

GOVT. POLYTECHNIC MAYURBHANJ LESSON PLAN

Discipline : ELECTRICAL ENGG.		Semester: 5th Sem		Name of the Teaching Faculty :Leena Marndi
Subject : DEC&MP lab		No. of Days / per week class allotted : 05		Semester From date : 01.08.2023 To Date : 30.11.2023
MONTH	Week	Day		Topics
AUGUST	1st	2nd		<u>Digital Electronics</u>
			G-II	Verify truth tables of AND, OR, NOT, NOR, NAND, XOR, XNOR gates.
	2nd	1st	G-I	Verify truth tables of AND, OR, NOT, NOR, NAND, XOR, XNOR gates.
		2nd	G-II	Implement various gates by using universal properties of NAND & NOR gates and verify truth table.
	3rd	1st	G-I	Implement various gates by using universal properties of NAND & NOR gates and verify truth table.
	4TH	1st	G-II	Implement half adder and Full adder using logic gates
				. Implement half subtractor and Full subtractor using logic gates
		2nd	G-I	Implement half adder and Full adder using logic gates
				. Implement half subtractor and Full subtractor using logic gates
	5TH	1st	G-II	Implement a 4-bit Binary to Gray code converter. Implement a Single bit digital comparator
		2nd	G-I	Implement a 4-bit Binary to Gray code converter. Implement a Single bit digital comparator
SEPTEMBER	2nd	1st	G-II	Study Multiplexer and demultiplexer.
		2nd	G-I	Study Multiplexer and demultiplexer.
	3rd	1st	G-II	Study of flip-flops. i) S-R flip flop ii) J-K flip flop iii) flip flop iv) T flip flop
		2nd	G-I	Study of flip-flops. i) S-R flip flop ii) J-K flip flop iii) flip flop iv) T flip flop
	4TH	1st	G-II	Realize a 4-bit asynchronous UP/Down counter with a control for up/down counting.
				Realize a 4-bit synchronous UP/Down counter with a control for up/down
				Implement Mode-10 asynchronous counters.counting.
	5TH	1st	G-I	Realize a 4-bit asynchronous UP/Down counter with a control for up/down counting.
				Realize a 4-bit synchronous UP/Down counter with a control for up/down
				Implement Mode-10 asynchronous counters.counting.

		2nd	G-II	Study shift registers.
OCTOBER	1st	2nd	G-I	Study shift registers.
	2nd	1st	G-II	<u>Microprocessor</u>
				1. a. 1'S Complement. b. 2'S Complement.
		2nd	G-I	1. a. 1'S Complement. b. 2'S Complement.
	3rd	1st	G-II	2. a. Addition of 8-bit number. b. Subtraction of 8-bit number resulting 8/16 bit number
		2nd	G-I	2. a. Addition of 8-bit number. b. Subtraction of 8-bit number resulting 8/16 bit number
	5TH	1st	G-II	3. a. Decimal Addition 8-bit number. b. Decimal Subtraction 8-bit number
		2nd	G-I	3. a. Decimal Addition 8-bit number. b. Decimal Subtraction 8-bit number
NOVEMBER	2nd	1st	G-II	4. a. Compare between two numbers. b. Find the largest in an Array
		2nd	G-I	4. a. Compare between two numbers. b. Find the largest in an Array
	3rd	1st	G-II	5. Block Transfer.
		2nd	G-I	5. Block Transfer.
	4TH	1st	G-II	Traffic light control using 8255.
		2nd	G-I	Traffic light control using 8255.Generation of square wave using 8255
	5TH	2nd	G-II	Generation of square wave using 8255

Total Practical days=29