

LESSON PLAN	
JHARSUGUDA ENGINEERING SCHOOL, JHARSUGUDA	
Name of the Faculty: Jyoti Ranjan Nayak	Academic Year: 2019-20
Course No.: Th 2	Course name: Circuit and Network Theory
Programme: 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, magnetizing force, mmf, and their relation	Black board
2.	2.	55min	1	Permeability, reluctance and permeance	Black board
3.	3.	55min	1	Analogy between electric and magnetic circuit	Black board
4.	4.	55min	1	B-H curve	Black board
5.	5.	55min	1	Series and parallel magnetic circuit	Black board
6.	6.	55min	1	Hysteresis loop	Black board
7.	7.	55min	2	Self inductance and mutual inductance	Black board
8.	8.	55min	2	Conductively coupled circuit and mutual inductance	Black board
9.	9.	55min	2	Dot convention, coefficient of coupling	Black board
10	10.	55min	2	Series and parallel connection of coupled inductors	Black board
11	11.	55 min	2	Numerical problems solving	Black board
12	12.	55 min	3	Types of circuit elements	Black board
13	13.	55min	3	Mesh analysis	Black board
14	14.	55 min	3	Problems solving	Black board
15	15.	55 min	3	Super mesh analysis	Black board
16	16.	55min	3	Node analysis	Black board
17	17.	55min	3	Super node analysis	Black board
18	18.	55 min	3	Source transformation techniques	Black board
19	19.	55 min	3	Numerical problems solving	Black board
20	20.	55 min	3	Numerical problems solving	Black board
21	21.	55 min	4	Star to delta and delta to star transformation	Black board
22	22.	55min	4	Superposition theorem	Black board
23	23.	55min	4	Thevenins theorem	Black board
24	24.	55 min	4	Nortons theorem	Black board
25	25.	55 min	4	Maximum power transfer theorem	Black board
26	26.	55 min	4	Numerical problems solving	Black board
27	27.	55 min	4	Numerical problems solving	Black board
28	28.	55 min	4	Numerical problems solving	Black board
29	29.	55 min	5	Ac through RL, RC, RLC circuit	Projector

30	30.	55 min	5	Ac through RL, RC, RLC circuit	Projector
31	31.	55 min	5	Numerical problems solving	Black board
32	32.	55 min	5	Numerical problems solving	Black board
33	33.	55 min	5	RLC series circuit	Projector
34	34.	55 min	5	RLC parallel circuit	Projector
35	35.	55 min	5	Power factor, power triangle, active, reactive, apparent power	Black board
36	36.	55 min	5	Series resonance, parallel resonance	Black board
37	37.	55 min	5	Band width, selectivity, Q factor	Black board
38	38.	55 min	5	Numerical problems solving	Black board
39	39.	55 min	6	Poly phase system, phase sequence	Black board
40	40.	55 min	6	Relation between phase and line quantity in star and delta system	Black board
41	41.	55 min	6	Power equation	Black board
42	42.	55 min	6	Measurement of 3 phase power by 2 watt meter method	Black board
43	43.	55 min	6	Numerical problems solving	Black board
44	44.	55 min	7	Steady state and transient response	Black board
45	45.	55 min	7	Response to RL, RC, RLC circuit to dc condition	Black board
46	46.	55 min	7	Numerical problems solving	Black board
47	47.	55 min	7	Numerical problems solving	Black board
48	48.	55 min	8	Z parameters, Y parameters	Black board
49	49.	55 min	8	ABCD parameters, h parameters	Black board
50	50.	55 min	8	Interrelationship of different parameters	Black board
51	51.	55 min	8	T and pie representation	Black board
52	52.	55 min	8	Numerical problems solving	Black board
53	53.	55 min	8	Numerical problems solving	Black board
54	54.	55 min	9	Defination, classification of filters	Black board
55	55.	55 min	9	Cut off frequency	Black board
56	56.	55 min	9	Constant K low pass, high pass filter	Black board
57	57.	55 min	9	Constant K band pass, band stop filter	Black board
58	58.	55 min	9	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

LESSON PLAN	
JHARSUGUDA ENGINEERING SCHOOL, JHARSUGUDA	
Name of the Faculty: Lipsa Panigrahi	Academic Year: 2019-20
Course No.: Th 4	Course name: Electrical Engineering Material
Programme: 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