

Note :	For Practical questions Students Have to implement Circuit in any one of the software Logisim (need to installed) or Circuit Verse (Browser /Web based simulator). (Same procedure which we follow in Practical Session).
Sr. no	Practical List
1	Design reducing boolean equation Logic diagram circuit of $F(P, Q, R) = (P+Q)(P+R)$
2	Design reducing boolean equation Logic diagram circuit of $F(X, Y, Z) = X'Y + YZ' + YZ + XY'Z'$
3	Implement Exor Gate using NAND Gates
4	Implement ExNor Gate using NOR Gates
5	Design a binary to gray code converter circuit using only NAND gates.
6	Construct Half subtractor and Full subtractor circuit in Simulator
7	Construct Half Adder and Full Adder circuit in Simulator
8	Design Basic Logic Gates in Simulator
9	Realize the NAND gate as a universal building block.
10	Realize the NOR gate as a universal building block.
11	Design 4 bit Binary Parallel Adder circuit.
12	Design 8:1 Multiplexer in simulator

13	Design 1:8 De- Multiplexer in simulator
14	Design 3 bit Magnitude Comparator
15	Design Encoder and Decoder in Simulator
16	Design of 3-bit Asynchronous up counter.
17	Design of 3-bit Up counter using T flip flop
18	Design S-R flip flop in simulator
19	Design J-K flip flop in simulator
20	Design BCD to Excess - 3 Code Converter