

Reg. No. :

Name :

III Semester B.C.A. Degree (CBCSS – Reg./Sup./Imp.)
Examination, November 2017
(2014 Admn. Onwards)
Core Course
3B07BCA : INTRODUCTION TO MICROPROCESSORS

Time : 3 Hours

Max. Marks : 40

SECTION – A

1. One word answer : (8×½=4)

- a) The necessary steps carried out to perform the operation of accessing either memory or IO device constitute a _____
- b) In 8085 ,the _____ flag is set to 1, if the result of an arithmetic or logic operation contains even number of 1's.
- c) _____ signal indicates the availability of the valid address on the address/data lines.
- d) If _____ flag is set, the 8086 processor enters the single step execution mode.
- e) _____ is the instruction to exchange the contents of specified source and destination operands.
- f) The _____ directive marks the start of a named procedure in the statement.
- g) _____ is a label assigned for repeatedly appearing string of instructions.
- h) The _____ is able to handle a number of simultaneously appearing interrupt requests.

SECTION – B

Write short notes on **any seven** of the following questions. (7×2=14)

2. Draw the read and write cycle timing diagram of 8086.



3. Explain the function of the signals of 8086.
 - 1) ALE
 - 2) HOLD
 - 3) READY
 - 4) INTR.
4. Distinguish between AAD and DAA instructions.
5. What are assembler directives ?
6. What is NMI ?
7. What is Interrupt Vector Table ?
8. How is macro defined ?
9. What is register indirect addressing mode ?
10. What is programmed IO ?
11. What are the operating modes of 8086 ?

SECTION – C

Answer **any four** of the following questions. (4×3=12)

12. Explain the flag registers of 8086.
13. Explain various instruction formats of 8086.
14. Describe conditional and unconditional jumps of 8086.
15. Explain the stack structure of 8086.
16. Explain the registers of 8259 A.
17. What are the advantages of segmented memory ?

SECTION – D

Write an essay on **any two** of the following questions. (2×5=10)

18. Explain the architecture of 8085 with the help of a block diagram.
 19. Explain the pin diagram of 8086.
 20. With suitable examples, discuss the addressing modes of 8086.
 21. Explain the architecture of DMA Controller 8257.
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