

QP CODE: 211327

Reg. No:.....

**Second Semester M. Pharm Degree Regular/Supplementary Examinations  
February 2021  
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. Define microcapsules. Explain the types and advantages. Enumerate the methods of preparation of microcapsules. Explain coacervation.
2. Explain about concept, events and biological process involved in drug targeting.
3. Define liposomes. Explain about the types, preparation and evaluation of liposomes

**Short Notes**

**(9x5=45)**

4. Explain about brain specific delivery system.
5. Describe the tumour targeting methods.
6. Intra nasal delivery systems.
7. Evaluation and applications of nano particles.
8. Gene expression systems.
9. Monoclonal antibodies and its preparation.
10. Preparation and application of aquasomes.
11. Aptamers.
12. Propellants used in aerosols

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