

**Total No. of Pages : 02**

**Total No. of Questions : 09**

**B.Tech.(CE) (2012 to 2017) (Sem.-7,8)**

# TRAFFIC ENGINEERING

**Subject Code : BTCE-819**

**M.Code : 71878**

**Time : 3 Hrs.**

**Max. Marks : 60**

**INSTRUCTIONS TO CANDIDATES :**

1. **SECTION-A is COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

## SECTION-A

1. **Write briefly :**
  - a. Define PCU.
  - b. What is PIEV theory?
  - c. What is road safety audit?
  - d. Define terms Traffic capacity & Practical capacity.
  - e. What is meant by Parking Accumulation?
  - f. Draw section of four lanes divided urban road and mark its components.
  - g. What do you understand by term “effective green”?
  - h. List the uses of informatory signs. Give two examples.
  - i. List various types of volume counts.
  - j. Explain License plate method.

### SECTION-B

2. Explain the various vehicular characteristics that affect the design and traffic performance.
3. What are the reasons for cause of road accident? How is accident data recorded?
4. Describe and enumerate with sketches on the three categories of traffic signs according to Indian Motor Vehicles Act.
5. Explain the applications of ITS.
6. Explain in details the different methods of origin and destination studies.

### SECTION-C

7. Explain the concept of LOS with the help of neat sketch.
8. The average normal traffic on cross roads A and B during design period is 425 and 185 PCU per hour. Saturation flow values estimated are 850 and 720 PCU per hour respectively. All red time for pedestrian crossing is 12 second. Design a two phase traffic signal by Webster's method.
9. Explain the types of Co-ordinated signal systems.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**