



15CV561

## Traffic Engineering

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

Time: 3 hrs. Max. Marks: 80 Note: Answer any FIVE full questions, choosing ONE full question from each module. **Module-1** In detail explain the road user characteristics. (08 Marks) Derive an expression for flow and concentration using Green-shield theory. (08 Marks) OR 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 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 a. Explain the preventive measures to reduce accidents. (08 Marks) b. Explain the importance and methods of traffic forecasting. (08 Marks) Module-3 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) **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** a. Explain various design factors of highway lighting. (10 Marks) **b.** Explain the various detrimental effect of traffic noise. (06 Marks) a. List and explain different types of lighting layouts. (08 Marks) b. Explain the measure to control the traffic noise. (08 Marks) Module-5 a. Discuss the details of traffic system management. (08 Marks) b. List and explain the various phases of traffic regulation. (08 Marks)

OR

Write short notes on

. TDM

c. Traffic congestion



