

Roll No.....
Total No. of Questions: [13]

Total No. of Printed Pages: [01]

B.Pharmacy (Semester – 7th)
NOVEL DRUG DELIVERY SYSTEM
Subject Code: BP704T
Paper ID: [17170139]

Time: 03 Hours

Maximum Marks: 75

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 9 questions of 5 marks each. The student has to attempt any 7 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A

(2 marks each)

- Q1. Explain the following:
- a) Ocuserts
 - b) Liposomes,
 - c) Osmotic pump
 - d) Metered dose Inhaler
 - e) Intrauterine devices
 - f) Significance of microencapsulation
 - g) First law of diffusion
 - h) Half life and protein binding
 - i) Nanoparticles
 - j) Gastroretentive drug delivery systems

Section – B

(5 marks each)

- Q2. Describe how Polymers used in controlled released drug delivery systems.
- Q3. Write various approaches to design controlled release formulations.
- Q4. Write the advantages and disadvantages of mucosal(buccal) drug delivery systems.
- Q5. Write the advantages and disadvantages of liposome and, niosome based drug delivery Systems.
- Q6. Write in brief about Ocular Drug Delivery Systems.
- Q7. Applications disadvantages of transdermal drug Delivery Systems.
- Q8. Write in brief about Nasopulmonary drug delivery systems
- Q9. Write various advantages, disadvantages, approaches for Gastroretentive drug delivery Systems (GRDDS)
- Q10. Write briefly about types of formulations used in Inhalers, nasal sprays and nebulizers.

Section – C

(10 marks each)

- Q11. What are targeted drug delivery systems? Write in detail various types of targeted drug delivery systems along with their advantages and disadvantages.
- Q12. What are Controlled drug delivery systems? Write in detail various types of Controlled drug delivery systems with their advantages and disadvantages in the course of therapy.
- Q13. What is microencapsulation? Write the methods of microencapsulation and applications of microspheres or microcapsules.