

BCA/M-21

1888

LOGICAL ORGANISATION OF COMPUTER–II

Paper–BCA-122

Time Allowed : 3 Hours]

[Maximum Marks : 80

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

Compulsory Question

1. Explain the following :

- (a) Binary Cell.
- (b) Fish Memory.
- (c) Joystick.
- (d) I/O interface.

UNIT–I

- 2. (a) Differentiate between Sequential and Combinational circuits.
(b) Explain the working of JK flip flop and Race around condition.
- 3. Explain the Master Slave flip flop.

UNIT–II

- 4. What is a Register? Explain the working of a 4-bit shift register.
- 5. (a) Differentiate between Synchronous and Asynchronous counters.
(b) Explain Decade counter with timing diagram.

UNIT–III

- 6. Describe the following :
 - (a) Memory parameters.
 - (b) Semiconductor RAM and its types.
- 7. Describe the construction and working of :
 - (a) Magnetic Storage Devices.
 - (b) Optical Storage Devices.

UNIT–IV

- 8. Explain different types of Addressing Modes with examples.
- 9. Explain the following :
 - (a) DMA.
 - (b) Machine Instruction.