



R18 Regulation

Subject code: 2E8AA

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VIII Semester Supplementary Examinations, April 2024

Traffic Engineering & Management

(Civil Engineering)

Maximum Marks: 70

Date: 22.04.2024 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. What are the methods of traffic volume counting?
2. Explain 85th, 50th and 15th percentile speeds.
3. Write a short note on level of service
4. Outline the factors affecting capacity.
5. Determine the ratio of the width of the car parking area required at kerb for 30° parking relative to 60° parking approximately?
6. List out the causes of accidents.
7. Recall the lost time in traffic signal.
8. Write short note on timing diagram.
9. Explain traffic segregation.
10. Define intelligent transport system.

Part-B

Answer All the following questions.

(5X10M=50Marks)

11. A. Explain speed and delay studies. Discuss about the different methods of conducting speed and delay studies. [5M]
B. How the measurement of traffic volume is done? Explain different methods to count traffic volume. [5M]

OR

12. A. What are the different types of average speeds? Explain about each of them. [5M]
B. Explain the basic characteristics of traffic in brief. [5M]
13. A. Define highway capacity and briefly discuss about different types of highway capacity as per HCM. [5M]
B. What do you understand by highway capacity and level of service? [5M]

OR

14. A. Explain the factors affecting highway capacity and level of service. [5M]
B. Outline the procedure to compute the level of service for two lane highways. [5M]
15. A. Enumerate the various methods to prevent accidents. [5M]
B. Outline different types of parking surveys. [5M]

OR

- 16 A. Explain the parameters: [5M]
 I. Parking turnover
 II. Parking load
 III. Parking index
B. Explain in details about different types of parking facilities. [5M]
- 17 A. Illustrate the design procedure of isolated traffic signal by webster method. [5M]
B. Explain in detail about different types of traffic signal. [5M]
- OR
- 18 A. Explain signal coordination and its methods. [5M]
B. Explain the principles phasing with the help of timing diagram. [5M]
- 19 A. What are the advantages of intelligent transportation system? [5M]
B. List out various travel demand management techniques. [5M]
- OR
- 20 A. Explain about traffic regulatory measures. [5M]
B. What is the need of traffic management? Explain in brief. [5M]