

QP CODE: 112327

Reg. No:.....

**First Semester M.Pharm Degree Supplementary Examinations July 2025
M.Pharm (Pharmaceutics)**

Paper II – Drug Delivery Systems (MPH 102T)

(Common for 2019 and 2024 Scheme)

Time: 3 Hours

Total Marks: 75

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Essays

(3x10=30)

1. Explain the basic concepts, merits and demerits of controlled release formulation.
2. Describe the principle involved in feedback regulated drug delivery systems with example.
3. What are the barriers involved in protein drug delivery. Mention the methods to overcome the same through formulation techniques.

Short Notes

(9x5=45)

4. Customized drug delivery system.
5. Explain 3D printing of pharmaceuticals.
6. Describe the advantages of Buccal drug delivery system.
7. Approaches to extend gastrointestinal transit.
8. Principle of mucoadhesion.
9. Barriers involved in ocular drug permeation.
10. Structure of skin.
11. Reservoir type transdermal drug delivery system.
12. Two evaluation methods for protein drug delivery.
