

DHABALESWAR INSTITUTE OF POLYTECHNIC

LESSON PLAN

Discipline	Semester	Name of the Teaching Faculty
Subject	No. of days per Week Class Alloted	Semester from Dt. _____ To Dt. _____ No. of Weeks: _____
Week	Class Day	Theory / Practical Topics
1st	1st day	Elementary GENERATION OF ELECTRICITY:-
	2nd day	Elementary idea on generation of electricity from Thermal, Hydel, Nuclear, Power station.
	3rd day	Introduction to Solar Power Plant (Photovoltaic cells).
	4th day	Layout diagram of generating stations.
	5th day	TRANSMISSION OF ELECTRIC POWER
2nd	1st day	Layout of transmission and distribution scheme.
	2nd day	Voltage Regulation & efficiency of transmission.
	3rd day	State and explain kelvin's Law For economical size of conductor.
	4th day	Corona and Corona loss on transmission lines.
	5th day	OVER HEAD LINES:-
3rd	1st day	Types of Supports, size and spacing of conductor.
	2nd day	Types of Conductor materials.
	3rd day	State types of insulator and cross arms.
	4th day	Sag in overhead line with support at same level and different level.
4th	1st day	Approximate Formula effect of wind, Pcc, and temperature on sag.
5th	2nd day	Simple problem on sag.
	3rd day	Problems solved on sag.
	4th day	PERFORMANCE OF SHORT & MEDIUM LINES:-
	5th day	Calculation of regulation and efficiency.

DHABALESWAR INSTITUTE OF POLYTECHNIC

LESSON PLAN

Discipline	Semester	Name of the Teaching Faculty
Subject	No. of days per Week Class Alloted	Semester from Dt. _____ To Dt. _____ No. of Weeks: _____
Week	Class Day	Theory / Practical Topics
6th	1st day	EHV TRANSMISSION
	2nd day	EHV AC transmission.
	3rd day	Reasons for adoption of EHV AC transmission.
		Problems involved in EHV transmission.
7th	1st day	HVDC transmission.
	2nd day	Advantages and Limitations of HVDC transmission system.
	3rd day	DISTRIBUTION SYSTEMS
		Introduction to Distribution System.
	2nd day	Connection Schemes of Distribution system:
	3rd day	(Radial, Ring Main and Inter Connected system)
	4th day	DC distributions.
		Distributor feed at one end.
	5th day	Distributor feed at both the ends.
8th	1st day	Ring distributors.
	2nd day	AC distribution system.
	3rd day	Method of solving AC distribution problem.
	4th day	Three Phase four wire star connected system arrangement.
	5th day	UNDERGROUND CABLES &
9th		Cable insulation and classification of cables.
	1st day	Types of L.T & H.T. Cables with constructional features.

DHABALESWAR INSTITUTE OF POLYTECHNIC

LESSON PLAN

Discipline	Semester	Name of the Teaching Faculty
Subject	No. of days per Week Class Alloted	Semester from Dt. _____ To Dt. _____ No. of Weeks: _____
Week	Class Day	Theory / Practical Topics
10th	2nd day	Methods of cable laying.
	3rd day	Localization of cable faults.
	4th day	Murray and Varley loop - Test for short circuit Fault / Earth Fault.
	1st day	ECONOMIC ASPECTS:- Causes of low power factor
	2nd day	Explain methods of improvement of power factor in power system.
11th	3rd day	Factors affecting the economics of generation: (Define and explain)
	4th day	Load curves Demand factor Maximum demand.
	5th day	Load factor Diversity factor Plant capacity factor
	1st day	Peak load and base load on power station.
	2nd day	TYPES OF TARIFF:- Desirable characteristics of a tariff.
12th	3rd day	Explain flat rate, block rate, two part tariff.
	4th	Maximum Demand Tariff.
	5th	Solving of Numerical problems
	1st day	SUBSTATIONS:- Layout of LT, HT and EHT substation.
	2nd day	Earthing of substation, 3rd day transmission and distribution lines.
	4th day	Revision and question discussion.

DHABALESWAR INSTITUTE OF POLYTECHNIC

LESSON PLAN

[illegible]