

**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.

		<b>MARKS</b>
<b>Q.1</b>	(a) Explain need of vehicle safety? (b) Explain Causes of rear end collision. (c) List out Vehicle safety system and explain any two of them.	03 04 07
<b>Q.2</b>	(a) Explain Driving safety, Conditional safety and Operating safety. (b) Explain traffic rules and regulations. (c) Write a short note on Bumper design for the vehicle safety.	03 04 07
	<b>OR</b>	
	(c) Write a short note on Vehicle safety rating in India.	07
<b>Q.3</b>	(a) Explain Exterior safety and Interior safety. (b) Discuss road safety and its importance. (c) Explain road traffic accidents scenario in India.	03 04 07
	<b>OR</b>	
<b>Q.3</b>	(a) Explain role of police for the accident prevention. (b) Discuss on traffic rules and driving behavior. (c) Describe various front and rear object detection systems in detail.	03 04 07
<b>Q.4</b>	(a) What is the responsibility of people for accident prevention? (b) Explain provision for disabled person according to road safety. (c) Discuss the four E's of Accidents prevention.	03 04 07
	<b>OR</b>	
<b>Q.4</b>	(a) What is the role of policy makers and politicians for prevention of accident? (b) Explain antiskid braking system. (c) Write a note on Tilttable steering wheel.	03 04 07
<b>Q.5</b>	(a) Explain importance of efforts done by Drivers and Official road safety body for the road safety. (b) Explain Pre-school road safety education in details. (c) Discuss on Multidisciplinary approach to planning for traffic safety and injury control.	03 04 07
	<b>OR</b>	
<b>Q.5</b>	(a) What are efforts done by Government on Road Safety? (b) Write a note on the celebration on road safety seminar organized by Students. (c) Explain 5 P's of Road safety education.	03 04 07

\*\*\*\*\*