

LESSON PLAN	
JHARSUGUDA ENGINEERING SCHOOL, JHARSUGUDA	
Name of the Faculty: Lipsa Panigrahi	Academic Year: 2021-2022
Course No. Th-4	Course Name: GENERATION TRANSMISSION DISTRIBUTION
Programe: Diploma	Branch: Electrical
Year/Sem: II / I V	

Sl. No.	Period	Time (min)	Unit	Topic to be Covered	Teaching Method
1.	1.	55	1	Introduction	Black board
2.	2.	55	1	Thermal power plant	Black board
3.	3.	55	1	Hydel power plant	Black board
4.	4.	55	1	Nuclear power plant	Black board
5.	5.	55	1	Solar power plant	Black board
6.	6.	55	1	Layout of generating station	Black board
7.	7.	55	2	Layout of transmission and distribution scheme	Black board
8.	8.	55	2	Voltage regulation and efficiency of transformer	Black board
9.	9.	55	2	Kelvin's law	Black board
10	10.	55	2	Corona and corona losses	Black board
11	11.	55	3	Types of supports, size and spacing	Black board
12	12.	55	3	Types of conductor material	Black board
13	13.	55	3	Types of insulator and cross arm	Black board
14	14.	55	3	sag	Black board
15	15.	55	3	Problems in sag	Black board
16	16.	55	4	Calculation of regulation and efficiency in short transmission lines	Black board
17	17.	55	4	Calculation of regulation and efficiency in short transmission lines	Black board
18	18.	55	4	Calculation of regulation and efficiency in short transmission lines	Black board
19	19.	55	4	Calculation of regulation and efficiency in medium transmission lines	Black board

23	23.	55	5	Reason for adoption of E.H.V A.C transmission	Black board
24	24.	55	5	Problems in E.H.V transmission	Black board
25	25.	55	5	Problems in E.H.V transmission	Black board
26	26.	55	5	Problems in E.H.V transmission	Black board
27	27.	55	5	H.V.D.C transmission	Black board
28	28.	55	5	Advantages and limitation of H.V.D.C transmission system	Black board
29	29.	55	6	Distribution system	Black board
30	30.	55	6	Connection scheme of distribution system	Black board
31	31.	55	6	Distributor fed at one end	Black board
32	32.	55	6	Distributor fed at both end	Black board
33	33.	55	6	Ring distributor	Black board
34	34.	55	6	A.C distribution system	Black board
35	35.	55	6	Problems of a.c distribution system	Black board
36	36.	55	6	3 phase 4 wire star connected arrangement	Black board
37	37.	55	7	Cable insulation	Black board
38	38.	55	7	Classification of cable	Black board
39	39.	55	7	Types of cable with constructional feature	Black board
40	40.	55	7	Methods of cable laying	Black board
41	41.	55	7	Murray and varley loop test for short circuit fault	Black board
42	42.	55	7	Murray and varley loop test for earth fault	Black board
43	43.	55	8	Causes of low power factor and methods of improving it	Black board
44	44.	55	8	Factors affecting the economic of generation	Black board
45	45.	55	8	Peak load and base load on power station	Black board
46	46.	55	9	Characteristic of tariff	Black board
47	47.	55	9	Types of tariff	Black board
48	48.	55	9	problems	Black board
49	49.	55	9	problems	Black board
50	50.	55	9	problems	Black board
51	51.	55	10	Layout of L.T substation	Black board
52	52.	55	10	Layout of H.T substation	Black board
53	53.	55	10	Layout of E.H.T substation	Black board

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59	59.	55		REVISION	Black board
60	60.	55		REVISION	Black board