

# Lesson Plan

2023 (w)

Subject :- EEM(Code) TH-4 Name of faculty:- AMIYA RANJAN BEHERA

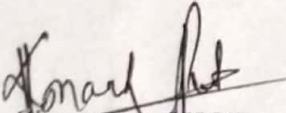
Semester :- 3rd Class allotted 60 Branch :- Electrical engg

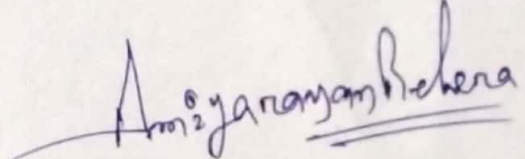
Discipline	Semester:- 3rd	From date:-01/08/23 To date:30/11/23	Teaching Aid
Subject:	No. of days/ per week:4p/w	Theory/ Practical –Topics/Lesson	
Week	Date/Period		

1	01/08/23 to 05/08/23	Conducting Materials: 1 . 1 Introduction . 2 Resistivity, factors affecting resistivity 1 . 3 Classification of conducting materials into low-resistivity and high resistivity materials 1 . 4 Low Resistivity Materials and their Applications. (Copper, Silver, Gold, Aluminum, Steel 1 . 5 Stranded conductors 1 . 6 Bundled conductors 1 . 7 Low resistivity copper alloys 1 . 8 High Resistivity Materials and their Applications (Tungsten, Carbon, Platinum, Mercury)	White board & marker
2	07/08/23 to 12/08/23	1 . 9 Superconductivity 1 . 10 Superconducting materials 1 . 11 Application of superconductor materials 2. Semiconducting Materials: 2 . 1 Introduction 2 . 2 Semiconductors	White board & marker
3	14/08/23 to 9/08/23	2 . 3 Electron Energy and Energy Band Theory 2 . 4 Excitation of Atoms 2 . 5 Insulators, Semiconductors and Conductors 2 . 6 Semiconductor Materials	White board & marker
4	21/08/23 to 6/08/23	2 . 7 Covalent Bonds 2 . 8 Intrinsic Semiconductors 2 . 9 Extrinsic Semiconductors 2 . 10 N-Type Materials	White board & marker
5	28/08/23 2/09/23	2 . 11 P-Type Materials 2 . 12 Minority and Majority Carriers 2 . 13 Semi-Conductor Materials 2 . 14 Applications of Semiconductor materials 2.14.1 Rectifiers 2.14.2 Temperature-sensitive resistors or thermistors 2.14.3 Photoconductive cells 2.14.4 Photovoltaic cells 2.14.5 Varistors	White board & marker

		2.14.6 Transistors 2.14.7 Hall effect generators 2.14.8 Solar power	
6	04/09/23 to 09/09/23	3. Insulating Materials: 3.1 Introduction 3.2 General properties of Insulating Materials 3.2.1 Electrical properties 3.2.2 Visual properties 3.2.3 Mechanical properties 3.2.4 Thermal properties 3.2.5 Chemical properties 3.2.6 Agein	White board & marker
7	11/09/23 to 16/09/23	3.3 Insulating Materials – Classification, properties, applications 3.3.1 Introduction 3.3.2 Classification of insulating materials on the basis physical and	White board & marker
8	18/09/23 to 23/09/23	chemical structure 3.4 Insulating Gases 3.4.1 Introduction. 3.4.2 Commonly used insulating gases	White board & marker
9	25/09/23 to 30/09/23	4. Dielectric Materials: 4.1 Introduction 4.2 Dielectric Constant of Permittivity 4.3 Polarization 4.4 Dielectric Loss 4.5 Electric Conductivity of Dielectrics and their Break Down 4.6 Properties of Dielectrics. 4.7 Applications of Dielectrics..	White board & marker
10	03/10/23 to 07/10/23	. Magnetic Materials: 5.1 Introduction 5.2 Classification 5.2.1 Diamagnetism 5.2.2 Para magnetism 5.2.3 Ferromagnetism.	White board & marker
11	09/10/23 to 14/10/23	5.3 Magnetization Curve 5.4 Hysteresis 5.5 Eddy Currents 5.6 Curie Point 5.7 Magneto-striction 5.8 Soft and Hard magnetic Materials 5.8.1 Soft magnetic materials 5.8.2 Hard magnetic materials	White board & marker
12	16/10/23 to 20/10/23	6. Materials for Special Purposes 6.1 Introduction 6.2 Structural Materials 6.3 Protective Mat	White board & marker & smart board
13	30/10/23 to		White board

	04/11/23	6.3.1 Lead 6.3.2 Steel tapes, wires and strips 6.4 Other Materials	&marker
14	06/11/23 to 11/11/23	6.4.1 Thermocouple materials 6.4.2 Bimetals	White board & marker
15	13/11/23 to 18/11/23	6.4.3 Soldering Materials 6.4.4 Fuse and Fuse materials. 6.4.5 Dehydrating material.	White board & marker & smart board
16	20/11/23 to 25/11/23	REVISION	White board & marker
17	28/11/23 to 30/11/23		White board & marker

  
Signature of HOD

  
Signature of faculty