

GUJARAT TECHNOLOGICAL UNIVERSITY**ME - SEMESTER-IV • EXAMINATION – SUMMER • 2014****Subject Code: 741901****Date: 04-06-2014****Subject Name: Multimodal Transportation System Planning
and Management****Time: 02:30 pm - 05:00 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)** Public transport is an important constituent of multi modal urban Transportation System. Justify the statement. What is the desirable Public Transport share with respect to city size (population) as per the guidelines of Ministry of Urban Affairs and Transport, GOI, 1996. **07**
- (b)** Explain the objective of National Urban Transport Policy (NUTP), 2006 with respect to Multi Modal Transportation System (MMTS). **07**
- Q.2 (a)** Explain the following statement with respect to the choice of mode in MMTS. **07**
 "The choice between Public Transport and Private Transport is an individual decision depending on modal frequency, trip length, duration, route, purpose, comparative fare, parking facilities and comfort and convenience. It is further, influenced by Government policies and Urban Local body decisions."
- (b)** Explain basic characteristics of right of way, technology and service types used to define transit mode. **07**
- OR**
- (b)** Explain the significance of Mass Transportation System (Bus) in designing MMTS. State the details of BRT System in 10 cities with investment support through JNNURM. **07**
- Q.3 (a)** Explain the integration (I) of modes with respect to Network Integration and Information Integration for MMTS. **07**
- (b)** Explain Multi Modal Transfer Station with sketch. **07**
- OR**
- Q.3 (a)** Explain the master plan for Delhi 2021 to be implemented by DIMMTS (spv). **07**
- (b)** Enlist Rapid Rail Transit System component. A RRT operates 10 four car trains / track / hour. Schedule load average is 1.9 passengers per seat. How many people can the train carry? Assume 80 seats per car. **07**
- Q.4 (a)** Conventional Transportation Planning tends to focus on motor vehicle traffic conditions. Justify the statement. **07**
- (b)** Explain the salient features of Bay Area Rapid Transit, San Francisco City. **07**
- OR**
- Q.4 (a)** State Green Transport hierarchy for Urban Transportation. The Green Transportation Hierarchy favors more efficient (in terms of space, energy and other costs) modes. Justify the statement. **07**
- (b)** Which are the public transport modes operating in Indian cities? Describe the condition and efficiency of Public Transport Mode in Indian cities. **07**
- Q.5 (a)** Explain the performance attributes of Urban Public Transport Modes (Heavy rail, LRT, Street Car (tram), Bus, BRT and Para Transit). **07**
- (b)** State the factors that affect accessibility and check whether they are currently considered in planning ? **07**

OR

- Q.5** **(a)** Describe Public Transport route Network Planning ñ An integrated approach for **07**
Hyderabad city.
- (b)** Explain the integration of mode with respect to financial integration and **07**
institutional integration for MMTS.
