15U532	(Pages:2)	Name:
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# FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, OCTOBER 2017 (CUCBCSS-UG)

### CC15U BCS5 B08-COMPUTER ORGANIZATION AND ARCHITECTURE

(Computer Science – Core Course) (2015-Admission Regular)

Time: Three Hours Maximum: 80 Marks

#### PART A

Answer all questions. Each question carries 1 mark

- 1. Define effective address
- 2. Define accumulator
- 3. Define cache memory.
- 4. Define latency.
- 5. Define auxiliary memory
- 6. Define MMU
- 7. Differentiate between hit and miss.
- 8. Define DMA
- 9. Explain cache coherence
- 10. Differentiate between MIMD and MISD

(10x1=10 Marks)

#### **PART B**

Answer all questions. Each question carries 2 marks

- 11. Explain about computer registers.
- 12. Explain addressing modes.
- 13. Define pipeline.
- 14. Define handshaking.
- 15. Define vector processor.

(5x2=10 Marks)

## PART C

Answer any five questions. Each question carries 4 marks

- 16. What is instruction sequencing? Explain?
- 17. Explain the design of accumulator logic?
- 18. Explain booth algorithm for multiplication?

- 19. What are the memory reference instructions?
- 20. Explain the design of control unit?
- 21. What is locality of reference?
- 22. Explain about I/O processors?
- 23. Explain about asynchronous transfer?

(5x4=20 Marks)

#### **PART D**

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

- 24. Explain the design of Basic computer?
- 25. Explain instruction cycle?
- 26. Explain the different types of instructions in basic computer design?
- 27. Explain is Memory hierarchy?
- 28. What is stack organization?
- 29. Briefly explain the concepts of pipelining
- 30. What are interrupts? Explain how priority interrupts are serviced?
- 31. Describe about parallel computers?

(5x8=40 Marks)

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