

Reg. No. :

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

**Question Paper Code : 31016**

16.5.13

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2013.

Sixth Semester

Civil Engineering

080100046 — TRAFFIC ENGINEERING AND MANAGEMENT

(Regulation 2008)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is meant by PCU and why it is necessary?
2. Mention the different land use characteristics.
3. What are the ill effects of parking?
4. Define journey speed and parking capacity.
5. Define the concept of coordinated signal system.
6. What are the components of ITS?
7. List the effect of weather on accidents.
8. Define TDM.
9. What are the effects of traffic on environment?
10. What are the objectives of highway lighting?

PART B — (5 × 16 = 80 marks)

11. (a) (i) Discuss in detail the human factors governing the road user behaviour. (10)
- (ii) Brief about the resistances that are offered to the motion of the vehicle. (6)

Or

- (b) (i) Explain the phenomenon of skidding along with the factors determining skid resistance in detail. (10)
- (ii) Brief about the road construction practices for obtaining skid resistant surfaces. (6)

12. (a) Explain the level of service concept with neat sketch and mention the factors to be considered for evaluation of level of service. (16)

Or

- (b) Describe the different methods of measuring running speed and journey speed with their advantages. (16)

13. (a) Explain the different types of road markings in detail with neat sketches. (16)

Or

- (b) (i) Mention the different categories of traffic signs and discuss about warning signs. (8)  
(ii) List out the advantages and disadvantages of traffic signals. (8)

14. (a) (i) Discuss the various road factors and their effect on accidents. (8)  
(ii) Suggest measures to increase safety among pedestrians. (8)

Or

- (b) Explain about the different types of Traffic management measures in detail with neat sketches. (16)

15. (a) (i) Discuss the measures taken up by the government to reduce the vehicular air pollution. (8)  
(ii) Describe the effects of traffic on environment. (8)

Or

- (b) (i) Describe the different methods by which the street lighting can be done with their advantages. (8)  
(ii) Compare the different methods of on – street parking. (8)

