

QP CODE: 211327

Reg. No:.....

**Second Semester M. Pharm Degree Regular/Supplementary Examinations
May 2022**

M.Pharm (Pharmaceutics)

Paper I: Molecular Pharmaceutics (MPH 201T)

(Nano Technology and Targeted Drug Delivery Systems)

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 principle and fundamentals involved in drug targeting to the brain.
2. Describe the therapeutic antisense molecules and aptamers as drugs of future
3. Describe structure, classification and preparation methods of niosomes

Short Notes

(9x5=45)

4. Describe in detail about the biological process involved in drug targeting
5. What are monoclonal antibodies. Explain the principle and mechanism of their production
6. Explain in detail the techniques used for the preparation of liposomes
7. Discuss about the role of propellants in inhalation aerosols
8. Ex-Vivo and in-vivo gene therapy
9. Describe the preparation and evaluation of nasal drug delivery systems
10. Preparation and applications of aquasomes
11. Describe the gene expression techniques
12. Explain on evaluation of microspheres.
