

B.Tech. CIVIL ENGINEERING (BTCLEVI)**Term-End Examination****June, 2016**

00315

BICEE-023 : TRAFFIC ENGINEERING*Time : 3 hours**Maximum Marks : 70*

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

1. Define vehicle characteristics. Also discuss the significance of power performance of vehicles in traffic engineering. 10
2. Discuss in detail the objectives and scope of traffic engineering in India. 10
3. Data collected by floating car method on a road stretch 4 km long running North – South is given in the following table :

Trip No.	Direction of Trip	Journey Time		Delay		No. of Vehicles Overtaking	No. of Vehicles Overtaken	No. of Vehicles from Opposite Direction
		Min	Sec	Min	Sec			
1	N – S	6	32	1	40	4	7	268
2	S – N	7	14	1	50	5	3	186
3	N – S	6	50	1	30	5	3	280
4	S – N	7	40	2	00	2	1	200
5	N – S	6	10	1	10	3	5	250
6	S – N	8	00	2	22	2	2	170
7	N – S	6	28	1	40	2	5	290
8	S – N	7	30	1	40	3	2	160

Determine the average values of volume, journey speed and running speed of the traffic stream along either direction. 10

4. What is Parking Survey ? Discuss its necessity and the various types. 10

5. Write short notes on time sharing and space sharing concepts. 10
 6. What are grade separated intersections ? Give an account of their design features. 10
 7. Examine the need for an improvement in regulation and management of traffic facilities in India, with special reference to pedestrians and cyclists. 10
 8. Discuss in detail the planning and designing of transit and carpool lanes. 10
 9. What do you mean by signal co-ordination ? Discuss its significance. 10
 10. What are the different modes of transportation ? Examine their impact on the environment. 10
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