

GUJARAT TECHNOLOGICAL UNIVERSITY

B.PHARM – SEMESTER – VII • EXAMINATION – WINTER – 2015

Subject Code: 2270016

Date: 16/12/2015

Subject Name: Innovations in Conventional Drug Delivery System

Time: 10.30 AM to 1.30 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) | Classify different types of osmotic pumps. Discuss any one in detail. | 06 |
| | (b) | What are biodegradable polymers? Give the applications of biodegradable polymers. | 05 |
| | (c) | What are the basic components of osmotic drug delivery system? | 05 |
| Q.2 | (a) | Give the significance of fast dispersible tablet. Give the techniques used in preparation of fast dispersible tablet. | 06 |
| | (b) | What is mucoadhesion? Describe different mechanisms of bioadhesion. | 05 |
| | (c) | Enlist various approaches for taste masking. Explain any one approach with examples. | 05 |
| Q.3 | (a) | Discuss the merits and demerits of sublingual dosage forms. How are they evaluated? | 06 |
| | (b) | Enlist recent innovations in advances in capsules. Describe any one in detail. | 05 |
| | (c) | Write a note on pulsincap Technology. | 05 |
| Q.4 | (a) | Explain the innovation in pelletization processes. | 06 |
| | (b) | What is in-situ gel? Discuss various approaches of in-situ gelation. | 05 |
| | (c) | What is liposome? Enlist the material used for preparation of liposome. Write about any one method of preparation. | 05 |
| Q.5 | (a) | Write a note on prefilled syringe technology for injection formulations. | 06 |
| | (b) | Write a note on needle free injection technology. | 05 |
| | (c) | Write a note on erodible occusert. | 05 |
| Q. 6 | (a) | Discuss the limitations of conventional ocular dosage forms. | 06 |
| | (b) | Write a note on innovations in powder aerosols drug delivery. | 05 |
| | (c) | Describe the recent innovations in liquid solution. | 05 |
| Q.7 | (a) | Enlist types of innovation in liquid dosage form. Discuss pharmaceutical applications of nanoemulsion. | 06 |
| | (b) | What is microemulsion? Give the evaluation methods for microemulsion. | 05 |
| | (c) | Describe various methods for preparation of nanosuspension. | 05 |
