
OF
MEDICAL PHARMACOLOGY**



PhD. Entrance Syllabus

Session: 2024-25

M. Brahma
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MDS, MS, MCh (CVTS), DIB (CVTS), MNMIS, FACS (Thoracic)
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INTEGRAL INSTITUTE OF MEDICAL SCIENCES & RESEARCH
PhD. ENTRANCE SYLLABUS-2024
MEDICAL PHARMACOLOGY

- 1. General pharmacology-** Basic concepts of Pharmacokinetics, Pharmacodynamics and new drug development Details of Essential drugs, Pharmacovigilance, Pharmacoepidemiology, Pharmacogenetics, Pharmacoeconomics, Gene Therapy, Therapeutic drug monitoring, Drug interactions.
- 2. Autonomic nervous system-** Neurotransmitters, Pharmacology of drugs acting on Adrenergic and Cholinergic system, Recent advances in the treatment of Glaucoma and Benign prostatic hypertrophy, Pheochromocytoma, Migraine. Recent advances in B blockers.
- 3. Central nervous system-** Neurotransmitters, neuromodulators. Drugs for epilepsy, Parkinsonism, Mental illnesses, Analgesia, Anaesthesia, Skeletal muscle relaxation. Recent advances in the treatment of Alzheimer's, Epilepsy, Rheumatoid arthritis, Gout, Anesthesia. Management of pain.
- 4. Endocrine system-** Drugs effective in thyroid disturbances, Diabetes mellitus. Basic pharmacology of corticosteroids, contraceptive agents and oxytocics. Recent advances in Osteoporosis, DM and infertility
- 5. Cardiovascular system-** Drugs for Hypertension, Angina, Congestive cardiac failure, Hyperlipidemia, Shock, Arrhythmias with recent advances. Drugs effective in coagulation disorders and anemia with recent advances.
- 6. Respiratory system-** Drugs useful in treatment of Bronchial asthma and cough
- 7. Drugs acting on Kidney-** Pharmacology of Diuretic agents and antidiuretic agents
- 8. Antimicrobial agents-** Pharmacology of Individual groups of antimicrobial agents. National policies for Treatment of tuberculosis, leprosy, malaria, HIV infection. Drugs for amoebiasis, fungal infections and helminthic infestations
- 9. Anticancer agents and Immunomodulators**
- 10. Gastrointestinal system-** Drugs effective for motility disorders and Peptic ulcer