Code No: **R164101E**

R16

Set No. 1

IV B.Tech I Semester Regular/Supplementary Examinations, March - 2021
TRAFFIC ENGINEERING
(Civil Engineering)

Time: 3 hours   Max. Marks: 70

Question paper consists of Part-A and Part-B
Answer ALL sub questions from Part-A
Answer any FOUR questions from Part-B
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PART–A *(14 Marks)*

1. a) What is travel time and delay?   [2]
    b) What is time headway?   [2]
    c) What are the different causes of traffic accidents?   [3]
    d) What are the acceptable levels of noise?   [2]
    e) What is level of service?   [2]
    f) What is the role of IVHS?   [3]

PART–B *(4x14 = 56 Marks)*

2. a) How the urban highways are classified in India? Discuss it.   [7]
    b) Explain in detail about pedestrian volume studies.   [7]

3. a) Discuss about density measurement techniques.   [7]
    b) Explain in detail about car-following theories.   [7]

4. a) Explain the ARRB method of traffic signal design.   [7]
    b) How are the accident records maintained? Explain.   [7]

5. a) Write the detrimental effects of traffic noise on environment?   [7]
    b) What are air pollution standards? Explain the measures for controlling air   [7]
        pollution from road traffic?

6. a) Describe the operating conditions of different levels of service as per HCM
        manual.   [7]
    b) Discuss about the capacity of urban streets?   [7]

7. a) Discuss various IVHS categories used in the field of traffic engineering.   [7]
    b) What are the benefits and costs of IVHS? Discuss it.   [7]

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