

**GOVERNMENT POLYTECHNIC, MALKANGIRI**  
**DEPARTMENT OF MECHANICAL ENGINEERING**

LESSON PLAN

Discipline: <b>Mechanical Engineering</b>	Semester: <b>6TH</b>	Name of the Teaching Faculty: <b>Shantanu Kumar Maity</b>
Subject: <b>Power Station Engineering Lab</b>	No. of days/week class allotted <b>4</b>	Semester From date: 04.02.2025 To date:17.05.2025 No. of Week: <b>15</b>
<b>Course Outcomes</b>	CO1: Understanding steam power plants, cooling towers, jet condenser, turbine	
	CO2: Understanding spring loaded safety valve and equipment used in practices	
	CO3: Understanding steam generators (boilers) models and usage	
<b>Week</b>	<b>2 Class/Day</b>	<b>Theory/Practical Topics</b>
1st	1st	To study the modern steam power plant with model
	2nd	To study the modern steam power plant with model
2nd	1st	To study the modern steam power plant with model
	2nd	To study the modern steam power plant with model
3rd	1st	To determine the various efficiencies of steam turbine
	2nd	To determine the various efficiencies of steam turbine
4th	1st	To determine the various efficiencies of steam turbine
	2nd	To determine the various efficiencies of steam turbine
5th	1st	To study the cooling tower
	2nd	To study the cooling tower
6th	1st	To study the cooling tower
	2nd	To study the cooling tower
7th	1st	Study of jet condenser
	2nd	Study of jet condenser
8th	1st	Study of jet condenser
	2nd	Study of jet condenser
9th	1st	Study of De-level turbine
	2nd	Study of De-level turbine
10th	1st	Study of De-level turbine
	2nd	Study of De-level turbine
11th	1st	To study the spring loaded safety valve
	2nd	To study the spring loaded safety valve
12th	1st	To study the spring loaded safety valve
	2nd	To study the spring loaded safety valve
13th	1st	To study the following steam generators (boilers) model, (Lancashire , Cornish , Babcock & Wilcox, Vertical water tube)
	2nd	To study the following steam generators (boilers) model, (Lancashire , Cornish , Babcock & Wilcox, Vertical water tube)



14th	1st	To study the following steam generators (boilers) model, (Lancashire , Cornish , Babcock & Wilcox, Vertical water tube)
	2nd	To study the following steam generators (boilers) model, (Lancashire , Cornish , Babcock & Wilcox, Vertical water tube)
15th	1st	To study the following steam generators (boilers) model, (Lancashire , Cornish , Babcock & Wilcox, Vertical water tube)
	2nd	To study the following steam generators (boilers) model, (Lancashire , Cornish , Babcock & Wilcox, Vertical water tube)

**Learning Resources:**

R.K Rajput Power plant engineering (Laxmi Publication)  
P.K. Nag Power plant engineering (TMH)  
Nag pal G,R Power plant engineering (Khanna Publisher)

*Shantanu Kumar Maity*  
Signature of Faculty

*[Signature]*  
03/02/25  
Signature of HOD/

*[Signature]*  
06/02/2025  
Signature of Academic Coordinator

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Signature of Principal