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Course Code: MCA-155

Course Name: Computer Organization

Practice Questions (Practical)

1. Design Circuit Diagram for given Boolean Expression mentioned below:
 $ABC+C'D$
2. Reduced using K-Map and design Circuit Diagram for given Boolean Expression mentioned below:

$$X'Y'Z'+X'YZ'+XY'Z'+XY'Z'+XY'Z+XYZ'+XYZ$$

3. Design circuit diagram for 16x1 Multiplexer.
4. Design circuit diagram for 2x4 Decoder.
5. Design the circuit diagram for full adder using two half adders with one OR gate.
6. Design the circuit diagram for SR Latch and SR flip-flop using NAND and NOR both.
7. Design the circuit diagram for basic logic microoperations using MUX configuration.
8. Design the circuit diagram for 4-bit Arithmetic Circuit.
9. Design the circuit diagram for 2-bit Register using D-flip flop.
10. Design the circuit diagram showing the implementation of SISO, SIPO, PISO and PIPO registers.