Seat No.:	Enrolment No.

Subject Code: 181907

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII • EXAMINATION - SUMMER 2014

Date: 27-05-2014

Sub	ject :	Name: Automobile Body Engineering	
Instru		0:30 am TO 01:00 pm Total Marks: 70	
mstr		Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a) (b)	Explain vehicle drag and its types. Discuss effect of body profiling on bus. Draw the bus body layout and give the function of each component of bus body.	07 07
Q.2	(a) (b)	Explain various seat dimension parameter with sketch. Explain crush test performed while testing of vehicle. OR	07 07
	(b)	Explain method of improving visibility in car and space in cars.	07
Q.3	(a)	What is difference between frame construction and double skin construction explains it in detail.	07
	(b)	Explain various insulating material with its characteristics. OR	07
Q.3	(a) (b)	Explain various adhesive and sealant used in automobile. Explain various types of sections used for frame construction for buses with neat sketch.	07 07
Q.4	(a) (b)	Explain SLED test. Discuss the need of aerodynamic structure in the auto vehicle and also explain different types of forces and moments acting in vehicle. OR	07 07
Q.4	(a) (b)	Explain methods for paint and painting process for automobile body. Explain body characteristics of vehicle.	07 07
Q.5	(a)	List Different types of bus bodies and explain splitlevel, double decker and articulated bus bodies with suitable sketch.	07
	(b)	Discuss sources of noises testing and method of elimination. OR	07
Q.5	(a) (b)	Explain global load cases. Explain shear panel method.	07 07
