

MSCCS-08/MSCCS-202/MCA-202

June - Examination 2018

MSCCS-Final/MCA-IIInd 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 the given instructions.

Section - A**10 × 2 = 20**

(Very Short Answer Type Questions)

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 null macros?
- (ii) What is non maskable interrupts?
- (iii) Describe the use of instruction pointer in 8088 microprocessor.
- (iv) Give two examples of zero address instructions.
- (v) List the uses of ALU.
- (vi) What is a stack pointer?

- (vii) What is program counter?
- (viii) Give one difference between machine language and assembly language.
- (ix) What do you mean by Mnemonics?
- (x) What is mantissa and exponent in floating point number representation? Give an example.

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) What is the use of flag? Describe various flags in 8088 microprocessor.
- 3) Evaluate expression $Z=(P+Q)*(R-S)/(T+V)$ using zero address and one address instructions.
- 4) Explain the hardware implementation for signed two's complement addition and subtraction.
- 5) What is instruction cycle? Explain different stages of instruction cycle.
- 6) Discuss various addressing modes in 8085 with suitable example.
- 7) Write short note on cache coherence.
- 8) What do you mean by cache memory? Discuss the major differences between Cache and main secondary memory hierarchy.
- 9) Discuss the difference between subroutine and macros.

Section - C**2 × 20 = 40**

(Long Answer Questions)

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

- 10) What is Microprocessor? Describe the block diagram of 8085 microprocessor.
 - 11) Give the main differences between the following pairs :-
 - (i) Vertical and horizontal microinstruction
 - (ii) Microprogramming and Hardwired control
 - 12) Explain RISC pipelining with suitable example.
 - 13) What is assembler? Explain the working of assembler in detail.
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