

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Ph. SEMESTER– VII • EXAMINATION – WINTER -2020**Subject Code: 2270016****Date: 16/01/2021****Subject Name: INNOVATIONS IN CONVENTIONAL DRUG DELIVERY SYSTEM****Time: 10:30AM To 12:30PM****Total Marks: 54****Instructions:**

1. Attempt any **THREE** questions from Q-1 to Q-6.
2. Q.7 is compulsory to attempt.
3. Make suitable assumptions wherever necessary.
4. Figures to the right indicate full marks.

- Q.1** (a) Enlist the techniques used in preparation of fast dispersible tablet and discuss any one in details. **06**
(b) Enlist advantages and disadvantages of Sublingual drug delivery system **05**
(c) What are the basic components of osmotic drug delivery system? **05**
- Q.2** (a) Enlist various methods for preparation of nanosuspension and discuss any one in details. **06**
(b) Enlist recent innovations in advances in capsules. Describe any one in detail. **05**
(c) Define the term pellets. Explain the innovation in pelletization processes. **05**
- Q.3** (a) Enlist advantages, disadvantages and limitations of fast dispersible tablet. **06**
(b) Write a note on pulsincap Technology. **05**
(c) Enlist the advantages and disadvantages of pellets. **05**
- Q.4** (a) Discuss the principle and mechanism of osmotic drug delivery system. Write its merits and demerits. **06**
(b) What is prefilled syringe? Write its advantages and disadvantages. **05**
(c) Write a note on Extruded product spheronizing process. **05**
- Q.5** (a) Write a note on materials used for prefilled syringes. **06**
(b) Enlist various approaches of in-situ gelation and discuss any one in detail. **05**
(c) Describe the innovations in powder aerosols drug delivery. **05**
- Q.6** (a) What is needle free injection technology? Write its advantages and disadvantages. **06**
(b) Differentiate between Microemulsion and Macroemulsion giving suitable example. **05**
(c) Enlist various characteristics of SEDDSs. **05**
- Q.7** (a) Describe the any one recent innovations in Emulsion. **06**
- OR**
- (a) Discuss the limitations of conventional ocular dosage forms. **06**
- OR**
- (a) Discuss in detail ocular insert. **06**
