

**GANPAT UNIVERSITY**

**B. Tech- Semester-VII Civil Engineering**

**Regular Examination Nov/Dec- 2015**

**Subject: 2CI : 711- Transportation Engineering –I**

Time: 3 Hours

Total Marks: 70

Instructions: - (1) Answer to the two sections must be written in separate answer books.

(2) Figures to the right indicate full marks.

(3) Assume suitable data if required.

**SECTION - I**

- QUES 1**      **Answer the following Questions.** 12
- (A) What is homogeneous and heterogeneous traffic? Draw the neat sketch of speed v/s density and speed v/s volume. (4)
- (B) What is PCU? Explain with example. (4)
- (C) Define the following terms: (4)
- i. Running speed
  - ii. Journey speed
  - iii. Time mean speed
  - iv. Spot speed

OR

- QUES 1**      **Answer the following Questions.** 12
- (A) Explain Career of Transportation Engineer. (4)
- (B) Write short note on "Changing the world in transportation engineering". (4)
- (C) What is traffic engineering? Explain objectives of traffic engineering. (4)

- QUES 2**      **Answer the following Questions.** 11
- (A) Give application of VISSIM, TRANS-CAD, CIVIL 3D and MX-ROAD. (5)
- (B) Discuss the various traffic studies and their importance. (6)

OR

- QUES 2**      **Answer the following Questions.** 11
- (A) What are the main objectives and purposes of intermediate public transport survey? (5)
- (B) Discuss briefly various factors which affect the road user characteristics and their effect on traffic performance. (6)



**QUES 3 Answer the following Questions.**

- (A) What are the different causes of traffic accidents? Discuss. (6)
- (B) Indicated how the traffic volume data are presented and the results in traffic engineering? (6)

**SECTION – II****QUES 4 Answer the following Questions.**

12

- (A) Describes the briefly level of Service concept in the HCM manual. (6)
- (B) Enlist traffic control device. Discuss warning sign with examples. (6)

OR

**QUES 4 Answer the following Questions.**

- (A) Define level of service and describes of Intelligent Transportation Engineering use in Highway capacity and level of service. (6)
- (B) What are the various types of traffic marking commonly used? Explain each with its application. (6)

**QUES 5 Answer the following Questions.**

11

- (A) Write short note on "Traffic Signals". (5)
- (B) Discuss types of parking with examples. (6)

OR

**QUES 5 Answer the following Questions.**

11

- (A) What are various types of islands used? Explain the uses of each. (5)
- (B) Give Comment "Pedestrian facilities in the Indian cities are not given proper justification in planning. (6)

**QUES 6 Answer the following Questions.**

12

- (A) Describes the briefly One way street. (6)
- (B) Write short note on "At grade Separated Intersection". (6)

**.....End of Paper.....**