Seat No.: _____ *Enrolment No._____*

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- VIth SEMESTER–EXAMINATION – MAY- 2012

Subject code: 160205 **Date: 19/05/2012**

Subject Name: Automobile Chassis and body engineering

Time: 10:30 am – 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)**	Explain with figure the vehicle drag.	**07**
	(b)	Describe Aerodynamic aids for optimization of drag.	**07**
Q.2	**(a)**	Explain safety requirements for car body.	**07**
	(b)	Write the difference between frame, chassis and body of a vehicle.	**07**
		OR	
	(b)	Draw and explain typical car body construction.	**07**
Q.3	**(a)**	Classify types of bus body. Draw and explain bus body layout.	**07**
	(b)	Draw the diagram for coach work and coach construction and explain it.	**07**
		OR	
Q.3	**(a)**	Describe with figure the light commercial vehicle body.	**07**
	(b)	Explain with sketch the tipper body design.	**07**
Q.4	**(a)**	Explain use of different metal sheets as vehicle body material.	**07**
	(b)	Describe the uses of plastics, FRP and GRP in bus body	**07**
		OR	
Q.4	**(a)**	Explain symmetric and asymmetric vertical loads in case of car loading.	**07**
	(b)	Describe idealized structure.	**07**
Q.5	**(a)**	Explain with a neat sketch the dash board and instrument panel of vehicle.	**07**
	(b)	Describe the selection of paint and painting process of vehicle.	**07**
		OR	
Q.5	**(a)**	Write the sources of body noises and explain the methods of its elimination.	**07**
	(b)	Explain selection of air conditioning equipment and its mounting in vehicle.	**07**

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