Seat No.:	Enrolment No.

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.

Q.1	(a)	Classify liposomes based on their structure. Describe merits and demerits of liposomes.	06
	(b) (c)	Describe pharmaceutical applications of nanoparticles. Define niosomes. Explain any one method of preparation of niosomes.	05 05
Q.2	(a) (b)	Enumerate methods used for preparation of liposome. Discuss any one in detail. Discuss rational, applications and limitations of mucoadhesive drug delivery systems.	06 05
	(c)	Describe quality control tests of nanoparticles drug delivery system.	05
Q.3	(a) (b) (c)	Discuss various factors affecting on bioadhesion. Discuss design and applications of Iontophoretic drug delivery system. Enlist <i>in-vitro</i> methods used for evaluation of bioadhesion. Explain any one.	06 05 05
Q.4	(a) (b) (c)	Define <i>Insitu</i> gel. Discuss various approaches of <i>insitu</i> gel preparation. Write a note on pelletization techniques. Describe types of excipients used in preparation of SEDDS.	06 05 05
Q.5	(a) (b) (c)	Differentiate film and diskette. Discuss methods of preparation of diskette. What is sonophoresis? Discuss advantages of sonophoresis technique. Enlist methods of preparation of microspheres. Explain solvent evaporation method.	06 05 05
Q. 6	(a) (b) (c)	Discuss evaluation parameters of <i>insitu</i> gel drug delivery. Describe formulation method of Self emulsifying drug delivery system. Write a note on Transdermal patch.	06 05 05
Q.7	(a) (b) (c)	Describe evaluation parameters of SEDDS. Write a note on polymerization based method of nanoparticles preparation. Describe significance of minitablets in oral drug delivery system.	06 05 05
