

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VII • EXAMINATION – WINTER 2013

Subject Code: 170206

Date: 03-12-2013

Subject Name: Two and Three Wheeler Technology

Time: 10:30 TO 01:00

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 the two wheelers. Also explain different types of motorcycles. **07**
(b) Explain in detail steering geometry for two wheeler vehicle. **07**
- Q.2** (a) Explain construction and working of differential gear box used in three wheelers. **07**
(b) Explain requirements and types of clutch used in two & three wheelers. **07**
- OR**
- (b) Explain Continuous Variable Transmission system. **07**
- Q.3** (a) Draw the lighting diagram for two wheeler. **07**
(b) Explain the need and methods of Fuel Carburization. **07**
- OR**
- Q.3** (a) Explain various controls provided on the handle bar of two wheeler with line sketch. **07**
(b) Explain: Gyroscopic Effect & Trail **07**
- Q.4** (a) Types of braking mechanism & explain any one in detail. **07**
(b) Explain in detail with diagram Disc brake for two wheelers. **07**
- OR**
- Q.4** (a) Explain with neat sketch, Gear shift mechanism for two wheeler. **07**
Q.4 (b) Draw the wiring diagram of two wheeler. **07**
- Q.5** (a) Classify the frames of two wheelers and explain any one in detail. **07**
(b) Explain the construction and working of shock absorber with neat cross sectional view. **07**
- OR**
- Q.5** (a) Explain the difference between air cooling and liquid cooling systems. **07**
(b) Aerodynamic constraints for two wheeler vehicles. **07**
