| Seat No.: | Enrolment No. |
|-----------|---------------|
| | |

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI • EXAMINATION - SUMMER- 2015

| Subject Code: 160205 | | Date: 12/05/2015 | | |
|---|------------|---|-------|----------|
| Subject Name: Automobile chassis and body engineering Time: 10.30am-01.00pm Instructions: | | Total Marks: 70 | | |
| | | Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. | | |
| Q.1 | (a) (b) | Write the difference between frame, chassis and body of a vehicle. What is driver's visibility? Explain methods for improving visibility of Drivers in a vehicle. | | 07 07 |
| Q.2 | (a) (b) | Describe with the neat sketch: Light commercial vehicle body. Explain different materials used for automobile body. OR | | 07 07 |
| | (b) | Explain vehicle drag. Explain vehicle body optimization techni | ques. | 07 |
| Q.3 | (a) (b) | Classify types of bus body. Draw bus body layout with main components. List out car body construction and explain typical car body construction with neat sketch. | | 07 07 |
| Q.3 | (a) (b) | OR Explain passenger seat dimension and floor height of bus with sketch. Explain different symmetric and asymmetric vertical loads in car. | | 07 07 |
| Q.4 | (a) (b) | Describe the construction of door and dash board. Explain Shear Panel method for determining stress analysis and body load. OR | | 07 07 |
| Q.4 | (a) (b) | Explain Body noise test and water leakage test. Briefly describe painting process for vehicle in details. | | 07 07 |
| Q.5 | (a) (b) | Write short note on Corrosion protection of body. Explain selection of air conditioning equipment and its mounting in vehicle. OR | | |
| Q.5 | (a) (b) | Explain roll over test to be performed for auto vehicles. What is vehicle safety? Explain requirements and provisions for vehicle safety. | | 07 07 |
