Seat No.:	Enrolment No.
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GUJARAT TECHNOLOGICAL UNIVERSITY

M.E. – SEMESTER – IV EXAMINATION – OCTOBER 2012

Subject code: 741301 Date: 25-10 -		<u>}</u>	
Subj	ect Na	ame: Advances in Transportation Engineering.	
Time	e: 2:30	0 pm – 5:00 pm Total Marks: 70)
Instr	cuctio	ons:	
		ttempt all questions.	
		Take suitable assumptions wherever necessary.	
		igures to the right indicate full marks. Each question carry equal marks (14 marks)	
	7, L	ach question earry equal marks (14 marks)	
Q.1	(a)	Explain in detail "Electronic payments, toll collection and fare collection.	07
	(b)	What is high performance concrete? Describe the characteristics and	07
		benefits of high performance concrete	
Q.2	(a)	Explain by drawing sketch public transportation management system by	07
	` ,	Satellite.	
	(b)	Enlist the different types of flyash classes. How the flyash can be used in	07
		road construction? OR	
	(b)	Explain by drawing flow chart National ITS Architecture and standards.	07
Q.3	(a)	Explain by drawing table conventional approach and advance system	07
	()	approaches for traffic congestion and traffic accidents.	
	(b)	Describe the properties of recycled concrete used as aggregates.	07
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Q-3	(a) (b)	What is modified bitumen? Explain the polymer bitumen modifier. Explain use of ITS in traffic management.	07 07
Q.4	` ,		07
Q.4	(a) (b)	What is road pricing? how road pricing is carried out by ITS. Describe the characteristics of fiber reinforced concrete.	07
	(6)	OR	0.
Q.4	(a)	Distinguish between glass fibre and polymer fibre reinforced concrete.	07
	(b)	Explain integrating ITS into transportation planning	07
Q. 5	(a)	What is adaptive traffic control system? Describe in detail.	07
Q. 0	(b)	What are the objectives of freeway incident management system?	07
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~ -		OR	
Q. 5	(a)	Explain the difference between pretrip and enroute travel information	07
	(b)	system. What do you understand by microsurfacing? Which equipments are used?	07
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