

GUJARAT TECHNOLOGICAL UNIVERSITY

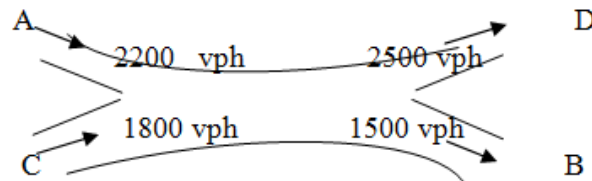
M. E. - SEMESTER – II • EXAMINATION – WINTER • 2013

Subject code: 1721301**Date: 24-12-2013****Subject Name: Traffic Engineering - 2****Time: 10.30 am – 01.00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Explain the relationship between Flow-Density and Speed-Density of traffic flow with neat sketch. **07**
- (b) Define Highway Capacity. What are the types of capacity? Explain each in detail. **07**

- Q.2** (a) What is Level of Service? Explain Level of Service for uninterrupted flow on rural highway with sketch. **07**
- (b) What is Hourly Volume? What are the purposes of Hourly Volume study? **07**
- OR**
- (b) Determine the minimum length and width of the given weaving section. **07**
Road AB and CD are two rural section of highway intersection. Level of Service B is to be provided for the traffic flow. The maximum service volume is 1500 passenger car / hour / lane.



- Q.3** (a) Explain various forms of weaving with neat sketch. Explain Diverging and Merging. **07**
- (b) Explain various types of Traffic Sign with sketch. **07**

OR

- Q.3** (a) Explain the concept of Signal Coordination. **07**
- (b) Enlist the various types of Signals. Explain Fixed time signal. **07**

- Q.4** (a) What are the measures required to adopt for effective Transportation System Management ? **07**
- (b) What are the impacts of Traffic air pollution? **07**

OR

- Q.4** (a) How the saturation flow at Intersection is measured? Explain in detail. **07**
- (b) Enlist the Traffic control devices. Explain any one in detail. **07**

- Q.5** (a) What are the advantages of simulation techniques ? **07**
- (b) Write the design standards for on street parking facilities. **07**

OR

- Q.5** (a) What are the steps involved in simulation? Explain in detail. **07**
- (b) What are the advantages and disadvantages of Traffic Signal? **07**
