

DEPARTMENT OF PHARMACEUTICAL SCIENCES & TECHNOLOGY

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(Internal Assessment II)**

CLASS: BPHARM		SEMESTER: VII/ADD
BRANCH: PHARMACY		SESSION: MO 2025
SUBJECT: BP704T NOVEL DRUG DELIVERY SYSTEMS		
TIME: 2.00 Hour		FULL MARK: 30

PART I

A. Objective type questions (Answer all questions)	(5 x02=10 marks)
1. Summarize the advantages and limitation of microencapsulation	(CO1+CO2)
2. Classify Microparticulate systems citing example	(CO2+CO3)
3. Elaborate the role of phase separation coacervation in formation of microcapsules.	(CO3+CO4)
4. Point out two major limitations of Sustained dosage forms.	[CO1]
5. Highlight the importance of sustained dosage forms over conventional dosage	[[CO1]

PART II

B. Long Answers (Answer any one out of two)	(01x10=10 marks)
1. Write short notes on the following:	
a. Osmotic drug delivery systems	[3] [CO3]
b. Ion Exchange resins as drug delivery systems	[3] [CO3]
c. Discussion on the rationale for Site specific deliveries	[4] [CO3+CO4]
2. Illustrate the solvent evaporation and spray drying techniques of microencapsulation	(CO3+CO4)

PART III

C. Short Answers (Answer any two out of three)	(02x05=10 marks)
1. Discuss the following systems regarding its working principle with a schematic diagram for each: [CO3+CO4]	
a. Vapour Pressure activated polymer-controlled systems	
b. Hydrodynamic pressure activated systems	
2. Discuss the parameters to be considered for characteristics of drugs to be formulated for sustained release dosage forms. [CO1]	
3. Detail out the process of evaluations of microencapsulation.	CO3

:22/09/2025 :M