

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VIII(NEW) EXAMINATION – SUMMER 2019****Subject Code: 2183902****Date: 17/05/2019****Subject Name: Nanotechnology for Advanced Drug Delivery Systems****Time: 10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

		MARKS
Q.1	(a) Define Tissue Engineering.	03
	(b) Explain Material Selection for Carrier Designing.	04
	(c) Describe Mechanism of Drug Loading with All Subtypes.	07
Q.2	(a) Write full form of MDI and explain it briefly.	03
	(b) Write a Short Note on Ophthalmic Drug Delivery.	04
	(c) How Nano Carriers can Be used for Active Targeting? Explain.	07
	OR	
	(c) What are the Limitations, Safety Issues and Perspective for Designing Carrier? Describe it Briefly.	07
Q.3	(a) Describe Sensing (Nano Medicine).	03
	(b) Describe Dermal and Urogenital Drug Delivery.	04
	(c) Describe Small Molecule Drug. Also Explain the Delivery of Therapeutic Enzymes.	07
	OR	
Q.3	(a) Define : Medical Devices (Nano Medicine)	03
	(b) Explain: Rectal Drug Delivery.	04
	(c) Describe Immunoliposome for Targeting Myocardium.	07
Q.4	(a) Define Lymphatic System with all the components.	03
	(b) Explain Topical Dosage Form.	04
	(c) Explain Drug Release Mechanism.	07
	OR	
Q.4	(a) Explain Different Types of Nano Carriers.	03
	(b) Write a Short Note on Clearance of Particles from Lung.	04
	(c) Describe the Delivery of Nanoparticles to the Cardiovascular System.	07
Q.5	(a) What is Visualization? (Nano Medicine)	03
	(b) Define Blood Purification (Nano Medicine)	04
	(c) Describe Gene Delivery, Biocompatibility and Imaging for Carrier Design.	07
	OR	
Q.5	(a) Write Down any Five Dosage Form with Types.	03
	(b) Define Drug Delivery: Oral and Nasal.	04
	(c) Describe Aerosols as Drug Carrier.(Types)	07
