

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>Insitu</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 |
