



## BRAINWARE UNIVERSITY

Term End Examination 2023-2024  
Programme – M.Pharm(Pharmaceutics)-2023  
Course Name – Drug Delivery System  
Course Code - MPH102T  
( Semester I )

Brainware University  
Barasat  
Kolkata  
396, 397, 398  
MPH102T

Full Marks : 75

Time : 3:0 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

### Group-A

(Short Answer Type Questions)

5 x 5=25

1. Explain buccal drug delivery systems in brief. (5)
2. Describe about the biological factors considered in design of CR and SR dosage form. (5)
3. Enumerate a short note on Osmotic pressure activated drug delivery system. (5)
4. Explain the mechanisms of mucoadhesion. (5)
5. Describe how the targeting strategies enhance drug efficacy while minimising side effects for proteins and peptides. (5)

OR

Explain the vesicular systems in brief for ocular targeting of drugs. (5)

### Group-B

(Long Answer Type Questions)

10 x 5=50

6. Describe regarding the basic components of transdermal drug delivery systems. (10)
7. Describe various formulation approaches of transdermal drug delivery systems. (10)
8. Explain the importance of stability and formulation in protein and peptide drug delivery and also mention the methods to enhance the stability of such candidates. (10)
9. Explain the theories of mucoadhesion with a neat sketch. (10)