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## **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 07 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. Explain the objective of National Urban Transport Policy (NUTP), 2006 with **07** respect to Multi Modal Transportation System (MMTS). **07** Q.2Explain the following statement with respect to the choice of mode in MMTS. õThe 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 decisionsö. Explain basic characteristics of right of way, technology and service types used 07 to define transit mode. Explain the significance of Mass Transportation System (Bus) in designing **07** MMTS. State the details of BRT System in 10 cities with investment support through JNNURM. Q.3Explain the integration (I) of modes with respect to Network Integration and 07 Information Integration for MMTS. Explain Multi Modal Transfer Station with sketch. 07 (b) Explain the master plan for Delhi 2021 to be implemented by DIMMTS (spv). 0.3 07 (a) **(b)** Enlist Rapid Rail Transit System component. A RRT operates 10 four car trains 07 / track / hour. Schedule load average is 1.9 passengers per seat. How many people can the train carry? Assume 80 seats per car. 0.4 Conventional Transportation Planning tends to focus on motor vehicle traffic **07** conditions. Justify the statement. Explain the salient features of Bay Area Rapid Transit, San Francisco City. **07** (b) OR **Q.4** State Green Transport hierarchy for Urban Transportation. 07 Transportation Hierarchy favors more efficient (in terms of space, energy and other costs) modes. Justify the statement. Which are the public transport modes operating in Indian cities? Describe the **07 (b)** condition and efficiency of Public Transport Mode in Indian cities. **Q.5** Explain the performance attributes of Urban Public Transport Modes (Heavy **07** rail, LRT, Street Car (tram), Bus, BRT and Para Transit. State the factors that affect accessibility and check whether they are currently **07** (b) considered in planning?

## OR

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

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