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Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, MAY 2010

Fourth Semester

Branch : Computer Science and Engineering

COMPUTER ORGANIZATION (R)

[2008 admissions—Regular/2007 admissions—Improvement/Supplementary]

Time : Three Hours

Maximum : 100 Marks

Part A

*Answer all questions briefly.
Each question carries 4 marks.*

1. Compare single bus and 2 bus CPU organization.
2. Describe the different types of interconnection structures in a processor.
3. What is CLA ?
4. Describe the working of an array multiplier.
5. What is the need for a control unit ?
6. Differentiate between Micro and Macro instructions.
7. Write short notes on Cache Memories.
8. Differentiate between Semiconductors RAM and ROM memories with respect to their characteristics, design, cost and performance.
9. Write short notes on different types of displays.
10. What is the need for an I/O interface ?

(10 × 4 = 40 marks)

Part B

*Answer either (a) or (b) of each module.
Each full question carries 12 marks.*

Module 1

11. (a) Explain in detail the different steps required for the execution of an instruction.

Or

- (b) Describe the layered view of a computer system.

Module 2

12. (a) Describe Booth's algorithm with an example.

Or

- (b) Describe the different steps required for ALU design.

Turn over

Module 3

13. (a) Briefly describe the implementation of a microprogram control unit.

Or

(b) Describe the different steps involved in control logic design.

Module 4

14. (a) Describe the needs and uses of having different types of memories.

Or

(b) Write down the characteristics of different types of memories that you are familiar with.

Module 5

15. (a) Explain in detail the different types of I/O standard interface.

Or

(b) Describe the different types of input devices that you are familiar with.

(5 × 12 = 60 marks)

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1. Expl
2. Expl
3. Why
4. How
5. Draw
6. Show
7. Brie
8. Expl
9. W
10. How

11. (a)

(b)