

GUJARAT TECHNOLOGICAL UNIVERSITY**BE – SEMESTER- VII EXAMINATION-SUMMER 2023****Subject Code: 3170628****Date: 30/06/2023****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) Give purpose and application of Intelligent Transportation System.	03
	(b) Write a short note on Early Warning System.	04
	(c) Give case studies for smart cities (1) Ahmedabad (2) Surat.	07
Q.2	(a) What are the causes of flood? Give its effects.	03
	(b) What are the Aim and objectives of solar smart cities?	04
	(c) Explain challenges faced by smart cities and Give measures in Indian Context.	07
	OR	
	(c) Explain Disaster Management Cycle with neat sketch.	07
Q.3	(a) Write a short note on Traffic safety management.	03
	(b) Explain public safety and security in a smart city.	04
	(c) Discuss methods for water resources conservation system in India.	07
	OR	
Q.3	(a) Give advantages of Integrated Infrastructure Management System (ITMS).	03
	(b) Explain Infrastructure Need Assessment.	04
	(c) Explain GIS for transportation engineering in detail.	07
Q.4	(a) Write about the goals of smart cities.	03
	(b) List down procedure for selection of smart city in India.	04
	(c) Explain E – Ticketing in detail.	07
	OR	
Q.4	(a) What do you understand about Solar vehicles?	03
	(b) Write a short note on flood mitigation measure.	04
	(c) List the criteria for used for smart city housing. Also give SWOT analysis in detail.	07
Q.5	(a) What is the need of integrated approach of infrastructure management?	03
	(b) Write a short note on Delhi – Mumbai Industrial corridor.	04
	(c) Write about the IOT based smart wastewater management system.	07
	OR	
Q.5	(a) Give targets laid down by GOI for development of smart cities.	03
	(b) What is smart mobility and how it can be improved?	04
	(c) Explain various forms of solar energy in which it can harnessed? Also give benefits of solar energy.	07
