

GUJARAT TECHNOLOGICAL UNIVERSITY

BE MINOR - SEMESTER-V EXAMINATION – SUMMER 2024

Subject Code:115AF01

Date:27-05-2024

Subject Name:Sustainable Smart City

Time:02:30 PM TO 05:00 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 do you mean by “smart city”?	03
	(b) How do you define Quality of life in the city?	04
	(c) Describe Urbanization? Explain its impacts on cities.	07
Q.2	(a) Describe the principles of Smart cities.	03
	(b) Explain the urban evolution in India.	04
	(c) Explain in brief the eco challenges in contemporary cities.	07
	OR	
	(c) Explain the different Corporate social and environmental strategies for the development of cities.	07
Q.3	(a) What are recent initiatives taken at UN level for Sustainable smart city development?	03
	(b) Explain in brief the principles of green cities.	04
	(c) Explain the different green technologies in cities.	07
	OR	
Q.3	(a) What are recent initiatives taken at EU level for Sustainable smart city development?	03
	(b) What do you understand by “Sustainable Development”?	04
	(c) Describe Green infrastructure in brief.	07
Q.4	(a) Enlist various Climate change indicators.	03
	(b) What do you understand by Ecological footprint?	04
	(c) Explain Urban Sustainability its principles and challenges.	07
	OR	
Q.4	(a) Enlist various Urban growth patterns.	03
	(b) What do you understand by Green Buildings?	04
	(c) What is ICT? Explain its innovation potential in the field of smart city with appropriate example.	07
Q.5	(a) What is the role of public participation in shaping the cities?	03
	(b) Discuss the public transport system to develop energy efficient city.	04
	(c) Explain the impact of ICT on the management of cities.	07
	OR	
Q.5	(a) Write down the full form of: LEED, GRIHA, IGBC.	03
	(b) What are the benefits of LEED certification?	04
	(c) Explain the major waste and sewage management infrastructure that can be introduced in smart cities.	07
