

QP Code: 724006

Reg. No.....

**Seventh Semester B. Pharm Degree Regular/Supplementary
Examinations September 2024
Novel Drug Delivery Systems
(2017 Scheme)**

Time: 3 Hours

Max. 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 diagrams wherever necessary*

Essays

(2x10=20)

1. Define microencapsulation. Discuss the process of microencapsulation by various methods with examples and applications
2. Discuss the formulation considerations of Buccal delivery systems

Short Notes

(7x5=35)

3. What are monoclonal antibodies. Mention their applications.
4. Explain the formulation design of "Alzet Osmotic Pump" with a neat labelled diagram
5. What are niosomes. Explain the structural components of niosomes.
6. Briefly explain the applications of polymers in the formulation of controlled-release drug delivery systems.
7. What are ophthalmic inserts. Explain the design aspects of the Ocusert system.
8. What is Nanoparticle drug delivery system. Write its advantages and disadvantages
9. What are inhalers. Add a brief note on pressurised metered dose inhalers

Answer Briefly

(10x2=20)

10. Differentiate between biodegradable and non-biodegradable polymers
11. Write the limitations of conventional ocular preparations
12. Write the role of cholesterol in the formulation of liposomes
13. What is the type of polymers used in implantable drug delivery systems
14. Define microspheres
15. What are transdermal patches
16. What do you understand by the terms mucoadhesion and bioadhesion
17. List out the approaches used in the design of gastro-retentive drug delivery systems
18. What are ion-exchange resins
19. What are permeation enhancers. Give examples
