DE Sampled Practical List for IPE

1. Implement all the basic logic gates and verify its truth-tables using CEDAR logic software.

2. Verify the NAND gate as universal logic gates using CEDAR logic software.

3. Verify the NOR gate as universal logic gates using CEDAR logic software.

4. Design and verify the truth tables of Half and Full adder circuits using CEDAR logic software.

5. Design and verify the truth tables of Half and Full subtractor circuits using CEDAR logic software.

6. Design and implement 4:1 Multiplexer using logic gates using CEDAR logic software

7. Design and implement 3:8 Decoder using logic gates using CEDAR logic software

8. Design and verify the truth tables of positive edge triggered JK and D-flip-flops using CEDAR logic software.

9. Design and verify the truth tables of negative edge triggered JK and D-flip-flops using CEDAR logic software.

10. Convert negative edge triggered JK flipflop into T-flipflop with the help of CEDAR logic software.

11. Design 4-bit SISO and PIPO shift register using CEDAR logic software

12. Design 4-bit PISO shift register using CEDAR logic software

13. Design 4-bit SIPO shift register using CEDAR logic software

14. Design 3-bit ripple up counter using JK flipflop with the help of CEDAR logic software.

15. Design 4-bit ripple up counter using T flipflop with the help of CEDAR logic software.

16. Design 4-bit ripple down counter using T flipflop with the help of CEDAR logic software.

17. Design 3-bit ripple down counter using JK flipflop with the help of CEDAR logic software..

18. Design modulo-6 asynchronous counter using JK flip-flop with the help of CEDAR logic software.

19. Design 3-bit synchronous up-down counter using T-flip-flop using CEDAR logic software.

20. Design 3-bit synchronous down counter using flip-flops using CEDAR logic software

21. Design 3-bit synchronous up-down counter using flip-flops using CEDAR logic software

22. Design BCD ripple counter using T-FF in CEDAR logic software.

23. Design BCD synchronous counter using T-FF in CEDAR logic software.

24. Design ring counter using D-FF in CEDAR logic software.

25. Design Johnson counter using D-FF in CEDAR logic software.