

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- SEMESTER–VI EXAMINATION – WINTER 2025****Subject Code:3160212****Date:25-11-2025****Subject Name:Two and Three Vehicle Technology****Time:02:30 PM TO 05:00 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.

Q.1*	(a) Explain gear shifting mechanism in bike.	03
	(b) Draw the layout of two wheelers	04
	(c) Write a short note on CVT-Continuously Variable Transmission of Two-wheeler.	07
Q.2	(a) Discuss about the white smoke and black smoke exhaust.	03
	(b) Explain the types of lubricants.	04
	(c) Write a short note on different types of cooling system in two-wheeler.	07

OR

Q.3	(c) Explain the multiplate clutch with help of neat sketch.	07
	(a) Write the constructional and functional difference between two stroke and four stroke SI engine?	03
	(b) Explain the Clutch release mechanism.	04
	(c) Explain the types of tires and types of wheels.	07

OR

Q.3	(a) Discuss the spoke wheel and alloy wheel.	03
	(b) Difference between the chain drive, belt drive and shaft drive.	04
	(c) With help of neat sketch of Four stroke SI engine.	07
Q.4	(a) Write down on design considerations for frame.	03
	(b) Discuss the modification required for CNG conversion	04
	(c) Explain the types of suspension system with the help of neat sketch for two wheeler vehicles.	07

OR

Q.4	(a) Briefly short note on battery using in two wheeler vehicles.	03
	(b) Discuss about the Different types of cranking mechanism for two wheeler vehicles.	04
	(c) Explain the types of break system with the neat sketch.	07
Q.5	(a) Draw the layout of passenger rickshaw.	03
	(b) Explain the anti lock breaking system (ABS) for two wheeler vehicle.	04
	(c) Explain the Different types of fuel supply systems.	07

OR

Q.5	(a) Define scavenging and explain it for two wheeler.	03
	(b) Explain the Ignition system and Lighting system for two wheeler.	04
	(c) Explain the types of frame for two wheeler with neat sketch.	07
