C.U.SHAH UNIVERSITY Winter Examination-2018

Subject Name: Microprocessor & Its Applications

	Subject	Code: 4TE04MPA1	Branch: B.Tech (EC)			
	Semeste	br: 4 Date: 23/10/2018	Time: 10:30 To 01:30	Marks: 70		
	Instructio	ons:				
	(1)	Jse of Programmable calculator & any other electronic instrument is prohibited.				
	(2)	nstructions written on main answer book are strictly to be obeyed.				
	(3)	Draw neat diagrams and figures (if necessary) at right places.			
	(4)	Assume suitable data if needed.				
0 1		Attempt the following questio	ND C	(14)		
Q-1	a)	Define the term mnemonics.	5115	(14)		
	a) b)	Define the term assembler.				
	c)	Define the term compiler.				
	d)	Draw the hardware model of 80)85 microprocessor			
	e)		hired for memory in 8085 µp system?			
	() f)	1	d memory cells in a 256 x 8 memory ch	in		
	g)		8 x 8 bits, how many address lines and	T		
	5/	does memory chip have?	o x o ons, now many address miles and	dutu mies		
	h)	What is the function of IO/M' r	oin in 8085 microprocessor?			
	i)	What is the function of READY	1			
	j)	What is the function of HOLD	1 1			
	J) k)	Give single equivalent instructi				
	l)	Give single equivalent instructi				
			on which double the content of register	А.		
	n)	•	on which multiply the content of registe			
Atte		four questions from Q-2 to Q-8		5		
Q-2		Attempt all questions		(14)		
c			performed by microprocessor. Explain			
		internal data operations.				
	(b)	Define the following terms		07		
		-	Microprocessor 5. Microcontroller 6.	Instruction		
		7. Interpreter.	-			
Q-3	5	Attempt all questions		(14)		
-	(a)		classification. Explain different types o			
		detail.	- •••			
	(b)	Draw the pin diagram of 8085	microprocessor and explain function of	each pin in 07		
		brief.				



Q-4		Attempt all questions	(14)			
	(a)	Explain in detail with examples memory mapped I/O and I/O mapped I/O	07			
		interfacing methods.				
	(b)) What is an interrupt? Explain with diagram vectored interrupts in 8085 µp.				
Q-5		Attempt all questions				
	(a)	Explain the following instructions with examples	08			
		1. PUSH 2. SUI 3. ACI 4. ORA				
	(b) Write an assembly language program to add two 8-bit data bytes without		use of 06			
		any addition instructions.				
Q-6		Attempt all questions (14				
	(a)	Enlist the different addressing modes and explain each of them in detail with	07			
		examples.				
	(b)	Write an assembly language program to find out odd numbers from the given	07			
		array of data bytes.				
Q-7		Attempt all questions (1				
	(a)	Write an assembly language program to find out even numbers from the given	07			
		array of data bytes.				
	(b)	Write an assembly language program to arrange the given array of data bytes in	07			
		ascending order.				
Q-8		Attempt all questions (
	(a)	Explain in detail IC 8257 with block diagram. Also explain in brief its control	07			
		word.				
	(b)	Explain in detail IC 8279 with block diagram. Also explain in brief its control	07			
		word.				

