

Code: 19CE4601C

III B.Tech - II Semester – Regular Examinations – JUNE 2022

**TRAFFIC ENGINEERING
(CIVIL ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

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- Note: 1. This question paper contains two Parts A and B.
2. Part-A contains 5 short answer questions. Each Question carries 2 Marks.
3. Part-B contains 5 essay questions with an internal choice from each unit. Each question carries 12 marks.
4. All parts of Question paper must be answered in one place.
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PART – A

1. a) Define spot speed.
b) How is Rural Highway capacity defined?
c) Define the terms: Parking Load, Parking Index
d) What is the purpose of warning signs?
e) What is road safety audit?

PART – B

UNIT – I

2. a) What are the characteristics of road users? 6 M
b) Explain manual method for determining the spot speed. 6 M

OR

3. a) Explain the relationship between speed, volume and density. 6 M
b) Indicate how the traffic volume data are presented and the results used in traffic engineering. 6 M

UNIT – II

4. a) Explain the operating conditions of level of service as per HCM manual. 6 M
b) Explain about the Regulation of vehicle. 6 M

OR

5. a) Explain various factors affecting capacity and level of service of roads. 6 M
b) Explain about the Regulation Concerning driver. 6 M

UNIT-III

6. a) With the help of neat sketches, show various on street parking configurations indicating all the features. 6 M
b) Write a detailed note on traffic problems in urban areas. 6 M

OR

7. a) Explain when to adopt for off street parking facility. 6 M
b) Explain about the following
i) Importance of enforcement and punishment
ii) Goal and objectives of enforcement of regulations. 6 M

UNIT – IV

8. a) Explain the effects of traffic noise on the environment? What are the acceptable levels of sound level? 6 M
b) Explain various warning signs as per IRC with sketch. 6 M

OR

9. a) What are various measures for controlling air pollution? 6 M
b) Classify the Informatory type of traffic signs and mention the general objective of each type of sign. Explain them with neat sketches. 6 M

UNIT – V

10. a) Write about the following:
- i) Pedestrian crossing marking
 - ii) Markings at approach to intersections. 6 M
- b) List and explain the various engineering measures to be adapted to reduce the rate of road accidents. 6 M
- OR
11. a) Write a short note on the following with neat sketches
- i) No overtaking zone marking
 - ii) Marking of stop lines. 6 M
- b) What are the different causes of traffic accidents?
Discuss briefly. 6 M