SAINTGITS COLLEGE OF ENGINEERING LIBRARY KOTTAYAM

F 3381 (Pages : 2) Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, NOVEMBER 2014

Seventh Semester

Branch : Civil Engineering

CE 010 706 L06 – TRAFFIC ENGINEERING AND MANAGEMENT (Elective II) [CE]

(New Scheme – 2010 Admission onwards)

[Regular/Supplementary]

Time : Three Hours Maximum : 100 Marks

Part A

Answer **all** *questions.*
Each question carries 3 *marks.*

Explain the following briefly :

1. Traffic Management.
2. Highway capacity.
3. Grade seperated intersection.
4. Traffic safety.
5. Traffic flow.

(5 × 3 = 15 marks)

Part B

Answer **all** *questions.*
Each question carries 5 *marks.*

Write a brief note on the following :

6. Tidal flow operation.
7. Basic, possible and practical capacity.
8. Rotary intersection.
9. General causes and road accidents.
10. Queuing.

(5 × 5 = 25 marks)

Part C

Answer **all** *questions.*
Each question carries 12 *marks.*

11. Explain (i) Need and scope of traffic regulations ; (ii) One way streets.

Or

Turn over

12. Write short notes on the following :

    (a) Motor Vehicle Act.

    (b) Regulations concerning driver rules of road enforcement.

13. Explain :

    (a) Passenger car units.

    (b) Level of service.

Or

14. Estimate theoretical capacity of traffic lane with one way traffic flow at a stream speed of 38 kmph. Assume average space gap between vehicles to follow rotation $S_g = 0.278\ rt$. $t = 0.7$ sec. Assume average length of vehicles = 5 m.

15. Explain :

    (a) Capacity of rotary intersection.

    (b) Traffic signals.

Or

16. Briefly explain Webster's method for design of signals.

17. Explain in detail influence of road the vehicle, the weather and other factors on road accidents.

Or

18. Write notes on :

    (a) Collection of accident data.

    (b) Accident preventive measures.

19. Explain theory and basic diagrams of Traffic flow.

Or

20. Explain basic concepts of Lighthill-Whitham's theory.

(5 × 12 = 60 marks)

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