

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER- IV EXAMINATION – SUMMER 2020****Subject Code: 3140609****Date: 29/10/2020****Subject Name: Civil Engineering - Societal & Global Impact****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 is GIS? Give applications of GIS.	03
	(b) Describe the importance of civil engineering in shaping the world.	04
	(c) What is global warming? What are its causes and effects?	07
Q.2	(a) What are the challenges of mega cities?	03
	(b) Enlist Modern civil engineering marvels of India and describe any one.	04
	(c) Explain the concept of smart city. What are the pillars of smart cities?	07
	OR	
	(c) Write a short note on: Smart future roads.	07
Q.3	(a) What is infrastructure? Give its importance.	03
	(b) Write a short note on: Hyper loops.	04
	(c) Discuss types of chlorination.	07
	OR	
Q.3	(a) Discuss future innovations at airports?	03
	(b) Write short note on: Metros.	04
	(c) Explain minor methods of disinfection.	07
Q.4	(a) What are the objectives of solid waste management?	03
	(b) Describe preliminary treatment of waste water.	04
	(c) Describe sources of air pollution.	07
	OR	
Q.4	(a) Describe open dumping for disposal of solid waste.	03
	(b) Explain primary treatment of waste water.	04
	(c) Explain the effects of air pollution.	07
Q.5	(a) Define built environment. Describe components of built environment.	03
	(b) Write short note on: Recycling of materials.	04
	(c) What is EIA? What are the purposes of EIA? Explain stages of EIA.	07
	OR	
Q.5	(a) Give benefits of smart building.	03
	(b) Describe methodology for the repair of structures.	04
	(c) How efficiency of construction equipments can be improved?	07
