Total Pages : 02

BCA/M-23   1865

LOGICAL ORGANIZATION OF COMPUTER–II
BCA-122

Time : Three Hours]   [Maximum Marks : 80

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory. Attempt *four* more questions, selecting one question from each Unit.

1. (a) What is Race-Around Condition ?

    (b) Explain IOP.

    (c) What is a Flash Memory ? How is it used ?

    (d) Define Sequential Circuit and write its properties.

                                                4×4=16

Unit I

2. Describe working of Master-Slave flip-flop in detail with example.   **16**

3. (a) Write Excitation Table of JK and T-FF.   **8**

    (b) What is JK flip-flop ? Write its disadvantage also.

                                                8

Unit II

4. (a) Explain Serial In and Parallel Out 4-Bit Register. **8**

   (b) Write down the design procedure of Synchronous Counter. Design Synchronous MOD-5 Counter. **8**

5. What is Register ? State different types of Registers and also define various modes of operations performed on registers. **16**

Unit III

6. (a) Write a note on Hard-Copy Output Devices. **8**

   (b) Explain different types of Optical Scanners. **8**

7. Define Memory and its types. Explain difference between ROM and RAM. Also write types of ROM and RAM. **16**

Unit IV

8. (a) Describe Program Controlled and Interrupt Driven Data Transfer Techniques. **8**

   (b) Explain basic structure of CPU. **8**

9. (a) Write a note on DMA. **8**

   (b) Explain I/O Channels. **8**