

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.VOC. –SEMESTER 1(NEW SYLLABUS) EXAMINATION- WINTER 2018

Subject Code: 1110101

Date: 16-01-2019

Subject Name: Motor Vehicle Technology II

Time: 10:30 AM to 12:30 PM

Total Marks: 50

Instructions:

- 1. Attempt all questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**

- Q.1** (a) Give detail comparison of conventional frame and frameless construction. **05**
(b) What are the type of automobile vehicle body and explain their salient features. **05**

- Q.2** (a) What are the functions of front axle? Discuss the types of front axle? **05**
(b) Explain types of stub axle with neat sketches. **05**

OR

- (b) Explain with neat sketch wishbone type suspension system. **05**
- Q.3** (a) Explain principles of suspension system. Also, define (i) Sprung weight (ii) Unsprung weight. **05**
(b) Describe Mac-Pherson strut type suspension with neat sketch. **05**

OR

- Q.3** (a) What is anti-roll bar? Describe with neat sketch. **05**
(b) Explain leaf spring with neat sketch. **05**
- Q.4** (a) What are the functions of steering in an automobile? Discuss Rack and Pinion type steering gear. **05**
(b) Write a short note on Power steering system. **05**

OR

- Q.4** (a) Discuss in detail the Ackermann steering mechanism. **05**
(b) Explain the following terms: (i) Camber (II) Caster and (iii) King pin inclination. **05**
- Q.5** (a) What are the functions of braking system? Give detailed classification of automobile brakes. **05**
(b) Explain the construction and working of Drum brakes with neat sketch. **05**

OR

- Q.5** (a) Write a short note on Hydraulic braking system. **05**
(b) Describe with neat sketch construction and working of Disc brake. **05**