GUJARAT TECHNOLOGICAL UNIVERSITY

		BE - SEMESTER-VI (OLD) - EXAMINATION - SUI	MMER 2017	
Subject Code: 161701 Date: 05/0			Date: 05/05/2017	
Subject Name: Instrumentation System				
Time: 10:30 AM to 01:00 PM Total Marks: 70				
	Instructions:			
1. Attempt all questions.				
		2. Make suitable assumptions wherever necessary.		
	3	3. Figures to the right indicate full marks.		
0.1	(.)		0.7	
Q.1	(a) Describe the pneumatic loop wiring diagram in detail.(b) Draw the standard symbols.		07 07	
	(D)	1. Butterfly valve 2. Venturi tube	07	
		3. Rupture disk 4. Drain		
		5. Level gauge 6. Vehicle route		
		7. Programmable logic controller-Primary location		
Q.2	(a)	Explain air supply system for instrumentation.	07	
Q.2	 (a) Explain air supply system for instrumentation. (b) Draw the P&I diagram using appropriate control device for following processes: 1. A boiler discharge steam flow control system. (In it use vertex flow 			
		meter for measuring discharge steam).	it use vertex 110 w	
		2. Pressure control loop in tank.		
		OR		
	(b)	Explain the various types of compressor used for instrument a	air supply. 07	
Q.3	(a)	Describe the selection of measurement method for "Flow".	07	
	(b)	Prepare the specification sheet for pressure transmitter.	07	
		OR		
Q.3	(a)	Draw and explain electrical power system in control panel.	07	
	(b)	Give various methods for selecting level measurement.	07	
Q.4	(a)	Describe in details of various control panels.	07	
	(b)	Explain the plant start up procedure.	07	
		OR		
Q.4	(a)	Explain the function and types of dryers.	07	
	(b)	Discuss the check list for good installation practice in detail.	07	
Q.5	(a)	Why the documentation is required in plant?	07	
_	(b)	Explain the panel bid specifications for good panel design.	07	
		OR		
Q.5	(a)	Discuss electric safety and intrinsic safety.	07	
	(b)	Give details about duties, jobs and responsibilities of project in	manager. 07	
