

QP Code: 724006

Reg. No.....

**Seventh Semester B. Pharm Degree Supplementary Examinations
January 2025
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. What are controlled drug delivery systems. Explain the approaches to design controlled release formulations based on diffusion and dissolution
2. What are the various approaches for pulmonary drug delivery systems. Discuss in detail about the formulation and applications of metered dose inhalers

Short Notes

(7x5=35)

3. Elaborate on barriers to intra-ocular drug delivery
4. Mention the various approaches of targeted drug delivery systems along with their advantages and disadvantages
5. What are liposomes. Explain any one method of preparation of liposomes
6. Write the advantages and disadvantages of buccal delivery systems
7. Write the applications of gastro retentive drug delivery systems
8. Explain the various approaches to enhance the transdermal drug delivery
9. Explain the principle involved in Wurster Process

Answer Briefly

(10x2=20)

10. Write short notes on the Alzet Osmotic Pump
11. Write any two factors affecting drug absorption through the oral mucosa
12. What are the disadvantages of implants
13. Write short notes on Hydrodynamically Balanced Systems (HBS)
14. Write the commonly used propellants in metered dose inhalers
15. Write any four examples of polymers used in controlled drug delivery systems
16. Write short notes on ocuserts
17. Write the drawbacks of dry powder inhalers
18. What are niosomes
19. The concept of mucoadhesion / bio adhesion
