QP Code: 724006 **Reg. No……**

Seventh Semester B. Pharm Degree Regular/Supplementary Examinations August 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. Discuss the application of polymers in the formulation of controlled-release drug delivery systems.
2. Explain the factors affecting the permeation of the drug through the skin. Describe any one type of transdermal drug delivery system with a neat diagram

Short Notes **(7x5=35)**

3. What are ion exchange resins. Explain the ion exchange drug delivery system with suitable examples.
4. Discuss the methods of microencapsulation by coacervation phase separation technique with suitable examples.
5. What are implantable osmotic pumps and explain with suitable examples.
6. What are the ideal characteristics of Ocular Drug Delivery Systems.
7. State the applications of the naso-pulmonary drug delivery system. Discuss the formulation of metered dose inhalers.
8. Write the various approaches for gastro retention of the drug delivery system.
9. What is liposome drug delivery system. Write its advantages and disadvantages.

Answer Briefly **(10x2=20)**

10. Write the advantages of targeted drug delivery systems
11. What are monoclonal antibodies
12. Write short notes on Dissolution Controlled Oral Drug delivery systems
13. What are ocuserts
14. Write two techniques in the production of microparticles
15. Enlist the commonly used preservatives in ophthalmic products
16. Mention the basic components of transdermal drug delivery systems
17. What are permeation enhancers. Give examples
18. Write the merits and demerits of subdermal implants
19. What are microcapsules.

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