Pr.3 DIGITAL ELECTRONICS & MICROPROCESSOR LAB

Name of the Course: Diploma in Electrical Engineering

Name of the Faculty: S Bichiballi

Course code:	Pr.3	Semester	5th
Total Period:	45	Examination	3 hrs
Lab. periods:	3 P / week	Term Work	25
Maximum marks:	75	End Semester Examination:	50

LESSON PLAN

Week	Day	Experiment
1st	1st	Verify truth tables of AND, OR, NOT, NOR, NAND, XOR, XNOR gates.
	2nd	
	3rd	
2nd	1st	Implement various gates by using universal properties of NAND & NOR gates
	2nd	and verify truth table.
	3rd	
3rd	1st	Implement Half Adder and Full Adder using logic gates.
	2nd	
	3rd	
4th	1st	Implement Half Subtractor and Full Subtractor using logic gates.
	2nd	
	3rd	
5th	1st	Implement a 4-bit Binary to Gray code converter.
	2nd	
	3rd	
6th	1st	Implement a Single bit digital comparator.
	2nd	
	3rd	
7th	1st	Study of Multiplexer and Demultiplexer.
	2nd	
	3rd	
8th	1st	Study of Flip-Flops:
	2nd	I. S-R Flip Flop
	3rd	II. J-K Flip Flop
		III. D Flip Flop
		IV. T Flip Flop
9th	1st	Realize a 4-bit synchronous Up/Down Counter with a control for up/down counting.

	2nd	
	3rd	
10th	1st	
	2nd	Implement Mod-10 Asynchronous Counter.
	3rd	
11th	1st	
	2nd	Study of Shift Registers.
	3rd	
12th	1st	General Programming using 8085A development board
	2nd	I. 1'S Complement
	3rd	II. 2'S Complement
		III. Addition of 8-bit number
		IV. Subtraction of 8-bit number resulting 8/16 bit number.
13th	1st	I. Decimal Addition 8-bit number
	2nd	II. Decimal Subtraction 8-bit number
	3rd	
14th	1st	I. Compare between two numbers
	2nd	II. Find the largest in an Array
	3rd	III. Block Transfer.
15th	1st	Interfacing using 8085
		I. Traffic light control using 8255
		II. Generation of square wave using 8255

Signature of concerned faculty

H.O.D Electrical