

<b>Discipline: Mechanical Engg.</b>	<b>Semester: 6<sup>TH</sup></b>	<b>Name of the Teaching Faculty: BANESWAR MUNDA Designation: Workshop Superintendent</b>
<b>Subject: Thermal Engg-II</b>	<b>No. of days/week class allotted: 04</b>	<b>Semester From date: 14.02.2022 To date: 23.05.2023 No. of weeks: 13</b>
<b>Week</b>	<b>Class Day</b>	<b>Theory/Practical Topics</b>
		<b>CHAPTER 01: Performance of I.C engine</b>
1 <sup>ST</sup>	15.02.2023	Selection of Engine for a particular application
	16.02.2023	Indicated Power, Brake power, Friction Power
	17.02.2023	Fuel consumption, air consumption
	20.02.2023	Mechanical efficiency, Indicated thermal efficiency
2 <sup>ND</sup>	22.02.2023	Relative Efficiency, brake thermal efficiency, overall efficiency
		Mean effective pressure & specific fuel consumption.
	23.02.2023	Define air-fuel ratio & calorific value of fuel.
	24.02.2023	Work out problems to determine efficiencies & specific fuel consumption.
		<b>CHAPTER 02: Air Compressor</b>
3 <sup>RD</sup>	27.02.2023	Explanation of functions of compressor
	02.03.2023	Industrial and other use of compressor air
	03.03.2023	Classification of air compressor
	06.03.2023	Principle of operation of air compressor
4 <sup>TH</sup>	09.02.2023	Reciprocating and rotary compressor
	10.03.2023	Describe of the parts of reciprocating Air compressor.
	13.03.2023	Describe of the working principle of reciprocating Air compressor.
	15.03.2023	Explanation of terminology of reciprocating compressor such as bore, stroke.
5 <sup>TH</sup>	16.03.2023	Explain the terminology of pressure ratio, free air delivered & Volumetric efficiency
	17.03.2023	Derivation of work done of single stage compressor with and without clearance.
	20.03.2023	Derivation of work done of two stage compressor with and without clearance.
	22.03.2023	Solve simple problems (without clearance only)
		<b>CHAPTER 03: Properties of Steam</b>
6 <sup>TH</sup>	23.03.2023	Steam, properties of Steam. and its use, formation of steam
	24.03.2023	Difference between gas & vapours.
	27.03.2023	Representation on P-V and T-S diagram.
7 <sup>TH</sup>	29.03.2023	Representation on H-S and T-H diagram.
	31.03.2023	Use of steam table for finding unknown properties.
	03.04.2023	Use of steam mollier chart for finding unknown properties.
	05.04.2023	Non flow & flow process of vapour.
	06.04.2023	Determine the changes in properties & solve simple numerical
		<b>CHAPTER 04: Steam Generator</b>
8 <sup>TH</sup>	10.04.2023	Boiler and its Classification, Important terms for Boiler
	12.04.2023	Comparison between fire tube & Water tube Boiler, Description & working of Cochran Boiler

