Seat No.:	Enrolment No.

## GUJARAT TECHNOLOGICAL UNIVERSITY PDDC - SEMESTER – VII • EXAMINATION – WINTER 2012

Subject code: X 70903		ode: X 70903 Date: 01/01/2	Date: 01/01/2013	
•		Name: Industrial Instrumentation  .30 am - 01.00 pm  Total Marks	: 70	
Insti		ions: Attempt all questions.		
	2.	Make suitable assumptions wherever necessary.  Figures to the right indicate full marks.		
Q.1	(a) (b)	Explain Principles and classification of transducers. Explain different types of strain gauges and explain any one with necessary diagram.	07 07	
Q.2	(a) (b)	Explain construction and working of Load Cell (any one). Explain L.V.D.T. with necessary sketch.  OR	07 07	
	<b>(b)</b>	Explain R.V. D. T. with necessary diagram.	07	
Q.3	(a) (b)	• •		
Q.3	(a)	011	07	
	(b)		07	
Q.4	(a) (b)	Explain working principle of Rotameter for flow measurement.  Explain working principle of hot wire anemometer.  OR		
Q.4	(a)	Explain working principle of Ultrasonic flow meter for flow measurement.	07	
	<b>(b)</b>	Explain working principle of thermocouple.	07	
Q.5	(a) (b)	Explain strip chart recording method.  Explain X-Y type of recording method.  OR	07 07	
Q.5	(a) (b)	Explain principle of data acquisition system.  Explain Air purge system for level measurement.	07 07	

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