



**MODEL PAPER**  
**1<sup>st</sup> Year Examination, June-2025**

**Program: D.Pharm**  
**Year: 1<sup>st</sup> Year**  
**Subject: Pharmaceutics**  
**Subject Code: ER20-11T**

**Section II**

**Short Answer type questions**

**3 Marks**

**Unit I**

1. Explain the different container used in pharmaceutical industries
2. Define the term Pharmacopoeia. Write down the salient features of 3<sup>rd</sup> edition of Indian Pharmacopoeia.
3. Write down the advantage and disadvantage of glass and plastic as a packing material.
4. Explain the different selection criteria of the packaging materials
5. Define the following:-
  - i. Pharmacy
  - ii. Pharmacist
  - iii. Drugs

**Unit II**

1. Explain the various mechanism of size reductions.
2. What is Extraction? Name the various process used in extraction of crude drugs
3. Write the factor that affecting the rate of filtration.
4. Define the following. (With their principle and working methods).
  - a. Sintered glass filter.
  - b. Membrane filter
5. Discuss the different types of agitation methods

### **Unit III**

1. What is tablet? Write three advantages and disadvantages of tablet?
2. Define powder. Classify the powders.
3. How will you differentiate between a hard gelatin capsule and soft gelatin capsule
4. Differentiate between paste and ointment.
5. Elaborate the different types of suppositories.
6. Explain the different methods of preparation of ointments.

### **Unit IV**

1. Evaluate the different area that included in pharmaceutical manufacturing plant
2. Elaborate the ideal requirements for injectable preparation.
3. Write down the ideal characteristics and challenges of drug Delivery system.
4. Explain the responsibilities of QA and QC in manufacturing plants.
5. Classify the novel drug delivery systems (NDDS) with examples. Write the advantages and disadvantages of novel drug delivery systems.
6. Define the following
  - a. Vaccine
  - b. Toxoids
  - c. Sera

### **Section III**

**Long Answers Types Questions:**

**5 Marks**

#### **Unit I**

1. Elaborate the various professional scopes associations in Pharmacy?
2. Discuss in detail about the history, origin and development of Pharmacy?
3. Define pharmaceuticals aid. Writes its important and ideal properties.
4. Write a notes on pharmaceutical packaging and explain different types of packaging in details
5. Write a shorts notes on preservative, colouring agent and sweetening agents.

#### **Unit II**

1. Draw the label Diagram of freeze drying writes its Principle & working
2. Explain sieving and evaluate the different methods of sieving.
3. Explain in details about continuous hot percolation process with a neat diagram of soxhlet apparatus. What are the limitation of this process?
4. Demonstrate the construction and working principle of Cyclone separator with neat diagram.

5. Explain the different grades of powder specified in Indian Pharmacopoeia?

### **Unit III**

1. Demonstrate the different methods of preparation of Pastes.
2. Define syrup. Write its types and evaluate the different methods of preparing syrups.
3. Write down the three advantages and disadvantages of suspensions. Differentiate flocculated and deflocculated suspensions.
4. Explain the different suppository bases used in preparations of suppositories in details.
5. Write a short note of the following:
  - a. Emulsion
  - b. Creams
  - c. Effervescent
  - d. Solutions

### **Unit IV**

1. Explain the different areas included in plant layout.
2. Explain GMP in details.
3. Explain the different sections of pharmaceutical manufacturing plant.
4. Write a short note of the following
  - a. Validation
  - b. Calibrations

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**Disclaimer:** - This is a Model Paper. The Question in End semester examination will differ from the Model Paper. This Model paper is meant for practice only.