

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM. – SEMESTER VIII– • EXAMINATION – WINTER-2020

Subject Code: 2280016**Date: 16/01/2021****Subject Name: Current Advances in Novel Drug Delivery System****Time: 02:00PM TO 04:00PM****Total Marks: 54****Instructions:**

1. Attempt any THREE questions from Q-1 to Q-6.
2. Q.7 is compulsory to attempt.
3. Make suitable assumptions wherever necessary.
4. Figures to the right indicate full marks.

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|-------------|-----|--|-----------|
| Q.1 | (a) | Write a note on characterization of Liposomes. | 06 |
| | (b) | Discuss on Characterization and Evaluation of Microcapsules. | 05 |
| | (c) | Explain nanoparticulate drug delivery system. | 05 |
| Q.2 | (a) | Differentiate film and diskette. Discuss methods of preparation of diskette. | 06 |
| | (b) | Discuss rational, applications and limitations of mucoadhesive drug delivery systems. | 05 |
| | (c) | Explain air suspension technique for Microencapsulation | 05 |
| Q.3 | (a) | Enumerate methods used for preparation of liposome. Discuss any one in detail. | 06 |
| | (b) | Discuss the design of transdermal drug delivery system. | 05 |
| | (c) | Write a short note on “formulation of floating microspheres”. | 05 |
| Q.4 | (a) | Describe evaluation parameters of SEDDS. | 06 |
| | (b) | Write a note on polymerization based method of nanoparticles preparation. | 05 |
| | (c) | Explain different method of characterization of Microsphere in detail. | 05 |
| Q.5 | (a) | Define Niosomes. Explain different methods of preparation of Niosomes. | 06 |
| | (b) | Explain in detail evaluation methods for mucoadhesive drug delivery. | 05 |
| | (c) | Discuss formulation of Self emulsifying drug delivery system. | 05 |
| Q. 6 | (a) | Explain the selection procedure of excipients in self emulsifying drug delivery systems. | 06 |
| | (b) | Discuss the problems associated with liposomes drug delivery system. | 05 |
| | (c) | Give design and applications of Iontophoretic drug delivery system. | 05 |
| Q.7 | (a) | Define Pellet. Give the advantage and Disadvantage. Explain any one method. | 06 |
| | | OR | |
| | (a) | Discuss pH and Glucose sensitive approaches for In-situ gels. | 06 |
| | | OR | |
| | (a) | Give advantages of using sonophoresis as a physical penetration enhancer. | 06 |
