

# GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII (NEW) EXAMINATION – SUMMER 2024

Subject Code:3170628

Date:30-05-2024

Subject Name:Infrastructure for smart Cities

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.

- Q.1** (a) Write about the goals of smart cities. **03**  
(b) Describe the features of smart cities. **04**  
(c) What are the factors required to become a smart city? **07**

- Q.2** (a) Write about the economic benefits of green building. **03**  
(b) What is green building? Explain concept of green building. **04**  
(c) Explain in detail about what are the different types of infrastructure systems? **07**

**OR**

- (c) Give advantages and disadvantages of smart city. **07**

- Q.3** (a) Explain about Smart Grid. **03**  
(b) Explain Infrastructure Need Assessment. **04**  
(c) Give your views on road safety policies. **07**

**OR**

- Q.3** (a) What are the different phases of disaster management cycle? **03**  
(b) Write a short note on Traffic safety management **04**  
(c) Explain the concept of E-ticketing. **07**

- Q.4** (a) What do you understand about Solar vehicles? **03**  
(b) Enlist various application of GIS in Transportation Engineering. **04**  
(c) What are the benefits associated to water and wastewater management ? **07**

**OR**

- Q.4** (a) Give some suggestions to improve existing water conveyance system. **03**  
(b) Explain public safety and security in a smart city **04**  
(c) Describe GPS in transportation system management. **07**

- Q.5** (a) What do you mean by smart water management? **03**  
(b) Write a short note on Early Warning System. **04**  
(c) Describe Innovative sanitation Solutions for smart cities. **07**

**OR**

- Q.5** (a) What is smart city challenge? **03**  
(b) Write a short note on Delhi – Mumbai Industrial corridor. **04**  
(c) Write about any two case-studies of smart cities in India **07**

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