Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

## M. E. - SEMESTER – I • EXAMINATION – WINTER 2012

Subject code: 711302N Subject Name: Traffic Engineering - I			Date:	Date: 09-01-2013			
Tim	e: 02	2.30 pm – 05.00 pm ions:		Total	Marks: 70		
	1.	Attempt all questions.					
		Make suitable assumption	s wherev	ver necessary.			
	3.	Figures to the right indicate full marks.					
Q.1	(a) (b)	Define :- Speed, Volume, Time mean speed, Space mean speed, delay, 07					
Q.2	(a)	Modal speed, Turn over.  a) Explain Greenshield's Model					
Q. <u>2</u>		Explain Greenshield's Model What are the purposes of Traffic volume study?					
	(0)	OR					
	<b>(b)</b>						
Q.3	(a)	Calculate (i) Modal speed	1	(ii) Median speed	07		
		(iii) Design spee		(iv) Time mean speed			
	(v) 98 <sup>th</sup> percentile speed (vi) 85 <sup>th</sup> percentile speed						
		Speed class	(Kmph)	No. of vehicles observed			
		10-14.	9	2			
		15-19.	9	15			
		20-24.	9	22			
		25-29.	9	38			
		30-34.	9	62			
		35-39.	9	50			
		40-44.	9	26			
		45-49.	9	18			
		50-54.	9	10			
		55-59.		2			
	<b>(b)</b>	What are the factors affecting spot speeds?  OR					
Q.3	(a)	Enlist the methods of Origin-Destination survey. Explain any one method. <b>07</b>					
	<b>(b)</b>	What are the purposes of Origin – Destination study.					
<b>Q.4</b>	(a)	Write a short note on "Off street parking"			07		
	<b>(b)</b>	What are the data require for parking study?  OR					
Q.4	(a)	What are the remedial mea	sures for	_	07		
•	(b) Draw the neat sketch of Mandatory signs (Any five) and Warning signs (						
	five).						
Q.5	(a)	(a) What are the types of Marking? Explain each in detail.					
	<b>(b)</b>	What are the advantage and dis advantages of Rotary intersection? <b>OR</b>					
Q.5	(a)	(a) Explain the relation between the basic traffic flow parameter.					
-	<b>(b)</b>						

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