Seat No.:	Enrolment No.
Deat 110	Emonition 10.

Subject Name: Plastic Process Instrumentation and Process Control

Subject Code: 162303

Time: 10:30 AM to 01:00 PM

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER - VI (OLD).EXAMINATION - WINTER 2016

Date: 22/10/2016

Total Marks: 70

	Instruc	etions:	
		 Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. 	
Q.1	(a)	Define: Calibration, Accuracy, Precision, Repeatability, Drift, Sensitivity and True value.	07
	(b)	Explain the functional elements of an Instrument with block Diagram.	07
Q.2	(a) (b)	Explain Open loop and closed loop system with neat diagram. Give a broad classification of electrical measuring instruments. OR	07 07
	(b)	List all elastic pressure transducer and explain C-type bourdon tube gauge.	07
Q.3	(a) (b)	Make a comparison sheet for various pressure transducers. Explain static and dynamic characteristics of an instrument. OR	07 07
Q.3	(a) (b)	Explain linear variable differential transducer with neat sketch. Explain Eddy current tachometer with neat sketch.	07 07
Q.4	(a) (b)	Write short note on thermocouples. Write short note on PID injection pressure control. OR	07 07
Q.4	(a)	What are the different methods of temperature measurement? Explain resistance thermometer.	07
	(b)	What are the different methods to measure extrude thickness? Explain any one in detail.	07
Q.5	(a) (b)	Define, draw and derive equations for Step response and Impulse response. What are the different parts of Injection molding machine? Explain its functions. OR	07 07
Q.5	(a) (b)	Explain about different parts of a blow mould for an oil container with handle. Define process control. Explain about the importance of Process control.	07 07
