

BHARATI VIDYAPEETH
(DEEMED TO BE UNIVERSITY), PUNE, INDIA
PhD Entrance Test – 2025
SECTION-II: Medical Pharmacology - 35 Marks

- 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