

Seat No.: _____
No. _____

Enrolment

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VII(NEW) • EXAMINATION – WINTER 2016

Subject Code:2170207

Date:21/11/2016

Subject Name:Two and Three Wheeler Technology(Department Elective - I)

Time:10.30 AM to 1.00 PM

Total Marks: 70

Instructions:

1. **Attempt all questions.**
 2. **Make suitable assumptions wherever necessary.**
 3. **Figures to the right indicate full marks.**
- Q.1** (a) Classify various types of three wheelers. **07**
(b) Explain in detail with diagram Disc brake for two wheelers. **07**
- Q.2** (a) Explain selection criteria and design considerations for two wheeler engines. **07**
(b) Explain construction and working of Electric Vehicles. **07**
- OR**
- (b) Explain the layout of motorcycle with neat diagram **07**
- Q.3** (a) Explain Kick start mechanism for two wheeler. **07**
(b) Define scavenging? Explain any one method with neat sketch. **07**
- OR**
- Q.3** (a) Explain different Exhaust system layouts with routing and elevation. **07**
(b) Explain construction and working of continuously variable transmission with figure. **07**
- Q.4** (a) Classify various types of frames used in two wheelers. Explain back bone type of frame with neat sketch **07**
(b) Explain shock absorber construction and working principle. **07**
- OR**
- Q.4** (a) Compare spokes wheels, alloy wheels and pressed wheels. **07**
(b) Explain ergonomic considerations for body work of two and three wheelers. **07**
- Q.5** (a) Explain construction of handle bar used in motorcycles. Also list down some of the standard size parameters. **07**
(b) Explain preventive maintenance in two and three wheelers **07**
- OR**
- Q.5** (a) What is the purpose of helmet and explain different types of helmets. **07**
(b) Discuss the working of electric horn used in two wheelers. **07**
