

Question Paper

Exam Date & Time: 27-Nov-2023 (10:00 AM - 01:00 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) Classify rate pre-programmed drug delivery systems with one example each. Explain the effect of polymer solubility and solution diffusivity on a controlled drug delivery system with suitable examples. (10)
- 2) Explain various types of transdermal drug delivery systems with suitable diagrams. (10)
- 3) Define and write any four applications of pulsatile drug delivery. Explain in detail the osmotic pressure release systems. (10)
- 4) Define liposomes and explain the formulation and evaluation parameters for liposomes. (10)
- 5) Define GRDDS with its two applications and explain in detail the evaluation parameters for the GRDDS. (10)

SECTION - B

Answer all the questions.

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

- 6) Explain the major classes of nanocosmeceuticals with two examples each. (5)
- 7) Classify biodegradable polymers with two examples each. Explain the mechanism of polymer degradation. (5)
- 8) What is the importance of pharmacogenomics in personalized medicine? Explain with two examples. (5)
- 9) Discuss the factors to be considered in the ocular delivery systems. (5)
- 10) Write the mechanism of action of magnetic microspheres. (5)

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