

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI(NEW) EXAMINATION – WINTER 2022****Subject Code:3160212****Date:20-12-2022****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.

	MARKS
Q.1 (a) Define scavenging and explain it for two wheeler.	03
(b) Discuss the any one lubrication system used for 4-stroke engine.	04
(c) Explain the multi plate clutch used in two wheeler with neat sketch in detail.	07
Q.2 (a) Compare chain drive and gear drive for two wheeler	03
(b) Enlist the causes and remedies: engine consumes more fuel.	04
(c) Explain the drum brake with neat sketch.	07
OR	
(c) Explain the disc brake used in bikes with neat sketch.	07
Q.3 (a) Explain battery used in two wheeler in short	03
(b) Explain the port timing diagram for two stroke engine	04
(c) Explain the working principle of differential mechanism used in three wheeler.	07
OR	
Q.3 (a) Explain the magneto ignition system for two wheeler in short.	03
(b) Explain the double declutching in constant mesh gear box.	04
(c) Enlist the various horn mechanism and explain electric horn with neat sketch	07
Q.4 (a) Discuss the spoke wheel and alloy wheel.	03
(b) Differentiate between tube tyre and tubeless tyre.	04
(c) Explain starting mechanism for two wheeler vehicles.	07
OR	
Q.4 (a) Explain side light indicator in two wheeler in brief.	03
(b) Discuss the continuous Variable transmission used in two wheeler.	04
(c) Explain the importance of helmet and explain various type of helmet.	07
Q.5 (a) Give the advantages of multiplate clutch over single plate clutch.	03
(b) Explain the design requirements of racing bikes	04
(c) Explain the working principle of shock absorber with neat sketches.	07
OR	
Q.5 (a) Classify various types of three wheelers.	03
(b) Discuss the modification required for CNG conversion	04
(c) Explain preventive maintenance in two and three wheelers.	07
