Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI- EXAMINATION – SUMMER 2016			
Subject Code:161703		Date:09/05/2016	
Subject Name: Control System Components			
Time: 10:30 AM to 01:00 PM		Total Marks: 70	
Inst	ructio		
		Attempt all questions.	
		Make suitable assumptions wherever necessary. Figures to the right indicate full marks	
Q.1	(a)	Write a note on construction and working of single port and of port Globe valves.	louble 07
	(b)	Describe construction of electromechanical relay.	07
Q.2	(a)	Brief about flow and level switches.	07
	(b)	Explain importance of calculation of discharge coefficient (control valve sizing.	C _v for 07
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	(b)	Discuss noise problem in control valves.	07
Q.3	(a)	With neat sketch explain working of an optoelectronic relay.	07
	(b)	Discuss construction and working of temperature switches. OR	07
Q.3	(a)	Introduce working of contactor starters for motor.	07
	(b)	Explain inherent valve flow characteristics.	07
Q.4	(a)	Introduce valve capacity and valve rangeability in brief.	07
	(b)	Explain pneumatic transmitter in detail.	07
		OR	
Q.4	(a)	Describe safety relief valves in detail.	07
	(b)	Write about types of followers.	07
Q.5	(a)	Discuss construction and working of permanent magnet stepper m	notor. 07
-	(b)	What is cam? Discuss cam terminology introducing each part.	07
		OR	
Q.5	(a)	With block diagram and neat sketch discuss difference between and armature controlled DC Servomotor.	n field 07
	(b)	Explain design of multi-mesh gear train	07
