

# GOVT. POLYTECHNIC MAYURBHANJ LESSON PLAN

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Discipline :		Semester: 3rd Sem		Name of the Teaching Faculty : LAXMIDHAR SAHU	
Subject : EEM		No. of Days / per week class allotted : 04		Semester From date : 01.07.2024 To Date : 8.11.2024	
MONTH	Week	Day	UNIT	Topics	
JULY	1ST		UNIT-1	<b>Conducting Materials</b>	
		1st		Introduction. Resistivity, factors affecting resistivity	
		3rd		Classification of conducting materials into low-resistivity and high resistivity materials	
		4th		Low Resistivity Materials and their Applications. (Copper, Silver)	
		5th		Low Resistivity Materials and their Applications. ( Gold, Aluminum, Steel)	
	2ND	1st		Bundled conductors, Stranded conductors	
		3rd		Low resistivity copper alloys.	
		4th		High Resistivity Materials and their Applications(Tungsten, Carbon)	
		5th		High Resistivity Materials and their Applications( Platinum, Mercury)	
	3RD	1st		Superconductivity. Superconducting materials. Application of superconductor materials	
		3rd		<b>Muharram ( Holiday )</b>	
		4th		<b>Tutorial class</b>	
				<b>Semiconducting Materials</b>	
	4TH	5th	UNIT-2	Introduction. Semiconductors	
		1st		Electron Energy and Energy Band Theory	
		3rd		Excitation of Atoms	
		4th		Insulators, Semiconductors and Conductors	
		5th		Semiconductor Materials	
5TH	1st	Covalent Bonds. Intrinsic Semiconductors. Extrinsic Semiconductors			
	3rd	N-Type Materials. P-Type Materials			
		Minority and Majority Carriers. Semi-Conductor Materials			
1ST	4th	UNIT-2		Applications of Rectifiers: Temperature-sensitive resistors or thermistors	
	5th			Photoconductive cells, Photovoltaic cells	
	2ND			1st	Varistors, Transistors
				3rd	Hall effect generators ,Solar power
				4th	<b>Tutorial class</b>
3RD			<b>Insulating Materials:</b>		
	1st		Introduction-General properties of Insulating Materials		
	3rd		Electrical properties, Visual properties		

AUGUS	4TH	4th	UNIT-3	<b>Independence Day</b>	
		5th		<b>First Monthly Test</b>	
		1st		<b>Jhulana Purnima ( Holiday )</b>	
		3rd		Mechanical properties,Thermal properties	
		4th		Chemical properties, Ageing	
	5th	Insulating Materials-Classification of insulating materials on the basis physical and chemical			
	5TH	1st		UNIT 4	<b>Janmastami ( Holiday )</b>
		2nd			Insulating Gases -Introduction,Commonly used insulating gases
		4th			<b>Tutorial class</b>
					<b>Dielectric Materials:</b>
5th	Introduction,Dielectric Constant of Permittivity				
1ST	1st	Polarization			
	3rd	Dielectric Loss,Explanation with phase angle			
	4th	Electric Conductivity of Dielectrics and their Break Down			
	5th	Properties of Dielectrics.			
		Applications of Dielectrics.			
2ND	1st	UNIT 5	<b>Tutorial class</b>		
	3rd				
			<b>Magnetic Materials:</b>		
4th	Introduction,Classification of magnetic material,Diamagnetism				
5th	Para magnetism,Ferromagnetism				
3RD	1st		<b>Birthday of Mohammed ( Holiday )</b>		
	3rd		Magnetization Curve		
	4th		Hysteresis,Eddy Currents,Curie Point		
	5th		<b>Internal Assessment</b>		
4TH	1st		Magneto-striction		
	3rd	Soft magnetic Materials			
	4th	Hard magnetic Materials			
	5th	<b>Tutorial class</b>			
5TH	1st	<b>Question Discussion</b>			
SEPTEMBER	1ST		<b>Materials for Special Purposes</b>		
		3rd	<b>Gandhi Jayanti</b>		
		4th	Introduction to spacial purpose Materials		
		5th	Structural Materials		
	2ND	1st			
		3rd	<b>Dussehra ( Holiday )</b>		

<b>OCTOBER</b>	<b>2ND</b>	4th	<b>UNIT-6</b>	<b>Durga Puja ( Monday )</b>	
		5th		Protective Materials- Lead	
	<b>3RD</b>	1st		<b>Kumar Purnima ( Holiday )</b>	
		3rd		Protective materials -Steel tapes, wires and strips	
		4th		Thermocouple materials	
		5th		Bimetals	
	<b>4TH</b>	1st		Soldering Materials	
		3rd		Fuse and Fuse materials.	
		4th		Dehydrating material.	
		5th		<b>Tutorial class</b>	
	<b>5TH</b>	1st		<b>Question Discussion</b>	
		3rd		<b>Diwali ( Holiday )</b>	
		4th		<b>Semester Question Discussion</b>	
	<b>NOVEMBER</b>	<b>1ST</b>		5th	<b>Semester Question Discussion</b>
		<b>2ND</b>		1st	<b>Second Monthly Test</b>
3rd			<b>Semester Question Discussion</b>		
4th					
5th			<b>Semester Question Discussion</b>		



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