

Discipline	Semester	Name of the teaching Staff
Electrical	4th	Sandhya Kumari Roudhi
Subject	No of period	Semester from Date: 07/12/19 To date:
	POURWK: 04	NO. of week: 15
		* Monday - 02.
		* Tuesday - 01
		* Saturday - 01
Week	Class Day	Theory Topics:
1st	01	Thermal power station.
	02	Thermal power station.
	03	Hydel power station.
	04	Nuclear power station.
2nd	01	Nuclear power station.
	02	Solar power plant.
	03	Layout diagram of Generating station.
	04	Layout of transmission & distribution scheme.
3rd	01	voltage regulation & ^{efficiency of transmission} distribution scheme
	02	Kelvin's law
	03	- do -
	04	corona & corona losses on T/L.
4th	01	Type of supports, size & spacing of conductors
	02	Type of Conductor material.
	03	Type of insulator & cross Arm.
	04	Sag in OH line with support at same level.
5th	01	Sag in OH line with support at different level
	02	Problems on Sag.
	03	Classification of overhead T/L & important
	04	performance of 1 ϕ short T/L

Week	Class day	Theory Topic
6th	01	3 ϕ short T/L.
	02	Effect of load PF on Regulation & efficiency.
	03	medium T/L., End condenser method.
	04	Nominal T-method.
7th	01	Nominal π -method.
	02	EHV AC transmission (Reason for adopting)
	03	Problems involved in EHV transmission.
	04	- do -
8th	01	HVDC transmission.
	02	- do -
	03	Advantages & limitation of HVDC transmission.
	04	- do -
9th	01	Introduction to distribution system, Radial distrib.
	02	Ring main distribution system & Inter connected.
	03	Distributor fed at one end
	04	Distributor fed at both end.
10th	01	Ring distributor
	02	method of solving AC distribution problem.
	03	Three phase four wire star connected system.
	04	Cable insulation & classification of Cables.
11th	01	Type of LT & HT cables with constructional features.
	02	- do -
	03	method of Cable laying
	04	- do -
12th.	01	Murray loop test.



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week	class day	Topic
	02.	varley loop test.
	03	Causes of low power factor.
	04	method of improvement of power factor
13th	01	Load curve, Demand factor
	02	maximum demand, Load factor.
	03	Diversity factor, Plant Capacity factor.
	04	Peak load & Base load on power station.
14th.	01	Desirable characteristic of tariff.
	02	flat rate tariff, block rate tariff.
	03	two part & maximum demand tariff.
	04	Numerical problem.
15th.	01	Lay out of LT, HT, Substation
	02	Lay out of EHT Substation.
	03	Earthing of Substation.
	04	transmission & distribution lines.

(HOD Electrical)