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Logical Organisation of Computer-II
Paper-BCA -122

Time : Three Hours]   [Maximum Marks : 90

(Compulsory Question)

1. (a) How will you convert J-K flip-flop into D & T type flip-flop ?

    (b) Differentiate between Asynchronous and Synchronous counters.

    (c) Explain Performance parameters of memory.

    (d) Define Cache memory.

    (e) Differentiate between Impact & Non-impact printers.

    (f) Discuss Cycle sterling. $6\times3=18$

SECTION - A

2. (a) Differentiate between Sequential and Combinational circuit. 9

    (b) Explain S-R flip-flop.   9

3. Explain the working of J-K flip-flop and its problem. How will you remove it with Master-slave flip-flop ?   18

SECTION - B

4. (a) Explain Serial-in Parallel-out register to store 11010.   9

    (b) Describe the working of asynchronous dacade counter.   9

5. (a) Explain Parallel-in Serial-out register to store 11010.   9

    (b) Draw the timing diagram for 4-bit up & down counter.   9

SECTION - C

6. Explain the various types of Memories used in computer.   18

7. Write short notes on the following :

    (a) OCR.   (b) Light pen.

    (c) Graphics adaptor.   (d) Network card. $4\times4\frac{1}{2}=18$

SECTION - D

8. (a) How will you eliminate the speed mismatch between I/O devices and memory ?   9

    (b) Explain Instruction formats.   9

9. (a) Explain Fetch and Execute operation.   9

    (b) Explain the various addressing modes.   9

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