Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

ME – SEMESTER II (NEW) – • EXAMINATION – SUMMER 2016

Subject Code: 2721309 **Date: 31/05/2016**

Subject Name: Transportation System Management

Time:10:30 am to 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		What are the primary objectives of transportation system management strategies in situation of currently increasing travel demand under urban scenario?	**14**
Q.2	**(a)**	Discuss the role of capacity enhancement as a strategy to manage traffic flow? How could it be achieved?	**07**
	(b)	Categorize various elements which need to be addressed for managing transportation systems under various situations.	
		OR	
	(b)	Discuss the concerns in adopting the strategies like congestion pricing as an effective traffic system management tool?	**07**
Q.3	**(a)**	What is scrappage program? How could it contribute to transportation system management?	**07**
	(b)	What are the key assumptions, uncertainties & social concern involved in implementing scrappage programs?	**07**
		OR	
Q.3	**(a)**	Write a note on staggered work hours a TSM technique.	**07**
	(b)	Discuss how shuttle services & extended routes contribute to travel demand management?	**07**
Q.4	**(a)**	Explain the significance of Dial a ride & ride sharing as a tool to manage travel demand?	**07**
	(b)	What are priority lanes? Discuss its advantages & limitations?	**07**
		OR	
Q.4	**(a)**	What is skip stop service? When & where is it provided? What are its advantages?	**07**
	(b)	Discuss the advantages provided by transfer terminals & feeder services in managing traffic?	**07**
Q.5	**(a)**	Discuss the benefits of grade separated intersections over signalized intersection?	**07**
	(b)	Write a note on high occupancy vehicle a tool for transportation management?	**07**
		OR	
Q.5	**(a)**	Write a note on tidal flow technique to manage peak traffic demand.	**07**
	(b)	Discuss the importance of signal coordination in managing the traffic flow? How & where is it implemented?	**07**

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