## **GUJARAT TECHNOLOGICAL UNIVERSITY**

B. E. - SEMESTER – VI • EXAMINATION – WINTER 2012

Subj	ect o	code: 160805 Date: 07/01/2013	
Subj	ect I	Name: Advanced Microprocessors	
Time	e: 02	3.30 pm - 05.00 pm Total Marks: 70	
		ions:	
	1. 2.	Attempt any five questions.  Make suitable assumptions wherever necessary.  Figures to the right indicate full marks.	
Q.1	(a)	What do you mean by addressing modes? Explain addressing modes of 8086 microprocessor.	07
	<b>(b)</b>	•	03 04
Q.2	(a)		04 03
	<b>(b)</b>		07
		$\overline{BHE}$ and A0 with example. <b>OR</b>	
	(b)	Suppose that DS=0200H, BX=0300H, SI=0400H, SUM=20H. Determine the memory address accessed by each of the following instructions and also identify the addressing mode of each instruction.  (i) MOV AL, Byte PTR[1234H] (ii) MOV DL,AL	07
Q.3	(a)	directive	07
	<b>(b)</b>	(i) ASSUME (ii) OFFSET (iii) EQU (iv)DT(v)PTR Explain general purpose register of 8086 in detail.  OR	07
Q.3	(a)	Explain string instructions of 8086 microprocessor in detail.	07
	<b>(b)</b>	1	07
Q.4	(a)	Briefly describe the conditions which cause the 8086 to perform each of the following types of interrupts: type 0, type 1, type 2, type 3, type 4.	07
	<b>(b)</b>	Write an assembly language program which produce a packed BCD byte from 2 ASCII –encoded digits and result should be stored in AL register.  OR	07
Q.4	(a)		07
Q.4	<b>(b)</b>	•	07
Q.5	(a) (b)		07 07
Q.5	(a)		07
<b>V.</b> 5	( <b>a</b> )	disadvantage of each.	07
	(~)	flags in detail	31

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