

GUJARAT TECHNOLOGICAL UNIVERSITY**ME Semester –I Examination Feb. - 2012****Subject code: 711304N****Date: 15/02/2012****Subject Name: Basics of Transportation Engineering****Time: 10.30 am – 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.

- Q.1 (A) Write briefly the importance of transportation in the over all growth of society and economy. (7)
- (B) What is coordination? How it will improve the ill effects of the high traffic scenario of big cities? (7)

- Q.2 (A) Write briefly the various modes available for individual & its suitability in the present scenario. (7)
- (B) What is land use planning? How it effects the transportation of any city? (7)

OR

- (B) Write briefly the road user characteristics. (7)
- Q.3 (A) Briefly explain speed-flow -density relationship. (7)
- (B) What is PCU? Describe factor affecting PCU? (7)

OR

- Q.3 (A) Describe any one method of O -D survey in detail. How the data of O-D survey can be presented in different form? (7)
- (B) Briefly explain accident analysis. (7)
- Q.4 (A) Critically analyze the present terminal facilities available in the city bus station of the major cities of Gujarat. (7)
- (B) The following data is collected for a city. (7)

Zone	1	2	3	4	5	6	7
Population in Zone (000)	25	19	29	24	17	18	22
Total Trips Generated (00)	15	12	18	13	12	14	15

Develop a linear regression model for trips generated from a zone if the population in a particular zone increases to 56500 predict the expected trip generation from that zone.

OR

- Q.4 (A) What is intersection? Briefly mention the different types of intersection with neat sketch. (7)
(B) Describe briefly the techniques of off street parking. (7)
- Q.5 (A) Explain briefly the types of pavement with neat sketch. Also describe the important points for their selection. (7)
(B) What is overlay? Which are the types of overlay? (7)

OR

- Q.5 (A) Write the salient points of the failures in the flexible pavement. (7)
(B) Briefly explain the different steps for the economic evaluation of transportation project. (7)
