seat No.: Enrolment No

GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER - II • EXAMINATION - SUMMER • 2013

Subject code: 1720310			Date: 07-06-2013		
	•	t Name: Industrial Me	asurement		
Time: 10.30 am – 01.00 pm				Total Marks: 70	
In	stru	ctions:			
		 Attempt all question Make suitable assun Figures to the right 	nptions wherever	*	
Q.1	(a)	for gauge factor.		lisplacement and derive the equation	07 07
	(b) Describe the function of LASER baconstruction of LASER Doppler velocities			ed length measurement with working and imeters.	
Q.2	 (a) Explain voltage and current telemetry system. (b) List out the different types of transmitters and explain Smart and Integration transmitter. OR				
	(b)		07		
	(b)	Explain hydraulic force me			
Q.3	(a)	Displacer level detector.			07
	(b)	Give explanation of fiber of	optic temperature i	neasurement system.	07
Q.3	(a)	Explain McLeod gauge with merits and demerits.			
~	(b)	Explain the turbine flow meter with neat diagram.			
Q.4	(a)	Explain inductive types electrical signal.	ich is translate linear motion into	07	
(b) Clarify the operating principle of capacitive transc working, merits and demerits.				tive transducer with construction,	07
OR					07
Q.4	(a) (b)	Explain Static Errors in details. What is the meaning of measurement and its aim explain with functional elements of instrument.			
Q.5 (a) Explain the principle of pyrometer. And describe any one me contact type of temperature measurement.				describe any one method for non	07
	(b)	Define the following terms			07
		1.Repeatibility	2.Drift	3.Threshold	
		4.Precision7.Sensitivity	5.Resolution	6.Calibration	
Q.5	(a)	What is strain gauge? And	OR explain different t	vnes of strain gauge	07
ν.	(b)	Explain hydrostatic pressure type liquid level measuring system.			07
