

The Islamia University of Bahawalpur, Pakistan

Department of Computer Science & IT

Program: BSCS, BSIT Course Title: Digital Logic and Design (DLD)

Course Instructor: Dr. Dost Muhammad Khan

Objective: Digital Logic and Design (DLD) makes students of undergraduate level familiar with different types of number systems and codes, logic gates, combinational logic circuits and study of various digital systems. After this course students have complete understanding of any digital system. The course outline is given below:

Week 1: Introduction: An overview and Number Systems

Week 2: Number Systems and Codes

Week 3: Logic Gates

Week 4: Digital Circuits and Operational Characteristics

Week 5: Boolean Algebra and Logic Simplification

Week 6: Karnaugh Map and Boolean Expression Simplification

Week 7: Comparator, Counter

Week 8: Adder, Subtractor

Week 9: Encoder, Decoder

Week 10: Multiplexer, De-multiplexer

Week 11: S-R Latch, Flip-Flops

Week 12: Shift Registers

Week 13: Memory

Week 14: Analog to Digital Converters

Week 15, 16: Assignments and Review of Course

--- Good Luck ---