

Ajay Kumar Garg Engineering College, Ghaziabad

Department of MCA

Sessional Test-2

Course: MCA
 Session: 2017-18
 Subject: Computer Organization
 Max Marks: 50

Semester: I
 Section: MCA-1
 Sub Code: RCA104
 Time: 2 hour

Note: Answer **all** the sections.

Section-A

A. Attempt **all** the parts.

(5 X 2 = 10)

1. What do you mean by BUS Master?
2. Explain the different types of memory?
3. What do you mean by Micro-operation?
4. What do you mean by Wide Branch Addressing?
5. What is Micro program sequencing?

Section-B

B. Attempt **all** the parts.

(5 X 5 = 25)

6. Write the sequence of control step required for the structure of single bus organization for each of the following.
 - i. Add number NUM to register R1
 - ii. Add the content of memory location NUM to register R1
7. Design 4 bit fast adder and explain the working of it.
8. What is the difference between Hardwired and Micro-programmed Control unit, explain in detail.
9. What is 2 D and 2 ½ D RAM? Explain in detail.
10. Explain Multiple Bus Organization with suitable Block diagram of it

Section-C

C. Attempt **all** the parts.

(2 X 7.5 = 15)

11. Write short notes on:
 - i. Micro Instruction
 - ii. Register Transfer
 - iii. Prefetching
12. Write Booth multiplication Algorithm, and also do the multiplication of two numbers 11 x -18 using the Booth algorithm.