

B.E./B.TECH. Degree Examination, December 2020
Semester - VIII
CE16010 TRAFFIC ENGINEERING AND MANAGEMENT
(Regulation 2016)

Time: Three hours

Maximum : 80 Marks

Answer **ALL** questions**PART A - (8 X 2 = 16 marks)**

1. Running speed is the ratio between: (a) length of course & running time (b) length of course & journey time (c) length of course & delay time (d) Running time & journey time
2. State the definition of 'traffic engineering' as given in the glossary of institution of traffic engineering.
3. Origin destination study collects information on:
 - (a) Origin & destination (b) trip purpose (c) frequency of trip (d) all the above information
4. State the formula for 'annual average daily traffic'.
5. State the formula for estimating 'practical capacity of a rotary' as per Indian road congress.
6. The parking space required for a commercial vehicle as per Indian road congress is:
 - (a) 3.75m × 7.5m (b) 2.5m × 5m (c) 3m × 6m (d) 3m × 7m
7. Number of conflict points in a 4-legged 2-way junction is: (a) 12 (b) 32 (c) 24 (d) 36
8. List any two advantages of 'car pooling'.

PART B - (4 X16 = 64 marks)

09. (a) Explore how 'human factors' influences in highway geometric design. **(16)**
(OR)
(b) Examine how 'vehicle characteristics' affect highway geometric design. **(16)**
10. (a) List the methods available for origin destination survey and state the application of any two methods for urban traffic. **(16)**
(OR)
(b) List the various traffic studies and illustrate with an example how this data is used for real world study. **(16)**
11. (a) List the types of 'traffic signs' and explain 'prohibitory signs' and 'information signs'. Draw necessary diagrams. **(16)**
(OR)
(b) Draw a plan of a 'cloverleaf interchange' and state its merits & demerits. **(16)**
12. (a) List the 'traffic management measures' and explain any two with neat diagrams. **(16)**
(OR)
(b) Evaluate the following terms: (a) Priority for buses in traffic (b) Road pricing **(16)**