Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

PDDC - SEMESTER – IV • EXAMINATION – WINTER 2012

Subject code: X40901 **Date: 03/01/2013**

Subject Name: Microprocessor and Interfacing

Time: 02.30 pm - 05.00 pm **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Explain block diagram of microprocessor.	**07**
	(b)	Draw pin diagram of microprocessor.	**07**
Q.2	**(a)**	Explain different types of addressing modes in microprocessor.	**07**
	(b)	Explain what is T cycle and machine cycle with necessary example.	**07**
		OR	
	(b)	Enlist different types of interrupts in microprocessor and explain any one.	**07**
Q.3	**(a)**	Describe Memory organization of 8085 Microprocessor with classification of memory.	**07**
	(b)	Explain the execution of PUSH and POP instructions with necessary flow diagram.	**07**
		OR	
Q.3	**(a)**	Give instruction classification of 8085 with suitable example. Explain various arithmetic instructions in detail.	**07**
	(b)	Describe BUS organization of 8085 Microprocessor.	**07**
Q.4	**(a)**	Describe various Flags in 8085 Micro processor.	**07**
	(b)	Describe any one method for Analog to digital conversion.	**07**
		OR	
Q.4	**(a)**	Write a short note on 8251A USART.	**07**
	(b)	Write a short note on 8255A PPI.	**07**
Q.5	**(a)**	Write a short note on 8279 for keyboard interface.	**07**
	(b)	Write a short note on 8253 timer.	**07**
		OR	
Q.5	**(a)**	Describe the process of Digital to Analog conversion by Binary Weighted resister method	**07**
	(b)	Explain different JUMP instructions giving illustrations in each case.	**07**

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