

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VIII • EXAMINATION – SUMMER 2013

Subject Code: 181907**Date: 09/05/2013****Subject Name: Automobile Body Engineering (Department Elective II)****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.

Q.1 (a) What is “Streamline Design” for vehicle body? Give the importance of smooth curves and slopping surfaces. **07**

(b) Explain with neat sketch or layout of articulated bus. **07**

Q.2 (a) What is aerodynamics forces and moment? Explain the different types of forces and moment produce on vehicle. **07**

(b) What is wind tunnel? Write different types of wind tunnels. Also gives advantages of it. **07**

OR

(b) Describe the drag, side force and lift forces in details. **07**

Q.3 (a) Discuss about the conventional and integral type of bus body construction. **07**

(b) What are the requirements of body for various types of vehicles? **07**

OR

Q.3 (a) Explain about the visibility consideration in the body design. **07**

(b) What is the characteristic of flat platform body? **07**

Q.4 (a) Explain in brief different types of bus body style. **07**

(b) Why toughened glass is used in Automobile? Explain difference between toughened glass and laminated glass. **07**

OR

Q.4 (a) What are the different entrance and exit locations in the bus? **07**

Q.4 (b) What are the different types of painting methods and explain the modern procedure of spray painting? **07**

Q.5 (a) What are the functions of painting in Automobile body and What are the main constituents of paints? **07**

(b) Discuss the materials used for car body construction, truck body and passenger bus body. **07**

OR

Q.5 (a) Discuss about interior trim, exterior trim and upholstery of automobile body. **07**

(b) Explain about any four vehicle body repair tools. **07**
