

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI (NEW) EXAMINATION – WINTER 2018

Subject Code:2160205

Date:30/11/2018

Subject Name:Automobile Chassis and Body Engineering

Time: 02:30 PM TO 05:00 PM

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

		MARKS
Q.1	(a) Name various components of transmission line and explain functions of each	03
	(b) Explain various types of sections used for frame construction with sketch	04
	(c) Describe various types of vehicular frame with neat diagrams	07
Q.2	(a) Describe various vehicle components locations	03
	(b) What do you mean by crumple zones? What is their importance?	04
	(c) Describe various types of materials used for body construction	07
	OR	
	(c) Explain various types of joints used in vehicles	07
Q.3	(a) Define crashworthiness of vehicle	03
	(b) Explain various requirements of vehicle body	04
	(c) Describe various loads on vehicle body	07
	OR	
Q.3	(a) Classify Vehicles with sketches	03
	(b) Describe various types of car bodies with neat sketches	04
	(c) Write a short note on “vehicle roof”	07
Q.4	(a) Classify various bus bodies with diagram	03
	(b) Write a short note on tipper body	04
	(c) Explain various vehicle body trims	07
	OR	
Q.4	(a) Define ergonomics of vehicle	03
	(b) Write a short note on tanker body	04
	(c) Explain Full frontal crash test with neat sketch	07
Q.5	(a) Define different types of safety. Describe a diagram of vehicular Dashboard	03
	(b) Describe various types of car seats.	04
	(c) Describe working of Airbag system in vehicles	07
	OR	
Q.5	(a) Write a short note on seat belts.	03
	(b) Describe ways to improve “Vehicle’s Visibility”	04
	(c) Explain roll over crash tests with neat sketch	07
