Seat No.: _____ Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.PHARM. - SEMESTER– VII • EXAMINATION – SUMMER-2016

Subject Code: 2270016 **Date: 13/05/2016**

Subject Name: Innovations in Conventional Drug Delivery System

Time: 2:30 PM to 5:30 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)**	Explain various approaches used in developing novel ocular drug delivery system.	**06**
	(b)	Write a detailed note on non-animal capsule shells.	**05**
	(c)	Discuss various methods for preparation of nanosuspensions.	**05**
Q.2	**(a)**	Discuss various methods for parenteral DEPOT formulations.	**06**
	(b)	Discuss novel technology in implants.	**05**
	(c)	Write a short note on “coacervation phase separation” of particle coating.	**05**
Q.3	**(a)**	Explain various mechanisms of gastroretentive drug delivery systems.	**06**
	(b)	Write a note on novel ophthalmic semisolid preparations.	**05**
	(c)	Discuss about the evaluation parameters of microemulsions.	**05**
Q.4	**(a)**	Explain the various strategies employed in taste masking of drugs.	**06**
	(b)	Discuss the recent innovations in parenteral packaging.	**05**
	(c)	Write a note on evaluation parameters of floating tablets.	**05**
Q.5	**(a)**	Discuss the principle of osmotic drug delivery systems. Classify them and write a note on controlled porosity pumps.	**06**
	(b)	Write a short note on basic components of osmotic drug delivery systems with examples.	**05**
	(c)	Describe Higuchi- Leeper pump.	**05**
Q. 6	**(a)**	Classify glass containers. Describe the evaluation tests for suitability of glass containers.	**06**
	(b)	Discuss the approaches to deliver intact drug molecule to colon.	**05**
	(c)	Describe Pulsincap Technology.	**05**
Q.7	**(a)**	What are hydrogels? Discuss the approaches to control drug delivery using hydrogels.	**06**
	(b)	Describe the methods to determine the mucoadhesive property of formulations	**05**
	(c)	Write a note on Ocusert.	**05**

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