Roll No. | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 22

B.Pharma (Sem.-7)

NOVEL DRUG DELIVERY SYSTEM-THEORY

Subject Code : BP-704T

M.Code : 78390

Time : 3 Hrs. Max. Marks : 75

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains THREE questions carrying TEN marks each and student has to attempt any TWO questions.**
3. **SECTION-C contains NINE questions carrying FIVE marks each and student has to attempt any SEVEN questions.**

SECTION-A

Answer briefly :

1) Give the differences between controlled and sustained release formulations.

2) What is the need for mucoadhesive systems? Mention their advantages.

3) Write the principle and advantages of osmotic drug delivery systems.

4) What are hydrogels? Mention the applications of hydrogels.

5) Write the principle and advantages of pH dependent systems.

6) Write the differences between biodegradable and biocompatible polymers. Give two examples of each.

7) Write about the role of permeation enhancers in transdermal drug delivery systems with suitable examples.

8) Mention the advantages and disadvantages of drug targeting and give suitable examples of diseases for which targeting is required.

9) Write the principle in the formulation of altered density systems. Mention their applications.

10) Write the qualities of drugs suitable for controlled release dosage forms.

SECTION-B

11) Write the principle advantages and disadvantages, methods of preparation and application of liposomal drug delivery systems.

12) Enumerate the characteristics of drug to the formulated as TDDS. Discuss the different methods of formulating and evaluation of Transdermal Drug Delivery Systems.

13) Explain the design and evaluation of controlled release formulations with suitable example.

SECTION-C

14) Discuss the role of plasticizers in transdermal drug delivery systems.

15) Explain the mechanisms of drug release from controlled release dosage forms and how they are established.

16) Write about the evaluation tests meant for mucoadhesive systems.

17) Give the classification of polymers based on their structure with suitable examples.

18) Differentiate between dissolution controlled and diffusion controlled systems. Mention their relative advantages.

19) Write about stability problems of liposomes and approaches for stabilization.

20) Write the applications of natural gums in the design of controlled drug delivery.

21) Explain the principle of osmotic drug delivery systems.

22) Explain the formulation and evaluation of reservoir and matrix type systems.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.