

DEPARTMENT OF PHARMACEUTICAL SCIENCES & TECHNOLOGY

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI

(Internal Assessment I)

**CLASS: BPHARM
BRANCH: PHARMACY**

**SEMESTER: VII
SESSION: MO 2024**

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. Provide two rationale for design of sustained delivery systems. CO3+CO4
2. Provide the rationale why drugs with half life more than 12 hours are not good candidates for Sustained delivery. CO3+CO4
3. Enlist the advantages of mucoadhesive drug delivery system CO1+CO2
4. Define the wetting theory of mucoadhesion CO1
5. Summarize the advantages and limitation of microencapsulation CO2

PART II

B. Long Answers(Answer any one out of two) (01x10=10 marks)

1. Discuss the Pharmacokinetic factors and pharmacodynamic factors responsible for selection of a drug candidate for SR dosage forms CO2
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. Explain Hydrodynamic balanced systems as SR dosage forms CO2
2. How different mechanisms of mucoadhesion influences drug delivery systems? CO4 + CO5
3. Detail out the process of evaluations of microencapsulation. CO3

::::: 23/09/2024 M::::::