

GOVT. POLYTECHNIC BOLANGIR LESSON PLAN

Discipline : ELECTRICAL ENGG.	Semester: 3th Sem	Name of the Teaching Faculty : SUJATA BHOI	
Subject : EEM	No. of Days / per week class allotted : 04	Semester From date : 01.09.2020 To Date : 31.12.2020 No. of Weeks : 15	
Week	Class Day	Topics	
1ST SEPT	1st	Chapter 1 (CONDUCTING MATERIAL) 1. 1 Introduction	
	2nd	1. 2 Resistivity, factors affecting resistivity	
	3rd	1. 3 Classification of conducting materials into	
	4th	low-resistivity and high resistivity materials	
2ND SEPT	1st	1. 4 Low Resistivity Materials	
	2nd	Application of copper	
	3rd	Application of silver and gold	
	4th	Application of lluminium and steel	
3RD SEPT	1st	1. 5 Stranded conductors	
	2nd	1. 6 Bundled conductors	
	3rd	1. 7 Low resistivity copper alloys	
	4th	1. 8 High Resistivity Materials and their Applications (Tungsten, Carbon, Platinum, Mercury)	
4TH SEPT	1st	1. 9 Superconductivity	
	2nd	1. 10 Superconducting materials	
	3rd	1. 11 Application of superconductor materials	
	4th	1. 11 Application of superconductor materials	
1ST OCT	1st	SEMICONDUCTING MATERIAL(CHAPTER 2) 2.1 Introduction	
	2nd	2. 2 Semiconductors 2.3Electron energy and Energy band theory	
	3rd	2. 4 Excitation of Atoms	
	4th	2. 5 Insulators, Semiconductors and Conductors , 2.6 Semiconductor Material	
2ND OCT	1st	2. 7 Covalent Bonds	2.8
	2nd	2. 8 Intrinsic Semiconductors	
	3rd	2. 9 Extrinsic Semiconductors 2. 10 N-Type Materials 2. 11 P-Type Materials	
	4th	2. 12 Minority and Majority Carriers 2. 13 Semi-Conductor Materials	
3RD OCT	1st	2.14 Application of rectifier, photo conducting cell, photo voltaic cell , varistors	
	2nd	hall effect generator, solar power.	
	3rd	INSULATING MATERIAL(CHAPTER 3) Introduction,general property of insulating material	3.1
	4th	electrical, visual, mechanical, thermal, chemical property, ageing	

1ST NOV	1st	3.3 Insulating Materials – Classification, properties, applications
	2nd	3.3.1 Introduction
	3rd	3.3.2 Classification of insulating materials on the basis physical structure
	4th	chemical structure.
2ND NOV	1st	3.4 Insulating Gases
	2nd	3.4.1 Introduction.
	3rd	3.4.2 Commonly used insulating gases
	4th	DIELECTRIC MATERIAL(CHAPTER 4) 4.1 Introduction
3RD NOV	1st	4.2 Dielectric Constant of Permittivity
	2nd	4.3 Polarization
	3rd	4.4 Dielectric Loss
	4th	4.5 Electric Conductivity of Dielectrics and their Break Down
4TH NOV	1st	4.6 Properties of Dielectrics.
	2nd	4.7 Applications of Dielectrics
	3rd	4.7 Applications of Dielectrics
	4th	MAGNETIC MATERIAL(CHAPTER 5) 5.1 Introduction
1ST DEC	1st	5.2 Classification 5.2.1 Diamagnetism
	2nd	5.2.2 Para magnetism
	3rd	5.2.3 Ferromagnetism 5.3 magnetization curve
	4th	5.4 Hysteresis 5.5 Eddy current
2ND DEC	1st	5.6 Curie Point ,5.7 Magneto- striction
	2nd	5.8 Soft and Hard magnetic Materials
	3rd	5.8.1 Soft magnetic materials 5.8.2 Hard magnetic materials
	4th	MATERIAL FOR SPECIAL PURPOSES(CHAPTER 6) 6.1 Introduction
3RD DEC	1st	6.2 Structural Materials
	2nd	6.3 Protective Materials
	3rd	6.3.1 Lead
	4th	6.3.2 Steel tapes, wires and strips 6.4 Other Materials
4TH DEC	1st	6.4.1 Thermocouple materials
	2nd	6.4.2 Bimetals
	3rd	6.4.3 Soldering Materials
	4th	6.4.4 Fuse and Fuse materials. 6.4.5 Dehydrating material