

Exam Date & Time: 29-Mar-2021 (01:30 PM - 04:30 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

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

Novel Drug Delivery Systems [PCE-MIP103T - S2]

Marks: 75

Duration: 180 mins.

SECTION - A

Answer all the questions.

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

- 1) Explain the effect of polymer diffusivity and polymer solubility on controlled release drug delivery. (10)
- 2) What is the criteria for the selection of drugs for colon specific drug delivery systems? Explain any TWO approaches of colon specific delivery systems. (10)
- 3) Explain iontophoresis and sonophoresis techniques with the help of a diagram. (10)
- 4) Elucidate the methods for drugs loading in resealed erythrocytes. (10)
- 5) Describe in detail different types of oral controlled release drug delivery systems. (10)

SECTION - B

Answer all the questions.

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

- 6) Write a short note on biodegradable polymers with its mechanism of degradation and suitable examples. (5)
- 7) Enlist major classes of nanocosmeceuticals and explain any TWO. (5)
- 8) What are monoclonal antibodies. Give their production procedure. (5)
- 9) Explain any TWO chemical degradation pathways involved in protein and peptide drug delivery systems. Discuss their preventive measure also. (5)
- 10) Explain any THREE customized dosage forms and explain its applications in personalized medicine. (5)

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