

Seat No.: _____
No. _____

Enrolment

GUJARAT TECHNOLOGICAL UNIVERSITY

M. Pharm. – SEMESTER – II • EXAMINATION – SUMMER 2013

Subject Code: 2920102

Date: 23-05-2013

Subject Name: Novel Drug Delivery System Part-1

Time: 02.30 pm - 05.30 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) | Discuss the principle of osmotic drug delivery systems. Classify osmotic drug delivery systems and write a detailed note on controlled porosity osmotic pumps | 06 |
| | (b) | Write a note on basic components of osmotic drug delivery system giving examples for each component | 05 |
| | (c) | Describe Higuchi-Leeper pump | 05 |
| Q.2 | (a) | Discuss the rationale for developing colon targeted drug delivery system. Describe in detail about microbially triggered systems | 06 |
| | (b) | Describe the factors affecting drug absorption from colon targeted drug delivery systems | 05 |
| | (c) | Write a brief note on evaluation of colon targeted drug delivery systems | 05 |
| Q.3 | (a) | Enlist the methods of preparation of liposomes. Write in detail about mechanical dispersion method | 06 |
| | (b) | Discuss the evaluation parameters for liposomes | 05 |
| | (c) | Write a short note on application of liposomes in drug targeting | 05 |
| Q.4 | (a) | Discuss the strategies employed for taste masking of drugs | 06 |
| | (b) | Write a short note on advances in particle coating technology | 05 |
| | (c) | Classify pharmaceutical packaging materials with examples | 05 |
| Q.5 | (a) | Classify glass containers. Describe the tests for evaluation of suitability of glass as a container | 06 |
| | (b) | Write a note on paper and board based packaging materials | 05 |
| | (c) | Write a note on stability aspects of packaging materials | 05 |
| Q. 6 | (a) | Describe the approaches used in developing novel ocular drug delivery systems | 06 |
| | (b) | Write a note on soluble ophthalmic drug insert | 05 |
| | (c) | Discuss the limitations of conventional ocular dosage forms | 05 |
| Q.7 | (a) | Discuss about hydrogels as a novel approach to control drug delivery | 06 |
| | (b) | How are microemulsions evaluated? | 05 |
| | (c) | Discuss the advantages and limitations of buccal and sublingual drug delivery | 05 |
