Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE – SEMESTER – V (NEW) EXAMINATION – WINTER 2015

Subject Code: 2150207 **Date:10/12/ 2015**

Subject Name: Automobile Transmission

Time:10:30am to 1:00pm **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)**	What is the need of transmission in automobile? Explain classifications of transmission system.	**07**
	(b)	Explain tractive effort and resistance to motion of a vehicle	**07**
Q.2	**(a)**	Explain requirements of friction lining material. Give difference between wet clutch and dry clutch	**07**
	(b)	With neat sketch explain multi plate clutch.	**07**
		OR	
	(b)	With neat sketch explain centrifugal clutch	**07**
Q.3	**(a)**	With neat sketch explain synchromesh gear box.	**07**
	(b)	With neat sketch explain transfer box.	**07**
		OR	
Q.3	**(a)**	Explain gear box maintenance.	**07**
	(b)	With neat sketch explain constant mesh gear box.	**07**
Q.4	**(a)**	With neat sketch explain fluid coupling.	**07**
	(b)	Give difference between hydrodynamic and hydrostatic drive.	**07**
		OR	
Q.4	**(a)**	With the help of diagram explain constructional and functional details of torque converter.	**07**
	(b)	Explain constructional and functional details of Janney hydrostatic drive.	**07**
Q.5	**(a)**	Explain drive system used in hybrid vehicle.	**07**
	(b)	Write short note on Electric drive.	**07**
		OR	
Q.5	**(a)**	With neat sketch explain hydraulic actuation system.	**07**
	(b)	Explain automatic transmission with intelligent Electronic control systems.	**07**

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