

Roll No.

Total No. of Pages : 02

Total No. of Questions : 13

B.Pharma. (Sem.-7)

NOVEL DRUG DELIVERY SYSTEM-THEORY

Subject Code : BP-704T

M.Code : 78390

Date of Examination : 19-12-2022

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

- 1. Write briefly :**
- a) Polymers
 - b) Bio-adhesive system
 - c) Permeation
 - d) Ion exchange
 - e) GRDDS
 - f) Diffusion
 - g) Dissolution
 - h) Bio-adhesive
 - i) Ocular route
 - j) Noisome

SECTION-B

2. Classify Polymers with properties of each. Highlight the benefit of polymers in the formulation of controlled release drug delivery system.
3.
 - a) Enumerate formulation approaches of microencapsulation.
 - b) Explain the principle of muco-adhesion.
4. Write short note on :
 - a) Ocular drug delivery system
 - b) Monoclonal antibodies

SECTION-C

5. Explain physicochemical and biological properties of drugs relevant to controlled delivery system.
6. Explain different methods for the preparation of TDDS.
7. What is the mechanism behind permeation enhancers?
8. Explain the pharmaceutical application of Gastroretentive drug delivery system.
9. Give advantages and disadvantages of:
 - a) Microspheres
 - b) Nasal spray
10. What are the approaches for the preparation and evaluation of nanoparticles.
11. Give pharmaceutical application of:
 - a) IUDs
 - b) Nanoparticles
12. Explain the formulation aspect of:
 - a) Inhalers
 - b) osmotic pumps.
13. Write short note on:
 - a) Factors affecting permeation
 - b) Transmucosal permeability

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