

LESSON PLAN			
	Discipline:Electrical Engineering	Semester-4th SUMMER 2024	Name of the Teachng Faculty: Sri HRUSIKESH NAYAK
Sl. No.	Subject-Generation Transmission Distribution	No. Of Days/Week class allotted:04	Semester From date: 16.01.2024 to date: 26.04.2024. No of weeks: 15
	Weeks/Months	Class Day	Topic
1	1st Week	1st (16/01/2024)	1.1 Elementary idea on generation of electricity from Thermal power plant.
		2nd (18/01/2024)	1.1 Elementary idea on generation of electricity from Nuclear power plant.
		3rd (19/01/2024)	1.1 Elementary idea on generation of electricity from Hydel Power station.
2	2nd Week	1st (24/01/2024)	1.2 Introduction to Solar Power Plant (Photovoltaic cells).
		2nd (25/01/2024)	1.3 Layout diagram of generating stations.
3	3rd Week	1st (30/01/2024)	2.1 Layout of transmission and distribution scheme.
		2nd (31/01/2024)	2.2 Voltage Regulation & efficiency of transmission.
		3rd (01/02/2024)	2.3 State and explain Kelvin's law for economical size of conductor.
		4th (02/02/2024)	2.4 Corona and corona loss on transmission lines.
4	4th Week	1st (06/02/2024)	3.1 Types of supports, size and spacing of conductor.
		2nd (07/02/2024)	3.2 Types of conductor materials.
		3rd (08/02/2024)	3.3 State types of insulator and cross arms.
		4th (09/02/2024)	3.4 Sag in overhead line with support at same level and different level.
5	5th Week	1st (13/02/2024)	3.5 Simple problem on sag.
		2nd (15/02/2024)	3.5 Simple problem on sag.
		3rd (16/02/2024)	4.1. Calculation of regulation and efficiency.
6	6th Week	1st (20/02/2024)	4.1. Calculation of regulation and efficiency.
		2nd (21/02/2024)	4.1. Calculation of regulation and efficiency.
		3rd (22/02/2024)	4.1. Calculation of regulation and efficiency.
		4th (23/02/2024)	4.1. Calculation of regulation and efficiency.
7	7th Week	1st (27/02/2024)	4.1. Calculation of regulation and efficiency.
		2nd (28/02/2024)	5.1 EHV AC transmission.
		3rd (29/02/2024)	5.1..1. Reasons for adoption of EHV AC transmission.
		4th (01/03/2024)	5.1..2. Problems involved in EHV transmission.
8	8th Week	1st (06/03/2024)	5.2 HV DC transmission.
		2nd (07/03/2024)	5.2 HV DC transmission. 5.2..1. Advantages and Limitations of HVDC transmission system

9	9th Week	1st (12/03/2024)	6.1 Introduction to Distribution System.
		2nd (13/03/2024)	6.2 Connection Schemes of Distribution System: (Radial, Ring Main and Inter connected system).
		3rd (14/03/2024)	6.2 Connection Schemes of Distribution System: (Radial, Ring Main and Inter connected system).
		4th (15/03/2024)	6.3 DC distributions. 6.3.1 Distributor fed at one End.
10	10th Week	1st (19/03/2024)	6.3.2 Distributor fed at both the ends.
		2nd (20/03/2024)	6.3.3 Ring distributo.
		3rd (21/03/2024)	6.4 AC distribution system. 6.4.1. Method of solving AC distribution problem.
		4th (22/03/2024)	6.4.2. Three phase four wire star connected system arrangement.
11	11th Week	1st (27/03/2024)	7.1 Cable insulation and classification of cables.
		2nd (28/03/2024)	7.2 Types of L. T. & H.T. cables with constructional features.
12	12th Week	1st (02/04/2024)	7.3 Methods of cable lying.
		2nd (03/04/2024)	7.4 Localization of cable faults: Murray and Varley loop test for short circuit fault / Earth fault.
		3rd (04/04/2024)	7.4 Localization of cable faults: Murray and Varley loop test for short circuit fault / Earth fault.
		4th (05/04/2024)	8.1 Causes of low power factor and methods of improvement of power factor in power system.
13	13th Week	1st (09/04/2024)	8.2 Factors affecting the economics of generation: (Define and explain) 8.2.1 Load curves. 8.2.2 Demand facto
		2nd (10/04/2024)	8.2.3 Maximum demand. 8.2.4 Load factor.
		3rd (12/04/2024)	8.2.5 Diversity factor. 8.2.6 Plant capacity factor
14	14th Week	1st (16/04/2024)	8.3 Peak load and Base load on power station.
		2nd (18/04/2024)	9.1. Desirable characteristic of a tariff.
		3rd (19/04/2024)	Explain flat rate, block rate, two part and maximum demand tariff.
15	15th Week	1st (23/04/2024)	(Solve Problems)
		2nd (24/04/2024)	10.1 Layout of LT, HT and EHT substation.
		3rd (25/04/2024)	10.2 Earthing of Substation, transmission and distribution lines.
		4th (26/04/2024)	Problem solve.