

GOVT. POLYTECHNIC MAYURBHANJ LESSON PLAN

Discipline :		Semester: 3th Sem		Name of the Teaching Faculty :Laxmidhar Sahu	
Subject : EEM		No. of Days / per week class allotted : 04		Semester From date : 01.08.2023	To Date : 30.11.2023
MONTH	Week	Day	UNIT	Topics	
AUGUST	1ST	2nd	UNIT-1	1.Conducting Materials	
		4th		Introduction. Resistivity, factors affecting resistivity	
		5th		Classification of conducting materials into low-resistivity and high resistivity materials	
	2ND	1st		Low Resistivity Materials and their Applications. (Copper, Silver, Gold, Aluminum, Steel)	
		2nd		Low Resistivity Materials and their Applications. (Gold, Aluminum, Steel)	
		4th		Bundled conductors, Stranded conductors	
		5th		Low resistivity copper alloys.	
	3RD	1st		High Resistivity Materials and their Applications(Tungsten, Carbon, Platinum, Mercury)	
		2nd		Superconductivity. Superconducting materials. Application of superconductor materials	
		4th		Independance Day	
		5th		Question Discussion	
	4TH	1st	UNIT-2	2.Semiconducting Materials	
		2nd		Introduction. Semiconductors	
		4th		Electron Energy and Energy Band Theory	
		5th		Excitation of Atoms	
		1st		Insulators, Semiconductors and Conductors	
	5TH	2nd		Semiconductor Materials	
		4th		Covalent Bonds. Intrinsic Semiconductors. Extrinsic Semiconductors	
		5th		N-Type Materials. P-Type Materials	
		1st		Minority and Majority Carriers. Semi-Conductor Materials	
	1ST	2nd		Applications of Rectifiers, Temperature-sensitive resistors or thermistors	
		4th		Photoconductive cells, Applications of Photovoltaic cells Varistors	
		5th		Transistors, Hall effect generators, Solar power	
		1st		Question Discussion	
	2ND	2nd	UNIT-3	3. Insulating Materials:	
		4th		Introduction-General properties of Insulating Materials	
		5th		Electrical properties, Visual properties	
		1st		Mechanical properties, Thermal properties	
		2nd		Chemical properties, Ageing	
	3RD	4th		Class Test-1	
		5th			
		1st			
		2nd			
		4th			
		5th			

SEPT	4TH	1st		Insulating Materials-Classification of insulating materials on the basis physical and chemical structure
		2nd		Ganesh Puja
		4th		Insulating Gases -Introduction.Commonly used insulating gases
		5th		Question Discussion
OCTOBER	5TH	1st	UNIT-4	4.Dielectric Materials:
		2nd		Introduction- Dielectric Constant of Permittivity
		4th		Polarization
		5th		Dielectric Loss,Explanation with phasor angle
	1ST	1st		Electric Conductivity of Dielectrics and their Break Down
		2nd		Gandhi Jayanti
		4th		Properties of Dielectrics.
		5th		Applications of Dielectrics.
	2ND	1st		Birthday of Mohammad
		2nd		Question Discussion
		4th		5.Magnetic Materials:
		5th		Introduction-Classification of magnetic material,Diamagnetism
	3RD	1st	UNIT-5	Para magnetism,Ferromagnetism
		2nd		Magnetization Curve
		4th		Hysteresis
		5th		Magneto-striction
	4TH	1st		Soft and Hard magnetic Materials
		2nd		Internal Exam
		4th		Durga Puja
		5th		
	5TH	1st		
		2nd		
3ER	1ST	4th		Revision
		5th		Question Discussion
	2ND	1st		6.Materials for Special Purposes
		2nd		Introduction to spacial purpose Materials
		4th		Structural Materials
		5th		Protective Materials- Lead
		1st		Protective materials -Steel tapes, wires and strips
		2nd		Thermocouple materials
		1st		Bimetals

NOVEMBER	3RD	2nd	UNIT-6	Soldering Materials
		4th		Fuse and Fuse materials.
		5th		Dehydrating material.
	4TH	1st		Revision
		2nd		
		4th		Question Discussion
		5th		Question Discussion
	5TH	1st		Rasa Purnima
		2nd		Question Discussion
		4th		Class Test-2