

K18U 0094

Reg. No. :

Name :

VI Semester B.Sc. Degree (CBCSS – Reg./Supple./Imp.) Examination, May 2018 CORE COURSE IN COMPUTER SCIENCE 6B15CSC : Computer Organization (2014 Admn. Onwards)

12/18

Time: 3 Hours

Max. Marks: 40

SECTION - A

1. One word answer :

(8×0.5=4)

- a) To reduce the memory access time we generally make use of _____
- b) The ALU makes use of ______to store the intermediate results.
- c) The addressing mode which makes use of in-direction pointers is _____
- d) The addressing mode, where you directly specify the operand value is ____
- e) When performing a looping operation, the instruction gets stored in the ____
- f) The sign followed by the string of digits in floating point representation is called as _____
- g) The computer architecture aimed at reducing the time of execution of instructions is _____
- h) DMA transfers are performed by control circuits known as _____

SECTION-B

Write short notes on any seven of the following questions :

(7×2=14)

- 2. What is Execution time/Response time?
- 3. What are various types of operations required for instructions ?
- 4. What are the most common fields of an instruction format?
- 5. When can you say that a number is normalized?

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6. What is a port ? What are the different types of port available ?

- 7. What are the registers generally contained in a processor?
- 8. What is control word?
- 9. What are the major functions of input output system?
- 10. Differentiate between synchronous and asynchronous bus.
- 11. Explain Input Output Processor (IOP).

SECTION-C

Answer any four of the following questions :

12. What are condition code flags ? Explain the commonly used flags.

- 13. Explain stack organization.
- 14. Explain in detail the different mappings used for cache memory.
 - 15. What is asynchronous data transfer ? Explain in detail.
 - 16. What do you mean by multiprocessors ? Explain its characteristics.
 - 17. Explain the Add/Subtract rule for floating point numbers with example.

SECTION - D

Answer any two of the following questions :

- 18. Explain memory organization (Memory Hierarchy) in detail with figure.
- 19. Explain multiprocessors and multi computers with help of figures. Explain the difference between them.
- 20. What do you mean by micro programmed control ? Draw and explain micro programmed control unit.
- 21. Explain in detail about interrupts and types of interrupts.

(4×3=12)

 $(2 \times 5 = 10)$

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