LESSON PLAN	
JHARSUGUDA ENGINEERING SCHOOL,JHARSUGUDA	
Name of the Faculty:Sourav Kar	Academic Year: 2021-22
Course No.: Th 4	Course name: Electrical Engineering Material
Programe: Diploma	Branch:Electrical
Year/Sem: 2nd/3rd	Section:

Sl. No.	Period	Time (min)	Unit	Topic to be Covered	Teaching Method
1.	1.	55 min	1	Introduction to conducting material	Black board
2.	2.	55min	1	Resistivity and factors affecting resistivity	Black board
3.	3.	55min	1	Classification of conducting materials	Black board
4.	4.	55min	1	Low resistivity materials and their applications	Black board
5.	5.	55min	1	Stranded conductors and bundled conductors	Black board
6.	6.	55min	1	Low resistivity copper alloys, High resistivity materials	Black board
7.	7.	55min	1	Superconducting materials and it's application	Black board
8.	8.	55min	2	Introduction to semiconducting materials	Black board
9.	9.	55min	2	Electron energy and energy band theory	Black board
10	10.	55min	2	Excitation of atoms and covalent bond	Black board
11	11.	55 min	2	Insulators, Semiconductors and conductors	Black board
12	12.	55 min	2	Intrinsic and Extrinsic semiconductors	Black board
13	13.	55min	2	N-type and P-type materials	Black board
14	14.	55 min	2	Minority and Majority carriers	Black board
15	15.	55 min	2	Application of semiconductor materials	Black board
16	16.	55min	3	Introduction to insulating materials	Black board
17	17.	55min	3	General properties of insulating material	Black board
18	18.	55 min	3	Electrical properties	Black board
19	19.	55 min	3	Visual properties	Black board
20	20.	55 min	3	Mechanical Properties	Black board
21	21.	55 min	3	Chemical properties	Black board
22	22.	55min	3	Ageing	Black board

23	23.	55min	3	Classification of insulating materials	Black board
24	24.	55 min	3	Insulating gases	Black board
25	25.	55 min	4	Introduction to Dielectric materials	Black board
26	26.	55 min	4	Dielectric constant of permittivity	Black board
27	27.	55 min	4	Polarization	Black board
28	28.	55 min	4	Dielectric loss	Black board
29	29.	55 min	4	Electric conductivity of Dielectrics and their breakdown	Projector
30	30.	55 min	4	Properties of dielectric	Projector
31	31.	55 min	4	Application of dielectric	Black board
32	32.	55 min	4	Numerical problems solving on dielectric	Black board
33	33.	55 min	5	Introduction to magnetic materials	Projector
34	34.	55 min	5	Classification of magnetic material	Projector
35	35.	55 min	5	Diamagnetism	Black board
36	36.	55 min	5	Para magnetism	Black board
37	37.	55 min	5	Ferromagnetism	Black board
38	38.	55 min	5	Numerical problems solving on Magnetism	Black board
39	39.	55 min	5	Magnetization curve	Black board
40	40.	55 min	5	Hysteresis	Black board
41	41.	55 min	5	Eddy currents	Black board
42	42.	55 min	5	Curie point	Black board
43	43.	55 min	5	Magneto- striction	Black board
44	44.	55 min	5	Soft magnetic materials	Black board
45	45.	55 min	5	Hard magnetic materials	Black board
46	46.	55 min	6	Introduction to special purpose material	Black board
47	47.	55 min	6	Structural materials	Black board
48	48.	55 min	6	Protective materials	Black board
49	49.	55 min	6	Thermocouple materials	Black board
50	50.	55 min	6	Bimetals	Black board
51	51.	55 min	6	Soldering materials	Black board

52	52.	55 min	6	Numerical problems solving	Black board
53	53.	55 min	6	Numerical problems solving	Black board
54	54.	55 min	6	Fuse and fuse materials	Black board
55	55.	55 min	6	Dehydrating materials	Black board
56	56.	55 min	6	Numerical problems solving	Black board
57	57.	55 min	6	Numerical problems solving	Black board
58	58.	55 min	6	Numerical problems solving	Black board
59	59.	55 min		Revision of all topics	Black board
60	60.	55 min		Revision of all topics	Black board