

GOVT. POLYTECHNIC SAMBALPUR LESSON PLAN

Discipline : ELECTRICAL ENGG.		Semester: 3 rd Sem		Name of the Teaching Faculty : PRITISH KUMAR MOHIANTY	
Subject : EEM	No. of Days / per week class allotted : 04	Semester From date : 15.09.2022		To Date : 22.12.2022	
Week	Class Day	Topics			
1 ST 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			
2 ND 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 Aluminium and steel			
3 RD 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)			
4 TH 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			
5 TH 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			
6 TH WEEK 26.10.2022 TO 29.10.2022	26.10.2022	2. 7 Covalent Bonds & 2.8 Intrinsic Semiconductor EXTENSIVE SEMICONDUCTOR			
	27.10.2022	2. 9 Extrinsic Semiconductors 2. 10 N-Type Materials 2. 11 P-Type Materials			
	29.10.2022	2. 12 Minority and Majority Carriers 2. 13 Semi-Conductor Materials			
7 TH 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			
8 TH WEEK 07.11.2022 TO 12.11.2022	07.11.2022	3.3 Insulating Materials – Classification, properties, applications			
	08.11.2022	3.3.1 Introduction			
	10.11.2022	3.3.2 Classification of insulating materials on the basis physical structure			
	12.11.2022	chemical structure.			
9 TH 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			
10 TH 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			
11 TH 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			
	03.12.2022	MAGNETIC MATERIAL(CHAPTER 5) 5.1 Introduction			
12 TH 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 5.5ddy current			
	10.12.2022	5.6 Curie Point, 5.7 Magnetostriction			
13 TH 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			
14 TH 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