

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-IV (NEW) EXAMINATION – SUMMER 2022

Subject Code:3140609

Date:29-06-2022

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.
4. Simple and non-programmable scientific calculators are allowed.

		MARKS
Q.1	(a) What is pre-industrial society? What are its features?	03
	(b) Write a brief note on “Green revolution in India”.	04
	(c) Describe recent major civil engineering breakthroughs and innovations.	07
Q.2	(a) What is GIS? What are its causes and effects?	03
	(b) Write a brief note on future vision for Civil Engineering.	04
	(c) Describe the importance of civil engineering in shaping the world.	07
OR		
	(c) Describe any three Modern Civil Engineering Marvels and Wonders.	07
Q.3	(a) Write short note on: Hyper loops.	03
	(b) Describe impact of smart cities on Indian infrastructure.	04
	(c) Discuss Codes and Standards Governing Infrastructure Development.	07
OR		
Q.3	(a) What is your vision for future Airports?	03
	(b) Enlist futuristic energy sources and describe Hydropower.	04
	(c) Describe Indian Government Initiatives for Water Conservation.	07
Q.4	(a) Explain sanitary land filling method.	03
	(b) What is solid waste management? What are its objectives?	04
	(c) Write short note on: EIA	07
OR		
Q.4	(a) Give Classification of air pollution.	03
	(b) Explain global warming phenomena. What are its effects?	04
	(c) Discuss innovation techniques for ensuring environmental sustainability.	07
Q.5	(a) Enlist various civil engineering projects.	03
	(b) Discuss contribution of civil engineering to GDP in India.	04
	(c) Explain methods for the reduction of green house gas emissions in civil engineering in civil engineering projects.	07
OR		
Q.5	(a) Give benefits trends of Lean construction.	03
	(b) Discuss contribution of civil engineering in employment in India.	04
	(c) Give various measures for waste avoidance and reduction in construction.	07
