

C14-CM-304/C14-IT-304

4234

BOARD DIPLOMA EXAMINATION, (C-14) MARCH/APRIL—2018 DCME—THIRD SEMESTER EXAMINATION

COMPUTER ORGANIZATION

Time: 3 hours | [Total Marks: 80

PART—A

 $3 \times 10 = 30$

Instructions: (1) Answer **all** questions.

- (2) Each question carries three marks.
- (3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.
- 1. Define stored program concept.
- 2. Compare between floating and fixed point representation.
- **3.** List the disadvantages of floating point representation.
- **4.** Write about three address instructions with example.
- **5.** Write about base register addressing mode.
- **6.** Distinguish between virtual and physical address.
- **7.** List the various peripherals that are connected to the computer.

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- **8.** Differentiate between synchronous and asynchronous data transfer.
- 9. List out three modes of data transfer.
- **10.** List the advantages of parallel processing.

PART—B

 $10 \times 5 = 50$

Instructions: (1) Answer any **five** questions.

- (2) Each question carries ten marks.
- (3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.
- **11.** Draw the block diagram of digital computer and explain the functions of each unit.
- **12.** (a) Explain about instruction cycle, fetch cycle and execution cycle.
 - (b) Explain regarding direct, indirect, relative and indexed addressing modes.
- **13.** Explain floating point division with a neat sketch.
- **14.** Explain fixed point multiplication with a neat sketch.
- 15. Explain memory interleaving.
- **16.** (a) Write about the type of cache memory.
 - (b) Write about different types of BUS systems.
- 17. Explain daisy chaining priority method with a neat sketch.
- **18.** (a) Explain about priority interrupt.
 - (b) Explain about vector processing.

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