15U540 (Pages:2) Name: ……

Reg. No……..

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

(CUCBCSS-UG)

CC15U BCA 5 B11-COMPUTER ORGANIZATION AND ARCHITECTURE

(Core Course)

(2015-Admission Regular)

Time: Three Hours Maximum: 80 Marks

PART A

Answer ***all*** questions. Each question carries 1 mark.

1. SIMD stands for……..
2. ……..is a general purpose processing register.
3. ……...is a page replacement algorithm.
4. A stack organized computer uses instruction of …….addressing.
5. Cache memory works on the principle of……..
   a) Locality of data b) Locality of memory
   c) Locality of reference d) Locality of reference & memory
6. The circuit used to store one bit of data is known as……..
7. Von Neumann architecture is……
8. A collection of lines that connects several devices is called.....
   a) Bus b) Peripheral connection wires c) Both a and b d) Internal wires
9. Interrupts initiated by instructions are called…….
10. …… holds the microinstruction read from the memory.

(10 x 1 = 10 Marks)

PART B

Answer ***all*** questions. Each question carries 2 marks.

11. Define Bootstrap loader.
12. What do you mean by virtual memory?
13. Define latency.
14. What is symmetric multiprocessor?
15. What is MESI protocol?

(5 x 2 = 10 Marks)

PART C

Answer any ***five*** questions. Each question carries 2 marks.

16. Explain pipelining.
17. Briefly explain floating point arithmetic operation.
18. Explain memory hierarchy.
19. Explain addressing modes with example.
20. Differentiate between CISC and RISC processors.
21. Briefly explain computer registers.
22. Explain micro instruction and instruction format.
23. Write a note on stack organization.

(5 x 4 = 20Marks)

PART D

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

24. Write a note on parallel processing.
25. Briefly explain storage devices.
26. Write a note on DMA.
27. Explain Booth multiplication algorithm with example.
28. Discuss various memory mapping techniques.
29. Explain vector processing in detail.
30. Write a note on instruction cycle.
31. Explain the functional units of a computer.

(5 x 8 = 40 Marks)