

NAME OF THE PROGRAM: CSE	DEGREE: B. Tech
COURSE NAME: Computer Architecture	SEMESTER: 4th
COURSE CODE: PCC-CS 492	COURSE CREDIT: 2
COURSE TYPE: LAB	CONTACT HOURS: 4P

No.	List of Experiments	Date	
1.	lustration of basic Gates: AND, OR & NAND		
	Verify the results using a test bench	Week 1	
2.	of Half Adder(Using Basic Gate), Full Adder(Using Basic Gate) and Full using 2 half adder.  Week		
	Verify the results using a test bench		
3.	Design of 8-bit Adder using Full Adder as component	Week 3	
	Verify the results using a test bench		
4.	Create a 4 bit adder_subtractor composite circuit using 1 bit adder and XOR gate as components	Week 4	
	Verify the results using a test bench		
5.	Create a Half Subtractor, Full Subtractor, Full Subtractor using 2 half Subtractor, 8-bit Subtractor using Full Subtractor  Verification and the subtractor is a subtractor.		
6.	Verify the results using a test bench  Create a 4 bit comparator. Use buses for each of the input signal lines	Week 6	
	Verify the results using a test bench		
7.	Create 8:1 Multiplexer with select line. Use buses for each of the input signal lines Create 8:1 DeMultiplexer with select line. Use buses for each of the input signal lines Verify the results using a test bench		
8.	Design a behavioral simulation of JK flip flop and D flip flop. Consider clock period = 1 ps	. Consider clock period  Week 8	
	Design a behavioral simulation of T flip flop.		
	Verify the results using a test bench		
9.	Design a 4-bit serial in and parallel out shift register	Week 9	
	Design a 4-bit parallel in and serial out shift register		
	Verify the results using a test bench		
10.	Design 4 bit up down counter.	Week 10	
	Verify the results using a test bench		
11.	Design 4-bit simple ALU		
	Verify the results using a test bench	Week 11	
12.	Design memory modules for a RAM		
	Verify the results using a test bench	Week 12	

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