## **GUJARAT TECHNOLOGICAL UNIVERSITY**

## **BE - SEMESTER-IV EXAMINATION - SUMMER 2016**

	Subje	ct Code:140701 Date:30/05/2016	
	Subje	ct Name:Microprocessor And Interfacing	
	U	10:30 AM to 01:00 PM Total Marks: 70	
	Instruct		
		1. Attempt all questions.	
		2. Make suitable assumptions wherever necessary.	
		3. Figures to the right indicate full marks.	
<b>7</b> 1	(a)	Draw the functional block diagram of 2005 migrangescar & explain in Priof	07
<b>Q.1</b>	(a)	Draw the functional block diagram of 8085 microprocessor & explain in Brief. Discuss various addressing modes with suitable Examples.	07
Q.2	(b)	Describe the De-multiplexing of address bus in 8085.	07
Q.2			07
	<b>(b)</b>	Draw the timing diagram for the instruction MVI A, 32H at memory location 2000H and 2001H	U/
		OR	
	<b>(b)</b>	Explain flag register of 8085 microprocessor.	07
Q.3	(a)	Compare memory mapped I/O with peripheral mapped I/O	07
	<b>(b)</b>	Explain PUSH and POP instructions.	07
	. ,	OR	
Q.3	(a)	Listout various arithmetical and logical instruction of 8085 microprocessor.	<b>07</b>
		Explain any two with suitable example.	
	<b>(b)</b>	Write an assembly language program to load any no in Register C. Find no of	<b>07</b>
		1's and 0's. Store no. of 1's in reg. D and no of 0's in register E.	
Q.4	(a)	Draw & explain block diagram of 8259.	<b>07</b>
	<b>(b)</b>	With the help of block diagram explain the internal architecture of IC 8255	<b>07</b>
		and describe its working in BSR mode.	
		OR	
Q.4	(a)	Write short notes on 8279 Keyboard / Display interface.	<b>07</b>
	<b>(b)</b>	Describe various modes of 8253 timer.	<b>07</b>
Q.5	(a)	Total 16 data stored at memory location 4050h to 405Fh. Write program to	<b>07</b>
		copy these data into memory location 3000h to 300Fh.	
	<b>(b)</b>	Explain successive approximation type ADC.	<b>07</b>
		OR	
Q.5	(a)	What is conditional &unconditional branching? Illustrate the answer with	07
		suitable example.	
	<b>(b)</b>	Explain RIM & SIM instructions.	07

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