Exam Date & Time: 16-Dec-2022 (10:00 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

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

Nevel Drug Delivery Systems IPCE MIP102T1

Novel Drug Delivery Systems [PCE-MIP103T]		
Marks: 75	Duration: 180	mins.
SECTION - A		
Answer all the questions.		
Answer the following (10 marks $x = 50$ marks)		
1)	Write the detailed classification of controlled drug delivery systems. Explain the effect of solution solubility and polymer diffusivity on a controlled drug delivery system.	(10)
2)	Write the applications and various approaches in GRDDS.	(10)
3)	Explain any two instruments used for permeation studies of transdermal drug delivery systems with diagrams.	(10)
4)	Describe in detail the steps involved in rDNA technology and write its application.	(10)
5)	Define the pulsatile drug delivery system and explain in detail the mechanism of the reservoir system with an erodible coating.	(10)
SECTION - B		
Answer all the questions.		
	following (5 marks x 5 = 25 marks)	
6)	Enlist various physicochemical properties of polymers and explain any three.	(5)
7)	Write the significance of nanoscale materials in cosmeceuticals with suitable examples.	(5)
8)	Explain the causes of protein destabilization.	(5)
9)	Define microemulsion and explain the evaluation tests for microemulsion.	(5)
10)	What kinds of disease treatment can utilize personalized medicine? Explain with two examples.	(5)