

Index

Roll No: _____

Sr. No.	Title of experiment	Date	Marks (as per rubrics)					Total Marks (10)	Sign
			02	02	02	02	02		
1.	A. Demonstrate the working of basic logic gates and verify with the truth table. B. Realize the importance of universal gates by implementing basic logic gates.								
2.	A. Design and implementation of binary to Gray and vice-versa code converter. B. Design and Implementation of Half and Full Adder and Subtractor circuits.								
3.	A. Design and implementation of a combinational circuit that converts the given BCD number into an equivalent 2421 number. B. Design and implementation of a combinational circuit that converts a decimal digit from the 84-2-1 code to the 5421 code. C. Design and implementation of a combinational circuit that generates the addition of a given 3-bit number. D. Design a 4-bit parity generator and checker for your name.								
4.	Design and implementation of BCD and excess-3 parallel adder using two binary adders.								
5.	Implementation of the following Boolean function using a multiplexer: $F(A, B, C, D, E) = ABE' + BC'D + A'C'DE$								
6.	Implement practical 1, 2 and 3 in Verilog HDL.								
7.	Design and implement module-N synchronous counter.								
8.	Design and implement module-N ripple counter								
9.	Design and implement synchronous and asynchronous counters.								
10.	Design and develop an 8-bit universal shift register.								

Lab Faculty Signature and Name