

GUJARAT TECHNOLOGICAL UNIVERSITY**M. E. Sem. – IInd - Examination – June/July- 2011****Subject code: 1721303****Subject Name: Regional and Mass Transportation Systems Planning****Date: 27/06/2011****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) State meaning, characteristics and scope of Regional Transportation Planning. **07**

(b) Enlist various methods of population forecasting and explain any two in detail. **07**

Q.2 (a) Explain Saturation System of road planning. **07**

(b) Identify core or city region transportation and traffic problems and suggest their solutions. **07**

OR

(b) Explain Concentric Ring theory and Growth Pole theory. **07**

Q.3 (a) Write short note on GQ (Golden Quadrilateral). **07**

(b) Discuss briefly vehicle ownership model. **07**

OR

Q.3 (a) Write short note on PMGSY (Pradhan Mantri Gram Sadak Yojna) **07**

(b) Mention parameters to be considered for locating a shopping center. **07**

Q.4 (a) Discuss briefly : Density Saturation Gradient Model. **07**

(b) Write short note on Accessibility Measures. **07**

OR

Q.4 (a) Define the terms: Link efficiency, Homogeneity factor, Penetration factor. **07**

(b) Explain Beta-index, Alpha-index and Cyclomatic number with small example. **07**

Q.5 (a) Enlist goals of Regional Transportation Planning and mention constraints related with it. **07**

(b) Compare any two mass transportation systems. **07**

OR

Q.5 (a) Discuss network planning in brief. **07**

(b) Discuss merits and demerits of mass transportation system like BRTS or MetroRail etc. in a city. **07**
