

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
M. Pharm. – SEMESTER – II • EXAMINATION – SUMMER - 2018

Subject Code: 2920102**Date: 16/05/2018****Subject Name: Novel Drug Delivery System Part-I****Time: 10:30 AM TO 01:30 PM****Total Marks: 80****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Write ideal characteristics of the drug candidate for the GRDDS. Write the advantages and disadvantages of GRDDS. **06**
- (b) Describe in detail: effervescent based floating drug delivery systems. **05**
- (c) Enlist the approaches of GRDSS. Explain the various evaluation parameters for GRDDS. **05**
- Q.2** (a) Discuss in detail: formulation of sublingual dosage form with selection of drug. **06**
- (b) Enlist the various approaches for colon targeting. Give details of microbial flora activated system for colon targeting. **05**
- (c) Explain advantages, limitations and factors affecting drug delivery via buccal route. **05**
- Q.3** (a) Define osmotic drug delivery system. Write its principle and mechanism of drug release form dosage form. **06**
- (b) Enlist the different type of osmotic pumps and describe elementary osmotic pump in detail. **05**
- (c) Discuss in detail: basic components of osmotic drug delivery system with suitable example. **05**
- Q.4** (a) Enlist the recent innovation techniques developed in capsules. Explain inner cap technology in detail. **06**
- (b) Discuss in detail non-animal capsule shell. **05**
- (c) Write a short note on “pulsin cap technology”. **05**
- Q.5** (a) Write a note on prefilled syringe technology for injection formulations **06**
- (b) Discuss in detail: Emulgels. **05**
- (c) Write a note on Parenteral emulsions. **05**
- Q. 6** (a) Explain the different techniques for particle coating with applications. **06**
- (b) Explain various approaches of taste masking. **05**
- (c) Describe the recent innovations in liquid formulation **05**
- Q.7** (a) Classify the pharmaceutical packaging material. Discuss in detail factors affecting on selection of packaging material. **06**
- (b) Discuss in detail various types of plastics used in containers with their characteristics. **05**
- (c) Write a note on evaluation test of aerosol packaging containers. **05**
