

**MSCCS-08/MSCCS-202/MCA-202**

June - Examination 2017

**MSCCS-Final/MCA-2nd Year Examination****Computer Architecture and Microprocessors****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 × 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 words. Each question carries 2 marks.

- 1) (i) Define microprocessor.
- (ii) What do you understand by instruction format?
- (iii) What are the various types of instructions in 8085?
- (iv) What do you mean by input-output ports in 8085?
- (v) Write the names of methods of designing a control unit.
- (vi) What is the significance of random access memory in computer system?

- (vii) What do you understand by address space partitioning?
- (viii) Write the applications of microprogramming.
- (ix) Define assembly language.
- (x) What do you understand by PIC (Peripheral Component Interconnect)?

**Section - B****4 × 10 = 40**

(Short Answer Questions)

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

- 2) Describe RISC pipelining.
- 3) Explain the various types of memories used in computer system.
- 4) Explain internal organization of DMA controller.
- 5) Discuss the set-associative mapping method of cache memory.
- 6) Explain the various types of arithmetic instructions in 8085.
- 7) Explain the signal group of 8086.
- 8) Write the differences between Memory mapped I/O scheme and I/O mapped I/O scheme of address space partitioning.
- 9) Discuss the advantage of assembly language.

**Section - C****2 × 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 construction of combinational ALU.
  - 11) Explain Booth multiplication method of fixed point arithmetic.
  - 12) Explain various types of interrupts in 8085 with help of suitable diagram.
  - 13) Explain the architecture diagram of 8085.
-