

Roll No.

--	--	--	--	--	--	--	--	--	--

Total No. of Pages : 02

Total No. of Questions : 18

B.Tech.(CE) (2012 to 2017) (Sem.-7)

TRAFFIC ENGINEERING

Subject Code : BTCE-819

M.Code : 71878

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

SECTION-A**Write briefly :**

1. How the PIEV Theory plays a vital role in connection with road user?
2. What do you mean by Access Controlled Highways?
3. Differentiate between On-street and Off-street Parking.
4. Describe briefly various limitations of rotary.
5. Explain At-grade intersections.
6. What are object markings?
7. What does “3-Es” stand for in traffic engineering?
8. What are traffic aid systems for Expressways?
9. How are traffic islands classified?
10. Briefly describe road safety audit.

SECTION-B

11. Explain the traffic manoeuvres and their applications.
12. Explain the relationship between Speed, Density and Volume.
13. Two vehicles A and B of equal weight, approaching from cross roads at right angle collide with each other. They skid through distances 30m and 20m before collision and 20m and 35m after collision. If the directions of skidding vehicles A and B after collision are 45° and 130° with original path respectively, calculate the original speeds of the two vehicles before the application of brakes. Assume $f = 0.55$.
14. Elaborate 'Before and After studies' in relation to accident studies with a neat diagram.
15. Describe the concept of Design Capacity and level of service.

SECTION-C

16. What do you mean by PCU? Describe the concept of PCU. What are the various factors affecting PCU values, recommended values of PCU by IRC for Rural and Urban areas. What are the limitations of PCU?
17. Describe the use of Intelligent Transportation System in Traffic Engineering.
18. What do you mean by Traffic signs? What are the various types, explain with neat diagrams?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.