

PARUL UNIVERSITY
FACULTY OF PHARMACY
M.Pharm., Summer 2017-18 Examinations

Semester: 2**Date: 14/05/2018****Subject Code: MPH201T****Time: 10:00 am to 1:00 pm****Subject Name: Molecular Pharmaceutics (Nano Tech and Targeted DDS)****Total Marks: 75****Instructions:**

1. Figures to the right indicate maximum marks.
2. Make suitable assumptions wherever necessary.

Q.1 Essay Type Questions. (any 2 out of 3) (15 Marks Each) (30)

1. What is targeted drug delivery system? Describe the different approaches of Drug targeting in detail.
2. Define liposome. Give classification of liposome. Write down solvent injection and thin film hydration method in detail.
3. What is Gene Therapy? Describe detail approaches of gene therapy.

Q.2 Short Essay Type Questions. (any 5 out of 6) (5 Marks Each) (25)

1. Describe in detail about Tumor targeted drug delivery systems.
2. Write a short note on Dry Powder Inhaler (DPI).
3. Describe different strategies to enhance nasal drug absorption.
4. Describe the Monoclonal Antibodies production in detail.
5. Enlist various method of microencapsulation and explain any one in detail.
6. What are nanoparticles? Enlist the different methods for preparation of nanoparticles. Describe polymerization method in detail.

Q.3 Short Answers. (2 Marks Each) (20)

1. Write a brief note on Aquasomes.
2. Explain brief about different Challenges In Pulmonary Drug Delivery Systems.
3. Write down advantages and limitation of Intranasal Drug Delivery Systems.
4. Define Somatic and Germline Gene Therapy.
5. Explain briefly about target cells of Gene therapy.
6. Write down the principle of Air suspension technique.
7. Enumerate different approaches for CNS targeting.
8. Give composition of Niosomes.
9. What is Metered Dose Inhaler (MDI)?
10. Give brief application of biodegradable polymers in microencapsulation.