Seat No.: _____ **Enrolment No._____**

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VI (NEW) - EXAMINATION – SUMMER 2016

Subject Code:2160205 **Date:13/05/2016**

Subject Name: Automobile Chassis and Body Engineering

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)**	Enlist the types of chassis frame & explain it's design consideration.	**07**
	(b)	Explain function, construction & working of Air bag with neat sketch.	**07**
Q.2	**(a)**	Write short note on SSS method of vehicle structure analysis.	**07**
	(b)	Explain car body zones & body trims.	**07**
		OR	
	(b)	Explain the effects of different types of forces & moments acting on vehicle body.	**07**
Q.3	**(a)**	Classify & explain different types of bus bodies.	**07**
	(b)	Write short note about vehicle safety.	**07**
		OR	
Q.3	**(a)**	Compare the conventional & integral type construction of bus body.	**07**
	(b)	Classify & explain types of commercial vehicle body.	**07**
Q.4	**(a)**	Explain floor height & engine location for bus body.	**07**
	(b)	Explain driver visibility & methods for improving visibility.	**07**
		OR	
Q.4	**(a)**	Explain driver seat design & dimension parameters.	**07**
	(b)	Which materials are used in car body construction? State their characteristics.	**07**
Q.5	**(a)**	Explain an importance of ergonomics in vehicle.	**07**
	(b)	Why crash test is required? Explain it's procedure.	**07**
		OR	
Q.5	**(a)**	Write short note on dashboard instruments.	**07**
	(b)	As your point of view which improvements will you like to make in vehicle body design.	**07**

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