



C16/C16S-CM/IT-304

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PART - B

10/5=50

BOARD DIPLOMA EXAMINATION, (C-16 / C-16S)

MARCH / APRIL - 2019

DCME - III SEMESTER EXAMINATION

COMPUTER ORGANIZATION

Time : 3 Hours]

[Total Marks : 80

PART - A

3x10=30

- Instructions :
- (1) Answer ALL questions.
  - (2) Each question carries THREE marks.
  - (3) Answer should be brief and straight to the point.

- 1 Define the terms (a) fetch cycle (b) execute cycle.
- 2 Define (a) opcode (b) Address.
- 3 Write about fixed point representation of numbers.
- 4 Write short notes on zero address instruction.
- 5 Write about immediate addressing mode.
- 6 Write any three advantages of cache memory.
- 7 Write the need for an interface.
- 8 Write about DMA data transfer.
- 9 What is a bus system and list the different bus system.
- 10 Define vector processing.

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[ Contd...

- Instructions :
- (1) Answer any FIVE questions.
  - (2) Each question carries TEN marks.
  - (3) Answer should be comprehensive and criterion for valuation is the content but not the length of the answer.

- 11 Draw the block diagram of simple accumulator based CPU and explain the function of each unit.
- 12 (a) Explain (i) Micro operation and (ii) Macro operation 5  
(b) Explain direct and indirect addressing modes. *next* 5
- 13 Explain fixed point multiplication with a flowchart.
- 14 Explain floating point addition and subtraction with a flowchart.
- 15 Explain memory hierarchy in a computer.
- 16 Write short notes on the following :  
(a) Programmed I/O method of data transfer 5  
(b) Interrupt initiated I/O method of data transfer. 5
- 17 Explain synchronous and asynchronous data transfer.
- 18 (a) Explain memory interleaving in a computer. 5  
(b) List any five advantages of parallel processing and pipeline processing. 5

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