

Blooms Taxonomy Level

L1 - Remembering, L2 – Understanding, L3 – Applying, L4 – Analyzing
– Creating

PART-A (5 X 2 = 10)
(Answer all the questions)

1	What is a combinational circuit?
2	Draw the block diagram and Logic symbol of 8:1 multiplexer.
3	What is magnitude comparator? Types.
4	Give the Excitation Table of Toggle Flip-flop.
5	Write the difference between Latch and Flip-flop.

PART- B (2 X 16 + 1 X 8 = 40)

Design & implement the Full Adder and write its limitation.

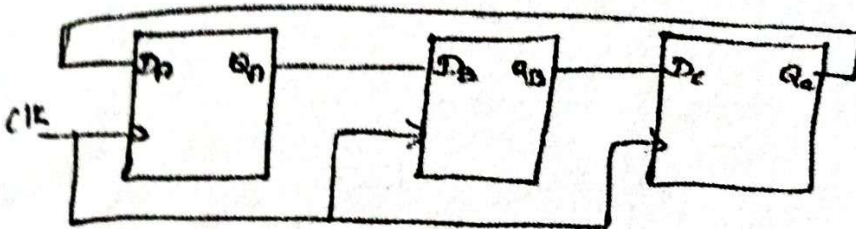
6

(OR)

Explain in detail about gray to binary code converters.

Draw the state table, state diagram for the sequential circuit shown below

7



(OR)

Design a synchronous counter that counts the sequence 0, 1, 2, 4, 5, 6, 0 using JK flip flop.

8

Implement the following Boolean expression using suitable multiplexer $F(A, B, C, D) = \sum(0, 1, 3, 4, 8, 9, 15)$.