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# VI Semester B.Sc. Degree (CBCSS-Reg./Supple./Improv.) Examination, April 2020 (2014 Admission Onwards) CORE COURSE IN COMPUTER SCIENCE 6B15CSC: Computer Organization

Max. Marks: 40 Time: 3 Hours

#### SECTION - A

 $(8 \times 0.5 = 4)$ One word answer. 1. a) An interrupt is a request from an I/O device for service by memory (TRUE/FALSE) b) Information transfer from one register to another is designated in symbolic \_\_\_\_\_ operator. form by means of \_ c) The register where the serial information from the printer is stored in d) Which holds the present micro-instruction while the next address is computed and read from memory? e) The hardware components used between the CPU and peripherals to supervise and synchronize all input and output transfers is f) \_\_\_\_\_ command is used to test various status conditions in the interface and the peripheral. g) The number of bits in the \_\_\_\_\_ field is equal to the number of address bits required to access the cache memory. h) CAM stands for SECTION - B

Write short notes on any seven of the following questions.

 $(7 \times 2 = 14)$ 

- 2. What are registers?
- 3. What is the need of Program Counter?

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- 4. What is interrupt cycle?
- 5. What is micro instruction?
- 6. What are three address instruction?
- 7. Mention any two characteristics of CISC.
- 8. Which are the ways that computer buses can be used to communicate with memory and I/O?
- 9. What is data transparency?
- 10. Differentiate synchronous and asynchronous bus.
- 11. What is strobe control?

### SECTION - C

Write short notes on any four of the following questions.

 $(4 \times 3 = 12)$ 

- 12. How floating point numbers are represented?
- 13. What are the phases in instruction cycle?
- 14. Discuss indirect address mode.
- 15. Compare isolated and memory mapped I/O.
- 16. Discuss memory connection to CPU.
- 17. Explain loosely coupled system.

## SECTION - D

Write short notes on any two of the following questions.

 $(2 \times 5 = 10)$ 

- 18. Explain the working of any five memory reference instructions.
- 19. Discuss general register organization of CPU.
- 20. Discuss a typical asynchronous communication interface.
- 21. Discuss multistage switching network.