

IV B.Tech I Semester Supplementary Examinations, November 2006
TRANSPORTATION PLANNING & DESIGN
(Civil Engineering)

Time: 3 hours**Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

1. (a) Discuss the relationship between land use and transport. [8]
(b) What are the four steps conventionally employed in Transportation Planning? Briefly explain. [8]
2. (a) What is a trip? Define. Differentiate between home based trips and non-home based trips by giving suitable examples. Also explain how Origin and Destination are different from Production and Attraction. [8]
(b) What are the various surveys carried out for Transportation Planning? Briefly explain. [8]
3. Discuss the importance of study area and zoning in Transportation Planning. What principles and guidelines are to be considered while defining study area and dividing it into zones? Explain. [16]
4. Differentiate between all-or-nothing assignment and capacity restraint method by taking a hypothetical example. Also explain the use of logit and probit analysis for mode split. [16]
5. What is Trip distribution? Explain. Discuss about the various growth factor methods used in Trip distribution giving their limitations. [16]
6. (a) What are the major pollutants emitted by vehicular traffic? What measures can reduce air pollution due to traffic? Explain. [8]
(b) What are the effects of noise pollution? Suggest suitable measures to reduce noise pollution. [8]
7. What are the principles governing the economic evaluation of highway projects? Explain. Explain the costs and benefits related to transportation projects. [16]
8. Write short notes on the following: [4 × 4 = 16]
 - (a) Road side Interview surveys
 - (b) Expansion factors
 - (c) Gravity Model
 - (d) Diversion Curves
