Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.PHARM – SEMESTER – VII • EXAMINATION – WINTER – 2015

Subject Code: 2270016 **Date: 16/12/2015**

Subject Name: Innovations in Conventional Drug Delivery System

Time: 10.30 AM to 1.30 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 different types of osmotic pumps. Discuss any one in detail.	**06**
	(b)	What are biodegradable polymers? Give the applications of biodegradable polymers.	**05**
	(c)	What are the basic components of osmotic drug delivery system?	**05**
Q.2	**(a)**	Give the significance of fast dispersible tablet. Give the techniques used in preparation of fast dispersible tablet.	**06**
	(b)	What is mucoadhesion? Describe different mechanisms of bioadhesion.	**05**
	(c)	Enlist various approaches for taste masking. Explain any one approach with examples.	**05**
Q.3	**(a)**	Discuss the merits and demerits of sublingual dosage forms. How are they evaluated?	**06**
	(b)	Enlist recent innovations in advances in capsules. Describe any one in detail.	**05**
	(c)	Write a note on pulsincap Technology.	**05**
Q.4	**(a)**	Explain the innovation in pelletization processes.	**06**
	(b)	What is in-situ gel? Discuss various approaches of in-situ gelation.	**05**
	(c)	What is liposome? Enlist the material used for preparation of liposome. Write about any one method of preparation.	**05**
Q.5	**(a)**	Write a note on prefilled syringe technology for injection formulations.	**06**
	(b)	Write a note on needle free injection technology.	**05**
	(c)	Write a note on erodible occusert.	**05**
Q. 6	**(a)**	Discuss the limitations of conventional ocular dosage forms.	**06**
	(b)	Write a note on innovations in powder aerosols drug delivery.	**05**
	(c)	Describe the recent innovations in liquid solution.	**05**
Q.7	**(a)**	Enlist types of innovation in liquid dosage form. Discuss pharmaceutical applications of nanoemulsion.	**06**
	(b)	What is microemulsion? Give the evaluation methods for microemulsion.	**05**
	(c)	Describe various methods for preparation of nanosuspension.	**05**

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