4234

BOARD DIPLOMA EXAMINATION, (C-14)

JUNE-2019

DCME - THIRD SEMESTER EXAMINATION

COMPUTER ORGANIZATION

Time:3 hours Max.Marks:80M

PART-A

10x3=30

Instructions: 1) Answer **all** questions.
2) Each question carries **three** marks.

1) List any three differences between main memory and secondary memory.

2) List the disadvantages of floating point representation.

3) Find the signed 2's complement of +126.

4) List the different ways of representing numeric data.

5) Differentiate between One address and two address instructions.

6) Write the memory hierarchy in computer.

7) Distinguish between system bus and data bus.

8) Write a short note on cycle stealing.

9) What is the need for an interface?

10) What is arthmetic pipelining?

PART-B 5 X 10 = 50

Instructions: 1) Answer any **five** questions.
2) Each question carries **ten** marks.

11) Explain the operation of simple accumulator based CPU with neat sketch.

12) a) Explain about stored program concept.

b) Explain about floating point representation.

13) Draw the flow chart for floating point division and explain.

14) Draw the flow chart for fixed point addition and substraction and explain.

15) Explain the concept of paging scheme for Virtual memory address mapping with neat diagram.

16) Explain about synchronous and asynchronous data transfer with timing diagrams.

17) Explain about Handshaking mode of data transfer with timing diagram and sequence of events.

18) a) Write any five advantages of cache memory.

b) What is flynn's taxonomy of processors? Draw the semantics of SISD and SIMD computers. [1+2+2=5]

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