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**Question Paper Code : 71516**

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2017.

Seventh Semester

Civil Engineering

CE 6006 — TRAFFIC ENGINEERING AND MANAGEMENT

(Regulations 2013)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. List out any eight major traffic problems of roads traffic.
2. What are the importance of land use transport interaction?
3. What is meant by 'level of service' in traffic analysis?
4. Draw a 'typical parking inventory' diagram with all its vital parts.
5. What do mean by the term 'channelization' in traffic flow studies?
6. What is meant by 'variable sign message' in traffic visual aids?
7. What are the merits of encouraging walk and non-motorized modes?
8. List out the various environmental hazards due to road traffic.
9. What is known as congestion pricing?
10. List out any four Travel Demand Management (TDM) techniques.

PART B — (5 × 16 = 80 marks)

11. (a) Write in detail the various vehicle characteristics with Indian Roads Congress (IRC) standards.

Or

- (b) Write in detail various road traffic problems with sustainable preventive measures.



12. (a) Explain in brief the various level of services as per Indian Roads Congress (IRC) Standards for arterial roads and down town streets.

Or

- (b) Explain in brief the speed survey methods which are commonly used in traffic planning of metro cities.
13. (a) 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 metres wide between kerbs. The design hour traffic volumes in PCU's are given in the table 13 (a).

Table 13 (a) Design Hour Traffic Volume in PCU's per hour

From	N			E			S			W		
To	E	S	W	S	W	N	W	N	E	N	E	S
Flow in PCU's per hour	485	853	209	257	935	565	362	964	560	572	690	408

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

Or

- (b) Explain in brief with neat diagrams the design elements of rotary type intersections with IRC standards.
14. (a) Enumerate the various points to be considered to promote public transportation and Non-motorized transportation.

Or

- (b) Explain in brief the various causes of road accidents with preventive measures.
15. (a) Discuss in detail the various methods of traffic regulatory measures in traffic management.

Or

- (b) Write short notes on the following :
- (i) Intelligent transport system for traffic management (8)
- (ii) Traffic segregation methods. (8)