

IV B.Tech I Semester Supplementary Examinations, November 2005
TRANSPORTATION PLANNING & DESIGN
(Civil Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. (a) What is Travel Demand? Define. Explain the factors influencing Travel Demand. [8]
(b) What are the assumptions made in Travel Demand forecasting? Explain. [8]
2. Explain the four states involved in Transportation planning process. Bring out the importance of each stage in arriving at the final travel demand. [16]
3. Discuss the principles governing the definition of a study area for transportation planning. Also describe the guidelines to be adopted in dividing study area into zones. [16]
4. (a) What is Trip generation and Trip attraction? Explain. Also explain the use of multiple linear regression technique for Trip generation. [10]
(b) Clearly explain the use of category analysis in Trip generation models. [6]
5. Explain the concept of Trip distribution. Discuss about the various growth factor models available for Trip distribution and give their limitations. [16]
6. What is the purpose of Traffic assignment? Briefly explain. Discuss the use of all-or-nothing technique and capacity restraint technique for assignment. [16]
7. (a) What are the adverse effects of traffic on environment? Describe [8]
(b) What are the costs and benefits involved in economic evaluation of transportation projects? Explain. [8]
8. Write short notes on the following: [4x4=16]
 - (a) Relation between Land use and Transport
 - (b) Gravity model
 - (c) Minimum path Tree
 - (d) Benefit-cost Ratio method.
