

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER- VI EXAMINATION – SUMMER 2026

Subject Code:3160212

Date:01-06-2026

Subject Name:Two and Three Vehicle Technology

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) Classify Three Wheelers.	03
	(b) Write down merits and demerits of shaft drive over chain drive.	04
	(c) Explain the disc brake used in bikes with neat sketch.	07
Q.2	(a) Explain Layout of moped.	03
	(b) Write down merits and demerits of shaft drive over chain drive.	04
	(c) Describe working of two stroke engine with sketch.	07
	OR	
	(c) Write a short note on different types of cooling system in two-wheeler.	07
Q.3	(a) Discuss the spoke wheel and alloy wheel.	03
	(b) Describe working of simple carburetor.	04
	(c) Explain the working principle of differential mechanism used in three Wheeler.	07
	OR	
Q.3	(a) List out scavenging methods.	03
	(b) Define following terms. (1) Shock absorber (2) Scavenging (3) Frame (4) Air cooling system.	04
	(c) Write a short note on CVT-Continuously Variable Transmission of Two-wheeler.	07
Q.4	(a) Explain importance of breaking system.	03
	(b) What are the causes of white smoke and black smoke exhaust?	04
	(c) Explain front telescopic suspension system with sketch.	07
	OR	
Q.4	(a) Explain spark plug.	03
	(b) What are the basic requirements of tyre? Explain.	04
	(c) Classify various types of frames used in two wheelers. Explain back bone type of frame with neat sketch.	07
Q.5	(a) Draw a layout of passenger rickshaw.	03
	(b) Explain requirement of clutch and transmission in racing bikes.	04
	(c) Enlist the various horn mechanism and explain electric horn with neat Sketch.	07
	OR	
Q.5	(a) Define (1) Belt drive (2) Chain drive (3) Shaft drive	03
	(b) Write the advantages of tubeless tire over tube tire.	04
	(c) Draw layout of braking system used in three wheeler and explain the same.	07
