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**BICEE-023**

**B. TECH. CIVIL ENGINEERING  
(BTCLEVI)**

**Term-End Examination**

**June, 2019**

**BICEE-023 : TRAFFIC ENGINEERING**

*Time : 3 Hours*

*Maximum Marks : 70*

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*Note : Answer any five questions. All questions carry equal marks.*

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1. Explain the significance of road user characteristics in traffic engineering. Discuss various factors affecting road user characteristics and their effects in traffic performance. 14
2. (a) Define parking survey. Discuss its necessity and types. 10  
(b) Write a short note on origin and destination study. 4
3. (a) Discuss the time and space sharing concepts to control traffic movements. 7  
(b) What are grade separated intersections ? Discuss their design features. 7

(A-35) P. T. O.

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4. (a) How would you redesign existing signals ?  
Explain with the help of a case study. 7
- (b) What are the visual impacts of traffic control devices ? How can these be alleviated ? 7
5. Define traffic rotary. What are the advantages and disadvantages of traffic rotary ? Explain various design factors considered in the design of rotary intersection. 14
6. (a) Explain the relationship between speed, travel time, volume, density and capacity. 4
- (b) Discuss the various factors to be considered for bus stop location and bus bay designs. 10
7. Write short notes on any *four* of the following :

$$4 \times 3 \frac{1}{2} = 14$$

- (a) Road lighting
- (b) Parking survey
- (c) Staggered crossing
- (d) PCU
- (e) Air pollution due to traffic flow

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(A-35)