Seat No.: \_\_\_\_ Enrolment No.

## GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm. - SEMESTER-8 • EXAMINATION - SUMMER -2018

Subject Code: 2280016 Date: 09/05/2018

Subject Name: Current advances in Novel Drug Delivery Systems

Time: 10:30 AM TO 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) (b) (c)	Explain in details: sonophoresis, iontophoresis, Electrophorosis Discuss on nanoparticulate drug delivery system. Write a note on in- situ gel.	06 05 05
Q.2	(a) (b) (c)	Explain innovation in Mucoadhesive films.  Discuss formulation ingredients use in Transdermal drug delivery systems.  Explain formulation and evaluation parameter for microcapsules.	06 05 05
Q.3	(a)	Which drug is ideal candidate for TDDS? Mention the classification of transdermal patches. Describe the composition of transdermal patch.	06
	(b) (c)	Explain evaluation parameter of liposomes and niosomes.  Enlist the method for microcapsules and explain any one.	05 05
Q.4	(a)	Explain the following terms. Films, Patches, Diskette, strips.	06
	(b) (c)	Describe the advantages of mucoadhesive patch over the convectional Tablet. Explain the Evaluation parameter of SEDDS.	05 05
Q.5	(a) (b)	Explain evaluation parameter for In situ gels. Discuss formulation of Self emulsifying drug delivery system.	06 05
	<b>(c)</b>	Define Pellet. Give the advantage and Disadvantage. Explain any one method.	05
Q. 6	(a)	Define microspheres and microcapsules. Explain the method of preparation of it.	06
	<b>(b)</b>	Enumerate the method of preparation pellets and beads.	05
	<b>(c)</b>	Discuss on Characterization and Evaluation of Microcapsules.	05
Q.7	(a)	Explain minitablets.	06
	<b>(b)</b>	Enumerate evaluation parameter for niosomes. Explain any two.	05
	(c)	What is the evaluation tests carried out on final transdermal product? Write details about Adhesion testing. In Vivo and In Vitro test	05

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