Stry- I (6) Regular 5/12/13 Comp Dept.

COMP 5 - 3 (RC)

T.E. (Comp.) (Semester – V) (RC) Examination, Nov./Dec. 2013 MICROPROCESSORS AND MICROCONTROLLERS

Duration: 3 Hours Total Marks: 100

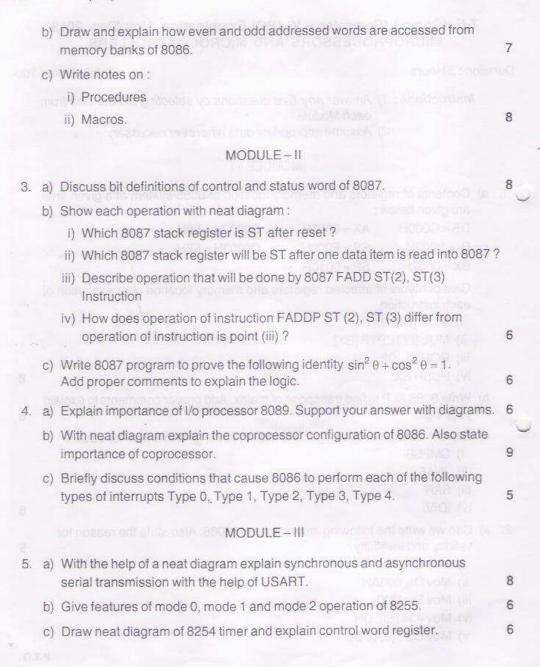
Instructions: 1) Answer any five questions by selecting atleast one from each Module.

2) Assume appropriate data wherever necessary.

		MODULE – I					
1	. a)	Contents of registers and memory location of 8086 system at a given time are given below: DS = C000H					
		Give contents of affected registers and memory location after execution of each instruction. i) MOV [DI], BX ii) MUL BYTEPTR [BX] iii) ROR BL, 02 iv) PUSH BX.					
	b)	Write 8086 ALP to find transpose of matrix. Add proper comments to explain your logic.					
	c)	ii) SAR iv) IDIV.					
2	. a)	Can we write the following instructions for 8086. Also state the reason for validity and invalidity: i) Mov CX, AL Commonwealth and the state of th					
		ii) Mov Ds, 003AH iii) Mov BL, [BX] iv) Mov 434 [SI], DH v) Mov CS: [BX], DL.					

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6.	a)	Consider part addresses as follows					
		Part A = 8000	Part B = 8001	Part C = 8002			
		Control register	= 8003H.				
		 i) Identify mode 0 control word to configure Part A and Part C_L as outperformed and Part B and Part C_u as input Part. 					
		splay the reading from Part B at Part A and	4				
	b)) Draw and explain block diagram of 8251.					
	C)	Explain two met	thods of interfacing] I/o devices.	6		
			MOD	ULE-IV			
7.	a)	 Interface two 8k* 8 ROM and two 8k* 8 RAM chips with 8086. Select suitable map. 					
	b)	Draw and expla	in internal architec	ture of 80286.	8		
	c)	Explain addressing modes supported by 8051 with example.					
8.	a)	With neat figure show how external memory is interfaced with microcontroller.					
		Also explain the	importance of EA	and PSEN pins of 8051.	8		
	b)	Define interrupt	List the steps 805	51 takes when it is interrupted.	5		
	c)		jures how 80286 g	enerates physical address when dealing in	-7		