

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

- (c) Explain the multiplate clutch with help of neat sketch. **07**
Q.3 (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**
