Roll No…….. **Total No. of Printed Pages: [01]**
Total No. of Questions: [09]

BCA-MCA Dual Degree (Semester – 1st)
COMPUTER ORGANIZATION
Subject Code: BCMC102
Paper ID: [18340103]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(2 marks each)**

Q1. Attempt the following:
- a) What is software?
- b) What is input device?
- c) What do you mean by three address instruction?
- d) What do you mean by universal gate?
- e) What is combinational circuit?
- f) What is cache memory?
- g) What is the difference between primary memory and secondary memory?
- h) What is register? What is its use?
- i) What is a truth table?
- j) What is D Flip Flop?

Section – B **(5 marks each)**

Q2. Discuss various computer generations in detail.
Q3. What is addressing mode? Discuss various types of addressing modes.
Q4. What is memory? Discuss various types of memory with their hierarchy.
Q5. What is instruction cycle? Explain instruction cycle with proper example.
Q6. What is Flip Flop? Explain SR Flip Flop with truth table.

Section – C **(10 marks each)**

Q7. (a) Draw block diagram of computer and explain it.
(b) Briefly explain CPU architecture.
Q8. (a) What is an adder? How full adder can be implemented using two half adders. Explain using proper diagram.
(b) What is an interrupt? Explain maskable and non- maskable interrupts.
Q9. Write short note on the following:
- i) Timing and control in CPU
- ii) Binary counter
- iii) Instruction types