Roll No. ⬜⬜⬜⬜⬜⬜⬜⬜⬜⬜⬜      Total No. of Pages : 01

Total No. of Questions : 06

**M.Pharmacy (Pharmaceutics) (Sem.–1)**
# MODERN PHARMACEUTICS
**Subject Code : MPH-103T**
**M.Code : 74659**
**Date of Examination: 12-01-2023**

Time : 3 Hrs.                                     Max. Marks: 75

**INSTRUCTIONS TO CANDIDATES :**
1. **Attempt any FIVE questions out of SIX questions.**
2. **Each question carries FIFTEEN marks.**

1. a) Discuss in detail the pre-formulation studies conducted for pharmaceutical emulsions.

    b) Give an account on different statistical design involved in optimization of pharmaceutical dosage forms.

2. a) Discuss similarity factors and its role in drug release kinetics.

    b) Write a short note on ANOVA test.

3. a) Discuss different forces involved in tablet compression.

    b) Explain different types of pharmaceutical validation along with the specific situations in which they are applied.

4. a) Explain sterilization process of LVPs and mention the limit of particulate matter in LVPs.

    b) What are flocculated and deflocculated suspensions? Discuss the evaluation parameters for suspensions.

5. a) Give an account on cGMP requirements for building layout of a coated tablets manufacturing unit.

    b) Discuss the role response surface methodology in formulation optimization.

6. a) Write a short note on stability testing of SMEDDS.

    b) What do you mean by dissolution? Discuss different parameters of dissolution which should be considered in dosage form development.