

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII (NEW) EXAMINATION – WINTER 2022

Subject Code:3170628

Date:07-01-2023

Subject Name:Infrastructure for smart Cities

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) Enlist the objectives of Smart Cities .	03
	(b) Give advantages and disadvantages of Smart Cities .	04
	(c) Explain the concept of Smart City and requirements of Smart Cities.	07
Q.2	(a) Discuss key technologies needed for Smart Cities .	03
	(b) Write short note on LAVASA: India's first fully planned Hill City.	04
	(c) Give a brief history of smart city project in India .	07
	OR	
	(c) Give smart city challenges and its measures in Indian context.	07
Q.3	(a) Explain the concept of Green Building .	03
	(b) Explain energy and ecology in the context of Smart City .	04
	(c) Describe the aim and objects of Solar Smart City .	07
	OR	
Q.3	(a) Explain Smart Grid.	03
	(b) Describe the desired criteria for housing in Smart Cities .	04
	(c) Discuss current security and privacy protection technologies for Smart City.	07
Q.4	(a) Enlist the features of Smart Car.	03
	(b) Enlist various application of GIS in Transportation Engineering .	04
	(c) Describe GPS in transportation system management.	07
	OR	
Q.4	(a) Write short note on :Fuels of Future.	03
	(b) Write short note on: Road Safety Policy (2010).	04
	(c) Explain Intelligent Transportation System (ITS)	07
Q.5	(a) Enlist the goals and tools of Smart Water Management .	03
	(b) Describe the various smart water management technologies.	04
	(c) Describe sustainable water sanitation and discuss the challenges of urban sanitation.	07
	OR	
Q.5	(a) Enlist guidelines for Smart City in INDIA.	03
	(b) Discuss various PAN city projects undertaken by Smart City Ahmedabad.	04
	(c) Describe Integrated Infrastructure Management System (IIMS) for Smart City.	07
