Roll No. ..... Total Pages : 2

BCA/M-15 **19015**

COMPUTER ARCHITECTURE

Paper–BCA-203

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. (a) Discuss Execution cycle for LDA 9H.

   (b) Write characteristic of RISC.

   (c) What is HIT-Ratio and flag bit in Cache memory?

   (d) What is Hardware Interrupt? 4×4=16

UNIT–I

2. Explain Instruction cycle of a basic computer organization. 16

3. (a) What is Mnemonics, discuss Memory Reference Instructions.

   (b) Explain Accumulator Logic Design. 16

UNIT–II

4. Explain Architecture and Design of ALU. 16

5. What is Microoperation? Explain Microprogram Sequencer. 16

UNIT–III

6. Explain Data transfer using Program Controlled and Interrupt Driven Data Transfer. 16

7. Explain Addressing Modes. Solve X = (A + B) * (C – D) using 3, 2, 1, 0 Instruction format style. 16

UNIT–IV

8. (a) Explain Mapping or Addressing used in Cache Memory.

   (b) Discuss write operation in Associative Memory. 16

9. Explain concept of Cycle-Stealing in DMA. 16