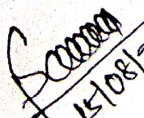
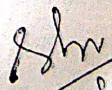


DISCIPLINE		SEMESTER	NAME OF THE TEACHING FACULTY	
CIVIL & MECHANICAL ENGG.		1ST	MISS. SINDHUJA PANIGRAHI,GF(ELECTRICAL)	
FUNDAMENTALS OF ELECTRICAL ENGG(TH-4A)		NO. OF DAYS PER WEEK CLASS ALLOTTED : 02	SEMESTER FROM 15/08/2024 TO 24/12/2024	
			NO. OF WEEKS:- 15 NOS.	
WEEKS	CLASS DAYS	THEORY TOPICS		
1ST WEEK	1ST	Electric and Magnetic Circuits:Introduction to Basic Principles of Electricity		
	2ND	Introduction to Generation,transmission & Distribution		
2ND WEEK	1ST	Definations of EMF, Current, Potential Difference, Power and Energy		
	2ND	Defination of Resistances, Capacitance, Inductance & ohms law		
3RD WEEK	1ST	Series and Parallel connection of Resistances, Capacitance, Inductance with Numericals		
	2ND	Introduction to Magnetic Circuit & Defination of M.M.F, magnetic force, permeability & susceptibility.		
4TH WEEK	1ST	Defination of reluctance, leakage factor and BH curve		
	2ND	Description of Hysteresis loop		
5TH WEEK	1ST	Electromagnetic induction & Faraday's laws of electromagnetic induction		
	2ND	Lenz's law; Dynamically induced emf; Statically induced emf		
6TH WEEK	1ST	Equations of self and mutual inductance		
	2ND	Analogy between electric and magnetic circuits.		
7TH WEEK	1ST	A.C. Circuits: Basic terminology Cycle, Frequency, Periodic time, Amplitude, Angular velocity,		
	2ND	RMS value, Average value, Form Factor Peak Factor		
8TH WEEK	1ST	Impedance, phase angle, and power factor		
	2ND	Mathematical and phasor representation of alternating emf and current		
9TH WEEK	1ST	Voltage and Current relationship in Star and Delta connections		
	2ND	A.C in resistors, inductors circuit		
10TH WEEK	1ST	A.C in Capacitive Circuit, A.C in R-L series Circuit		
	2ND	R-C series, R-L-C series Circuit		
11TH WEEK	1ST	A.C in R-L parallel		
	2ND	A.C in R-C Parallel, R-L-C Parallel Circuit.		
12TH WEEK	1ST	Power in A. C. Circuits, power triangle		
	2ND	Transformer and Machines: General construction and principle of Transformer		
13TH WEEK	1ST	Classification of transformer with construction and pinciple		
	2ND	Emf equation transformers		
14TH WEEK	1ST	Transformation ratio of transformers		
	2ND	Auto transformers		
15TH WEEK	1ST	Construction and Working principle of DC motors		
	2ND	Basic equations and characteristic of motors		


 15/08/24
 (GF, ELECT)


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 GOVT. POLY.
 GAJAPATI