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Question Paper Code : X20268

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2020
Seventh Semester
Civil Engineering
CE 6006 – TRAFFIC ENGINEERING AND MANAGEMENT
(Regulations 2013)

(Common to PTCE 6006 – Traffic Engineering and Management for
B.E. (Part-Time) – Sixth Semester – Civil Engineering – Regulations – 2014)

Time : Three Hours

Maximum : 100 Marks

Answer ALL questions
All questions carry equal marks.

PART – A

(10×2=20 Marks)

1. Write any one road characteristic with Indian Road Congress (IRC) standards.
2. What is the significance of land use transport inter-relation for sustainable transportation planning ?
3. List out any four demerits of 'Non-Motorized Transport' in Indian conditions.
4. Define "Running speed and Journey speed" in traffic speed studies.
5. List out any four merits of a rotary intersection in traffic engineering.
6. What is meant by 'Green Corridor' in signal co-ordination of traffic design control ?
7. List out the major causes of road accident. Write few lines about any one cause.
8. List out four merits of promoting Mass or Public transportation on roads.
9. List out any four Travel Demand Management (TDM) in traffic engineering.
10. What do you mean by the term Intelligent Transportation System (ITS) in traffic Engineering ?



PART – B

(5×13=65 Marks)

11. a) Write in brief major urban traffic problems in India with its root causes as well.

(OR)

- b) Write short notes on PIEV theory with its significance and road user characteristics.

12. a) Write in brief the different methods of parking studies with its significance.

(OR)

- b) Discuss in brief the 'Level of Service' concept with IRC standards for down-town areas.

13. a) Write briefly the significance of networking of pedestrians facilities and cycle tracks and critically comment about the current work in process at T-nagar area in Chennai city.

(OR)

- b) A two-phase traffic signal is to be installed at a right angled crossing of two city streets. The site is "average" and the approaches are 16 meters wide between curbs. The design hour traffic volumes in PCU's are given in the table 13. b. 1.

Table 13. b. 1 Design Hour Traffic Volume in PCU's/hour

| From | N | | | E | | | S | | | W | | |
|--------------------|----|-----|----|----|-----|----|----|-----|----|----|-----|----|
| To | E | S | W | S | W | N | W | N | E | N | E | S |
| Flow in PCU's/hour | 49 | 817 | 74 | 67 | 528 | 50 | 62 | 669 | 73 | 76 | 689 | 63 |

Design the two phase signal with its timing and phasing diagram by making suitable assumption.

14. a) Explain in detail any four preventive measures to be taken to ensure road safety with its justifications.

(OR)

- b) Write in brief any three environmental hazards of traffic development with its abatement measures.

15. a) Discuss in brief the traffic regulatory measures commonly implemented in traffic management as per IRC standards with neat sketches.

(OR)



b) Write short notes on the following :

- Congestion Pricing &
- Area Traffic Management

PART – C

(1×15=15 Marks)

16. a) Write briefly the significance of modal segregation and critically comment about any such lane discipline implemented in Chennai or any other city in India.

(OR)

b) Write short notes on the following :

- Coordination among different agencies &
 - Status of Traffic Enforcement in Chennai or any Indian city.
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