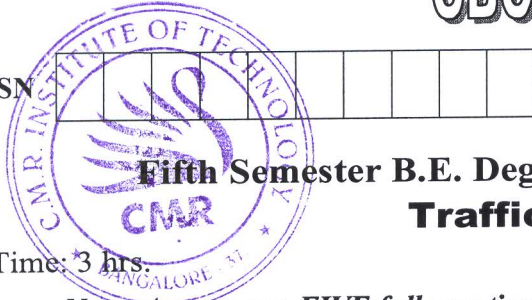


CBCS SCHEME

USN



17CV561

Fifth Semester B.E. Degree Examination, June/July 2023

Traffic Engineering

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Explain with sketch PIEV theory. (10 Marks)
b. Explain urban traffic problems and measure to meet the problems. (10 Marks)

OR

- 2 a. Define traffic engineering and explain its scope. (10 Marks)
b. Explain the concept of sustainable urban transport and integrated land use. (10 Marks)

Module-2

- 3 a. Define the term spot speed. Explain the presentation of spot speed data. (10 Marks)
b. Explain the different types of classified volume survey presentation. (10 Marks)

OR

- 4 a. Explain in brief Level of Service (LOS) and factors affecting LOS. (10 Marks)
b. A vehicle of weight 2.0 tonnes skids through a distance equal to 40m before colliding with another parked vehicle of weight 1.0 tonne, after equal to 12m before stopping. Compare the initial speed of the moving vehicle. Assume coefficient of friction as 0.5. (10 Marks)

Module-3

- 5 a. Write short notes on: i) Road Markings ii) Channelized Intersections. (10 Marks)
b. List different types of grade separated intersections and explain any one of them. (10 Marks)

OR

- 6 a. Enumerate the design factors and advantages of rotary intersections. (10 Marks)
b. Explain the three types of traffic signs with 3 examples for each with diagrams. (10 Marks)

Module-4

- 7 a. Describe the causes of road accidents and also suggest preventive measures to control accidents. (10 Marks)
b. Discuss the effect of air pollutants. (10 Marks)

OR

- 8 a. Explain the various detrimental effect of traffic noise. (10 Marks)
b. List and explain different types of lighting layouts. (10 Marks)

Module-5

- 9 a. Discuss the details of traffic system management. (10 Marks)
b. Enumerate the basic principles of traffic regulations. (10 Marks)

OR

- 10 Write short notes on:
a. TDM (Traffic Demand Management)
b. ITS (Intelligent Transport System)
c. Road pricing system
d. Traffic congestion. (20 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

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