

Code :R7410107

**R7**

**IV B.Tech I Semester(R07) Supplementary Examinations, May/June 2011**  
**TRAFFIC ENGINEERING**  
**(Civil Engineering)**

Time: 3 hours

Max Marks: 80

**Answer any FIVE questions**  
**All questions carry equal marks**

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1. What are the three basic parameters of traffic ? Define them and explain the relationship among the three parameters.
2. (a) Explain the method of manual volume counts and state its advantages.  
(b) What are the objectives of speed studies? Explain. Also explain the method of conducting spot speed studies.
3. (a) Define capacity of a road. Discuss about the factors influencing the capacity of a road section.  
(b) What do you understand by level of service ? Explain the different levels of service used in traffic analysis with the help of a neat sketch.
4. Define the following and write about their importance in parking analysis.
  - (a) Parking accumulation.
  - (b) Parking load.
  - (c) Parking turn over
  - (d) Parking index
5. (a) What are the problems resulting from increased traffic in urban areas ? Discuss.  
(b) Briefly explain the method of signal design by Webster's method bringing out various steps involved.
6. What are the major pollutants resulting from road traffic and what are their adverse effects on environment ? Explain. Also suggest remedial measures to reduce environmental pollution due to traffic.
7. (a) Give the classification of road signs and explain their importance.  
(b) What are the different type of pavement markings? Explain with the help of suitable sketches.
8. What are the major causes of road accidents? Explain. Also suggest the possible engineering measures that can help in reducing the number of accidents.

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