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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V EXAMINATION - WINTER 2015

Subject Code: 150202		Code: 150202 Date:15/12/2015	Date:15/12/2015	
Su	bject	Name: Automobile Systems		
Time: 10:30am to 1:00pm				
Ins	Instructions:			
	1. 2. 3.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a) (b)	Explain four wheel drives. Expain unibody structure for vehicle.	07	
Q.2	(a) (b)	Explain different types of resistance during motion of vehicle. Define Tractive efforts and draw bar pull in detail. OR	07	
	(b)	Write a short note on fluid flywheel.	07	
Q.3	(a) (b)	Describe working of single plate clutch with neat sketch. Explain characteristics of lining material and different types of lining material. OR	07	
Q.3	(a) (b)	Explain Sliding mesh gear box with neat sketch. Explain epicyclical gearbox with neat sketch.	07	
Q.4	(a) (b)	Write a short note on Torque converter with neat sketch. Explain Torque tube drive and Hotch kiss drive with neat sketch. OR	07	
Q.4	(a) (b)	Explain Bleeding of Brake with neat sketch. Explain working of Master cylinder with neat sketch.	07	
Q.5	(a) (b)	Write short note on tyre rotation of vehicle. Describe with neat sketch Ackerman steering system linkages. OR	07	
Q.5	(a) (b)	Describe various types of independent suspension system. Explain purpose and types of suspension system.	07	
