Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

U			BE – SEMESTER V • EXAMINATION – WINTER - 2012 e: 150203 Date: 17-01-2013	
Fime :	: 02	:30	ne: Power electronics and control engineering pm to 05:00 pm Total Marks: 70	
Instru	1 2	Atto Ma	: empt all questions. ke suitable assumptions wherever necessary. ures to the right indicate full marks.	
Q.1	`	(a) b)	Explain successive approximation type A/D Converter with neat diagram. Explain unijunction transistor with application.	07 07
Q.2	((a)	Explain the operation of dielectric heating and list the advantages of dielectric heating.	07
	(b)	Explain magnetic energy storage welder and capacitor energy storage welder.	07
			OR	
	(b)	Explain ignitron contactor and also state merits and limitation of ignitron.	07
Q.3	((a)	Explain memory organization in detail.	07
	(b)	Explain instruction classification in 8085. OR	07
Q.3	((a)	Explain programmable logic controller in detail.	07
Q.C		b)	Explain thermocouple and strain gauge in brief.	07
Q.4	((a)	Explain Silicon controlled rectifier with two transistor model.	07
	(b)	Write a program to arrange an array of data in ascending order in 8085. OR	07
Q.4	((a)	Explain pin diagram of 8085 microprocessor.	07
Q.4	(b)	Write a program to find the largest number in array of data using 8085 instructions.	07
Q.5	(a)	Explain DIAC and TRIAC.	07
Q.5	`	b)	Explain input and output interfacing in 8085. OR	07
Q.5	((a)	Explain leading and traveling wave tube briefly.	07
		b)	Explain high frequency power source for induction heating.	07
