MSCCS-08/MSCCS-202/MCA-202

June - Examination 2019

MSCCS-Final/MCA-IInd Year Examination

Computer Architecture and Micro Processor

Paper - MSCCS-08/MSCCS-202/MCA-202

Time : 3 Hours]   **[Max. Marks :- 80**

Note: The question paper is divided into three sections A, B and C. Write answers as per the given instructions.

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Section - A $8 \times 2 = 16$

(Very Short Answer Questions)

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Note: Answer **all** questions. As per the nature of the question delimit your answer in one word, one sentence or maximum up to 30 words. Each question carries 2 marks.

1) (i)   What is opcode?

   (ii) What do you mean by address bus?

   (iii) What is stack pointer?

   (iv) Give two differences between machine language and assembly language.

   (v)   What is Nuil macro? Give an example.

   (vi) What is Accumulator?

(vii) Give two differences between Microprocessor and Microcontroller.

(viii) What is program counter?

Section - B $4 \times 8 = 32$

(Short Answer Questions)

Note: Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 8 marks.

2)   What is Macro? How it is different than subroutine? Explain.

3)   Explain the concept of RISC pipelining with suitable example.

4)   Why the lower order address bus is multiplexed with data bus? How they will be demultiplexed?

5)   What is interrupt? Explain different types of interrupts.

6)   What is Cache? Explain its feature

7)   What is the use of flags? Explain different type of flags in 8086.

8)   Distinguish between synchronous data transfer and asynchronous data transfer.

9)   What do RISC and CISC stand for and what are the difference in practice?

Section - C $2 \times 16 = 32$
(Long Answer Questions)

Note: Answer **any two** questions. You have to delimit your each answer maximum up to 500 words. Each question carries 16 marks.

10) Explain the basic architecture of 8088 with neat diagram.

11) Solve the following expression using one address, two address, three address and zero address:

$X = (A * B) + (C * D) * E$

12) What is IO ports? What are Programmable and non Programmable ports? Explain with suitable example

13) Write short note on:

(a) RAID

(b) Optical Memory

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