Seat No.:	Enrolment No.
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GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER – III • EXAMINATION – WINTER 2012

Subject code: 730406 Date: 26/12/2012			
Subj	ect N	Name: Peripheral System Design and Interfacing.	
-		.30 am – 01.00 pm Total Marks: 70	
		ions:	
		Attempt all questions.	
		Make suitable assumptions wherever necessary.	
		Figures to the right indicate full marks.	
Q.1	(a)	What is PLC? Explain its operation with example.	07
	(b)	Draw & explain PC Based Data Acquisition System.	07
Q.2	(.)	XX . 1	07
	(a)	Write short notes on	07
	(b)	(1) Cross Compiler. (2) Simulator & Emulator. Classify GPIB bus configuration & explain any one in detail.	07
	(b)	OR	U/
	(b)	Classify operating modes of IEEE 1284 standard & explain in detail.	07
	(~)		•
Q.3	(a)	What is CENTRONICS? Explain CENTRONICS handshake with timing diagram.	07
	(b)	Write short notes on	07
		(1) PS / 2. (2) ISA.	
0.0		OR	
Q.3	(a)	Explain procedure for interfacing GPIB devices to PC.	07
	(b)	Write short notes on (1) USB. (2) VESA BUS.	07
		(1) USB. (2) VESA DUS.	
Q.4	(a)	Why PCI Bus is more popular? Explain in detail with its merits.	07
•	(b)	Write short notes on	07
	()	(1) Flow control. (2) Null Modem.	
		OR	
Q.4	(a)	Draw block diagram of DMA controller & explain DMA operation in detail.	07
Q.4	(b)	Write short notes on	07
		(1) Loop back Plug. (2) DCE and DTE.	
Q.5	(a)	Compare serial data transfer with parallel data transfer in detail.	07
Q.C	(b)	Explain Integrated development environment.	07
	(2)	OR	0.
Q.5	(a)	Explain CRT controller.	07
-	(b)	What are the basic signal conditioning requirements of following	07
		transducers?	
		(1) RTD. (2) Thermocouple.	
