eat No.:	Enrolment No.
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GUJARAT TECHNOLOGICAL UNIVERSITY

		M. E SEMESTER – II • EXAMINATION – WINTER • 2013	
Subjec	ct cod	e: 1721104 Date: 31-12-2013	3
Subjec	et Nar	ne: Automotive Chassis and Body Engineering	
Time:	10.30	0 am - 01.00 pm Total Marks: 70)
Instru	iction	ıs:	
	1. Att	tempt all questions.	
2	2. Ma	ake suitable assumptions wherever necessary.	
•	3. Fig	gures to the right indicate full marks.	
Q.1	(a)	Describe various body optimization techniques for minimum drag.	07
Q.I	(b)	Describe principle of wind tunnel technology.	07
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Q.2	(a)	Draw and describe different types of car bodies.	07
	(b)	Describe driver's visibility and methods of improving it.	07
	(L)	OR	07
	(b)	Draw and describe constructional details of car roof.	07
Q.3	(a)	Draw and describe constructional details of under floor, bonnet and	07
Q.S	()	boot.	
	(b)	Describe classification of coach work.	07
		OR	
Q.3	(a)	Describe safety considerations while designing the automobile body.	07
	(b)	Describe how airbags are useful in interior safety of automobiles.	07
Q.4	(a)	Describe use of sheet metal, Light alloys and plastics in vehicle body.	07
Q	(b)	Describe importance of Glass, Rubbers and Paints in vehicle body.	07
	. ,	OR	
Q.4	(a)	Draw and describe Layout of the design for passenger cars.	07
Q.4	(b)	Draw and describe Layout of the design for buses and coaches.	07
Q.5	(a)	Describe different loading situations in vehicle body.	07
Q.S	(b)	Describe Idealized structure design of vehicle body.	07
	(~)	OR	٠.
Q.5	(a)	Describe recent safety measures in vehicle bodies.	07
	(b)	Describe the testing of vehicle bodies.	07
