

LESSON PLAN 2023( Winter )

Dicipline: Electrical	Semester :5th Sem	Name of the Teaching faculty: Sudhansu Sekhar Munda Lect in E &TC
Subject: <b>DIGITAL ELECTRONICS &amp; MICROPROCESSOR</b>	No.of days/per week classalloted:5p(55Minutes)/week	Semester From date: 15 Sep 2022 to Date: 22 Dec 2022 No . Of Weeks:
<b>15 Sep to 21 Sep</b>	1st	<b>BASICS OF DIGITAL ELECTRONICS:</b> 1.1 Binary, Octal, Hexadecimal number systems and compare with
	2nd	1.2 Binary addition, subtraction, Multiplication and Division.
	3rd	1.3 1's complement for a binary number
	4th	2's complement numbers for a binary number
	5th	1.4 Subtraction of binary numbers in 2's complement method.
<b>22 Sep to 28 Sep</b>	1st	1.5 Use of weighted for a number in 8421, Excess-3 and Gray Code and vice-versa.
	2nd	Write Binary equivalent number for a number in 8421, Excess-3 and Gray Code and vice-versa.
	3rd	1.6 Importance of parity Bit.
	4th	1.7 Logic Gates: AND, OR, NOT, NAND, NOR and EX-OR gates with truth table.
	5th	1.8 Realize AND, OR, NOT operations using NAND, NOR gates
<b>29 Sep to 1 Oct</b>	1st	1.9 Different postulates and De-Morgan's theorems in Boolean algebra.
	2nd	1.10 Use Of Boolean Algebra For Simplification Of Logic Expression
	3rd	1.11 Karnaugh Map For 2,3,4 Variable, Simplification Of SOP And POS Logic Expression Using K-Map.
	4th	<b>2. COMBINATIONAL LOGIC CIRCUITS:</b> 2.1 Give the concept of combinational logic circuits . 2.2 Half adder circuit and verify its functionality using truth table.
<b>10-Oct</b>	<b>CLASS TEST-1</b>	
<b>11Oct to 15 Oct</b>	1st	2.3 Realize a Half-adder using NAND gates only and NOR gates only
	2nd	2.4 Full adder circuit and explain its operation with truth table.
	3rd	2.5 Realize full-adder using two Half-adders and an OR – gate and
	4th	2.6 Full subtractor circuit and explain its operation with truth table.
	5th	2.7 Operation of 4 X 1 Multiplexers .

