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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-IV • EXAMINATION - WINTER • 2014

Subject Name: Transducers Time: 02:30 pm - 05:00 pm Instructions: 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. Q.1 (a) Explain in detail the functional elements of an Instrument. (b) List out types of inferential type of flow meters and explain ultrasonic flow meter. Q.2 (a) Explain all static characteristics of instruments. (b) Explain in detail Resistance strain Gauge. OR (b) Explain Vibration method of Density Measurement. Q.3 (a) Explain in detail Linear variable –Differential Transformer. (b) Discuss capacitance level indicator and radiation level detector in detail. OR Q.3 (a) Discuss air purge system and ultrasonic system to measure the liquid. Level. (b) Explain Non-contact type Thickness measurement in detail. Q.4 (a) Explain in detail any two quantity flow meters. OR Q.4 (a) Explain in detail basic operating principal, advantages and disadvantages and parts of variable head flow meters. (b) Classify electrical telemetry systems. Explain any two in brief. Q.5 (a) What is temperature? And write in detail about Temperature Scales. (b) Explain all type of Manometers and errors in Manometer. OR Q.5 (a) List out types of electrical temperature measuring instruments and explain Each in brief. (b) Discuss McLeod gauge in detail.		•	Code: 141702 Date: 02-01-2015	
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