

QP Code: 724006

Reg. No.....

**Seventh Semester B. Pharm Degree Regular/Supplementary
Examinations February 2023
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 approaches to design controlled release dosage forms. Explain the principle involved in the design of dosage form using ion exchange resins (5+5)
2. Discuss the formulation aspects in the development of buccal patches citing suitable examples

Short Notes

(7x5=35)

3. Explain the basic components of transdermal patches
4. Importance of polymers in formulation development
5. Explain in-situ ocular delivery systems
6. Discuss formulation criteria for pulmonary route of drug administration
7. Differentiate between liposomes and niosomes
8. Discuss the limitations of conventional ocular delivery systems
9. Explain any three theories of mucoadhesion

Answer Briefly

(10x2=20)

10. Define repeat action tablets with examples
11. Write the merits and demerits of transdermal patches
12. Mention two examples each of hydrophilic and hydrophobic polymers
13. Enlist ideal features of permeation enhancers with examples
14. What are implants. Give example
15. Classify types of nasal formulations
16. Enlist the applications of microencapsulation
17. Mention the applications of nanoparticles.
18. Write the scope of targeted drug delivery
19. Enlist physico-chemical factors affecting selection of drug candidate
