

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 : *TOPPERWorld*
(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.