

Roll No.

(06/21-II)

5393

B.C.A. EXAMINATION

(For Batch 2011 & Onwards)

(Fourth Semester)

COMPUTER ARCHITECTURE-II

BCA-243

Time : Three Hours

Maximum Marks : 80

Note : Question No. 1 is compulsory. Attempt Five questions in all, selecting one question from each Unit in addition to compulsory question.

1. (a) Multiply $(101)_2$ by $(110)_2$
- (b) Solve $(1111001)_2 \div (1011)_2 = (?)_2$?
- (c) What do you mean by Polling ?
- (d) Explain the term NUMA machine.

4×4=16

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P.T.O.

Unit I

2. Explain the representation of numbers by signed bit magnitude, 1's complement method and 2's complement method in computer system with suitable examples. 16

Or

3. Explain the term floating point addition and floating point subtraction with examples. 16

Unit II

4. (a) What do you mean by Interrupts ? What are the main types of Interrupts ? 8
(b) Differentiate RISC and CISC. 8

Or

5. Explain the RISC instructions set in detail. 16

Unit III

6. Explain look ahead pipelining with its advantages and disadvantages. 16

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Or

7. Distinguished between Pipelined and Non-pipelined Architecture. 16

Unit IV

8. (a) Explain Parallelism in Uniprocessor system. 8
(b) Distinguished between loosely coupled and tightly coupled multiprocessor. 8

Or

9. Write short notes on the following : $4 \times 4 = 16$
(i) SISD
(ii) SIMD
(iii) MISD
(iv) MIMD.

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