

B.Tech. CIVIL ENGINEERING (BTCLEVI)

Term-End Examination

June, 2017

00997

BICEE-023 : TRAFFIC ENGINEERING

Time : 3 hours

Maximum Marks : 70

*Note : Attempt any **five** questions. All questions carry equal marks. Assume suitable data, if necessary. Use of scientific calculator is permitted.*

1. What is the significance of road user characteristics in traffic engineering ? Discuss briefly the various factors which affect the road user characteristics and their effects in traffic performance. 14

2. Give the step by step procedure for carrying out speed and delay analysis. What equipments are used for such study ? 14

3. (a) What are the various causes of road accidents ? Also, give remedial measures. 7
(b) Describe briefly the various methods of origin and destination study. What are the various uses of O & D studies ? 7

4. (a) Explain traffic manoeuvres and their applications. 6
- (b) Discuss the factors that are considered for selection of a bus stop location. Briefly discuss the design of a bus bay. 8
5. Define traffic rotary. What are the advantages and disadvantages of traffic rotary ? Explain briefly the various design factors that are considered in the design of a rotary intersection. 14
6. (a) What are the various methods of signal design ? Discuss in detail. 7
- (b) Discuss the various technological approaches to minimise the environmental pollution due to traffic. 7
7. Write short notes on any **four** of the following : $4 \times 3 \frac{1}{2} = 14$
- (a) Channelizing Island
 - (b) Grade Separated Intersection
 - (c) Staggered Crossing
 - (d) Parking Survey
 - (e) Road Lighting
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