

34046 - INTEGRATED CIRCUITS PRACTICAL

DETAILED SYLLABUS

List of experiments

1. Verification of truth table of OR, AND, NOT, NOR, NAND, EX-OR gates.
2. Realization of basic gates using NAND & NOR gates.
3. Realization of logic circuit for a given Boolean expression.
4. Half adder, Full adder using IC's.
5. Half subtractor, full subtractor using IC's.
6. Construction and verification of truth table for Decoder/Encoder.
7. Multiplexer/De-multiplexer using multiplexer IC's.
8. Parity generator and checker using parity checker/ generator IC's.
9. Construction and verification of truth table for RS, D, T & JK flip-flop.
10. 4- bit ripple counter using FF
11. Construct a Single digit Decade Counter with 7 segment display.
12. Astable Multi vibrator using IC 555.
13. Simulate the Clippers and clampers using the simulation tool like PSPICE/ multisim/orcad/tina.
14. simulate the inverting and non inverting amplifier, voltage follower, integrator, differentiator, summing amplifier, difference amplifier(Any 3) using the simulation tool like PSPICE/ multisim/orcad/tina.
15. simulate the Hartley and phase shift oscillator, sine, square and triangular waveform generators and precision rectifiers(Any 3) using the simulation tool like PSPICE/ multisim/orcad/tina.