

**QP CODE: 211327**

**Reg. No:.....**

**Second Semester M. Pharm Degree Regular/Supplementary Examinations  
October 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. Explain the types, method of preparation and evaluation of nanoparticles in targeted drug delivery system.
2. Explain the types, method of preparation and evaluation of micro capsules
3. Discuss the methods of preparation and evaluation of aerosol

**Short Notes**

**(9x5=45)**

4. Application of niosomes.
5. Brain specific delivery system.
6. Gene expression system.
7. Techniques for tumor targeting
8. Container of aerosol.
9. Electosomes.
10. Evaluation of liposomes.
11. *In vivo* gene therapy.
12. Explain the types of intra nasal route delivery system

\*\*\*\*\*