Seat No.:	Enrolment No.
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GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-VI • EXAMINATION - WINTER 2013

Subj	ect C	ode: 161703 Date: 02-12-2013	
_	: 02:3	ame: Control System Components 30 pm to 05:00 pm Total Marks: 70	
	2. N	ttempt all questions. Iake suitable assumptions wherever necessary. igures to the right indicate full marks.	
Q.1	(a)	Define the following terms used in gears- (i) Gear Ratio (ii) Back lash (iii) Pitch Circle	07
	(b)		07
Q.2	(a)	Explain the pressure drop requirements for good control valve and also explain how it controls flow?	07
	(b)	one which is not using movable parts.	07
	(b)	Which are different types of stepper motors? Also explain the various applications of stepper motor in instrumentation	07
Q.3	(a) (b)		07 07
		OR	
Q.3	(a) (b)		07 07
Q.4	(a) (b)		07 07
Q.4	(a) (b)		07 07
Q.5	(a)	Classify the actuators of control valves and explain them in brief.	07
	(b)	•	07
Q.5	(a)	relay and contactor?	07
	(b)	Explain the Cam as a Mechanical Function Generator, with suitable example.	07
