

PUBLIC SERVICE RAJASTHAN COMMISSION, AJMER

SYLLABUS OF SCREENING TEST FOR THE POST OF SENIOR DEMONSTRATOR- PHARMACOLOGY MEDICAL EDUCATION DEPARTMENT

Unit-I - General Pharmacology :

- Introduction to Pharmacology .
- Pharmacokinetics : Absorption, Distribution, Metabolism and Excretion of drugs.
- Pharmacodynamics: Mechanism of action and factors modifying action of Drugs, Drug interactions.
- New drug development and Clinical trials.
- Adverse drug reactions.
- Pharmacovigilance.
- Rational use of Drugs.
- Concept of essential drugs.
- Drugs use in pregnancy, lactation and geriatrics pharmacology.

Unit-II - Autonomic Nervous System :

- Introduction to ANS.
- Cholinergics and Anti-cholinergics.
- Adrenergics and Anti-adrenergic Drugs.
- Drugs acting on Autonomic Ganglion.

Unit-III - Peripheral Nervous System :

- Skeletal Muscle relaxants.
- Local anaesthetics.

Unit-IV – Autacoids :

- Histamine and Anti-Histaminics, Prostaglandins, Leukotrienes and Platelets Activating Factors, 5-HT Agonists and Antagonists.

Unit-V - Central Nervous System :

- Introduction to CNS.
- Alcohols.
- General Anaesthetics.
- Opioid Analgesics.
- Non-steroidal anti-inflammatory drugs including drug treatment of Rheumatoid Arthritis and Gout.
- Sedatives and Hypnotics.
- Anti-epileptics.

- Psychopharmacology- Antipsychotics, antianxiety drugs, antidepressants, antimanic agents.
- Anti-parkinsonian drugs and Treatment of other neurodegenerative disorder.
- CNS Stimulants and cognition enhancers.
- Drug Abuse.

Unit-VI - Respiratory System :

- Drugs use in Cough, Bronchial Asthma & COPD.

Unit-VII - Renal System :

- Diuretics and Antidiuretics.
- Drugs affecting Renin-Angiotensin System and Plasma kinins.

Unit-VIII – Cardio vascular System :

- Cardiac Glycosides and treatment of Congestive Heart Failure.
- Antianginal drugs.
- Antihypertensives.
- Antiarrhythmics.
- Plasma Expenders and Drugs for shock.
- Drugs for Peripheral Vascular Disease.

Unit-IX - Drugs acting on Blood and Blood formation :

- Hematinics.
- Antiplatelet drugs.
- Coagulants and anti-coagulants.
- Fibrinolytics.
- Hypolipidemic drugs.

Unit-X - Gastrointestinal System :

- Drug treatment of peptic ulcer.
- Emetics, Antiemetics and Prokinetics.
- Purgatives.
- Antidiarrheals.
- Drugs for Inflammatory Bowel Disease.

Unit-XI – Endocrinology :

- Anterior and Posterior pituitary hormones.
- Drugs affecting Calcium Metabolism.
- Thyroid and Antithyroid drugs.
- Drugs for Diabetes Mellitus.
- Corticosteroids.
- Male and Female Sex Hormones including Contraceptives.
- Drugs acting on Uterus.

Unit-XII - Antimicrobial Agents :

- General consideration to Antimicrobials.
- Sulphonamides and Quinolones.
- Beta-lactams (Penicillins, Cephalosporins, Carbapenems and Monobactams)
- Tetracyclines and Chloramphenicol.
- Macrolides and miscellaneous antibiotics.
- Urinary antiseptics.
- Drug treatment of sexually transmitted diseases.
- Aminoglycosides.
- Chemotherapy of Tuberculosis and Leprosy.
- Antiamebic drugs.
- Antimalarials.
- Antihelmintics.
- Antifungals.
- Antiviral drugs and Anti-HIV drugs.

Unit-XIII- Chemotherapy of Neoplastic diseases :

- Anticancer drugs.

Unit-XIV - Miscellaneous Topics :

- Immunosuppressants and Immunomodulators.
- Chelating Agents and treatment of Heavy Metal Poisoning.
- Gene Therapy.
- Vitamins.
- Antiseptics and Disinfectants.
- Vaccines & Sera.

Note :- Pattern of Question Paper

1. Objective type paper
2. Maximum Marks :180
3. Number of Questions :180
4. Duration of Paper : Three Hours
5. All questions carry equal marks.
6. There will be Negative marking.
