	GUJARAT TECHNOLOGICAL UNIVERSITY		
M.E. SEMESTER III–EXAMINATION (Remedial)– WINTER 2015			
9	Subi	ect code: 730406 Date: 07/12/201	5
	Subje Fime:	ect Name: Peripheral System Design & Interfacing 2:30 PM to 5:00 PM Total Marks: 70 uctions: 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks.	
Q.1	(a) (b)	What is bus? Explain bus structure and bus design in detail. What are the advantages and disadvantages of GPIB standard? Explain GPIB bus configurations in details.	07 07
Q.2	(a) (b)	Compare ISA, EISA, MCA and VESA VL bus Explain centronics handshake with timing diagram. Explain EPP and ECP mode for serial communication.	07 07
	(b)	OR What are the application of ST 100 and multi bus? Explain the electrical and mechanical configuration of ST 100 and multi bus.	07
Q.3	(a)	Compare serial and parallel data transfer and explain the RS 232 C serial data transfer standard.	07
	(b)	What is Transparent addressing in CRT Controller? How it is implemented? OR	07
Q.3	(a)	Which different memory contention schemes are used in CRT Controller? Explain any two in detail.	07
	(b)	Explain RS 449 communication interface in detail.	07
Q.4	(a)	What is DMA? With help of functional block diagram explain the operation of DMA controller.	07
	(b)	What are the advantages of PCI bus standards? Explain PCI bus in detail OR	07
Q.4	(a) (b)	What is data acquisition system? Draw and explain block diagram of it in detail. Write Short note on programmable logic controller.	07 07
Q.5	(a)	Compare cross compiler and simulator and explain the simulator in circuit emulator.	07
	(b)	Write short note on PID controller. OR	07
Q.5	(a)	Explain different program development tools used in microprocessor based system with models.	07
	(b)	Write short note on current loop interface	07
