GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER – II • EXAMINATION – SUMMER • 2013

Su	bject	code: 1721310N Date: 05-06-2013	
Su	bject	Name: Road Safety and Environment	
		0.30 am – 01.00 pm Total Marks: 70	
In		etions:	
		Attempt all questions.	
		Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a)	Explain with a flow chart, road safety improvement programme.	07
۷.1	(b)	Explain comprehensive and third party insurance with respect to vehicles.	07
Q.2	(a)	Explain the elements of accident information system for accident prone location (Block Spot).	07
	(b)	Discuss how highway design can enhance road safety. OR	07
	(b)	List out various methods of statistical analysis of road accident records. Explain passion distribution with suitable example.	07
Q.3	(a)	Explain weighed severity index (WSI) method for determining the accident prone location.	07
	(b)	Explain briefly traffic management measures and their influence on accident prevention.	07
		OR	
Q.3	(a) (b)	Briefly explain the details to be collected in road accident form A-1. Discuss various measures to increase pedestrian safety.	07 07
Q.4	(a)	Draw flow diagram or environmental assessment of highway projects as per	07
	(b)	IRC: 104:1988. Enlist broad steps involved in EIA for highways. Discuss the air pollution in view of EIA of highway projects. OR	07
Q.4	(a)	Explain the measures to prevent soil erosion and land degradation in road development in hilly areas.	07
	(b)	Write short on traffic calming measures.	07
Q.5	(a)	What do mean by noise? What are the detrimental effects of traffic noise? Explain briefly.	07
	(b)	What are the various measures for controlling air pollution from road traffic? Explain briefly.	07
		OR	
Q.5	(a)	With a flow chart, state the steps involved in road safety audit process as per IFC: SP: 88-22010.	07
	(b)	What is road safety audit? State the specific aims of RSA. Also state important benefits of road safety audits.	07
