# RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER

#### SYLLABUS FOR SCREENING TEST FOR THE POST OF

### SENIOR DEMONSTRATOR - PHARMACOLOGY

### (MEDICAL AND HEALTH DEPARTMENT)

## **General Pharmacology:**

Routes of drug administration, mechanism of drug action, factors modifying drug action and doses, Pharmacokinetic parameters, Drug absorption, Distribution, Metabolism(biotransformation) and excretion, Adverse drug reactions, drug-use in pregnancy and importance of drug-drug interactions. Concept of Essential medicines, rational use of medicines, Basic principles of drug discovery and clinical trials.

## **Central Nervous Systems:**

Alcohols, General anesthetics, non-steroidal anti-inflammatory drugs including drug treatment of rheumatoid arthritis and gout; opioidanalgesics; Hypnotics and sedatives, antianxiety drugs, antiepileptics, antiparkinsonsonian drugs, antipsychotics, antidepressants, antimanic agents; CNS stimulants and cognitive enhancers; Drug abuse

## **Autonomic Nervous System:**

Autonomic neurotransmitters, cholinergic and anticholinergic drugs, adrenergic and antiadrenergic drugs.

## **Peripheral Nervous System:**

Skeletal muscle relaxants and Local anesthetics.

**Cardiovascular system:** Drugs for congestive heart failure, Antianginals, Antihypertensives, antiarrhythmics, Drugs for Shock.

**Diuretics and Antidiuretics** 

## **Haemopoietic system:**

Hematinics, Coagulants and anticoagulants, Antiplatelet drugs, Fibrinolytics, Drugs for hyperlipidemia.

### **Gastrointestinal system:**

Drugs for acid-peptic disorders, Antiemetics&prokinetics, antidiarrheals, Purgatives & Cathartics, Drugs for inflammatory bowel disease.

#### Autacoids:

Histamine and Antihistaminics, prostaglandins and antiprostaglandins, 5-HT agonists and antagonists.

#### **Respiratory System:**

Cough expectorants, mucolytics and cough suppressants, Drugs used in Bronchial asthma.

### **Hormones:**

Anterior and posterior pituitary hormones, thyroid and antithyroid drugs, Insulins and antidiabetics, corticosteroids, Male and female sex hormones including contraceptives, Drugs affecting calcium metabolism.

## **Chemotherapy:**

General Principles, Sulphonamides. Quinolones, Betalactams(Penicillins, cephalosporins, Carbapenems and Monobactams), Aminoglycosides, Macrolides & Retolides, Tetracyclines and chloramphenicol, Antifungal agents, Antiviral & Anti HIV drugs, Miscellaneous antibiotics, Anti cancer drugs.

**Chemotherapy** of Tuberculosis, Leprosy, Amebiasis, Malaria, helminthiasis, urinary Tract infection and Sexually transmitted diseases

## **Miscellaneous agents:**

Heavy metal antagonists, immunosuppressants&immunomodulators, gene therapy.

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Note:- Pattern of Question Paper

1. Objective type paper

2. Maximum Marks:100

3. Number of Ouestions:100

4. Duration of Paper: Two Hours

5. All questions carry equal marks.

6. There will be Negative marking.

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