CLASS: B.Pharm V SEM EXAM: 2022

**Subject: Pharmaceutics** 

Paper Code: BP-704T

Paper Name: Novel Drug Delivery System

Time: 3 hours Max Marks: 75

Note: Question paper is divided in two sections A&B. Attempt all section as per instruction.

## SECTION- A

Note: Answer any five questions in about 150 words. Each question carries 7 marks.

- 1. Write a short note on nebulizers.
- 2. Give the pharmaceutical application of microencapsulation.
- 3. Discuss activation modulated drug delivery systems.
- 4. Write a note on monoclonal antibodies.
- 5. Explain the concept of controlled drug delivery system
- 6. Discuss the concept of osmotic pump.
- 7. How permeation enhancers promotes dermal penetration of drug.
- 8. Define the microencapsulation with advantages and disadvantages.
- 9. Discuss the properties of drugs relevant to controlled release formulations.
- 10. Write down the application of polymers in the formulation of controlled drug delivery.

## **SECTION-B**

Note: Answer any four questions in detail. Each question carries ten marks.

- 1. Explain the concept of controlled drug delivery system and approaches to design them.
- 2. Explain the intra-ocular barriers and method to overcome them.
- 3. Discuss the basic components of TDDS. Discuss various factors affecting drug permeation through skin, in details.
- 4. Write a detail note on approaches for GRDDS(Gastro-retentive drug delivery system).
- 5. Discuss the nasal-pulmonary route of drug delivery. Give a note on the formulation of inhalers
- 6. Write down the development and applications of IUDs (intra uterine devices). Give the advantages and disadvantages of Intrauterine drug delivery systems.
- 7. Explain the following: (a) Liposomes (b) Niosomes
- 8. Discuss transmucosal permeability and formulation consideration of buccal delivery system.