

GANPAT UNIVERSITY
B. Tech. Semester: VII (CIVIL) Engineering
Regular Examination November – December 2013
2CI711 - Transportation Engineering I

Time: 3 Hours

Total Marks: 70

- Instruction:**
- 1 Attempt all questions
 - 2 Figures to the right indicate full marks

Section – I

- Que. – 1 (a) Define :- Cordon lines, Study area, Trip generation, Base year, Desire line, Land use 12
 (b) Explain the road user characteristics in detail.

OR

- Que. – 1 (a) Explain the relationship between basic flow parameters with neat sketch. 12
 (b) Define :- Density, Space headway, Time headway, Time mean speed, Spot speed, Space mean

- Que. – 2 (a) Enlist the methods of Volume count survey. Explain any one method in details. 11
 (b) Explain the remedial measures for preventing accidents.

OR

- Que. – 2 (a) What are the types of rotary intersection? Explain the advantages of Rotary intersection. 11
 (b) What are the types of parking? Explain with sketch.

- Que. – 3 Attempt any three 12
 (a) Write a short note on "Road safety Audit"
 (b) Explain License plate method of O-D survey.
 (c) Write a short note on "VISSIM"
 (d) Differentiate between Homogeneous and Heterogeneous traffic flow

Section – II

- Que. – 4 (a) What are the factors affecting capacity and Level of Service? Explain 12
 (b) Explain various types of road signs with sketch.

OR

- Que. – 4 (a) Explain various types of road marking with sketch. 12
 (b) What is the necessity of traffic signal? Explain types of signal.

- Que. – 5 (a) Explain briefly about the Ride sharing and Peak hour metering. 11
 (b) Differentiate between Over pass and Under pass.

OR

- Que. – 5 (a) Explain about the condition diagram and collision diagram with sketch. 11
 (b) Explain at grade intersection and grade separated intersection with sketch.

- Que. – 6 Attempt any three 12
 (a) Explain about the roadway capacity for urban area.
 (b) Write a short note on "Tidal flow operation".
 (c) Explain advantages and disadvantages of one way street.
 (d) Write a short note on "Road Lighting".

END OF PAPER