

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER– VII (New) EXAMINATION – WINTER 2019

Subject Code: 2170207

Date: 26/11/2019

Subject Name: Two and Three Wheeler 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.

	MARKS
Q.1 (a) Explain scavenging used in two wheeler.	03
(b) Draw the lighting diagram for two wheeler.	04
(c) Explain selection criteria and design considerations for two wheeler engines.	07
Q.2 (a) Classify various types of three wheelers.	03
(b) Explain Gear shift mechanism for two wheeler.	04
(c) Explain in detail with diagram Disc brake for two wheelers.	07
OR	
(c) Explain construction and working of CVT with figure.	07
Q.3 (a) Draw the port timing diagram and explain it.	03
(b) Write a short note on brake down maintenance.	04
(c) Discuss the working of electric horn used in two wheelers.	07
OR	
Q.3 (a) Draw the brake circuit layout for two and three wheeler.	03
(b) Explain constant mesh gear box with neat sketch.	04
(c) What is the purpose of helmet and explain different types of helmets.	07
Q.4 (a) Explain vulcanizing process.	03
(b) Write the advantages of tubeless tyre over tube tyre.	04
(c) Explain preventive maintenance in two and three wheelers.	07
OR	
Q.4 (a) Explain Dog clutch with neat sketch.	03
(b) Give Aerodynamic constraints for two wheeler vehicles	04
(c) Compare spokes wheels, alloy wheels and pressed wheels.	07
Q.5 (a) Draw the horn circuit for two wheeler.	03
(b) Explain shock absorber working.	04
(c) Classify various types of frames used in two wheelers. Explain back bone type of frame with neat sketch.	07
OR	
Q.5 (a) Define air resistance and gradient resistance.	03
(b) Write a short note on Tubeless tyre.	04
(c) Explain ergonomic considerations for body work of two and three wheelers.	07
