

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER-VI (NEW) EXAMINATION – WINTER 2024

Subject Code:3160608

Date:12-12-2024

Subject Name: Urban Transportation 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: Mobility, Accessibility, Urban area	03
(b) Explain Para transit mode of transportation.	04
(c) Explain problem in urban transportation in the present scenario of high vehicle ownership.	07
Q.2 (a) Describe the components of urban goods movement	03
(b) What are the factors affecting urban goods movement?	04
(c) Classify urban mass transit system based on transit technology. Explain Bus rapid transit system in detail.	07
OR	
(c) Explain sequential decision-making process in travel demand analysis with neat sketch.	07
Q.3 (a) What are the various types of checks for transport surveys? Explain in brief screen line check.	03
(b) Write a short note on Zoning.	04
(c) Enlist various transportation surveys. Explain Home interview survey in detail.	07
OR	
Q.3 (a) Define (1) Intrazonal zonal trip (2) Interzonal trip (3) Through trip	03
(b) Write a short note on Sampling.	04
(c) Explain Gerin Lowry land use model.	07
Q.4 (a) Write short note on Trip generation.	03
(b) Differentiate between trip end models and trip interchange models.	04
(c) Briefly explain Gravity model with suitable example.	07
OR	
Q.4 (a) State advantages of category analysis.	03
(b) Describe the factors affecting trip generation.	04
(c) Enlist different trip distribution models. Explain growth factor models.	07
Q.5 (a) Write a short note on route classification.	03
(b) What is modal split? Discuss the factors affecting modal split.	04
(c) Classify and explain various types of urban road pattern.	07
OR	
Q.5 (a) What do you understand by transit scheduling?	03
(b) Briefly explain zonal regression method of trip generation	04
(c) Explain corridor identification and corridor screen line analysis.	07
