Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

DIPLOMA ENGG.- IIIrd SEMESTER–EXAMINATION – MAY/JUNE- 2012

Subject code: 331701 **Date: 30/05/2012**

Subject Name: Transducer and Telemetry

Time: 02:30 pm – 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.**
4. **English version is considered to be Authentic**

Q.1	(a)	Differentiate active and passive transducer with definition and examples.	**07**
	(b)	Define resistive transducer. Explain any one.	**07**
Q.2			
	(a)	Explain working principle of piezo electrc transducer with application.	**07**
	(b)	Write short note on radio active tranducers.	**07**
		OR	
	(b)	Write short note on strain gauge tranducers.	**07**
Q.3			
	(a)	State the types of photo electrical transducer.explain working principle of any one with application	**07**
	(b)	Explain semiconductor pressure sensor.	**07**
		OR	
Q.3	(a)	Draw and explain the blok diagram of general telemetry system.	**07**
	(b)	Compare pneumatic verses electronic telemetry systems	**07**
Q.4			
	(a)	Explain the working principle and application of fiberscope.	**07**
	(b)	Explain the working principle and application of Annunciator.	**07**
		OR	
Q. 4	(a)	Draw and explain the positioning telemetry	**07**
	(b)	Define modulation technique.State the types of modulation. Explain any one .	**07**
Q.5			
	(a)	Write short note on “intrinsic safety”	**07**
	(b)	Explain working of I to V convertor using diagram.	**07**
		OR	
Q.5	(a)	Explain hall effect transducer and its application	**07**
	(b)	State the types of temperature transducers.Explain any one in detail.	**07**

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