

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Pharm - SEMESTER– VIII • EXAMINATION–WINTER-2016

Subject Code: 2280016**Date: 02/12/2016****Subject Name: Current advances in Novel Drug Delivery Systems****Time: 02.30 pm – 05.30 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 liposomes based on their structure. Describe merits and demerits of liposomes. | 06 |
| | (b) | Describe pharmaceutical applications of nanoparticles. | 05 |
| | (c) | Define niosomes. Explain any one method of preparation of niosomes. | 05 |
| Q.2 | (a) | Enumerate methods used for preparation of liposome. Discuss any one in detail. | 06 |
| | (b) | Discuss rational, applications and limitations of mucoadhesive drug delivery systems. | 05 |
| | (c) | Describe quality control tests of nanoparticles drug delivery system. | 05 |
| Q.3 | (a) | Discuss various factors affecting on bioadhesion. | 06 |
| | (b) | Discuss design and applications of Iontophoretic drug delivery system. | 05 |
| | (c) | Enlist <i>in-vitro</i> methods used for evaluation of bioadhesion. Explain any one. | 05 |
| Q.4 | (a) | Define <i>In situ</i> gel. Discuss various approaches of <i>insitu</i> gel preparation. | 06 |
| | (b) | Write a note on pelletization techniques. | 05 |
| | (c) | Describe types of excipients used in preparation of SEDDS. | 05 |
| Q.5 | (a) | Differentiate film and diskette. Discuss methods of preparation of diskette. | 06 |
| | (b) | What is sonophoresis? Discuss advantages of sonophoresis technique. | 05 |
| | (c) | Enlist methods of preparation of microspheres. Explain solvent evaporation method. | 05 |
| Q. 6 | (a) | Discuss evaluation parameters of <i>insitu</i> gel drug delivery. | 06 |
| | (b) | Describe formulation method of Self emulsifying drug delivery system. | 05 |
| | (c) | Write a note on Transdermal patch. | 05 |
| Q.7 | (a) | Describe evaluation parameters of SEDDS. | 06 |
| | (b) | Write a note on polymerization based method of nanoparticles preparation. | 05 |
| | (c) | Describe significance of minitabets in oral drug delivery system. | 05 |
