

PARUL UNIVERSITY
FACULTY OF PHARMACY
M. Pharm Winter 2017 - 18 Examination

Semester: 1
Subject Code: MPH102T
Subject Name: Drug Delivery Systems

Date: 10/01/2018
Time: 10:00 am to 1:00 pm
Total Marks: 75

Instructions:

1. Figures to the right indicate maximum marks.
2. Make suitable assumptions wherever necessary.

Q.1 Essay Type Questions. (any 2 out of 3) (15 Marks Each) (30)

1. Enumerate different types of controlled Drug Delivery Systems. Write down diffusion and dissolution controlled drug delivery systems in detail.
2. Describe detail principles and fundamentals of mechanical activated, pH activated and Enzyme activated systems.
3. Describe Principle, concepts, advantages and disadvantages of Gastro-Retentive Drug Delivery Systems. Explain any two approaches to modulate GI transit time.

Q.2 Short Essay Type Questions. (any 5 out of 6) (5 Marks Each) (25)

1. What is controlled Drug Delivery Systems? Write down its Rationale, Advantages and Disadvantages of controlled Drug Delivery Systems.
2. Write a detail note on Biodegradable polymers.
3. Write a detail note on Personalized Medicine.
4. Describe different strategies to improve Transdermal Drug Delivery.
5. Describe formulation and evaluation of proteins and other macromolecules delivery systems.
6. Describe detail about Osmotic activated Drug Delivery Systems and Feedback Regulated Drug Delivery Systems.

Q.3 Short Answers. (2 Marks Each) (20)

1. Explain briefly about evaluation of transdermal patch.
2. Define Loading dose and Maintenance dose.
3. Write down brief about Bioelectronic Medicines.
4. Write down brief about Telepharmacy.
5. Explain briefly about shot vaccines.
6. Describe any one method to overcome barriers for Ocular Drug Delivery Systems.
7. Write down advantages and disadvantages of Buccal Drug Delivery Systems.
8. Define Iontophoresis and Sonophoresis.
9. Write down brief applications of polymers.
10. Explain brief Principle of mucoadhesion.