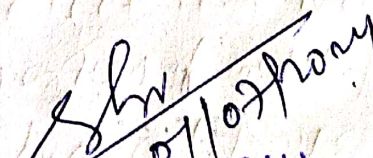


DISCIPLINE		SEMESTER	NAME OF THE TEACHING FACULTY	
ELECTRICAL		3RD	SRI SUSHANTA KUMAR MALIK, SR. LECTURER	
SUBJECT: EEM (TH-4)		NO. OF DAYS PER WEEK CLASS ALLOTTED : 04		SEMESTER FROM 01/07/2024 TO 11/11/2024 = 16/12/24
				NO. OF WEEKS : 15 NOS.
WEEKS	CLASS DAYS	THEORY TOPICS		
1ST	1ST	Introduction to electrical engineering materials		
	2ND	Introduction to conducting materials		
	3RD	Resistivity		
	4TH	factors affecting resistivity		
2ND	1ST	Classification of conducting materials		
	2ND	low-resistivity and high resistivity materials		
	3RD	Low Resistivity Materials and their Applications		
	4TH	Copper, Silver, Gold, Aluminum, Steel		
3RD	1ST	Stranded conductors		
	2ND	Bundled conductors		
	3RD	Low resistivity copper alloys		
	4TH	High Resistivity Materials and their Applications		
4TH	1ST	Tungsten, Carbon, Platinum, Mercury		
	2ND	Superconductivity		
	3RD	Superconducting materials		
	4TH	Application of superconductor materials		
5TH	1ST	Introduction to semiconducting materials		
	2ND	Electron Energy and Energy Band Theory		
	3RD	Excitation of Atoms		
	4TH	Insulators, Semiconductors and Conductors		
6TH	1ST	Semiconductor Materials		
	2ND	Covalent Bonds		
	3RD	Intrinsic Semiconductors, Extrinsic Semiconductors		
	4TH	p type and n type materials		
7TH	1ST	Minority and Majority Carriers		
	2ND	Semi-Conductor Materials, Applications of Semiconductor materials		
	3RD	Introduction to insulating materials		
	4TH	General properties of Insulating Materials		
8TH	1ST	Electrical, Mechanical and visual property		
	2ND	Chemical properties Ageing		
	3RD	Insulating Materials – Classification, properties, applications		
	4TH	Classification of insulating materials on the basis physical and chemical structure		
9TH	1ST	Insulating Gases		
	2ND	Commonly used insulating gases		
	3RD	Commonly used insulating gases continuation..		
	4TH	dielectric materials		
10TH	1ST	Dielectric Constant of Permittivity		
	2ND	dielectric break down		
	3RD	Polarization		
	4TH	Dielectric Loss		
11TH	1ST	Electric Conductivity of Dielectrics and their Break Down		
	2ND	Properties of Dielectrics		
	3RD	Applications of Dielectrics		

	4TH	Introduction to magnetic materials
12TH	1ST	Classification of magnetic materials
	2ND	Diamagnetic paramagnetic and ferromagnetic
	3RD	Magnetization Curve
	4TH	Hysteresis , eddy current ,curie point
13TH	1ST	magnetostriction
	2ND	Soft and Hard magnetic Materials
	3RD	Soft and Hard magnetic Materials continuation
	4TH	Materials for Special Purposes
14TH	1ST	Structural Materials
	2ND	Steel tapes, wires and strips
	3RD	Protective Materials
	4TH	Thermocouple materials
15TH	1ST	Soldering Materials
	2ND	Fuse and Fuse materials.
	3RD	Dehydrating material
	4TH	Lead, Bimetals


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