

QP CODE: 112327

Reg. No:.....

**First Semester M.Pharm Degree Regular/Supplementary Examinations
April 2023
M.Pharm (Pharmaceutics)**

**Paper II – Drug Delivery System (MPH 101T)
(Common for 2017 and 2019 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. Describe the physicochemical and biological approaches for sustained release formulation.
2. Describe the barriers of drug permeation for ocular drug delivery systems.
3. Explain the formulation and evaluation of transdermal drug delivery systems.

Short Notes

(9x5=45)

4. Single shot vaccines.
5. Evaluation of delivery systems of proteins.
6. The concept of gastro-retentive drug delivery systems.
7. Osmotic activated drug delivery systems.
8. 3D printing of pharmaceutical and its importance.
9. The various types of polymers for controlled release formulations.
10. The applications of rate controlled drug delivery systems.
11. The factors influencing buccal drug delivery systems.
12. Principle of penetration enhancers.
