

GUJARAT TECHNOLOGICAL UNIVERSITY
BPLAN – SEMESTER IV– • EXAMINATION – WINTER 2016

Subject Code: 1045503**Date: 24/10/2016****Subject Name: Traffic and Transportation Planning-II****Time:02:30 PM to 04:30 PM****Total Marks: 50****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a) Fill in the blanks 05**
- 1) Full form of TOD_____.
 - 2) Trip distribution is carried out by _____ method and _____ method
 - 3) In road accident reporting the symbol $\rightarrow| \leftarrow$ represent_____.
 - 4) Smog is result of combination of smoke and _____.
 - 5) In India the government frames rues to control the noise produce by motor cycle by _____Act.
- (b) Define the following terms 05**
- 1) Comprehensive Mobility Plan (CMP)
 - 2) Model Split
 - 3) Spot Speed
 - 4) Accessibility
 - 5) Urban Form
- Q.2 (a) Describe TOD with neat sketch and list out benefits of TOD. 05**
- (b) Explain impact of urban form on transportation. 05**
- OR**
- (b) List out various surveys carried out for traffic and transportation planning. 05**
 Explain any one survey in detail.
- Q.3 (a) Explain process of Pre Distribution Model split also draw a flow diagram of the same. 05**
- (b) Explain Lowery Derivative model for land use transport. 05**
- OR**
- Q.3 (a) What are the various techniques for estimating direct road user cost? 05**
- (b) Explain in brief process of trip distribution. 05**
- Q.4 (a) What is traffic noise? Explain abatement measures for traffic noise. 05**
- (b) Explain with neat sketch how traffic accidents are present in collision diagram. 05**
- OR**
- Q.4 (a) Explain design consideration for street lighting. 05**
- (b) Explain transportation planning for adult or handicapped (any one) 05**
- Q.5 (a) Calculate and tabulate the inter zonal trip for journey from home to work for a self contained town consists of four residential area N,S,E,W and two industrial estate GIDC-OLD and GIDC-NEW through gravity model. The trip from home to work generated by each residential area per 24 hour day are as follow: 10**

N 1200
S 2500
E 1500
W 2800

There are 3000 jobs in industrial estate GIDC-OLD and 3500 in industrial estate GIDC-NEW. It is known that attraction between zones is inversely proportional to the square of the journey times between zones.

The journey times in minutes from home to work are:

Zone	GIDC-OLD	GIDC-NEW
N	10	20
S	20	10
E	15	10
W	10	20

OR

- Q.5** (a) Give review of local level transport policy as per your city. **05**
(b) Explain pricing and funding of transport system. **05**
