Roll No.	Total No. of Pages : 01
Total No. of Questions: 06	

M.Pharmacy (Pharmaceutics) (2017 & Onwards) (Sem.-1)

DRUG DELIVERY SYSTEM

Subject Code : MPH-102T M.Code : 74658

Time: 3 Hrs. Max. Marks: 75

## **INSTRUCTIONS TO CANDIDATES:**

- 1. Attempt any FIVE questions out of SIX questions.
- 2. Each question carry FIFTEEN marks.
- 1. a) What is pharmacogenetics? Discuss the concept of pharmacogenetics and its rationale giving suitable examples.
  - b) Give a brief account of the polymers commonly used to control the rate of drug release from solid dosage forms.
- 2. a) What are osmotic tablets and their advantages? Mention the designs of these tablets and the excipients used in them.
  - b) What are feedback regulated drug delivery systems? Give two examples of such system and discuss the mechanism of drug release from them.
- 3. a) Discuss the mechanism of muco adhesion. Enlist the tests employed for evaluating mucoadhesion.
  - b) Briefly discuss the advancements in Transdermal drug delivery systems with an aim of enhancing drug penetration across skin.
- 4. a) Discuss the reasons for failure of oral protein delivery. Enumerate the approaches employed for oral protein delivery.
  - b) Write briefly about mucosal delivery of vaccines and the formulation ingredients used in such vaccines.
- 5. a) Enumerate ocular dosage forms for systemic drug delivery and give an account of the drug release mechanism.
  - b) Explain 3D printing process and mention its advantages.
- 6. Write short notes on:
  - a) Bioelectric medication b) Telepharmacy c) Transdermal vaccine delivery

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

1 | M-74658