Seventh Semester B. Pharm Degree Regular/Supplementary **Examinations February 2023 Novel Drug Delivery Systems**

(2017 Scheme)

Time: 3 Hours

- 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

Essavs

- 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

- 3. Explain the basic components of transdermal patches
- 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
- Discuss the limitations of conventional ocular delivery systems
- Explain any three theories of mucoadhesion

Answer Briefly

- 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 solid lipid nanoparticles
- 18. Write the scope of targeted drug delivery
- 19. Enlist physico-chemical factors affecting selection of drug candidate *******

(2x10=20)

(7x5=35)

(10x2=20)

Max. Marks: 75

CORRECTION / NO-CORRECTION FILE

QPCODE: 724006

Dated: 20-02-2023

Question No.17

Modified as "Mention the applications of nanoparticles."

Corrections/Modifications/Replacement of Questions if any shall be made available to all students. Take the print out of the Correction File in such cases and distribute to all students.

(Sd/-)

CONTROLLER OF EXAMINATIONS