## KIIT POLYTECHNIC, BHUBANESWAR

## **LESSON PLAN**

## **Session (2023-2024)**

Discipline:	Semester:	Name of the Teaching Faculty:
Mechanical Engineering	6 <sup>th</sup> , Summer/2024	Prasant Kumar Patra, Lecturer
		Email ID: pkpatrafme@kp.kiit.ac.in
Subject: Power Station Engineering	No. of Days/Week:	<b>Start Date:</b> 16/01/2024
Lab, Practical-2	02	<b>End Date:</b> 26/04/2024

Week	Class Day	Theory/Practical Topics		
1st	1st	Laboratory Visit and familiarize with laboratory. Understanding		
		Laboratory instructions and safety rules.		
	2nd	Study of modern steam power plant. (Theoretical explanation of Thermal		
2 1	1-4	power plant Fuels, Components, and layout of plant)		
2nd	1st	Sketching steam power plant layout and understanding the location and function of different components of steam power plant.		
	2nd	Study of modern steam power plant. (Demonstration)		
3rd	1st	Viva, Report writing & Evaluation		
	2nd	Theoretical explanation and Demonstration of Cochran boiler		
4th	1st	Study on Cochran boiler		
	2nd	Theoretical explanation and Demonstration of Babcock & Wilcox boiler.		
5th	1st	Study on Babcock & Wilcox boiler.		
	2nd	Viva, Report writing & Evaluation		
6th	1st	Study on Cornish & Lancashire boiler.		
	2nd	Theoretical explanation on Jet & Surface condenser.		
7th	1st	Demonstration on Surface Condenser.		
	2nd	Study of Surface Condenser.		
8 <sup>th</sup>	1st	Viva, Report writing & Evaluation		
	2nd	Demonstration on spring-loaded safety valve.		
9 <sup>th</sup>	1st	Study of spring-loaded safety valve.		
	2nd	Viva, Report writing & Evaluation		
10 <sup>th</sup>	1st	Demonstration on Cooling tower		
	2nd	Study of Cooling tower		
11 <sup>th</sup>	1st	Viva, Report writing & Evaluation		
	2nd	Theoretical explanation on various efficiencies of steam turbine.		
12 <sup>th</sup>	1st	Viva, Report writing & Evaluation		
	2nd	Experiment for Left out students/ Question Discussion		
13 <sup>th</sup>	1st	Experiment for Left out students/ Question Discussion		
	2nd	Final Viva & Record Submission		