

GUJARAT TECHNOLOGICAL UNIVERSITY**M. E. - SEMESTER – I • EXAMINATION – SUMMER • 2013****Subject code: 711304N****Date: 06-06-2013****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) Discuss various modes of transportation and their suitability **07**
- (b) Develop regression model for trip generation from the following data: **07**

Household income (Rs in thousands)	Trips per day
10	2
20	4
30	4
40	7
50	10
60	11

- Q.2** (a) Explain Speed-Flow-Density relationship. **07**
- (b) Write short note on O-D survey. **07**

OR

- (b) What is desire line diagram? How is it prepared? What is its significance? **07**

- Q.3** (a) Give classification of Urban and rural roads on the basis of accessibility criteria? **07**

- (b) Write a note on gravity model for trip distribution? **07**

OR

- Q.3** (a) What is travel demand forecasting? List methods for travel demand forecasting? Explain any one? **07**

- (b) Explain with neat sketch, various types of Parking facilities? **07**

- Q.4** (a) Compare Mass Transit system and Demand responsive Transit system? **07**

- (b) What is meant by coordination in Transportation Engineering? How is coordination achieved? What are its advantages and limitations? **07**

- Q.5** (a) State measures to prevent accidents. **07**

- (b) Write a note on methods of Traffic flow regulation. **07**
