

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VIII(NEW) EXAMINATION – SUMMER 2019****Subject Code:2183906****Date:13/05/2019****Subject Name:Industrial Nanotechnology****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) What do you mean by Sustainable energy?	03
	(b) Explain: Energy Efficiency.	04
	(c) Write short note on impact of nanotechnology on Textiles Industries.	07
Q.2	(a) Explain role of nanotechnology in the automobile Industries.	03
	(b) What do you mean by Lead Encapsulation?	04
	(c) Write a short note on LEED.	07
	OR	
	(c) Write a short note on economic impacts & commercialization of nanotechnology.	07
Q.3	(a) Explain role of thermal barrier and write down name of materials used in it.	03
	(b) Give the use of nanotechnology in Agriculture.	04
	(c) Write short note Nanotechnology in Sports.	07
	OR	
Q.3	(a) What do you mean by rebound effect?	03
	(b) Write down various applications of Nano clays.	04
	(c) Write a short note on greenhouse gases in the vicinity of nanotechnology.	07
Q.4	(a) Define: Radiant Barriers.	03
	(b) Give the use of nanotechnology in Nano electronics.	04
	(c) Write a short note Carbon Footprint.	07
	OR	
Q.4	(a) Define: Industrial parks.	03
	(b) What do you understand by hybrid wind and solar Energy?	04
	(c) Explain role of nanotechnology in health care.	07
Q.5	(a) Define: Ethical Implications.	03
	(b) What do you mean by waste exchanges?	04
	(c) Write a short note on Nano bank.	07
	OR	
Q.5	(a) List out the materials used for fire protection.	03
	(b) Write a short note on Nano coating used in industry.	04
	(c) Write down short note on material used in the field of Civil Engineering and Construction.	07
