

Laboratory Manual

CPE2311: Digital Logic Design Lab

Name: _____

Reg. #: _____

Section: _____

Department of Electrical and Computer Engineering

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Islamabad, Pakistan

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List of Experiments

1. Introduction to Digital Logic and Equipment
2. Number System conversion and Compliment Arithmetic
3. Familiarization with Logic Gates and Truth Table based Verification
4. Introduction to Boolean Algebra and Logic Simplification
5. Combinational Circuits Implementation using K-Maps
6. Implementation of Adder and Magnitude Comparator
7. Design of Combinational Circuits using Multiplexers and Decoders
8. Implementation of D-Type Latch and J-K Flip Flop
9. Finite state machine based design of Sequential Circuits
10. Design and Implementation of Counters and Shift Register
11. Implementation of Combinational Logic using Verilog HDL
12. Implementation of Sequential Logic using Verilog HDL