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BIEL-036

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Ŋ	Term-End Examination			
134	June, 2012			
O BIEL-036 : MICROPROCESSOR				
Time : 2 ho	ours Maximum Marks : 70			
Note: Q re	uestion No.1 is compulsory . Answer any four from st.			
1. (a) (b) (c)	To put the 8085 microprocessor in wait state : $2x7=14$ (i) Lower the HOLD input (ii) Lower the READY input (iii) Raise the HOLD input (iv) Raise the READY input In 8085 µp, the register used to hold the conditions is known as : (i) Program status register (ii) Program counter (iii) Accumulator (iv) Stack pointer The microprocessor 8085 has basic instructions and opcodes. (i) 80, 246 (ii) 70, 256 (iii) 80, 256 (iv) 70, 246			

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P.T.O.

- (d) The status bit that can be operated by direct instruction is :
 - (i) AC (ii) Z (iii) CY (iv) z
- (e) The number of Software interrupt in 8085 microprocessor is ______,
 (i) 5 (ii) 8

(i)
$$5$$
 (ii) 8 (iii) 10 (iv) 1

(f) The necessary steps carried out to perform the operation of accessing either memory or

I/O device, constitute a _____.

- (i) Execution cycle
- (ii) Instruction cycle
- (iii) Fetch operation
- (iv) Machine cycle
- (g) The bit length of Accumulator, IR, PC, SP is :

(i)	8, 8, 16, 16	(ii)	16, 16, 8, 8
(iii)	8, 16, 8, 16	(iv)	8, 8, 8, 8

2.

- (a) What is stack? What is the function of stack **10** pointer? Discuss PUSH and POP operation.
 - (b) Explain what is subroutine ? What **4** instruction is used to call a subroutine ?
- 3. Write Assembly Language Program to find the 14 smallest number. The numbers are stored at memory location 2500_{H} to 2509_{H} . The result must be stored in the memory location $(250A)_{\text{H}}$. Give the flow chart also.

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- 4. Discuss different data transfer schemes.
- 5. Draw the timing diagram for the execution of 14 instruction MVIA, $52_{\rm H}$. Show all relevant informations on timing diagram. This instruction have been stored at $(2501)_{\rm H}$ memory address onwards.

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- 6. Write a program to display 0, 1.... 9 and repeat 14 on a seven segment display through 8255.
- 7. (a) Briefly explain about the following 8 instructions :
 - (i) ADD (ii) NEG
 - (iii) AAM (iv) DIV

 (b) Explain string instructions supported by 6 8086 processor.

- 8. Write notes on *any two* of the followings : 7x2=14
 - (a) Square wave generation using 8253
 - (b) Multi tasking and Multi programming
 - (c) Compare between 80186 and 80386

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