PVP 12

Code: CE7T5C

IV B.Tech - I Semester – Regular / Supplementary Examinations
November 2016

TRAFFIC ENGINEERING
(CIVIL ENGINEERING)

Duration: 3 hours Max. Marks: 70

Answer any FIVE questions. All questions carry equal marks

1.

a) Define Traffic Volume, Speed and Density. 6 M

b) Explain briefly the relationship between Speed, Flow and Density. 8 M

2.

a) What are the objectives of traffic volume studies? Explain. Also explain the method of manual traffic volume counts. 7 M

b) What are the statistical methods used in the analysis of Speed data? Explain them bringing out their objectives. 7 M

3.

a) Define Capacity. What are the factors affecting Highway Capacity? 8 M

b) Write the relation between Speed and Capacity for Two Lane Highway. 6 M

4.

a) Briefly explain the types of On street Parking facilities with the help of a neat diagram. 8 M

b) Explain the Patrolling Method. 6 M

5.

a) The average normal flow of traffic on cross roads A and B during design period are 400 and 250 pcu per hour; the saturations flow values on these roads are estimated as 1250 and 1000 pcu per hour respectively. The all-red time required for pedestrian crossing is 12 secs. Design two phase traffic signal by webster's method. 7 M

b) Explain Importance of traffic Control and Regulation. 7 M

6. Summarize the following detrimental Impacts caused by Road Traffic: Agents causing, Causes, Preventive and Remedial measures. 14 M

a) Air Pollution b) Traffic Safety

7.

a) What are the differences between cautionary signs and regulatory signs? Explain and Give two examples for each type of sign. 7 M

b) Explain various types of Lane Marking with the help of relevant Sketches. 7 M

8.

a) Brief about the Parties involved in the Road Safety Audit; their Roles and Responsibilities. 7 M

b) Enumerate the Elements and Objectives of Road Safety Audit. 7 M