Seat No.:	Enrolment No.
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GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER – II • EXAMINATION – SUMMER • 2013

•		de: 1/21104 Date: 05-06-2013	•
•		ame: Automotive Chassis and Body Engineering 30 am – 01.00 pm	,
	ructio	•	•
HISU	1. A 2. N	Ons: Attempt all questions. Take suitable assumptions wherever necessary. Sigures to the right indicate full marks.	
Q.1	(a) (b)	Explain car body construction with neat sketch. Explain 1. Boot 2. Dash board 3. Bonnet 4. Roof.	07 07
Q.2	(a) (b)	Give detailed classification of vehicle bodies. Explain various materials used for automobile body. OR	07 07
	(b)	Explain shear panel method for design of vehicle bodies.	07
Q.3	(a) (b)	Explain chassis frame design. What is vehicle safety? Explain requirements and provisions for vehicle safety.	07 07
Q.3	(a) (b)	OR Write a short note on õVehicle aerodynamicsö. Draw the bus body layout and give the function of each component of bus body.	07 07
Q.4	(a) (b)	Explain different aerodynamic forces and moments with their effects on the vehicle. What is driverøs visibility? Explain methods for improving visibility of driver in a vehicle. OR	07 07
Q.4	(a) (b)	Explain rules and regulations for design of vehicle bodies. Explain stress analysis in integral bus body.	07 07
Q.5	(a) (b)	Give the difference between symmetric and asymmetric vertical loads. Explain selection of paint and different methods of painting process. OR	07 07
Q.5	(a) (b)	Explain different body optimization techniques for minimum drag. Write a short note on ÷wind tunnel testing of scale modelø	07 07
