VIT

Vellore Institute of Technology

School of Computer Science & Engineering

Continuous Assessment Test – I

CBS1004- Computer Architecture and Organization

Time: 1:30 Hrs Slot : A1 Max.Marks:50

Answers ALL the questions(5×10=50 Marks)

1. Assume that the IAS machine has to execute the Instruction in parallel way, write the procedure to execute the Instruction.
2. Detail the IAS machine Architecture with a sample program execution in the machine.
3. Write a Assembly level code (a)To check the given number is greater or small by using the IAS instruction set. (b) To check the given number is Odd/Even (c) Addition of N numbers
4. Assume that following register values

   PC= 1, BX=1000, SI= 50, DI=50, R1= 400, Offset = 100

   Memory Table:

Address	Value
399	15
400	13
401	14
1000	7
1001	5
1002	6
1050	78
1100	8
1101	9
2000	200

   Calculate the Effective address for the different Addressing modes.

5. a) Detail the advantage and disadvantage of the following instruction types.
   (i) One Address
   (ii) Two Address
   (iii) Three Address
   (iv) Zero Address.

   (b) Write addition of two numbers from the above instruction types.