Seat No.: _____ Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.PHARM - SEMESTER–8 EXAMINATION – WINTER -2023

Subject Code: 2280016 Date: 13/12/2023

Subject Name: Current advances in Novel Drug Delivery Systems

Time: 02.30 p.m. to 5.30 p.m. 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)**	Enlist the methods of preparation of liposomes. Discuss in detail any one	**06**
	(b)	What are niosomes. Classify and discuss about the excipients used for the formulation of niosomes.	**05**
	(c)	Differentiate between niosomes and liposomes.	**05**
Q.2	**(a)**	Discuss in detail evaluation parameters of pellets.	**06**
	(b)	Enlist method of preparation of microcapsules. Explain any one in detail.	**05**
	(c)	Briefly discuss minitablets.	**05**
Q.3	**(a)**	Discuss the design of transdermal drug delivery system	**06**
	(b)	Give principle of iontophoretic drug delivery system.	**05**
	(c)	Discuss in brief advantages and disadvantages of sonophoresis.	**05**
Q.4	**(a)**	Write a note on buccal patches.	**06**
	(b)	Explain evaluations of mucoadhesive film.	**05**
	(c)	Explain the evaluation parameters of nanoparticles.	**05**
Q.5	**(a)**	Discuss method of preparation for nanoparticles.	**06**
	(b)	Write a brief note on diskette.	**05**
	(c)	Give the applications of nanoparticles.	**05**
Q. 6	**(a)**	Describe formulation of SEDDS.	**06**
	(b)	Describe polymers used for in situ gelling.	**05**
	(c)	Discuss evaluation test for transdermal patch in detail.	**05**
Q.7	**(a)**	What is an insitu gelling system? Discuss various conditions for insitu gelling with suitable examples.	**06**
	(b)	Explain evaluation parameters for SEDDS.	**05**
	(c)	Explain any one method for preparing beads and pellets.	**05**

****