

SYLLABUS FOR COMPUTER BASED RECRUITMENT TEST (CBRT)
FOR THE POST OF JUNIOR SCIENTIFIC OFFICER (DRUGS) UNDER
DIRECTORATE OF FOOD AND DRUGS ADMINISTRATION
(Adv 3 Year 2020)

- I. General English including Grammar - 10 marks**
- II. General Knowledge, Current Affairs and Events of National and International Importance - 10 marks**
- III. Logical Reasoning and Analytical Ability - 25 marks**
- IV. Core: - 30 marks**

1. Pharmaceutical analysis:

Principles of following techniques and their application in Drug Analysis

- Complexometric Titrations
- Nonaqueous titrations with reference to drugs given in I.P.
- Microbiological assays and biological standardization of antibiotics and vitamins as per I.P.
- Absorption and Emission spectroscopic techniques
- Chromatography and Electrophoretic Techniques
- Hyphenated Techniques
- Potentiometric analysis

2. Pharmaceutics and Technology:

A study of Manufacture of dosage forms, Labeling and Storage drug delivery systems

- Solid Dosage forms, Capsules & liquid orals, Injectables, Topical preparations
- Blood products and plasma substitutes
- Sustain release dosage forms and novel drug delivery systems
- Sterilization - Different methods of sterilization and sterility testing of pharmaceuticals.
- Pharmacokinetics- Bioavailability and Bioequivalence and stability studies

3. Pharmaceutical legislation –

- Pharmacy Act
- Drugs and Cosmetics Act and Rules
- Drugs price control order
- Narcotic Drugs and Psychotropic Substances Act
- Medicinal and toilet Preparations Act-1955(Excise duties)
- Products recall procedures

4. Clinical trials and pharmacology-

- Evaluation of drugs in clinical trials.
- Radioisotopes in medical practice, biological effects of radiation.
- Specialized Drug therapy in pediatrics, geriatrics and during pregnancy.

5. Pharmaceutical and medicinal chemistry

- **Nomenclature, use and metabolism of drugs belonging to the following categories official in I.P:** NSAID's , Corticosteroids, Antihistaminics, Antihypertensives, Antineoplastics, Antiamoebics, Antiarrhythmics, vasodilators, Neuroleptics and tranquilizers, Diuretics, Antibiotics, Antimalarials. Antitubercular and antileprotics, Oral contraceptives, Insulin and other antidiabetics, Antiulcer drugs.
- Chemistry of Vitamins: Source, significance and deficiency diseases.
- Chemistry of Active principles from Crude drugs- Rauwolfia, Ergot, Belladonna, Vinca, Ginseng, Senna, Digitalis and Cloves

Note:

*** Duration for C.B.R.T : 75 Minutes**

***Maximum Marks for C.B.R.T : 75 Marks**

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