

QP Code: 724006

Reg. No.....

**Seventh Semester B. Pharm Degree Supplementary Examinations
December 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. Classify polymers. Explain in detail the biodegradable polymers.
2. State the applications and limitations on naso-pulmonary drug delivery systems. Discuss the formulation of metered dose inhalers.

Short Notes

(7x5=35)

3. Enlist the approaches involved in the design of implants. Discuss about the osmotic pump in detail.
4. Diffusion and dissolution-controlled release mechanism involved in the design and fabrications of oral controlled release drug delivery systems.
5. The applications of nebulizers in pulmonary drug delivery.
6. Non-erodible ocular drug delivery system.
7. Applications of monoclonal antibodies in pharmaceutical field.
8. Ideal characteristics of targeted drug delivery systems.
9. Factors controlling gastric retention of dosage forms.

Answer Briefly

(10x2=20)

10. What are niosomes.
11. Principle of mucoadhesion.
12. Advantages of GRDDS.
13. Approaches to overcome ocular barriers.
14. What are permeation enhancers.
15. Applications of Microencapsulation.
16. What are high density systems.
17. What are liposomes.
18. Factors affecting permeation.
19. Define controlled drug delivery and targeted drug delivery.
