CBCS SCHEME

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

15CV561

Fifth Semester B.E. Degree Examination, Dec.2018/Jan.2019
Traffic Engineering

Time: 3 hrs. Max. Marks: 80

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

Module-1

1 a. In detail explain the road user characteristics. **(08 Marks)**
b. Derive an expression for flow and concentration using Green-shield theory. **(08 Marks)**

OR

2 a. Explain the details of vehicle characteristics affecting road design. **(08 Marks)**
b. Explain urban traffic problems and measure to meet the problems. **(08 Marks)**

Module-2

3 a. Briefly explain the various causes of accidents. **(08 Marks)**
b. Define the term spot speed. Explain the presentation of spot speed data. **(08 Marks)**

OR

4 a. Explain the preventive measures to reduce accidents. **(08 Marks)**
b. Explain the importance and methods of traffic forecasting. **(08 Marks)**

Module-3

5 a. Enumerate the design factors and advantages of rotary intersection. **(10 Marks)**
b. Write short notes on: i) Road markings ii) Channelized intersections. **(06 Marks)**

OR

6 a. What are the advantages and disadvantages of traffic signal? **(08 Marks)**
b. Explain traffic signal design as per IRC method. **(08 Marks)**

Module-4

7 a. Explain various design factors of highway lighting. **(10 Marks)**
b. Explain the various detrimental effect of traffic noise. **(06 Marks)**

OR

8 a. List and explain different types of lighting layouts. **(08 Marks)**
b. Explain the measure to control the traffic noise. **(08 Marks)**

Module-5

9 a. Discuss the details of traffic system management. **(08 Marks)**
b. List and explain the various phases of traffic regulation. **(08 Marks)**

OR

10 Write short notes on:
a. TDM b. ITS
c. Traffic congestion d. Road pricing system. **(16 Marks)**

* * * * *