Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VI • EXAMINATION – WINTER 2013

Subject Code: 160805 **Date: 04-12-2013**

Subject Name: Advance Microprocessor

Time: 02:30 pm to 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 the internal architecture of 8086 microprocessor.	07
	(b)	Draw pin configuration of 8086 microprocessor and describe all pins.	07
Q.2	(a)	Explain Minimum mode configuration of 8086 Microprocessor along with block diagram.	07
	(b)	Describe memory interfacing of 8086 microprocessor.	07
		OR	
	(b)	Briefly explain with example various addressing modes of 8086 microprocessor.	07
Q.3	(a)	Explain following instruction of 8086 with example. XLAT,LEA,SAHF,CBW,MOVSB,LOOP,SCASB	07
	(b)	Explain various types of Interrupt of 8086 microprocessor.	07
		OR	
Q.3	(a)	Explain following assembler directives with example. DB,DUP,PTR,ASSUME,DW,DD ,OFFSET,EQU	07
	(b)	Explain Interrupt Response of 8086 microprocessor.	07
Q.4	(a)	Write a program to find the average of five numbers which are stored in memory.	07
	(b)	Write a program which adds a profit of 15Rs to each element in a COST array and puts the result in a PRICES array.	07
		OR	
Q.4	(a)	Write a program to copy a string from the location TEST_MESS to the location NEW_LOCK.	07
	(b)	Write a program to find the largest number among the series which are stored in the memory.	07
Q.5	(a)	Draw the block diagram of Coprocessor and explain each block	07
	(b)	Describe loosely coupled and closely coupled multiprocessor system.	07
		OR	
Q.5	(a)	Write short notes on	
		i. Nested Macros	03
		ii. Memory segmentation	04
	(b)	Explain general purpose registers of 8086 in detail.	07

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