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LOGICAL ORGANISATION OF COMPUTER-II

Time : 3 Hours *Maximum Marks : 80*

(COMPULSORY QUESTIONS)

1. a) Differentiate between combinational and sequential circuit.

   b) Why is the state of clocked Rs Flip-Floop in indeterminate when S=1 and R=1?

c) What is the difference between Asynchronous and Synchronous counter?
d) How is the data recorded in CDROM?
e) What is the purpose of IOP?
f) What is the difference between Register Addressing mode and Register Indirect Addressing mode?

Unit-I

2. Draw the Logic Diagram of Rs Flip-Floop and Explain its working and also find its characteristic Equation.
3. What is Flip-Flop excitation Table? Show the Flip-Flop Excitation table For JK, RS, D and type Flip-Flop.

Unit-II

4. Explain the working of serial Input serial output (SISO) and serial Input Parallel output (SIPO) Register.
5. What is Ripple counter? Design a 3 bit Ripple counter and explain its working.

Unit-III

6. a) What are differences between sequential access, Random access and Direct access Memory?
   b) What should be the characteristic of Memory cell>
7. a) Explain the construction of Hard disk. How data is accessed in hard disk?
   b) Briefly explain the Flash Memory.

Unit-IV

8. Explain the Instruction cycle of computer.
9. a) Explain the use of I/O Interface.
   b) Explain the Program controlled and Interrupt . controlled Data transfer.