

**GANPAT UNIVERSITY**  
**B. TECH. (CIVIL) SEM - VII**  
**C – 705, TRANSPORTATION ENGINEERING I**  
**(ELECTIVE)**  
**Nov – Dec 2012**

**Time :- 3 Hours**

**Total Marks :- 70**

**Instructions :- (i) Attempt all Questions**

**(ii) Figures to the right indicate full marks**

**SECTION I**

- Q1 (a) Explain the Road User characteristics 12  
(b) Enlist the various methods of O-D survey. Explain any one in detail.
- OR
- Q1 (a) Explain the speed – volume – density relationship with neat sketch. 12  
(b) Explain the method of spot speed survey by Radar Speedometer.
- Q2 (a) What are the purposes of Volume count survey? 11  
(b) What are the preventive measures or accident? Explain in detail.
- OR
- Q2 (a) Explain briefly on “Level of Service” 11  
(b) Classify the various types of Road Signs. Explain Regulatory and Informatory signs” with sketch.
- Q3 (a) What are the types of “On street parking”? Explain with sketch.  
(b) Write a short note on “At Grade Intersection”. 12

## SECTION II

- Q4 (a) Explain various types of Traffic Signal. 12  
(b) What is PCU? What are the factors affecting PCU?  
OR
- Q4 (a) Write a short note on "MX Road software" 12  
(b) What are the advantages and dis-advantyaages of Rotary Intersection?
- Q5 (a) Write a short note on "Road Lighting" 11  
(b) What are the types of Rotary Intersection? Explain in detail  
OR
- Q5 (a) Write a short note on "Cloverleaf" 11  
(b) Explain the physical characteristics of vehicle.
- Q6 (a) What are the causes of accidents? 12  
(b) Explain PIEV theory

END OF PAPER