

GUJARAT TECHNOLOGICAL UNIVERSITY
M. Pharm - SEMESTER– II • EXAMINATION – WINTER-2016

Subject Code: 2920102**Date: 30/11/2016****Subject Name: NOVEL DRUG DELIVERY SYSTEM PART-I****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) Define microencapsulation and detail out the coacervation phase separation techniques.	06
	(b) Give a brief account on effervescent type of floating drug delivery systems.	05
	(c) Discuss different depot types of controlled release formulation.	05
Q.2	(a) Enumerate in vitro and in vivo evaluation methods of colon delivery systems.	06
	(b) Discuss the limitations of conventional ocular dosage forms	05
	(c) Discuss the strategies employed for taste masking of drugs.	05
Q.3	(a) Classify pharmaceutical packaging materials with examples.	06
	(b) Write short notes on SMEDDS.	05
	(c) Discuss novel innovations of semisolid gels.	05
Q.4	(a) Discuss the rationale for developing colon targeted drug delivery system. Describe in detail about microbially triggered systems.	06
	(b) Write a short note on advances in particle coating technology	05
	(c) Write a note on soluble ophthalmic drug insert.	05
Q.5	(a) What are the basic components of Osmotic drug delivery system? Explain.	06
	(b) Discuss the factors affecting drug release rate of Osmotic dosage forms.	05
	(c) State various approaches of GRDDS and factors controlling it.	05
Q. 6	(a) Give a brief account on pulsatile drug delivery system.	06
	(b) Describe different approaches to design the colon tablets.	05
	(c) Describe the recent innovations in liquid formulation.	05
Q.7	(a) Write a note on different approaches of modified drug released capsule.	06
	(b) Discuss merits, demerits and limitations of trans mucosal drug delivery and permeability characteristics of oral mucosa.	05
	(c) How are microemulsions evaluated?	05
