

LESSON PLAN FOR Digital Electronics & Microprocessor Lab(Pr3)

Discipline: Electrical Engineering	Semester: 5th	Name of the Teaching Faculty: Ms. Deepika sarkar (Lect. In ETC)
Subject: Digital Electronics & Microprocessor Lab	No. of days per week class allotted: 3	Semester From Date : 01.08.23 to Date: 30.11.2023 No. of Weeks: 15 Session:- 2023-24
Week	Class Day	Theory/Practical Topic
1st	1st	1. Verify truth tables of AND, OR, NOT, NOR, NAND, XOR, XNOR gates.
2nd	2nd	2. Implement various gates by using universal properties of NAND & NOR gates and verify truth table.
3rd	3rd	3. Implement half adder and Full adder using logic gates.
4th	4th	4. Implement half subtractor and Full subtractor using logic gates.
5th	5th	5. Implement a 4-bit Binary to Gray code converter.
6th	6th	6. Implement a Single bit digital comparator.
7th	7th	7. Study Multiplexer and demultiplexer. 8. Study of flip-flops.i) S-R flip flop ii) J-K flip flop iii) flip flop iv) T flip flop
8th	8th	9. Realize a 4-bit asynchronous UP/Down counter with a control for up/down counting.
9th	9th	10. Realize a 4-bit synchronous UP/Down counter with a control for up/down counting.
10th	10th	11. Implement Mode-10 asynchronous counters.
11th	11th	12. Study shift registers.
		II) Microprocessor (A) General Programming using 8085A development board
12th	12th	1. a. 1'S Complement. b. 2'S Complement. 2. a. Addition of 8-bit number. b. Subtraction of 8-bit number resulting 8/16 bit number.
13th	13th	3. a. Decimal Addition 8-bit number. b. Decimal Subtraction 8-bit number

14th	14th	3. a. Compare between two numbers. b. Find the largest in an Array 5. Block Transfer.
15th	15h	4. Traffic light control using 8255.

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31/07/23
Faculty

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