CBCS SCHEME

USN | | | | | | | | | | |

21CV652

Sixth Semester B.E./B.Tech. Degree Examination, Dec.2025/Jan.2026
Traffic Engineering

Time: 3 hrs. Max. Marks: 100

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

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.

Module-1

1 a. Describe the factors affecting road user characteristics. **(10 Marks)**

b. Enumerate the urban traffic problems in India. Mention the remedies to traffic problems in India. **(10 Marks)**

OR

2 a. Explain briefly the vehicular performance characteristics. **(10 Marks)**

b. Describe sustainable approach for land use and transport. **(10 Marks)**

Module-2

3 a. Explain the methods of measuring spot speeds using direct timing procedure and Enoscope. **(10 Marks)**

b. Briefly discuss the concept of journey time and delay surveys. **(10 Marks)**

OR

4 a. Outline the different methods of conducting O and D studies. **(10 Marks)**

b. Explain the concept of level of service. Mention the applications of LOS. **(10 Marks)**

Module-3

5 a. Enumerate the advantages and disadvantages of rotary intersection. **(10 Marks)**

b. Explain the following :

i. Channelized intersection

ii. Un-channelized intersection. **(10 Marks)**

OR

6 a. Discuss the different types of traffic signs used in urban area. **(10 Marks)**

b. The average normal flow of traffic on cross roads A and B during design period are 400 and 250 PCU per hour. The saturation flow values on these roads are estimated as 1250 and 1000 PCU per hour respectively. The all-red time required for pedestrian crossing is 12 seconds. Design two phase traffic signal with pedestrian crossing by Webster's method. **(10 Marks)**

Module-4

7 a. Explain the causes and prevention of rod accidents. (10 Marks)

b. Discuss the measures to control traffic noise. (10 Marks)

OR

8 a. Explain the different types of distribution of street lights. (10 Marks)

b. Discuss the promotion of non-motorised transport in urban area. (10 Marks)

Module-5

9 a. Mention the objectives and explain the types of area traffic management system. **(08 Marks)**

b. Explain the following :

i. Traffic System Management (TSM)

ii. Travel Demand Management (TDM). (12 Marks)

OR

10 a. Discuss the classification of traffic segregation. **(10 Marks)**

b. Mention the advantages, disadvantages and applications of intelligent transport system. (10 Marks)

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