

Manmohan Technical University
Office of the Controller of Examinations
Exam Year: 2082, Mansir (Model Question)

School: School of Medicine and Allied Health Sciences	Level: Bachelor	Time: 3 Hours
Program: B. Pharmacy	Year/Part: III/I	Full Marks: 50
Subject: Pharmaceutics -II (Dosage Form Design & Formulation) (BP501)		Pass Marks: 25

- ✓ Candidates are required to give their answers in their own words as far as practicable.
- ✓ The figures in the margin indicate **Full Marks**.
- ✓ Assume suitable data if necessary.

GROUP A (Multiple-Choice Questions are provided on separate sheet) **[10×1=10]**

GROUP B (Problem Based Question) **[1×10=10]**

1. Assume that you are preparing Losartan Potassium film coated tablets and Pantoprazole Sodium Sesquihydrate enteric coated tablets with API content of 50 mg and 40 mg respectively. Final tablet weight is 150 mg in both cases.

- a. What are the physical and analytical tests to be performed for each finished product? 4
- b. Provide the limit for each test as applicable. 2
- c. What are the problems encountered during tablet manufacturing along with the remedies for each. 4

GROUP C (Long Answer Questions - Attempt Any Four) **[4×5=20]**

1. Explain in detail about different methods of sterilization of parenterals.
2. Discuss about stability problems encountered in emulsion dosage forms in detail.
3. Write down the disintegration time, volume and nature of media for disintegration of following:
 - a. Film coated tablets
 - b. Punched tablets
 - c. Enteric coated tablets
 - d. Chewable tablets
 - e. Orodispersible tablets
4. What are different bases used in semisolid dosage forms and discuss about the basis of their selection in detail.
5. Write short notes on: "Types of containers and filling-sealing of parenteral containers."

GROUP D (Short Answer Questions - Attempt Any Five) **[5×2=10]**

1. What are various sizes of hard gelatin capsules with common sizes for use in allopathic medicine.
2. Discuss about types of gelatin and bloom strength.
3. Define the rotary die process of soft gel capsule manufacturing.
4. Discuss about the quality control tests of suppositories and transdermal patches.
5. What are different solubility enhancement techniques?
6. Classify dosage forms on the basis of routes of applications with examples.