

# C. U. SHAH UNIVERSITY

## Summer Examination- 2022

**Subject Name: Urban Transportation System**

**Subject Code: 4TE07UTS1**

**Branch: B.Tech (Civil)**

**Semester: 7**

**Date: 25/04/2022**

**Time: 02:30 To 05:30**

**Marks: 70**

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
  - (2) Instructions written on main answer book are strictly to be obeyed.
  - (3) Draw neat diagrams and figures (if necessary) at right places.
  - (4) Assume suitable data if needed.
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Q-1) Attempt the following: (14)

- 1) What is full form of B.P.R?
- 2) Enlist the types of urban road system or pattern.
- 3) Define urban area as per Census India.
- 4) Which government body does population calculation in India.
- 5) Define screen line survey.
- 6) What are survey data check.
- 7) What is full form of L.U.P .
- 8) Enlist four step of travel demand modeling.
- 9) Define the term trip
- 10) Define cordon line
- 11) What do you mean by expressway?
- 12) Enlist four mega infrastructure project ongoing in India.
- 13) What is purpose of traffic assignments model?
- 14) What is integrated transport system?

**Attempt any four from Q-2 to Q-8:**

Q-2) Attempt all questions (14)

- (1) What is BRTS? How is it different from other transit systems? Critically discuss its merits and demerits. (7)
- (2) Critically discuss the linkages – land use and transportation system. Use neat figures. (7)

Q-3) Attempt all questions (14)

- (1) Write short note on : All or nothing assignment method. (7)
- (2) Distinguish between trip end model and trip interchange model. (7)



Q-4) Attempt all questions (14)

- (1) Explain aggregate and disaggregate approach for travel demand. (7)
- (2) Which are the methods of O-D Survey? Describe any two in detail. (7)

Q-5) Attempt all questions (14)

- (1) Enlist different methods of trip distribution. Explain each in detail with formula. (7)
- (2) What is trip generation? Explain factors governing trip generation and trip attraction rates. (7)

Q-6) Attempt all questions (14)

- (1) What are the innovations in Rapid transit system? (7)
- (2) Explain bus and rail transit. (7)

Q-7) Attempt all questions (14)

- (1) Develop regression equation (7)

Population in zone (100)	10	15	20	22	25
Trips (100)	8	10	13	12	15

- (2) What is importance of metro rail project in Ahmedabad. (7)

Q-8) Attempt all questions (14)

- (1) Develop a trip generation equation using regression analysis for the following data and the coefficient of correlation. (7)

Income of H.H in (100)	5	20	8	11
Trips per day	12	10	14	10

- (2) Discuss various urban transportation problems in detail. (7)

