

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER-VII EXAMINATION – WINTER 2025

Subject Code:3170214

Date:13-11-2025

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) Explain need of vehicle safety?	03
	(b) Explain Causes of rear end collision.	04
	(c) List out Vehicle safety system and explain any two of them.	07
Q.2	(a) Explain Driving safety, Conditional safety and Operating safety.	03
	(b) Explain traffic rules and regulations.	04
	(c) Write a short note on Bumper design for the vehicle safety.	07
	OR	
	(c) Write a short note on Vehicle safety rating in India.	07
Q.3	(a) Explain Exterior safety and Interior safety.	03
	(b) Discuss road safety and its importance.	04
	(c) Explain road traffic accidents scenario in India.	07
	OR	
Q.3	(a) Explain role of police for the accident prevention.	03
	(b) Discuss on traffic rules and driving behavior.	04
	(c) Describe various front and rear object detection systems in detail.	07
Q.4	(a) What is the responsibility of people for accident prevention?	03
	(b) Explain provision for disabled person according to road safety.	04
	(c) Discuss the four E's of Accidents prevention.	07
	OR	
Q.4	(a) What is the role of policy makers and politicians for prevention of accident?	03
	(b) Explain antiskid braking system.	04
	(c) Write a note on Tilttable steering wheel.	07
Q.5	(a) Explain importance of efforts done by Drivers and Official road safety body for the road safety.	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
	OR	
Q.5	(a) What are efforts done by Government on Road Safety?	03
	(b) Write a note on the celebration on road safety seminar organized by Students.	04
	(c) Explain 5 P's of Road safety education.	07
