

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII (NEW) EXAMINATION – WINTER 2023****Subject Code:3170214****Date:01-12-2023****Subject Name: Vehicle and Road Safety****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.
4. Simple and non-programmable scientific calculators are allowed.

		MARKS
Q.1	(a) Define Active safety and Passive safety.	03
	(b) What are the provisions for disabled person according to road safety?	04
	(c) Explain crash test of vehicle with their importance.	07
Q.2	(a) Give the police responsibilities for the accident preventions.	03
	(b) Plan to aware people about rules and regulations of traffic.	04
	(c) State the various causes of rear end collision in vehicle.	07
	OR	
	(c) Explain antiskid braking system in details with required figure.	07
Q.3	(a) What is the role of vehicle bumper design in safety point of view?	03
	(b) Give brief introduction about road safety and their importance.	04
	(c) Write a note on the reasons of children having the accidents in the cases, they are	07
	(1) Enforcement - by imposing laws	
	(2) Encouragement by the use of publicity campaigns	
	OR	
Q.3	(a) Define : (1) conditional safety (2) perceptibility safety	03
	(b) Discuss on road traffic accidents scenario in India.	04
	(c) Describe electronic system to activate air bags.	07
Q.4	(a) State the requirements of concept of vehicle safety.	03
	(b) Discuss on traffic rules and driving behavior.	04
	(c) Write a note on Road Safety Educations in the cases, they are	07
	(1) Practical rather than theory education	
	(2) Principles of own development as regards to road safety education	
	OR	
Q.4	(a) Write a note on Collapsible steering column.	03
	(b) Describe automatic seat belt Tightener system.	04
	(c) Discuss on crashes related to pedestrian and bicyclists.	07
Q.5	(a) How teachers and parents are responsible for road accidents and their safety measurements?	03
	(b) Write a note on the celebration on road safety seminar organized by students.	04
	(c) Describe the different types of efforts done by government on road safety events.	07

OR

Q.5	(a)	Give some examples of the presentations on the road safety educations.	03
	(b)	Explain pre-school road safety education in details	04
	(c)	Discuss on Multidisciplinary approach to planning for traffic safety and injury control	07
