

Enrollment No: \_\_\_\_\_

Exam Seat No: \_\_\_\_\_

# C.U.SHAH UNIVERSITY

## Winter Examination-2019

**Subject Name: Drug Delivery System**

**Subject Code: MPH102T**

**Branch: M. Pharm (Pharmaceutics)**

**Semester: 1**

**Date: 03/12/2019**

**Time: 02:30 To 05:30**

**Marks: 75**

**Instructions:**

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
  - (2) Instructions written on main answer book are strictly to be obeyed.
  - (3) Draw neat diagrams and figures (if necessary) at right places.
  - (4) Assume suitable data if needed.
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**Q-I Answer following: (20)**

1. Classify polymers. 02
2. Discuss the limitations of conventional ocular dosage forms. 02
3. Enumerate the factors affecting CRDDS. 02
4. Briefly explain personalized Medicines. 02
5. What categories of drug are suitable for Floating Drug Delivery? 02
6. Enumerate the factors affecting GRDDS. 02
7. Enlist the importance of Protein and Peptides in Pharmaceuticals. 02
8. Explain the rationale for TDDS. 02
9. Briefly explain about Penetration enhancers for TDDS. 02
10. Explain advantages and disadvantages of Buccal Drug delivery system. 02

**Q-II Attempt any two: (20)**

1. Explain the basic components of Osmotic Drug Delivery system with examples. 10
2. Explain the mechanism of drug delivery from CR/SR formulations. 10
3. Discuss the formulation challenges associated with delivery of proteins and peptides. 10

**Q-III Attempt any seven: (35)**

1. Write a note on pH activated Rate Controlled Drug Delivery System. 5
2. Discuss the role of polymers in Pharmaceutical Dosage forms. 5
3. Write a note on Ocular Implants. 5
4. Discuss evaluation parameters for BDDS. 5
5. Discuss the concept of in-situ forming gels for ophthalmic drug delivery. 5
6. Explain the basic components of Transdermal Drug Delivery system. 5
7. Write a note of PEGylation. 5



8. Explain liposomal delivery system for vaccines. 5
9. Mention different approaches to get Gastroretention and describe any one approach 5

