

**MSCCS-08/MSCCS-202/
MCA-202****June – Examination 2020****MSCCS (Final)/MCA (II Year)
Examination****Computer Architecture and Micro Processors****Paper : MSCCS-08/MSCCS-202/MCA-202***Time : 3 Hours]**[Maximum Marks : 80*

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

Section–A**8×2=16****(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 function of ALU ?
- (ii) Define the term instruction format.

- (iii) What is Microcontroller ?
- (iv) Define the term interrupt ?
- (v) What is usage of macro ?
- (vi) What is function of control bus ?
- (vii) What is superscalar processing ?
- (viii) What do you understand by serial access memory ?

Section-B **4×8=32**

(Short Answer Type Questions)

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

2. Explain the various addressing modes with suitable examples.
3. What is pipelining ? Explain the RISC pipeline with suitable diagram.
4. Write the advantage and application of microprogramming.
5. Explain the direct mapping of cache memory.
6. Define interrupt. Explain various types of interrupt used in computer system.
7. Explain instruction cycle with suitable diagram and example.

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8. Explain fixed point addition arithmetic with suitable diagram.
9. Explain the micro-programmed control method of control unit designing.

Section-C **2×16=32**

(Long Answer Type Questions)

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

10. Draw and explain the pin configuration of 8085 microprocessor with categorization according to their function.
11. What is DMA (Direct Memory Access) ? Explain the DMA process with suitable diagram.
12. What is interconnection structure ? Explain various types of interconnection structure with suitable diagram.
13. Write short notes on the following :
 - (a) RAID
 - (b) Pentium Processor

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