GOVERNMENT POLYTECHNIC ,BARGARH

Department Of Electrical Engineering

Semester:3RD.DIPLOMA
Subject:Electrical Engineering Material
Branch:ElectricalEngineering

Session:2022(WINTER)
No of Period :60 (4p/week)
NameofFaculty:NITESH KU. ACHARYA

Period	Date	Topicstobe covered
1	15.09.2022	Introduction Resistivity, factors affecting resistivity
2	16.09.2022	Classification of conducting materials into low-resistivity and high resistivity materials
3	19.09.2022	Low Resistivity Materials and their Applications (Copper, Silver)
4	20.09.2022	Low Resistivity Materials and their Applications (Gold, Aluminium, Steel)
5	22.09.2022	Stranded conductors
6	23.09.2022	Bundled conductors
7	26.09.2022	Low resistivity copper alloys
8	27.09.2022	High Resistivity Materials and their Applications (Tungsten, Carbon)
9	29.09.2022	High Resistivity Materials and their Applications (Platinum, Mercury)
10	30.09.2022	Superconductivity
11	10.10.2022	Superconducting materials
12	11.10.2022	Application of superconductor materials
13	13.10.2022	Introduction, Semiconductors, Electron Energy and Energy Band Theory
14	14.10.2022	Excitation of Atoms, Insulators, Semiconductors and Conductors, Semiconductor Materials
15	17.10.2022	Covalent Bonds, Intrinsic Semiconductors
16	18.10.2022	Extrinsic Semiconductors
17	20.10.2022	N-Type Materials
18	21.10.2022	P-Type Materials
19	25.10.2022	Minority and Majority Carriers, Semi-Conductor Materials
20	27.10.2022	Applications of Semiconductor materials (Rectifiers, Temperature-sensitive resisters or thermistors, Photoconductive cells)
21	28.10.2022	Applications of Semiconductor materials (Photovoltaic cells, Varisters , Transistors)
22	31.10.2022	Applications of Semiconductor materials (Hall effect generators, Solar power)
23	01.11.2022	Introduction, General properties of Insulating Materials, Electrical properties, Visual properties
24	03.11.2022	Mechanical properties, Thermal properties, Chemical properties, Ageing
25	04.11.2022	Insulating Materials – Classification, properties, applications
26	07.11.2022	Classification of insulating materials on the basis physical and chemical structure
27	10.11.2022	Insulating Gases

28	11.11.2022	Commonly used insulating gases
29	14.11.2022	Introduction, Dielectric Constant of Permittivity
30	15.11.2022	Polarisation
31	17.11.2022	Dielectric Loss
32	18.11.2022	Electric Conductivity of Dielectrics and their Break Down
33	21.11.2022	Properties of Dielectrics
34	22.11.2022	Applications of Dielectrics
35	24.11.2022	Introduction, Classification (Diamagnetism)
36	25.11.2022	Para magnetism
37	28.11.2022	Ferromagnetism
38	29.11.2022	Magnetization Curve
39	01.12.2022	Hysteresis
40	02.12.2022	Eddy Currents
41	05.12.2022	Curie Point
42	06.12.2022	Magneto-striction
43	08.12.2022	Soft magnetic Materials
44	09.12.2022	Hard magnetic Materials
45	12.12.2022	Introduction, Structural Materials
46	13.12.2022	Protective Materials Lead, Steel tapes
47	15.12.2022	wires and strips
48	16.12.2022	Thermocouple materials
49	19.12.2022	Bimetals
50	20.12.2022	Soldering Materials
51	22.12.2022	Fuse and Fuse materials
52	23.12.2022	Dehydrating material
53	02.01.2023	Revision of Conducting material
54	03.01.2023	Revision of Semiconducting material
55	05.01.2023	Revision of insulating material
56	06.01.2023	Revision of Dielectric material
57	09.01.2023	Revision of magnetic material
58	12.01.2023	Revision of special material
59	13.01.2023	Previous Question Discussion
60	16.01.2023	Previous Question Discussion

12/9/22
SignatureofFaculty

12/09/22
SignatureofHOD