

GUJARAT TECHNOLOGICAL UNIVERSITY

BE MINOR - SEMESTER-VI EXAMINATION – SUMMER 2024

Subject Code:116AF02

Date:29-05-2024

Subject Name: Intelligent Transportation for Smart City

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) Write a short note on problems in public transportation system.	03
	(b) Give the advantages and disadvantages of Intelligent transportation system.	04
	(c) Explain ITS integration into transportation planning.	07
Q.2	(a) Describe the function of Intelligent transportation system.	03
	(b) Briefly explain the necessities for Intelligent transportation system planning.	04
	(c) Discuss about the architectures involved in ITS.	07
OR		
	(c) Explain in brief role of GIS into ITS.	07
Q.3	(a) What are the advantages of route guidance?	03
	(b) Classify route guidance system and explain any one in detail.	04
	(c) What is road pricing? How road pricing is carried out in ITS.	07
OR		
Q.3	(a) Enlist various surveys used to collect traffic data. Explain working of Pneumatic tube.	03
	(b) Describe characteristics of advanced traveler information system.	04
	(c) Write a short note on various tags used in ITS.	07
Q.4	(a) How adaptive cruise control system would be helpful in preventing accidents?	03
	(b) Describe automated highway system in detail.	04
	(c) Enlist various methods used for classified volume count and explain automatic counters in detail.	07
OR		
Q.4	(a) How videography would be helpful in ITS?	03
	(b) Write a short note on coordination of multi-modal transport systems.	04
	(c) Explain the essential characteristics of different ITS systems.	07
Q.5	(a) Explain Pre trip travel information system in detail.	03
	(b) Write a short note on fleet management.	04
	(c) How will you implement ITS in your city? Explain in detail.	07
OR		
Q.5	(a) Explain enroute travel information system in detail.	03
	(b) How incident management would be helpful in improving safety of road user.	04
	(c) Explain in details various initiatives of central government to promote ITS in India.	07
