

# Question Paper

Exam Date & Time: 24-Nov-2023 (10:00 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

Manipal Academy of Higher Education, Manipal MPharm Theory End-Semester Examinations.

### Drug Delivery Systems [PCE-MPH102T]

Marks: 75

Duration: 180 mins.

#### SECTION - A

Answer all the questions.

Answer the following (10 marks x 5 = 50 marks)

- 1) What are the benefits of personalised medicine? Write about the dosage forms for personalised medicine. (10)
- 2) Classify and describe the features of various intra uterine devices. (10)
- 3) Explain any FOUR Activation Modulated Drug Delivery Systems. (10)
- 4) Discuss different evaluation tests for transdermal drug delivery systems. (10)
- 5) Explain different factors affecting the design of Gastro-retentive dosage forms (10)

#### SECTION - B

Answer all the questions.

Answer the following (5 marks x 5 = 25 marks)

- 6) Add a note on different techniques involved in Coacervation-Phase Separation method of Microencapsulation (5)
- 7) Discuss the methods for promoting absorption through the buccal mucosa. (5)
- 8) Discuss the approaches for transdermal delivery of proteins and peptides. (5)
- 9) Write a note on single shot vaccines (5)
- 10) What are smart polymers? Classify the various types of smart polymers with examples. (5)

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