

B.Tech. CIVIL ENGINEERING (BTCLEVI)

Term-End Examination

00613 December, 2016

BICEE-023 : TRAFFIC ENGINEERING

Time : 3 hours

Maximum Marks : 70

*Note : Attempt any **seven** questions. All questions carry equal marks. Assume missing data, if any. Use of scientific calculator is allowed.*

1. What are the various components of road traffic ? Also discuss the factors governing these components. 10

2. What do you mean by road user behaviour ? Discuss its effect on road traffic. 10

3. Design a two-phase traffic signal by Webster's method for the following data : 10
Average Traffic flow on Road A = 400 pcu per hr
Average Traffic flow on Road B = 250 pcu per hr
Saturation flow on Road A = 1250 pcu per hr
Saturation flow on Road B = 1000 pcu per hr
All red time for pedestrian crossing = 12 sec

4. Write short notes on (a) Origin and Destination Study, and (b) Spot Speed Study. 5+5

 5. What is at-grade crossing ? Discuss its advantages and disadvantages in Indian traffic scenario. 10

 6. Discuss in detail the design of various types of channelising islands. 10

 7. Examine the importance and challenges in planning and designing of pedestrian facilities. 10

 8. Discuss the various factors to be considered for bus stop location and bus bay designs. 10

 9. Make an account of the advantages and disadvantages of traffic signals. 10

 10. Write short notes on the following : 5+5
 - (a) Noise Pollution
 - (b) Air Pollutionby Traffic Flow
-