

Lesson Plan

Subject: **PSE** (Th -3)

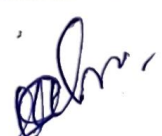
Name of faculty: **Er.SARBESWAR ROUT**


Semester: **6TH** *Class allotted: **4p/week**

Branch: **Mechanical**


Session: **2025(S)**


Discipline	Semester	From date:	To date:	Teaching Aid
Subject:	No. of days/ per week	Theory/ Practical –Topics/Lesson		
Week	Date/Period			
1	04/02/2025 TO 08/02/2025	1.0 INTRODUCTION: Describe sources of energy Explain concept of Central and Captive power station Classify power plants. Importance of electrical power in day today life.		White Board Marker Smart board
2	10/02/2025 TO 15/02/2025	Overview of method of electrical power generation. 2.0 THERMAL POWER STATIONS: Layout of steam power stations. Steam power cycle. Explain Carnot vapour power cycle with P-V, T-s diagram.		White Board Marker Smart board
3	17/02/2025 TO 22/02/2025	Explain Rankine cycle with P-V, T-S & H-s diagram determine thermal efficiency, Work done, work ratio, and specific steam Consumption. Solve Simple Problems. Numerical problem		White Board Marker Smart board
4	24/02/2025 TO 01/03/2025	Solve Simple Problems. Solve Simple Problems. Solve Simple Problems. Solve Simple Problems.		White Board Marker Smart board
5	03/03/2025 TO 08/03/2025	List of thermal power stations in the state with their capacities. Boiler Accessories Operation of Air pre heater Operation of Economiser		White Board Marker Smart board
6	10/03/2025 TO 15/03/2025	Operation of super heater Need of boiler mountings 3.0 NUCLEAR POWER STATIONS: Classify nuclear fuel (Fissile & fertile material) Explain fusion and fission reaction.		White Board Marker Smart board
7	17/03/2025 TO 22/03/2025	Explain working of nuclear power plants with block diagram . Explain the working and construction of nuclear reactor. Compare the nuclear and thermal plants. Explain the disposal of nuclear waste.		White Board Marker Smart board


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8	24/03/2025 TO 29/03/2025	Selection of site for nuclear power stations. List of nuclear power stations.. 4.0 DIESEL ELECTRIC POWER STATIONS: State the advantages and disadvantages of diesel electric power stations	White Board Marker Smart board
9	31/03/2025 TO 05/04/2025	Explain briefly different systems of diesel electric power stations Fuel storage and fuel supply system, Fuel injection system, Air supply system INTERNAL ASSESMENT TEST	White Board Marker Smart board
10	07/04/2025 TO 12/04/2025	Exhaust system, cooling system, Lubrication system, starting system, governing system. Selection of site for diesel electric power stations.	White Board Marker Smart board
11	14/04/2025 TO 19/04/2025	Difference between static Performance and thermal efficiency of diesel electric power stations. 5.0 HYDEL POWER STATIONS: State advantages and disadvantages of hydroelectric power plant.	White Board Marker Smart board
12	21/04/2025 TO 26/04/2025	Classify and explain the general arrangement of storage type hydroelectric project Selection of site of hydel power plant. List of hydro power stations with their capacities and number of units in the state. Types of turbines and generation used.	White Board Marker Smart board
13	28/04/2025 TO 03/05/2025	Simple problems. Simple problems. Simple problems. Simple problems.	White Board Marker Smart board
14	05/05/2025 TO 10/05/2025	6.0 GAS TURBINE POWER STATIONS Selection of site for gas turbine stations. Fuels for gas turbine, Merits, demerits and application of gas turbine power plants. Elements of simple gas turbine power plants	White Board Marker Smart board
15	12/05/2025 TO 17/05/2025	Revision	White Board Marker Smart board


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