

R16

Code No: 137HV

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, December - 2019

TRAFFIC ENGINEERING

(Civil Engineering)

Time: 3 Hours

Max. Marks: 75

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART - A

(25 Marks)

- 1.a) Draw the relations among volume, speed and density. [2]
- b) Present the applications of origin and destination studies and different ways of representing them? [3]
- c) What are the different measures to increase road safety? [2]
- d) Present the procedures in road safety auditing from different perspectives? [3]
- e) Present on heavy vehicle adjustment and driver population adjustment. [2]
- f) Define on level of service and factors influencing them. [3]
- g) Define cycle length and present contributing them. [2]
- h) List the warrants of traffic signals. [3]
- i) Explain congestion pricing and factors influencing them. [2]
- j) How do you arrive on differential toll policies and present leads and quantification procedures? [3]

PART - B

(50 Marks)

2. Explain on methods of speed studies? And present on statistical methods for speed data analysis. [10]
- OR
3. Explain the procedure for delay study and present delay analysis and factors influence in modeling them. [10]
  4. Explain different methods of parking study and present on versions of parking analysis. [10]
- OR
5. Explain different methods of accident analysis and modeling. [10]
  6. Discuss on analysis concepts for capacity and its relation with level of service. [10]
- OR
7. Compute the capacity of urban road with and without access control. [10]



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8. Explain traffic signal design. [10]

OR

9. Develop signal coordination approach with vehicle actuated signal system. [10]

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10.a) Discuss on objectives of transportation system management and an integrated view for a city.

b) Discuss the measures to be taken for improving vehicular flow. [4+6]

OR

11.a) Discuss on measures for parking management.

b) Explain the warrants and management leads for transit stop relocation. [4+6]

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