

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Ph Semester–III Examination Dec. - 2011

Subject code: 930102

Date: 10/12/2011

Subject Name: Novel Drug Delivery System: Part-II

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.**

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|-------------|-----|--|-----------|
| Q.1 | (a) | What are standard and co-processed excipients? Discuss with suitable example | 06 |
| | (b) | Discuss inactive ingredient database | 05 |
| | (c) | Write a note on polymers as solubilizing agents | 05 |
| Q.2 | (a) | Give biodegradation mechanism of naturally occurring polymers | 06 |
| | (b) | Discuss hydrolysable polymers | 05 |
| | (c) | Discuss polymers used in colon targeted drug delivery with suitable example | 05 |
| Q.3 | (a) | Describe various polymers which undergo sol-gel transition | 06 |
| | (b) | Write a note on PEGylation | 05 |
| | (c) | Give application of nanotechnology in the field of pharmaceutical science | 05 |
| Q.4 | (a) | Discuss any one method for particle coating technology | 06 |
| | (b) | Discuss various approaches of in-situ gelation | 05 |
| | (c) | Give advantages of using sonophoresis as a physical penetration enhancer | 05 |
| Q.5 | (a) | Discuss the problems associated with liposomes drug delivery system | 06 |
| | (b) | What is intelligent drug delivery system? Give its application | 05 |
| | (c) | Write a note on tailor-made drug delivery system | 05 |
| Q. 6 | (a) | Discuss issues related to delivery of proteins and peptides | 06 |
| | (b) | Give drug delivery applications of supercritical fluid technology | 05 |
| | (c) | Discuss evaluation of bioadhesive drug delivery system | 05 |
| Q.7 | (a) | Write note on immunomodulated molecules | 06 |
| | (b) | Discuss any one biotech based product in detail | 05 |
| | (c) | Write potential of the prodrug approach | 05 |
