

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.