

**Second Semester M. Pharm Degree Supplementary Examinations
August 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. Explain nano particles. How they are prepared and evaluated. Discuss with examples. Write on their applications.
2. Discuss the various types of monoclonal antibodies and their applications. List and explain the limits of using these for drug delivery.
3. Write the preparation, evaluation, and application of pulmonary drug delivery systems. Support your answer with suitable examples.

Short Notes

(9x5=45)

4. How Niosomes are prepared. Explain
5. Explain therapeutic antisense molecules.
6. Explain the preparation and evaluation of microspheres
7. How Phytosomes are prepared. What are its applications.
8. With suitable diagrams illustrate different types of liposomes. Write the importance of components of liposomes
9. Explain the factors to be considered for brain specific delivery of drugs. Discuss on methods to overcome the same.
10. Discuss the various types of containers used for aerosols
11. Discuss the preparation and evaluation of Aquasomes
12. Explain ex-vivo and in-vivo gene therapy
