Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

M. Pharm. – SEMESTER – II • EXAMINATION – SUMMER 2013

Subject Code: 2920102 **Date: 23-05-2013**

Subject Name: Novel Drug Delivery System Part-1

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)	Discuss the principle of osmotic drug delivery systems. Classify osmotic drug delivery systems and write a detailed note on controlled porosity osmotic pumps	**06**
	(b)	Write a note on basic components of osmotic drug delivery system giving examples for each component	**05**
	(c)	Describe Higuchi-Leeper pump	**05**
Q.2	(a)	Discuss the rationale for developing colon targeted drug delivery system. Describe in detail about microbially trigerred systems	**06**
	(b)	Describe the factors affecting drug absorption from colon targeted drug delivery systems	**05**
	(c)	Write a brief note on evaluation of colon targeted drug delivery systems	**05**
Q.3	(a)	Enlist the methods of preparation of liposomes. Write in detail about mechanical dispersion method	**06**
	(b)	Discuss the evaluation parameters for liposomes	**05**
	(c)	Write a short note on application of liposomes in drug targeting	**05**
Q.4	(a)	Discuss the strategies employed for taste masking of drugs	**06**
	(b)	Write a short note on advances in particle coating technology	**05**
	(c)	Classify pharmaceutical packaging materials with examples	**05**
Q.5	(a)	Classify glass containers. Describe the tests for evaluation of suitability of glass as a container	**06**
	(b)	Write a note on paper and board based packaging materials	**05**
	(c)	Write a note on stability aspects of packaging materials	**05**
Q. 6	(a)	Describe the approaches used in developing novel ocular drug delivery systems	**06**
	(b)	Write a note on soluble ophthalmic drug insert	**05**
	(c)	Discuss the limitations of conventional ocular dosage forms	**05**
Q.7	(a)	Discuss about hydrogels as a novel approach to control drug delivery	**06**
	(b)	How are microemulsions evaluated?	**05**
	(c)	Discuss the advantages and limitations of buccal and sublingual drug delivery	**05**

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