Roll No.

Total Pages: 03

BCA/M-22

1873

LOGICAL ORGANISATION OF COMPUTER-II BCA-122

Time: Three Hours]

[Maximum Marks: 80

Note: Attempt Five questions in all, selecting one question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

- 1. (a) Presetting and clearing of a flip-flop.
 - (b) Binary counters.
 - (c) Laser printer
 - (d) Trap Interrupt.

Unit I

- 2. What do you mean by race around condition? How will you eliminate it?
- 3. (a) What is a latch? Explain working of a clocked SR flip-flop.
 - (b) Differentiate D-type and T-type flip-flop.

Unit II

- 4. (a) Explain Serial In and Parallel Out 4-bit register.
 - (b) How will you convert a shift register as a ring counter? Explain.
- 5. (a) What do you mean by Synchronous and Asynchronous binary counters?
 - (b) Explain 4-bit Up-Down counter with timing diagrams.

Unit III

- 6. (a) What do you mean by Flash Memory? Explain.
 - (b) Differentiate between RAM and ROM. Describe various types of ROM.
- 7. (a) Discuss various Memory Parameters.
 - (b) Describe Magnetic and Optical Storage Devices.

Unit IV

- 8. (a) Explain fetch and execute operation for executing LOAD instructions.
 - (b) Describe various Instruction Formats with examples in detail.

- 9. (a) Explain Program Controlled and Interrupt driven 1 data transfer techniques.
 - (b) Explain IOP.

