

GUJARAT TECHNOLOGICAL UNIVERSITY**M. E. Sem – IV Examination May 2011****Subject code: 741901****Subject Name: Multimodal Transportation System Planning & Management****Date: 16/05/2011****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) Define Multi Modal Transport System (MMTS). Justify the need of MMTS in urban India as about 32 percent of all vehicles in the country are plying in metropolitan cities (about 11 percent of country's total population). **07**

(b) Public Transport is an important constituent of MMTS. Justify the statement. **07**

Q.2 (a) What is the actual Share of Public transport and other modes in selected metropolitan cities in India (in 2007): Delhi, Mumbai, Kolkata, Chennai, Bangalore and Hyderabad. **07**

(b) Explain the elements of comprehensive MMTS with flow chart. **07**

OR

(b) Describe basic characteristics of right-of-way, technology and service types used to define transit mode. **07**

Q.3 (a) Explain integration of modes with respect to network integration, information integration, physical integration, operational integration, financial integration and institutional integration for Multi Modal Transport System. **07**

(b) Enlist and define generic classes of transit modes **07**

i) Street transit

ii) Semi – rapid transit

iii) Rapid transit

OR

Q.3 (a) Explain Master Plan for Delhi 2021 with respect to integrated planning for Multi Modal Transport System. **07**

(b) What are the salient features of Bay Area Rapid Transit, San Francisco city. **07**

Q.4 (a) A well developed Multi Modal Transport System use maximum application of Intelligent Transport System. Justify the statement with example of Delhi, Chennai and Bangalore. **07**

(b) Define following terms : **07**

Bus, Trolley-bus, Street-car, Commuter transit, Vanpool, Subscription-bus, Taxi and Dial-a-ride.

OR

Q.4 (a) Explain with a sketch, a typical layout for integration of various modes at MMTS terminal. **07**

(b) Describe “Public Transport Route Network Planning” – An Integrated Approach for Hyderabad city. **07**

- Q.5 (a)** Conventional transport planning tends to focus on motor vehicle traffic conditions. Justify the statement. **07**
- (b)** Explain the impacts considered and overlooked in conventional Transportation Planning. **07**

OR

- Q.5 (a)** State Green Transportation Hierarchy for urban transportation. The Green Transportation Hierarchy favours more efficient modes. Justify the statement. **07**
- (b)** Explain the performance characteristics of following urban transport modes : walking, cycling, taxi, fixed – route transit and para transit. **07**
