

GUJARAT TECHNOLOGICAL UNIVERSITY**BE(MINOR) - SEMESTER-IV EXAMINATION – SUMMER 2023****Subject Code:114AF01****Date:14-08-2023****Subject Name:Fundamentals of Smart City Planning****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) Define smart city. What are the objectives of smart city?	03
	(b) Write advantages and disadvantages of smart city.	04
	(c) Describe types of infrastructure systems for smart city.	07
Q.2	(a) What is cyber security? What is the need for cyber security in a smart city?	03
	(b) Give desired criteria for housing in smart cities.	04
	(c) What are the principle stake-holders of smart city?	07
	OR	
	(c) Explain briefly about a planned smart city in the world.	07
Q.3	(a) What is the need to develop smart city in India?	03
	(b) Explain mobility services used as a part of smart cities.	04
	(c) Explain the features of smart city.	07
	OR	
Q.3	(a) Explain the concept of smart city.	03
	(b) What are key aspects of smart sustainable cities? Explain any one.	04
	(c) What are the performance benchmarks of smart city?	07
Q.4	(a) What can be the role of Solar energy in smart city	03
	(b) Explain Mission, statement & guidelines for Smart cities in India	04
	(c) Explain briefly solar energy for smart city.	07
	OR	
Q.4	(a) Briefly explain the key trends in smart cities developments.	03
	(b) Describe various applications of GIS in SMART city.	04
	(c) Explain strategies for smart city mission in India.	07
Q.5	(a) Briefly explain concept of E-ticketing	03
	(b) Write short note on GPS role in smart city	04
	(c) Describe various phases of smart city project management.	07
	OR	
Q.5	(a) What is green building? How it benefits the development of smart city?	03
	(b) What are the rating systems of green building? Explain any one?	04
	(c) How lighting design can be a energy saving parameter in making building energy efficient?	07
