

GUJARAT TECHNOLOGICAL UNIVERSITY

B.PHARM. - SEMESTER– VII • EXAMINATION – SUMMER-2016

Subject Code: 2270016

Date: 13/05/2016

Subject Name: Innovations in Conventional Drug Delivery System

Time: 2:30 PM to 5:30 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) | Explain various approaches used in developing novel ocular drug delivery system. | 06 |
| | (b) | Write a detailed note on non-animal capsule shells. | 05 |
| | (c) | Discuss various methods for preparation of nanosuspensions. | 05 |
| Q.2 | (a) | Discuss various methods for parenteral DEPOT formulations. | 06 |
| | (b) | Discuss novel technology in implants. | 05 |
| | (c) | Write a short note on “coacervation phase separation” of particle coating. | 05 |
| Q.3 | (a) | Explain various mechanisms of gastroretentive drug delivery systems. | 06 |
| | (b) | Write a note on novel ophthalmic semisolid preparations. | 05 |
| | (c) | Discuss about the evaluation parameters of microemulsions. | 05 |
| Q.4 | (a) | Explain the various strategies employed in taste masking of drugs. | 06 |
| | (b) | Discuss the recent innovations in parenteral packaging. | 05 |
| | (c) | Write a note on evaluation parameters of floating tablets. | 05 |
| Q.5 | (a) | Discuss the principle of osmotic drug delivery systems. Classify them and write a note on controlled porosity pumps. | 06 |
| | (b) | Write a short note on basic components of osmotic drug delivery systems with examples. | 05 |
| | (c) | Describe Higuchi- Leeper pump. | 05 |
| Q. 6 | (a) | Classify glass containers. Describe the evaluation tests for suitability of glass containers. | 06 |
| | (b) | Discuss the approaches to deliver intact drug molecule to colon. | 05 |
| | (c) | Describe Pulsincap Technology. | 05 |
| Q.7 | (a) | What are hydrogels? Discuss the approaches to control drug delivery using hydrogels. | 06 |
| | (b) | Describe the methods to determine the mucoadhesive property of formulations | 05 |
| | (c) | Write a note on Ocusert. | 05 |
