

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

Exp. No.	List of Experiments	Date
1.	Illustration of basic Gates: AND, OR & NAND	Week 1
	Verify the results using a test bench	
2.	Design of Half Adder(Using Basic Gate) , Full Adder(Using Basic Gate) and Full adder using 2 half adder.	Week 2
	Verify the results using a test bench	
3.	Design of 4-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	Week 5
	Verify the results using a test bench	
6.	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 4:1 Multiplexer with select line. Use buses for each of the input signal lines	Week 7
	Create 1:4 DeMultiplexer with select line. Use buses for each of the input signal lines	
8.	Design a behavioral simulation of JK flip flop and D flip flop. Consider clock period = 1 ps	Week 8
	Design a behavioral simulation of T flip flop.	
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	
10.	Design 4 bit up down counter.	Week 10
	Verify the results using a test bench	
11.	Design 4-bit simple ALU	Week 11
	Verify the results using a test bench	
12.	Design memory modules for a RAM	Week 12
	Verify the results using a test bench	