

DIGITAL ELECTRONICS LAB

B.Tech (Engg. Phy.)-III Sem

LIST OF EXPERIMENTS

1. To verify the truth tables of logic gates: AND (7408), OR(7432), NOR(7402), NOT(7404), NAND(7400), XOR(7486)
2. To verify the truth table of Half Adder and Full Adder.
3. To study and verify the operation of 3 to 8 line decoder and 4 to 1 line multiplexer (74138, 74153).
4. To verify the truth tables for R-S, D and J-K Flip-Flops.
5. To verify the operation of a shift register (7474).
6. To verify the operation of a decade counter (5490 AJ).
7. To study the operation of 8-bit parity generator and checker and operation of BCD to 7-segment display (74180, 7447).
8. To study and verify the operation of CMOS Presettable Up/Down-Binary/BCD Counter (4029).
9. Perform Code Conversion (7486):
 - a. Binary to Gray
 - b. Gray to Binary
10. To design and implement the operation of Ring Counter and Johnson Counter using D-FFs (7474).