

Code: R7410107

R7

IV B.Tech I Semester (R07) Supplementary Examinations, May 2012

TRAFFIC ENGINEERING

(Civil Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions
All questions carry equal marks

1. Differentiate between traffic volume and traffic density with the help of neat graphs, explain how volume and density are related to speed.
2. (a) Explain about the concept of passenger car unit. Also explain about the methods of presenting traffic volume data.
(b) What is a cumulative speed distribution curve? Giving a sketch of a hypothetical cumulative speed distribution curve, indicate various percentile speeds and explain about their use.
3. Write short notes on the following:
 - (a) Factors affecting road capacity.
 - (b) Concept of level of service.
 - (c) Concept of service volume.
 - (d) Peak hour factor.
4. (a) With the help of neat sketches, explain about various on-street parking layouts.
(b) Describe the method of parking usage survey by patrolling method.
5. What are the objectives of channelization? Explain with the help of neat sketches, explain various channelization patterns possible at a T-intersection.
6. Explain about the adverse effects of traffic on environment. Discuss about the measures to reduce air pollution and noise pollution due to traffic.
7. (a) Differentiate between cautionary signs and regulatory signs by giving at least two examples for each. Also give their design specifications.
(b) What are the various objects marking used as a part of traffic engineering? Explain with the help of suitable diagrams.
8. (a) Explain how better engineering design can play a major role in increasing road safety.
(b) What is road safety audit? Describe the process of road safety audit.
