

GUJARAT TECHNOLOGICAL UNIVERSITY
M. E. - SEMESTER – I • EXAMINATION – SUMMER • 2014

Subject code: 711304N**Date: 21-06-2014****Subject Name: Basics of Transportation Engineering****Time: 02:30 pm - 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.

- Q.1** (a) Compare the various modes of transportation in terms of basic attributes. **07**
(b) Compare the private, public and para-transit system. **07**
- Q.2** (a) Define - Interzonal trip, Through trip, Trip generation, Trip distribution, Modal split, Desire line, Cordon line **07**
(b) Explain category analysis method of trip generation. **07**
- OR**
- (b) Write a short note on Gravity Model **07**
- Q.3** (a) Explain road user characteristics. **07**
(b) Explain the speed-volume-density relationship with sketch. **07**
- OR**
- Q.3** (a) What are the causes of accidents? **07**
(b) What are the advantages and disadvantages of rotary intersection? **07**
- Q.4** (a) What are the types of signals? Explain **07**
(b) Differentiate between Flexible pavement and Rigid pavement **07**
- OR**
- Q.4** (a) Explain the types of failures in rigid pavement. **07**
(b) Write a short note on Los Angeles abrasion test **07**
- Q.5** (a) Write a short note on ESWL **07**
(b) Explain the types of joints in CC pavement **07**
- OR**
- Q.5** (a) Why is economic evaluation of highway schemes done? **07**
(b) Describe the method of design of overlays for flexible pavement. **07**
