Discipline: ELECTRICAL	Semester: 5TH	Name of The Teaching Faculty: ER.SOUMYA SHYAMALI MAHAPATRA
Subject: DEC&MP	NO OF CLASSES/WEEKES 05	SEMESTER FROM: 15.9.2022-22.12.2022 NO OF WEEKS : 15
WEEKS	CLASS/DAY	THEORY/PRATICAL TOPICS
15.9.2022 TO 17.9.2022	1 st	. BASICS OF DIGITAL ELECTRONICS 1.1 Binary, Octal, Hexadecimal number systems and compare with Decimal system. Binary addition, subtraction, Multiplication and Division
	2 ND	BISWAKRMA PUJA
	1 st	1's complement and 2's complement numbers for a binary number
	2 ND	Subtraction of binary numbers in 2's complement method
19.9.2022 TO	3 RD	Use of weighted and Un-weighted codes & write Binary equivalent number for a number in 8421, Excess-3 and Gray Code and vice- versa
24.9.2022	4 TH	Use of weighted and Un-weighted codes & write Binary equivalent number for a number in 8421, Excess-3 and Gray Code and vice- versa
	5 TH	Importance of parity Bit
26.9.2022	1 st	Logic Gates: AND, OR, NOT, NAND, NOR and EX-OR gates with truth table
то	2 ND	Realize AND, OR, NOT operations using NAND, NOR gates
1.10.2022	3 RD	Different postulates and De-Morgan's theorems in Boolean algebra.
	4 TH	Use Of Boolean Algebra For Simplification Of Logic Expression
The States of the	5 TH -	
	1 ST	
3.10.2022	2 ND	VIJAYA DASAMI
то	3 RD	
	4 TH	
8.10.2022	5 TH	
10.10.2022 TO 15.10.2022	1 st	Karnaugh Map For 2,3,4 Variable, Simplification Of SOP And POS Logic Expression Using K-Map
	2 ND	Karnaugh Map For 2,3,4 Variable, Simplification Of SOP And POS Logic Expression Using K-Map
	3 RD	COMBINATIONAL LOGIC CIRCUITS 2.1 Give the concept of combinational logic circuits
	4 ^{тн}	Half adder circuit and verify its functionality using truth table
	5 TH	3 Realize a Half-adder using NAND gates only and NOR gates only
	1 st	Full adder circuit and explain its operation with truth table
17.10.2022 TO 22.10.2022	2 ND	Realize full-adder using two Half-adders and an OR – gate and write truth table
	3 RD	Full subtractor circuit and explain its operation with truth table
	4 TH	Operation of 4 X 1 Multiplexers and 1 X 4 demultiplexer
	5 TH	Working of Binary-Decimal Encoder & 3 X 8 Decoder
	1 st	DIWALI

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		f Two bit magnitude comparato
20 10 2022	2 ND	Working of Two Dicting
29.10.2022	340	Give the idea of Sequences and give the concept of lever closer of
	4 TH	State the necessity of clock and b
		and edge triggering
	514	Clocked SR flip flop with preset and one using S-R flip-flop and explain
	157	Construct level clocked JK flip hop using a
The State of the		with truth table
	2ND	Construct level clocked JK flip flop using 5 th mp
21 102022	-	with truth table
51.102022	3RD	Concept of race around condition and study of moster
10		flop.
5 11 2022	4 TH	Concept of race around condition and study of master sizes and
5.11.2022		flop.
	5 TH	Give the truth tables of edge triggered D and T flip flops and that
		their symbols. 3.8 Applications of flip flop
	1 ST	LAST MONDAY OF KARTIKA
7 11 2022	2ND	RAHAS PURNIMA
то	3 RD	Give the truth tables of edge triggered D and T flip flops and draw
	STREAM STREAM	their symbols. 3.8 Applications of flip flop
12.11.2022	4 TH	Define modulus of a counter
A BAR AND	5 TH	4-bit asynchronous counter and its timing diagram.
	1 st	Asynchronous decade counter.
14.11.2022	2 ND	4-bit synchronous counter
то	3RD	PRATHAMASTAMI
	4 TH	Distinguish between synchronous and asynchronous counters
19.11.2022	5 TH	State the need for a Register and list the four types of registers.
	1 st	Working of SISO, SIPO, PISO, PIPO Register with truth table using
21.11.2022		flip flop.
то	2 ND	Working of SISO, SIPO, PISO, PIPO Register with truth table using
And the second second		flip flop.
26.11.2022	3RD	8085 MICROPROCESSOR Introduction
	4 TH	Introduction to Microprocessors, Microcomputers
	5 TH	Architecture of Intel 8085A Microprocessor and description of
		each block.
	1 ⁵⁷	Architecture of Intel 8085A Microprocessor and description of
28.11.2022		each block.
то	2 ND	Pin diagram and description.
No. States Street Street Free	3 RD	Pin diagram and description.
3.12.2022	4 TH	Stack, Stack pointer & stack top
	5 TH	Stack, Stack pointer & stack top
5.12.2022	1 ⁵¹	Interrupts Opcode & Operand,
то	2 ND	Differentiate between one byte, two byte & three byte instruction
		with example.
10.12.2022	3*0	Instruction set of 8085 example9 Addressing mod
	4 ^{1H}	LAST THRUSDAY OF MARGASIRA
Participant and the second second	514	Fetch Cycle Machine Cycle Instruction Cycle T State

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		and memory write, I/O read, I/O
	1 st	Timing Diagram for memory read, memory memory wite
12.12.2022	2 ND	Timing Diagram for 8085 Instruction
то	3 RD	of 8085.
17.12.2022	4 TH	INTERFACING AND SUPPORT CHIPS 5.1 Basic Interfecting Memory mapping & I/O mapping
	5™	Functional block diagram and description of each block of Programmable peripheral interface Intel 8255
10 12 2022	1 st	Functional block diagram and description of each block of Programmable peripheral interface Intel 8255
TO	2 ND	Application using 8255: Seven segment LED display, Square wave generator, Traffic light Controller
24.12.2022	3 RD	Application using 8255: Seven segment LED display, Square wave generator, Traffic light Controller
and the second second second	4 [™]	
	5 TH	Attendance close

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