

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

M.PHARM- SEM-II-EXAMINATION – JULY 2012

Subject code: 2920102

Date: 06/07/2012

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) Enlist parameters to be considered in the design of controlled drug delivery system. Discuss various approaches for oral delayed release drug delivery system. **06**
- (b) Describe application of nanoparticle drug delivery system. **05**
- (c) Which categories of drug are suitable for GRDDS and Why? Explain expandable approach for GRDDS. **05**
- Q.2** (a) Enlist patented techniques of osmotic drug delivery system. Explain Higuchi-Theeuwes Pump. **06**
- (b) What are the objectives of sublingual drug delivery system? Discuss evaluation parameters of sublingual drug delivery system. **05**
- (c) Classify type of packaging material. Discuss selection criteria for packaging material and type. **05**
- Q.3** (a) Discuss in detail about non animal capsule. **06**
- (b) Enumerate various approaches for colon targeting. Explain microbial flora activated system for colon targeting. **05**
- (c) Discuss factors affecting on drug release from osmotic drug delivery system. **05**
- Q.4** (a) Discuss complexation technique for taste masking. **06**
- (b) Discuss various approaches of floating drug delivery system. **05**
- (c) Write a note on child resistant packaging. **05**
- Q.5** (a) Enlist recent innovation of particle coating. Discuss Fluid bed coating. **06**
- (b) Discuss various approaches of delayed release capsule technology. **05**
- (c) Discuss regulatory aspects of packaging. **05**
- Q.6** (a) Describe various approaches to develop parenteral controlled drug delivery system. **06**
- (b) Enlist various method used for bioadhesive property measurement. Discuss any one. **05**
- (c) Describe recent advances in semisolid dosage form. Explain hydrogel. **05**
- Q.7** (a) Classify types of Liposomes based on composition. Explain mechanism of liposome preparation. **06**
- (b) Write a note on Nanoemulsion drug delivery system. **05**
- (c) Describe formulation of ocular controlled drug delivery system. **05**
