

# Bhubanananda Orissa School of Engineering

## Lesson Plan

<b>Discipline:AE &amp;I</b>	<b>Semester:6<sup>th</sup></b>	<b>Name of the Teaching Faculty: Prafulla Kumar Panda</b>
<b>Subject: PPI</b>	No of Days/per week class allotted: <b>4</b>	Semester from10.03 2022 to10.06.2022 <b>No of weeks:14</b>
<b>Week No.</b>	<b>Class Day TUE,WED,THU, FRI</b>	<b>Theory Topics</b>
1 <sup>st</sup>	10-03-2022	Introduction of the Subject and Syllabus discussion.
	11-03-2022	<b>UNIT –I</b> 1. Introduction: 1.1 Importance of electric power plant.
2 <sup>nd</sup>	15-03-2022	1.2 Definition of power plant.
	16-03-2022	1.3 Types of power plants. Energy scores in India.
	17-03-2022	1.4 Sources of energy.
3 <sup>rd</sup>	22-03-2022	1.5 Recent development in power generation.
	23-03-2022	1.6 Direct energy conversion system.
	24-03-2022	1.7 Alternative energy system.
	25-03-2022	1.8 Energy scores in India.
4 <sup>th</sup>	29-03-2022	1.9 Development of electric power in India.
	30-03-2022	<b>Chapter 1 Revision, Previous years questions discussion.</b>
	31-03-2022	<b>UNIT –II</b> 2. Steam power plant: 2.1 Operation of condensing & non condensing power plants.
5 <sup>th</sup>	5-04-2022	2.2 Choice of steam, temperature & pressure.
	6-04-2022	2.3 Important features of a modern coal fire steam power plant.
	7-04-2022	2.4 Basic working principle of a thermal power plant.
	8-04-2022	2.5 Different units of a stem power plants. A. Boiler unit.

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6 <sup>th</sup>	12-04-2022	B. Steam nozzles & turbine.
	13-04-2022	C. Condensing unit & function of condenser.
	15-04-2022	D. Cooling unit.
7 <sup>th</sup>	19-04-2022	<b>Class Test -I</b>
	20-04-2022	E. Cooling ponds & cooling towers.
	21-04-2022	<b>Chapter 2 Revision, Previous year's questions discussion.</b>
	22-04-2022	<b>UNIT –III</b> 3. Hydroelectric Power plant: 3.1 Definition of Hydroelectric power plant.
8 <sup>th</sup>	26-04-2022	3.2 Essential features of a water power plant.
	27-04-2022	3.3 Classification of a hydro power plant.
	28-04-2022	3.4 Hydraulic turbines & its operating characteristics.
	29-04-2022	3.5 Selection of water turbine.
9 <sup>th</sup>	03-05-2022	3.6 Carbine hydro & steam power plant.
	04-05-2022	3.7 Comparison of hydropower station with thermal power station.
	05-05-2022	<b>Chapter 3 Revision, Previous year's questions discussion.</b>
	06-05-2022	<b>UNIT –IV</b> 4. Nuclear Power plant: 4.1 General introduction of nuclear physics.
10 <sup>th</sup>	10-05-2022	<b>Internal -I</b>
	11-05-2022	4.2 description of nuclear reactor.
	12-05-2022	4.3 Classification of nuclear reactor.
	13-05-2022	4.4 safety uranium.
11 <sup>th</sup>	17-05-2022	4.5 Methods of enriching uranium.
	18-05-2022	4.6 Nuclear power plant in India..

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	19-05-2022	4.7 Features of nuclear power.
	20-05-2022	<b>Chapter 4 Revision, Previous years questions discussion.</b>
12 <sup>th</sup>	24-05-2022	<b>UNIT –V</b> 5. Power plant instrumentation 5.1 General classification of instrument.
	25-05-2022	5.2 Pressure measuring instrument.
	26-05-2022	5.3 Temperature measuring instrument.
	27-05-2022	5.4 Flow measuring instrument.
13 <sup>th</sup>	31-05-2022	5.5 Analysis of combustion of gases.
	01-06-2022	<b>Chapter 5 Revision, Previous years questions discussion.</b>
	02-06-2022	<b>UNIT –VI</b> 6. Instrumentation for transmission for power: 6.1 Instrumentation schemed used for HVDC. &
	03-06-2022	EHVAC transmission system.
14 <sup>th</sup>	07-06-2022	6.2 Energy management. i. electronic instrumentation system adopted for energy conservation
	08-06-2022	ii. Electronic instrumentation scheme used for energy audit
	09-06-2022	6.3 Economics of power plant.
	10-06-2022	<b>Chapter 6 Revision, Previous years questions discussion.</b>
		<b>OVERALL PREVIOUS YEARS QUESTIONS DISCUSSION</b>

Signature of Faculty

HOD, AE&I

Academic Coordinator

Principal

नधर्म ग्लानि जिज्ञासु