

Roll No. Total Pages : 3

BCA/M-14 1081

COMPUTER ARCHITECTURE-II

Paper-BCA-243

Time Allowed : 3 Hours [Maximum Marks : 80

Note : Attempt five questions in all, selecting at least one question from each Unit. Question No. 1 is compulsory. All questions carry equal marks.

Compulsory Question

- 1. Define the following: 8x2
 - (a) CISC
 - (b) MIND
 - (c) Polling
 - (d) Omega Network
 - (e) Pipelining
 - (f) ISR
 - (g) Cross Bar Switching
 - (h) Reservation table.

UNIT-I

- 2. (a) What do you mean by Floating Point No.? Explain the concept of normalised floating point no.

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- (b) Perform the multiplication of 0111 and 0011 using Booth algo? 2x8

- 3. (a) Describe the algo for floating point no. division.

(b) Perform:

(i) 11.25 + 23.75

(ii) 11.25 - 23.75 using normalised floating pt. no. 2x8

UNIT-II

- 4. (a) Explain level and priorities of interrupts.
- (b) Differentiate between RISC and CISC. 2x8
- 5. (a) Implement Interrupt inside the CPU. Explain.
- (b) Explain characteristics of RISC. 2x8

UNIT-III

- 6. (a) Explain organisation of Pipeline in General Purpose Computer.
- (b) Explain advatnages of Look ahead system. 2x8
- 7. (a) Explain Pipeline execution of instruction.
- (b) Explain the concept of Pipeline with minimum idling. 2x8

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UNIT-IV

8. (a) Write short note on the following :
- (i) NUMA
 - (ii) COMA.
- (b) Discuss difference b/w tightly coupled and loosely coupled multi processor. 2×8
9. (a) Explain various algo used to allocate buses to any unit.
- (b) Explain Flynn's classification. 2×8