C 30348 (Pages : 2) Name.....

Reg. No.....

FIFTH SEMESTER B.C.A. DEGREE EXAMINATION, NOVEMBER 2017

(CUCBCSS—UG)

BCA 5B 11—COMPUTER ORGANIZATION AND ARCHITECTURE

Time : Three Hours Maximum : 80 Marks

Part A

Answer **all** *questions.*

Each question carries 1 *mark.*

1. An accumulator based computer supports ———— instruction format.
2. The memory technology which need less power is ————.
3. ———— is the first process in instruction execution.
4. The other name for the associative memory is ————.
5. CISC stands for ————.
6. The classification of SISD, SIMD, MISD and MIMD is known as ————.
7. The transformation of data from main memory to cache is ————.
8. Array processor is ————.
9. The main memory broken into equal size is called ————.
10. EEPROM stands for ————.

(10 × 1 = 10 marks)

Part B

Answer **all** *questions.*

Each question carries 2 *marks.*

11. What is an instruction ?
12. How memory access time can be calculated ?
13. What is PSW ?
14 Collision ?

nplicit addressing modes.

(5 × 2 = 10 marks)

Turn over

Part C

Answer any **five** *questions.*
Each questions carries 4 *marks.*

16. What is meant by instruction sequencing ?
17. Explain register organization of CPU.
18. Explain page replacement technique.
19. Explain how data dependency can be handled.
20. Explain the organization of RAM with diagram.
21. Explain DMA controller.
22. Explain one and two address Instructions.
23. Explain the system bus structure with neat diagram.

(5 × 4 = 20 marks)

Part D

Answer any **five** *questions.*
Each questions carries 8 *marks.*

24. Explain the block diagram of basic computer.
25. Explain magnetic disk with neat diagram.
26. Explain the terms :
    (a) BCD Adder.
    (b) BCD Subtractor.
27. Describe in detail about associative memory.
28. Write in detail about program control.
29. Explain micro program sequence in control unit.
30. Write about
    (a) Multiprocessors.
    (b) Synchronizations.
31. Explain the Flynn's classification of computers.

(5 × 8 = 40 marks)