Seat N	lo.:	Enrolment No		
Subi	act c	GUJARAT TECHNOLOGICAL UNIVER M.E –I st SEMESTER–EXAMINATION – JULY- 20 ode: 711304N	12	13/07/2012
Subje Time	ect N e: 2:3	Name: Basics of Transportation engineering 80 pm – 05:00 pm		Marks: 70
	Atte	empt all questions.		
		ke suitable assumptions wherever necessary. ures to the right indicate full marks.		
Q.1	(a) (b)	Explain with neat sketches speed- volume –density relationship Which are the different modes of transportation? Explain in de the characteristics of each mode.	_	07 07
Q.2	(a)	Explain with diagram the different stages involved in the Transportation planning process.		07
	(b)	What is Para-transit? How will you utilize this system for measize cities?	dium	07
		OR		
	(b)	What is co- ordination? Discuss the factors affecting the ordination.	e co-	07
Q.3	(a)	Explain the mechanical methods of volume data collection. All explain the use of volume data in planning various transportatifacilities.		07
	(b)	Explain (i) Speed (ii) Journey Speed (iii) Running Speed (iv) mean speed (v) space mean speed (vi) Average Speed Delay		07
		OR		
Q.3	(a)	What is O-D survey? Which are the different techniques of O-survey? Explain any one of them in detail. How will you represent the O-D data?		07
	(b)	Which are the different elements to be designed in the high geometry? Explain briefly their importance in the smooth oper of movement of vehicles	•	07
Q.4	(a)	What is super elevation? Explain the factors affecting the selevation.	super	07
	(b)	What is PCU? Explain the various factors affecting PCU. OR		07
Q.4	(a)	What is intersection? Explain the advantages and disadvantage at grade and grade separated intersection.	es of	07
	(b)	Explain briefly the terminal facilities to be planned at (Any two I. Railway station	/o)	07
		II. Airport		

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Bus station

Q.5	(a)	(a) Explain the function of different layers in the pavement with neat sketch. Which are the factors affecting the thickness of pavement layer?			
	(b)	Explain the different steps for the economic evaluation of transportation project.	07		
		OR			
Q.5 (a) What is overlay? Which are the types of overlay? reasons which lead to overlay design.		What is overlay? Which are the types of overlay? Describe the reasons which lead to overlay design.	07		
	(b)	Describe briefly the techniques of on street and off street parking.			
	. ,	Which method is more suitable in the busy street of CBD.			
