Digital Electronic & Integrated Circuits Laboratory
Code: EC492
Contacts: 3P
Credits: 2

1. Realization of basic gates using Universal logic gates.

2. Code conversion circuits- BCD to Excess-3 and vice-versa.

3 Four-bit parity generator and comparator circuits.

4. Construction of simple Decoder and Multiplexer circuits using logic gates.

5. Design of combinational circuit for BCD to decimal conversion to drive 7-segment display using multiplexer.

6. Construction of simple arithmetic circuits-Adder, Subtractor.

7. Realization of RS-JK and D flip-flops using Universal logic gates.

8. Realization of Universal Register using JK flip-flops and logic gates.

9. Realization of Universal Register using multiplexer and flip-flops.

10. Construction of Adder circuit using Shift Register and full Adder.

11. Realization of Asynchronous Up/Down counter.

12. Realization of Synchronous Up/Down counter.

13. Design of Sequential Counter with irregular sequences.

14. Realization of Ring counter and Johnson's counter.

15. Construction of adder circuit using Shift Register and full Adder.