

**GOVT. POLYTECHNIC SAMBALPUR LESSON PLAN**

Discipline : ELECTRICAL ENGG.		Name of the Teaching Faculty : PRITISH KUMAR MOHANTY	
Subject : EEM	Semester: 3th Sem No. of Days / per week class allotted : 04	Semester From date : 15.09.2022	To Date : 22.12.2022
Week	Class Day	Topics	
1ST WEEK 15.09.2022 TO 17.09.2022	15.09.2022	Chapter 1 ( CONDUCTING MATERIAL ) 1. 1 Introduction 1. 2 Resistivity, factors affecting resistivity	
	17.09.2022	1. 3 Classification of conducting materials & low-resistivity and high resistivity materials	
2ND WEEK 19.09.2022 TO 24.09.2022	19.09.2022	1. 4 Low Resistivity Materials	
	21.09.2022	Application of copper	
	22.09.2022	Application of silver and gold	
	24.09.2022	Application of Iuminium and steel	
3RD WEEK 26.09.2022 TO 01.10.2022	26.09.2022	1. 5 Stranded conductors	
	28.09.2022	1. 6 Bundled conductors	
	29.09.2022	1. 7 Low resistivity copper alloys	
	01.10.2022	1. 8 High Resistivity Materials and their Applications (Tungsten, Carbon, Platinum, Mercury)	
4TH WEEK 10.10.2022 TO 15.10.2022	10.10.2022	1. 9 Superconductivity	
	12.10.2022	1. 10 Superconducting materials	
	13.10.2022	1. 11 Application of superconductor materials	
	15.10.2022	1. 11 Application of superconductor materials	
5TH WEEK 17.10.2022 TO 22.10.2022	17.10.2022	SEMICONDUCTING MATERIAL(CHAPTER 2) 2.1 Introduction 2.3 Electron energy and	
	19.10.2022	2. 2 Semiconductors Energy band theory	
	20.10.2022	2. 4 Excitation of Atoms	
	22.10.2022	2. 5 Insulators, Semiconductors and Conductors , Semiconductor Material 2.6	
6TH WEEK 26.10.2022 TO 29.10.2022	26.10.2022	2. 7 Covalent Bonds & 2.8 Intrinsiv Semiconductor EXTRENSIVE SEMICONDUCTOR	
		2. 9 Extrinsic Semiconductors	
	27.10.2022	2. 10 N-Type Materials 2. 11 P-Type Materials	
	29.10.2022	2. 12 Minority and Majority Carriers 2. 13 Semi-Conductor Materials	
7TH WEEK 31.10.2022 TO 05.11.2022	31.10.2022	2.14 Application of rectifier, photo conducting cell, photo voltaic cell , varistors	
	02.11.2022	hall effect generator, solar power.	
	03.11.2022	INSULATING MATERIAL(CHAPTER 3) 3.1 Introduction,general property of insulating material	
	05.11.2022	electrical, visual, mechanical, thermal, chemical property, ageing	
8TH WEEK 07.11.2022 TO 12.11.2022	07.11.2022	3.3 Insulating Materials – Classification, properties, applications	
	09.11.2022	3.3.1 Introduction	
	10.11.2022	3.3.2 Classification of insulating materials on the basis physical structure	
	12.10.2022	chemical structure.	
9TH WEEK 14.11.2022 TO 19.11.2022	14.11.2022	3.4 Insulating Gases	
	16.11.2022	3.4.1 Introduction.	
	17.11.2022	3.4.2 Commonly used insulating gases	
	19.11.2022	DIELECTRIC MATERIAL(CHAPTER 4) 4.1 Introduction	
10TH WEEK 21.11.2022 TO 26.11.2022	21.11.2022	4.2 Dielectric Constant of Permittivity	
	23.11.2022	4.3 Polarization	
	24.11.2022	4.4 Dielectric Loss	
	26.11.2022	4.5 Electric Conductivity of Dielectrics and their Break Down	
11TH WEEK 28.11.2022 TO 03.12.2022	28.11.2022	4.6 Properties of Dielectrics.	
	30.11.2022	4.7 Applications of Dielectrics	
	01.12.2022	4.7 Applications of Dielectrics	
	0.312.2022	MAGNETIC MATERIAL(CHAPTER 5) 5.1 Introduction	
12TH WEEK 05.12.2022 TO 10.12.2022	05.12.2022	5.2 Classification 5.2.1 Diamagnetism 5.2.2 PARAMAGNETISM	
	07.12.2022	5.2.3 Ferromagnetism 5.3 magnetization curve	
	08.12.2022	5.4 Hysteresis	
	10.12.2022	5.5 Eddy current 5.6 Curie Point ,5.7 Magneto- striction	
13TH WEEK 12.12.2022 TO 17.12.2022	12.12.2022	5.8.1 Soft magnetic materials 5.8.2 Hard magnetic materials	
	14.12.2022	MATERIAL FOR SPECIAL PURPOSES(CHAPTER 6) 6.1 Introduction	
	15.12.2022	6.2 Structural Materials & 6.3 PROTECTIVE MATERIALS	
	17.12.2022	6.3.2 Steel tapes, wires and strips 6.4 Other Materials	
14TH WEEK 19.12.2022 TO 22.12.2022	19.12.2022	6.4.1 Thermocouple materials 6.4.2 BIMETALS, 6.4.3 SOLDERING MATERIALS	
	21.12.2022	6.4.4 Fuse and Fuse materials. 6.4.5 Dehydrating material	
	22.12.2022	REVISION	

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15/09/22