

QP CODE: 211327

Reg. No:.....

**Second Semester M. Pharm Degree Regular/Supplementary Examinations
November 2025**

M.Pharm (Pharmaceutics)

Paper I: Molecular Pharmaceutics (MPH 201T)

(Nano Technology and Targeted Drug Delivery Systems)

(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. Describe the advancements of gene therapy for the treatment of inherited disorders and cancer.
2. What are Monoclonal Antibodies. Explain the Principle and mechanism of their production.
3. Describe any two methods of preparation of Niosomes and their applications.

Short Notes

(9x5=45)

4. Microencapsulation techniques.
5. Magnetic Microspheres.
6. Explain targeted drug delivery to the brain.
7. Explain various approaches for intranasal drug delivery.
8. Define Gene Expression.
9. Liposomal gene delivery systems.
10. Preparation and evaluation of pulmonary drug delivery systems.
11. Preparation and Application of Aquasomes.
12. Explain the Principle and techniques of formulating Nanoparticles.
