Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

M. Pharm. – SEMESTER – II • EXAMINATION – SUMMER • 2014

Subject Code: 2920102 **Date: 29-05-2014**

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)**	Give the criteria of the drugs most suitable for sublingual drug delivery. Give the formulation attributes for sublingual drug delivery system.	**06**
	(b)	Write a note on 'Mouth Dissolving Tablets'.	**05**
	(c)	Drug for the disease/disorder that follows circadian rhythm can be formulated as delayed drug delivery system. Comment.	**05**
Q.2	**(a)**	Describe environmental control in parenteral manufacturing.	**06**
	(b)	Write the applications of particle coating.	**05**
	(c)	Describe role of packaging material in improving stability of the dosage form.	**05**
Q.3	**(a)**	Describe recent innovations in capsule technology.	**06**
	(b)	Write a note on 'Approaches for Parenteral Depot Formulations'.	**05**
	(c)	Describe evaluation tests for the Osmotic Drug Delivery System.	**05**
Q.4	**(a)**	Describe various approaches to taste masking.	**06**
	(b)	Write the factors affecting drug release from Osmotic Drug Delivery System.	**05**
	(c)	Compare and contrast Glass containers with plastic containers.	**05**
Q.5	**(a)**	Describe Wruster process for particle coating.	**06**
	(b)	Classify different types of osmotic pumps. Discuss any one in detail.	**05**
	(c)	Write a note on Parenteral emulsions.	**05**
Q. 6	**(a)**	Discuss the evaluation parameters for suspension.	**06**
	(b)	Describe formulation aspects, excipients used in manufacturing and evaluation parameters of effervescent antacid granules.	**05**
	(c)	Write a note on Emulgels.	**05**
Q.7	**(a)**	Write a note on solubility enhancement of the poorly soluble drugs.	**08**
	(b)	Explain in detail excipients used, factor affecting and formulation aspects of low density floating drug delivery system.	**08**

****