

DISCIPLINE: Electrical & Electronics Engg.	SEMESTER: 5 th Semester	NAME OF THE TEACHING FACULTY: Ms. Deepika Sarkar Lecturer -II in ETC
SUBJECT: Digital Electronics & Microprocessor Lab(PR2)	NO OF DAYS/PER WEEK CLASSES ALLOTTED: 1	SEMESTER FROM DATE: 14.07.2025 TO DATE: 15.11.2025 NO OF WEEKS:15

Week	Class Day	Topics
1 st	1 st	Verify truth tables of AND, OR, NOT, NOR, NAND, XOR, XNOR gates.
2 nd	1 st	Implement various gates by using universal properties of NAND & NOR gates and verify truth table.
3 rd	1 st	Implement half adder and Full adder using logic gates.
4 th	1 st	Implement half subtractor and Full subtractor using logic gates. & Implement a 4-bit Binary to Gray code converter.
5 th	1 st	Implement a Single bit digital comparator. & Study Multiplexer and demultiplexer.
6 th	1 st	Study of flip-flops. i) S-R flip flop ii) J-K flip flop iii) flip flop iv) T flip flop
7 th	1 st	Realize a 4-bit asynchronous UP/Down counter with a control for up/down counting.
8 th	1 st	Realize a 4-bit synchronous UP/Down counter with a control for up/down counting.
9 th	1 st	Implement Mode-10 asynchronous counters. & Study shift registers.
10 th	5 th	General Programming using 8085A development board. 1'S Complement. 2'S Complement.
11 th	1 st	Addition of 8-bit number. b. Subtraction of 8-bit number resulting 8/16 bit number.
12 th	1 st	Decimal Addition 8-bit number. b. Decimal Subtraction 8-bit number
13 th	1 st	Compare between two numbers. b. Find the largest in an Array
14 th	1 st	Block Transfer.
15 th	1 st	Interfacing using 8085 1. Traffic light control using 8255. 2. Generation of square wave using 8255

Deepika Sarkar
Lecturer 14.07.25

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HOD 14.07.25

Deepika Sarkar
Principal 14/7/25

