

Roll No.....

Total Pages: 3
1890

BCA/M-17
LOGICAL ORGANIZATION OF COMPUTERS-II
Paper: BCA-122

Time: Three Hours

Maximum Marks: 80

Note: Attempt five questions including No. 1 which is compulsory. All questions carry equal marks.

Compulsory Question

1. (a) What is Sequential Circuit. Write its properties.
(b) Define execution cycle for LDA 9H.
(c) Make execution table of JKFF.
(d) What is RAM? Name types of RAM.
(e) Make TT of D-FF. Why is it called delay FF?
(f) How many FFs are needed for Mod-7 counter?

Unit-I

2. What is flip-flop? Name types of FF. Discuss working of JKFF.
3. (a) What is Toggle Flip-Flop? Explain it.
(b) Explain Master-Slave FF and discuss how it solve Race-Around problem.

Unit-II

4. (a) Make Parallel-in Parallel-out register to store 1001.
(b) Make Mod-5 Counter using T-FF.
5. Define Counter Explain Mod-16 UP-Counter.

Unit-III

6. Define Memory and explain Primary and Secondary Memory.
7. (a) Discuss Non-Impact Printers.
(b) Explain working of Moving Head Magnetic Disk.

Unit-IV

8. Explain Direct Memory access and concept of Cycle-Stealing.
9. Write notes on the following :
(a) Instruction Format
(b) Interrupt Driven Data Transfer.