

Lesson Plan

Subject: **TH - II** (Th 4)


Name of faculty: **Er.SANGRAM BISWAL**

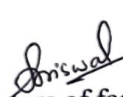
Semester: **4TH** Class allotted: **4p/week**

Branch: **Mechanical**


Session: **2025(S)**

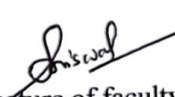
Discipline	Semester	From date:	To date:	Teaching Aid
Subject:	No. of days/ per week	Theory/ Practical –Topics/Lesson		
Week	Date/Period			
1	04/02/2025 TO 08/02/2025	1. Performance of I.C engine Define mechanical efficiency, Indicated thermal efficiency, Relative Efficiency, brake thermal efficiency overall efficiency Mean effective pressure & specific fuel consumption. Lower pair and higher pair		White Board Marker Smart board
2	10/02/2025 TO 15/02/2025	Define air-fuel ratio & calorific value of fuel. Work out problems to determine efficiencies & specific fuel consumption. <ul style="list-style-type: none">• Numerical problem• Numerical problem• Numerical problem		White Board Marker Smart board
3	17/02/2025 TO 22/02/2025	2. Air Compressor Explain functions of compressor & industrial use of compressor air Classify air compressor & principle of operation. Describe the parts and working principle of reciprocating Air compressor		White Board Marker Smart board
4	24/02/2025 TO 01/03/2025	Explain the terminology of reciprocating compressor such as bore, stroke, pressure ratio free air delivered & Volumetric efficiency. Derive the work done of single stage & two stage compressor with clearance. Derive the work done of single stage & two stage compressor without clearance.		White Board Marker Smart board
5	03/03/2025 TO 08/03/2025	<ul style="list-style-type: none">• Solve simple problems• Solve simple problems• Solve simple problems• Solve simple problems		White Board Marker Smart board
6	10/03/2025 TO 15/03/2025	3. Properties of Steam Properties of Steam Difference between gas & vapours Formation of steam. Representation on P-V, T-S, H-S, & T-H diagram.		White Board Marker Smart board


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7	17/03/2025 TO 22/03/2025	Definition & Properties of Steam. Use of steam table & mollier chart for finding unknown properties Non flow & flow process of vapour. P-V, T-S & H-S, diagram.	White Board Marker Smart board
8	24/03/2025 TO 29/03/2025	Determine the changes in properties <ul style="list-style-type: none"> • Solve simple problems • Solve simple problems • Solve simple problems 	White Board Marker Smart board
9	31/03/2025 TO 05/04/2025	4. Steam Generator Classification & types of Boiler. Important terms for Boiler. INTERNAL ASSESMENT TEST	White Board Marker Smart board
10	07/04/2025 TO 12/04/2025	Comparison between fire tube & Water tube Boiler. Description & working of common boilers (Cochran Lancashire, Description & working of common boilers (Babcock & Wilcox Boiler).	Marker White BoardSmart board
11	14/04/2025 TO 19/04/2025	Boiler Draught (Forced, induced & balanced) Boiler mountings & accessories 5. Steam Power Cycles Carnot cycle with vapour. Derive work & efficiency of the cycle. Rankine cycle. Reheat cycle	White Board Marker Smart board
12	21/04/2025 TO 26/04/2025	regenerative Cycle. <ul style="list-style-type: none"> • Solve simple numerical • Solve simple numerical • Solve simple numerical 	White Board Marker Smart board
13	28/04/2025 TO 03/05/2025	6. Heat Transfer Modes of Heat Transfer. Fourier law of heat conduction and thermal conductivity (Newton's laws of cooling])	White Board Marker Smart board
14	05/05/2025 TO 10/05/2025	Radiation heat transfer, Black body Radiation, Definition of Emissivity, absorptivity, & transmissibility	White Board Marker Smart board
15	12/05/2025 TO 17/05/2025	Revision Revision	White Board Marker Smart board


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