LESSON PLAN FOR ELECTRICAL ENGINEERING MATERIAL AND 3RD SEM ELECTRICAL

No. of weeks	No. of classes	Topic to be Though
1st	1	Conducting Materials: Introduction ,Resistivity,
	2	Factors affecting resistivity , Classification of conducting materials into low-resistivity and high resistivity materials
	3	Low Resistivity Materials and their Applications. (Copper, Silver, Gold, Aluminum, Steel)
	4	Stranded conductors, Bundled conductors
2nd	5	Low resistivity copper alloys High Resistivity Materials and their Applications(Tungsten, Carbon, Platinum, Mercury)
	6	Superconductivity , Superconducting materials
	7	Application of superconductor materials
	8	Semiconducting Materials: Introduction , Semiconductors
3rd	9	Electron Energy and Energy Band Theory
	10	Excitation of Atoms ,Insulators, Semiconductors and Conductors
	11	Semiconductor Materials
	12	Covalent Bonds ,Intrinsic Semiconductors
4th	13	Extrinsic Semiconductors
	14	N-Type Materials , P-Type Materials
	15	Minority and Majority Carriers
	16	Semi-Conductor Materials ,Applications of Semiconductor materials
5th	17	Rectifiers ,Temperature-sensitive resisters or thermistors ,Photoconductive cells
	18	Photovoltaic cells
	19	Varisters Transistors
	20	Hall effect generators , Solar power
6th	21	Insulating Materials: Introduction ,General properties of Insulating Materials
	22	Electrical properties
	23	Visual properties ,Mechanical properties
	24	Thermal properties ,Chemical properties , Ageing
7th	25	Thermal properties ,Chemical properties ,Ageing
	26	Introduction, Classification of insulating materials on the basis physical and chemical structure
	27	Insulating Gases ,Introduction ,Commonly used insulating gases chemical structure
	28	Dielectric Materials: Introduction ,Dielectric Constant of Permittivity
8th	29	Polarization
	30	Dielectric Loss
	31	Electric Conductivity of Dielectrics and their Break Down
	32	Properties of Dielectrics.
9th	33	Applications of Dielectrics.
	34	Magnetic Materials: Introduction, Classification
	35	Diamagnetism
	36	Para magnetism
10th	37	Ferromagnetism
	38	Magnetization Curve

LESSON PLAN FOR ELECTRICAL ENGINEERING MATERIAL AND 3RD SEM ELECTRICAL

	39	Hysteresis
	40	Eddy Currents
11th	41	Curie Point
	42	Magneto-striction
	43	Soft and Hard magnetic Materials
	44	Soft magnetic materials
12th	45	Hard magnetic materials
	46	Materials for Special Purposes, Introduction
	47	Structural Materials
	48	Protective Materials
	49	Lead
13th	50	Steel tapes, wires and strips
	51	Other Materials
	52	Thermocouple materials
14th	53	Bimetals
	54	Soldering Materials
	55	Fuse and Fuse materials.
	56	Dehydrating material.
15th	57	TEST
	58	TEST
	59	TEST
	60	TEST

Debaprasad Prusthiraj Dhall
15/09/2022
Sign of Faculty

sign. Of H.O.D

Academic Coordinator

15/9/22
PRINCIPAL
GOVT. POLYTECHNIC, DHENKANAL