

QP CODE: 211327

Reg. No:.....

**Second Semester M. Pharm Degree Supplementary Examinations
December 2023**

M.Pharm (Pharmaceutics)

Paper I: Molecular Pharmaceutics (MPH 201T)

(Nano Technology and Targeted Drug Delivery Systems)

(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. Define targeting. Explain the mechanism of tumour targeting.
2. Describe the advancements of gene therapy for the treatment of inherited disorders and cancer.
3. Describe any two methods of preparation of microspheres and their evaluation.

Short Notes

(9x5=45)

4. Explain the principle and techniques of formulating nanoparticles.
5. Preparation and application of phytosomes.
6. Explain on therapeutic antisense molecules.
7. Explain on brain specific drug delivery.
8. Explain preparation and application of monoclonal antibodies.
9. Explain the method of preparation of Niosomes.
10. Explain on pulmonary drug delivery systems with its merits and demerits.
11. Describe the nasal absorption pathways and various approaches for its enhancement.
12. Explain various methods of preparation of liposomes with their applications.
