GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI • EXAMINATION - WINTER 2013

Subject Code: 161705 Subject Name: Instrumentation Measurement-II Time: 02:30 pm to 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) (b)	Explain coutte visco meter in detail. Explain electronic length measurement in detail.	07 07
Q.2	(a) (b)	Explain capacitive strain gauge with neat sketch. Explain bounded resistance strain gauge with neat sketch. OR	07 07
	(b)	Explain mass spring seismic sensor with neat diagram.	07
Q.3	(a) (b)	Explain acceleration measurement in detail. Explain measurement of force using piezoelectric transducer. OR	07 07
Q.3	(a) (b)	Explain the measurement of gas density with neat sketch. Explain paper chromatography and thin-layer chromatography.	07 07
Q.4	(a) (b)	Explain principle, working and application of mass spectrometer. Explain principle, working and application of atomic absorption spectroscopy. OR	07 07
Q.4	(a) (b)	Explain glass electrodes in detail. Explain reference electrodes in detail.	07 07
Q.5	(a) (b)	Explain flame ionization detector in detail. Explain paramagnetic type oxygen analyzer with neat sketch. OR	07 07
Q.5	(a) (b)	Explain the scheme for measurement of dew point with neat sketch. Explain conductivity and give the complete scheme for measurement of conductivity in process with neat sketch.	07 07
