



R18 Regulation
TKR COLLEGE OF ENGINEERING AND TECHNOLOGY
(Autonomous, Accredited by NAAC with 'A' Grade)

Subject code: 2E8AA

B.Tech VIII Semester Regular Examinations, June 2022

TRAFFIC ENGINEERING AND MANAGEMENT
(CIVIL ENGINEERING)

Maximum Marks: 70

Date: 17.06.2022 Duration: 3 hours

- Note:
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

- 1 Write about the following: a. Journey Speed b. Running Speed
- 2 Write about critical gap.
- 3 What is meant by highway capacity?
- 4 What are the factors affecting capacity?
- 5 Write about the following: a. Parking Index b. Parking accumulation
- 6 List out various measures that may be taken to prevent accidents?
- 7 What is cycle length in traffic signal?
- 8 What is lost time in traffic signal?
- 9 Define Intelligent Transportation System (ITS).
- 10 Write about traffic system management?

Part-B

Answer All the following questions.

(5X10M=50Marks)

- 11 A. Write about traffic volume studies and explain how the data is collected and presented in traffic engineering? [5]
B. What are the basic characteristics of traffic? Explain about each of them? [5]

OR

- 12 Discuss the relation between parameters of Traffic-Volume, Speed and Concentration. [10]
- 13 Explain about Highway Capacity and what is the importance of the concept of Highway Capacity? [10]

OR

- 14 Write the procedure to compute the Level of Service for two lane highways. [10]
- 15 A. What are different types of parking surveys? Explain each in detail. [5]
B. Distinguish in detail between collision and condition diagrams with neat sketch? [5]

OR

- 16 Explain in detail about different types of parking facilities. [10]

- 17 A. Explain the design procedure of Isolated Traffic signals by Webster method? [5]
B. Write the principles of phasing. Explain with timing diagram. [5]

OR

- 18 A. What is signal coordination and also explain signal coordination methods. [5]
B. Explain in detail about Warrants for signalization? [5]

- 19 Write in detail about: i. Congestion and road pricing and ii. Co-ordination among agencies [5+5]

OR

- 20 Discuss in brief the traffic regulatory measures commonly implemented in traffic management treatment as per IRC standards with neat sketches. [10]