

**SYLLABUS FOR COMPUTER BASED RECRUITMENT TEST (CBRT)**  
**FOR THE POST OF ASSISTANT PHARMACEUTICAL CHEMIST**  
**IN**  
**GOA MEDICAL COLLEGE**  
**(Adv 03 Year 2025)**

**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 Calculations and Concentration Expressions**

- Molality, Molarity, Normality
- Dilutions and alligation
- Dosage calculations and volume adjustments

**2. Drug Storage and Inventory Management**

- Principles of stock maintenance and control
- Indenting and procurement processes
- Drug issue registers and record-keeping
- Good storage practices and temperature control (including refrigerators)

**3. Dispensing Pharmacy Practice**

- Supervision of dispensing workflow
- Prescription interpretation and labeling
- Patient counseling basics
- Maintenance of dispensing records and accountability

**4. Basics of Pharmaceutical Chemistry**

- Acid-base concepts relevant to drug formulations
- Buffers and pH in pharmaceutical systems
- Stability and degradation of drugs influenced by pH

**5. Quality Control and Assurance in Pharmacy**

- Identification and minimization of errors in dispensing and inventory
- Accuracy, precision, and significance in pharmaceutical analysis
- Standard Operating Procedures (SOPs) and documentation

**6. Pharmaceutical Analysis Techniques**

- Volumetric analysis: Acid-base, redox titrations, and EDTA titrations
- Use of indicators and calculations in titrations
- Introduction to instrumental methods (basic overview of AAS, TGA, DSC)

**7. Drug Dosage Forms and Routes of Administration**

- Classification and characteristics of dosage forms
- Selection criteria for routes of administration
- Handling and storage of various dosage forms

**8. Pharmaceutical Regulations and Ethics**

- Regulatory definitions of drugs and new drugs
- Legal aspects of drug storage, dispensing, and record-keeping
- Ethics in pharmacy practice

#### **9. Cold Chain Management**

- Importance and maintenance of cold chain in drug storage
- Monitoring and documentation of refrigerator temperatures
- Handling vaccines and temperature-sensitive drugs

#### **10. Safety and Hygiene in Pharmacy**

- Maintenance of cleanliness in pharmacy areas
- Handling hazardous materials and waste disposal
- Personal protective equipment and occupational safety

#### **Note:**

**\* Duration for C.B.R.T : 90 Minutes**

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

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