

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
M. Pharm. – SEMESTER – II • EXAMINATION – WINTER • 2014

Subject Code: 2920102

Date: 24-12-2014

Subject Name: Novel Drug Delivery System Part-I

Time: 10:30 am - 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) What are extractables and leachables? Give their importances in selection of containers and closures for packaging. **06**
- (b) Write a note on periodontal tablets with formulations and evaluations **05**
- (c) Explain the different techniques for particle coating with applications. **05**
- Q.2** (a) Write a note on different type of glass with their physicochemical properties **06**
- (b) Explain the biology of human buccal mucosa and explain the different types of buccal tablets with schematic diagram. **05**
- (c) Write a note on prefilled syringe technology for injection formulations **05**
- Q.3** (a) Give the FDA regulations for selection of packaging materials **06**
- (b) Explain taste masking formulations with examples. **05**
- (c) Write a note on novel approaches in semisolid dosage forms **05**
- Q.4** (a) Write a note on needle free injection technology **06**
- (b) Explain the composition and evaluation of rubber closures as packaging materials **05**
- (c) Write a note on preparation and evaluation of multiple emulsion with examples. **05**
- Q.5** (a) Describe different approaches to design the colon tablets **06**
- (b) Give the properties and evaluation of plastic materials for packaging **05**
- (c) Write a note on zero order released sterile intramuscular dosage form **05**
- Q.6** (a) Write a note on different approaches of modified drug released capsule **06**
- (b) List out the parameters for selection of drug for sublingual tablets **05**
- (c) Give the differences between liposomes and neosomes with their structures. **05**
- Q.7** (a) Classify the gastro retentive drug delivery system. Explain high density approach with suitable examples **06**
- (b) Describe the recent innovations in liquid formulation **05**
- (c) Write a note on pulsatile drug delivery system with its applications **05**
