

Reg. No. :

Name : VI Semester B.Sc. Degree (CCSS-Supple.) Examination, May 2018

CORE COURSE IN COMPUTER SCIENCE 6B15 CSC: Computer Organization (2012 - 13 Admns.)

Time: 3 Hours

Max. Weightage: 21

SECTION - A

Answer all questions. Weightage for a bunch of four questions is 1.

- . Which register stores the address of the next instruction to be executed?
- b) Accumulator
- c) Program counter
- d) Memory address register
- 2. 1-way set associative mapping reduces to
 - a) direct mapping
- b) indirect mapping
- c) associative mapping
- d) none of the above
- 3. Which of the following is the fastest memory?
 - a) Primary memory
- b) Secondary memory
- c) Cache memory
- d) Solid state device
- 4. Cache memory works on the principle of
 - a) locality of data
- b) locality of memory
- c) locality of reference
- d) locality of reference and memory
- 5. hich of the following is a volatile memory?
- b) ROM
- d) Pen drive
- c) Hard disc 6. Address mapping with less number of TAG bits is a) direct mapping
- c) set-associative mapping
- b) associative mapping d) none of the above
- 7. The zero flag is set when the
 - a) input becomes zero
 - b) result of most recent operation becomes zero
 - c) result of most recent operation becomes non-zero d) none of the above
- 8. Addressing mode in which the operand itself is specified in the instruction
 - a) implied addressing mode
- b) indirect addressing mode
- c) direct addressing mode
- d) immediate addressing mode



SECTION - B

Answerany 5 questions. Weightage 1 for each.

- 9. What is microprogram?
- 10. What do you mean by instruction?
- 11. What is the need of addressing modes?
- 12. Differentiate static RAM and dynamic RAM.
- 13. What do you mean by I/O processor?
- 14. What is auxiliary memory?
- 15. With the help of a block diagram explain the control unit of a basic computer.
- 16. What do you mean by strobe pulse? What are its limitations?

 $(5 \times 1 = 5)$

SECTION-C

Answer any five questions. Weightage 2 for each.

- 17. Distinguish between direct addressing mode and indirect addressing mode with the help of examples.
- 18. Write a short note about cache memory.
- 19. Explain register organization of CPU.
- 20. Explain briefly about the microprogrammed control unit.
- 21. Write a short note about associative memory.
- 22. Explain the characteristics of CISC systems.
- 23. Briefly explain about the direct memory access.
- 24. Explain about the different fixed point representations.

(5×2 0)

SECTION - D

Answer any one question. Weightage 4 for each.

- 25. What are the different types of instruction formats? Explain.
- 26. Explain in detail about asynchronous data transfer.

 $(1 \times 4 = 4)$