

GUJARAT TECHNOLOGICAL UNIVERSITY
M. Pharm. – SEMESTER – III • EXAMINATION – WINTER • 2014

Subject Code: 930102**Date: 06-12-2014****Subject Name: Novel Drug Delivery System Part-II****Time: 10:30 am - 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.

Q.1	(a)	What are biodegradable polymers? Classify them giving suitable examples. Give pharmaceutical application of biodegradable polymers.	06
	(b)	Write a detailed note on Environmentally responsive polymers.	05
	(c)	Write a note on polymers as solubilizing agents.	05
Q.2	(a)	Define mucoadhesion. Describe different mechanisms of bio-adhesion.	06
	(b)	Classify various mucoadhesive drug delivery systems. Write a note on in-vitro evaluation of mucoadhesive drug delivery system.	05
	(c)	Write a note on IIG status and impurity profile.	05
Q.3	(a)	Write a note on Immunomodulated molecules.	06
	(b)	Discuss delivery of proteins and peptides.	05
	(c)	Write a note on r-DNA technology.	05
Q.4	(a)	Discuss giving details, different methods for preparation of Neosomal Delivery Systems.	06
	(b)	Discuss characterization and evaluation of Neosomal Delivery Systems.	05
	(c)	Write a note on tailor-made medicine.	05
Q.5	(a)	Discuss design and applications of Iontophoretic drug delivery system.	06
	(b)	Define sonophoresis. Differentiate Iontophoresis and sonophoresis.	05
	(c)	Write applications of Hydrogels in drug delivery system.	05
Q.6	(a)	What is In situ Gel? Discuss various approaches of in-situ gelation.	06
	(b)	Write a note on PEGylation.	05
	(c)	What is spherical crystallization? Discuss its techniques and give application of spherical crystallization in pharmacy.	05
Q.7	(a)	What is diskette? Classify them. And discuss in brief method for preparation of diskette.	06
	(b)	Give pharmaceutical applications of supercritical fluid technology.	05
	(c)	Discuss prodrug approach in formulations of various types of drug delivery systems.	05
