

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM – SEMESTER – 7- EXAMINATION – WINTER - 2018

Subject Code: 2270016**Date: 28/11/2018****Subject Name: Innovations in Conventional Drug Delivery System****Time: 10:30 AM TO 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) | Write disadvantages of hard gelatine capsule shell. Enlist recent innovations in capsule shell, describe any one in detail. | 06 |
| | (b) | Define matrix Tablets. Explain factors influencing drug release from Matrix tablet. | 05 |
| | (c) | Write a detail note on non-animal capsule shells. | 05 |
| Q.2 | (a) | Discuss the principle of osmotic drug delivery systems. Classify oral ODDS and write a note on push pull pumps. | 06 |
| | (b) | Write a detail note on basic components of osmotic drug delivery systems with examples. | 05 |
| | (c) | Describe Pulsincap Technology. | 05 |
| Q.3 | (a) | Describe various methods for preparation of nanosuspension. | 06 |
| | (b) | Write a note on polymers used in preparation of matrix tablet. | 05 |
| | (c) | Give Advantages, Disadvantages and pharmaceutical applications of pelletization. | 05 |
| Q.4 | (a) | Write a note on prefilled syringe technology for injection formulations. | 06 |
| | (b) | Write a note on needle free injection technology. | 05 |
| | (c) | Explain various approaches used in developing novel ocular drug delivery system. | 05 |
| Q.5 | (a) | Give the significance of fast dispersible tablet. Enlist techniques used in preparation of fast dispersible tablet and discuss one in detail. | 06 |
| | (b) | Discuss the merits and demerits of sublingual dosage forms. Write drug selection criteria for sublingual tablet. | 05 |
| | (c) | Write a note on innovations in powder aerosols drug delivery. | 05 |
| Q. 6 | (a) | What are ophthalmic inserts? Classify them. Give ideal requirements for ophthalmic inserts. | 06 |
| | (b) | Discuss various methods for parenteral DEPOT formulations. | 05 |
| | (c) | Write a note on polymers used in ophthalmic drug delivery systems. | 05 |
| Q.7 | (a) | What are Hydrogels? Discuss polymers used to prepare hydrogels. Give pharmaceutical applications of hydrogels. | 06 |
| | (b) | What are SMEDDS? Write a note on materials and method used to prepare SMEDDS. | 05 |
| | (c) | Enlist types of innovation in dispersed systems. Discuss pharmaceutical applications of nanoemulsion. | 05 |
