

## EXPERIMENTS OF DIGITAL-LAB :-

### Verification of GATES

- a. To study and verify the truth table of logic gates
2. Half Adder, Full Adder, Subtractor
  - a. To realize Half Adder, Full Adder, Half and Full Subtractor
    - i. Using X-OR and Basic gates
    - ii. Using only NAND gates
3. Excess-3 to BCD & Vice Versa
  - a. Using NAND gates
4. Comparators
  - a. To verify the truth table of one bit, two and four bit comparators using logic gates
5. MUX/DEMUX
  - a. To study and verify the MUX and demux
  - b. To verify Half Adder, Full Adder, Half and Full Subtractor using MUX
6. Flip-flops
  - a. Truth table verification using i) RS FP, II) T FF, III) D FP, 1V) JK FP
7. Counters
  - a. Realization of 3-bit counter and MOD-N Counter
8. Shift Registers
  - a. SIPO
  - b. SISO
  - c. PIPO
  - d. PISO
9. VHDL Programming
  - a. Half Adder
  - b. Full Adder