MSCCS-08/MSCCS-202/MCA-202

December - Examination 2017

MSCCS-Final/MCA-IInd Year Examination Computer Architecture and Micro Processors Paper - MSCCS-08/MSCCS-202/MCA-202

Time: 3 Hours [Max. Marks: - 100

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

Section - A

 $10 \times 2 = 20$

(Very Short Answer Questions)

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

- 1) (i) Define instruction cycle.
 - (ii) What do you understand by addressing mode?
 - (iii) What are the various types of secondary memory?
 - (iv) What do you mean by subroutine in 8085?
 - (v) Write the names of Interconnect structures of bus in CPU.
 - (vi) What is the significance of cache memory in computer system?
 - (vii) What do you understand by DMA (Direct Memory Access)?

- (viii) Write the names of types of buses in 8085.
- (ix) Define microprogramming.
- (x) What do you understand by parallel processing?

Section - B

 $4 \times 10 = 40$

(Short Answer Questions)

Note: Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 10 marks.

- 2) Write the differences between RISC and CISC.
- 3) Explain the one hot method of designing control unit.
- 4) Explain internal organization of 8086.
- 5) Discuss the direct mapping method of cache memory.
- 6) Explain the various types of data transfer instructions in 8085.
- 7) Explain the basic structure of 8088.
- 8) Write the differences between Hardwired and Micro Programmed implementation of Control Unit.
- 9) Discuss various types of external memories.

Section - C

 $2 \times 20 = 40$

(Long Answer Questions)

Note: Answer **any two** questions. You have to delimit your each answer maximum upto 500 words. Each question carries 20 marks.

- 10) Explain various types of interrupts in 8085.
- 11) Explain addition method of fixed point arithmetic.
- 12) Explain instruction pipelining with suitable diagram and also find the pipeline performance.
- 13) Explain the pin configuration of 8086.

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