

Lesson Plan

Subject: TH - II (Th 4)Name of faculty: SATYABRATA KHILARSemester: 4THClass allotted: 4p/weekBranch: MechanicalSession: 2024(S)

Discipline	Semester	From date:	To date:	Teaching Aid
Subject:	No. of days/ per week	Theory/ Practical –Topics/Lesson		
Week	Date/Period			
1	16/01/2024	Define mechanical efficiency, Indicated thermal efficiency,		White Board Marker Smart board
	TO 20/01/2024	Relative Efficiency, brake thermal efficiency overall efficiency Mean effective pressure & specific fuel consumption. Lower pair and higher pair Define air-fuel ratio & calorific value of fuel.		
2	22/01/2024	Work out problems to determine efficiencies & specific fuel consumption.		White Board Marker Smart board
	TO 27/01/2024	Numerical problem Numerical problem Numerical problem		
3	29/02/2024	Air Compressor Explain functions of compressor & industrial use of compressor air		White Board Marker Smart board
	TO 03/02/2024	Classify air compressor & principle of operation. Describe the parts and working principle of reciprocating Air compressor		
4	05/02/2024	Explain the terminology of reciprocating compressor such as bore, stroke,		White Board Marker Smart board
	TO 10/02/2024	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		


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Week	Date/Period	Theory/ Practical –Topics/Lesson	Teaching Aids
5	12/02/2024 TO 17/02/2024	Solve simple problems Solve simple problems Solve simple problems Solve simple problems	White Board Marker Smart board
6	19/02/2024 TO 24/02/2024	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
7	26/02/2024 TO 02/03/2024	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.	Marker White Board
8	04/03/2024 TO 09/03/2024	Determine the changes in properties Solve simple problems Solve simple problems Solve simple problems	White Board Marker Smart board
9	11/03/2024 TO 16/03/2024	Steam Generator Classification & types of Boiler. Important terms for Boiler. Comparison between fire tube & Water tube Boiler.	White Board Marker Smart board
10	18/03/2024 TO 23/03/2024	Description & working of common boilers (Cochran Lancashire, Description & working of common boilers (Babcock & Wilcox Boiler). Boiler Draught (Forced, induced & balanced) Boiler mountings & accessories	Marker White Board Smart board
11	27/03/2024 TO 30/03/2024	Carnot cycle with vapour. Derive work & efficiency of the cycle. Rankine cycle. Reheat cycle	White Board Marker Smart board
12	02/04/2024 TO 06/04/2024	regenerative Cycle. Solve simple numerical Solve simple numerical Solve simple numerical	Marker White Board Smart board

13.	08/04/2024 TO 13/04/2024	Modes of Heat Transfer. Fourier law of heat conduction and thermal conductivity (Newton's laws of cooling. Radiation heat transfer, Black body Radiation, Definition of Emissivity, absorptivity, & transmissibility	White Board Marker Smart board
14	15/04/2024 TO 20/04/2024	Revision	White Board Marker Smart board
15	22/ 04/2024 TO 26/04/2024	Revision	White Board Marker Smart board


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