LESSON PLAN.								
ACADEMY SESSION - SUMMER 2024								
4th SEMESTER W.E.F-16/01/2024 Total Period :- 60								
Subject:- Thermal Engineering-II								
Teacher :- DHARMA PRAKSH SAMAL (LECTURER)								
SL NO	**MONTH**	**Week**	**Class Day**	**UNIT NO/PERIOD ALLOTED**	**Topic to be covered as per Syllabus**	**Topic actually covered as per Syllabus**	**Short fall if any/syllabus**	**remarks**
1	JANUARY	1st	1st	8	Define Mechanical Efficiency, Indicated Thermal Efficiency			
2			2nd		Relative Efficiency, Brake Thermal Eficiency,Overall Efficiency			
3			3rd		Relative Efficiency, Brake Thermal Eficiency,Overall Efficiency			
4			4th		Mean Effective Pressure & Specific Fuel Consumption			
5		2nd	1st		Mean Effective Pressure & Specific Fuel Consumption			
6			2nd		Define air-fuel ratio& calorific value of fuel			
7			3rd		Workout problems to determine efficiencies & specific fuel consumption.			
8			4th		Doubt clearing class on 1st chapter.			
9		3rd	1st		Explain functions of air-compressor & it's industrial use.			
10			2nd		Classify air-compressor & principle of operation.			
11			3rd		Classify air-compressor & principle of operation.			
12			4th		Describe parts & working principle of a reciprocating air-compressor			
13		4th	1st		Describe parts & working principle of a reciprocating air-compressor			
14			2nd	12	Explain various terminology for reciprocating compressor.			

15		4th	3rd	12	Explain various terminology for reciprocating compressor.			
16			4th		Derive workdone of single stage air-compr. with & without clearance			
17		5th	1st		Derive workdone of single stage air-compr. with & without clearance			
18			2nd		Derive workdone of double stage air-compr. with & without clearance			
19			3rd		Workout simple problems.			
20			4th		Doubt clearing class on air- compressor			
21	FEBRUARY	6th	1st	12	Difference between gas & vapour.			
22			2nd		Formation of steam & its type.			
23			3rd		Representing steam on P-V, T-S,H-S & T-H diagram			
24			4th		Definition & properties of steam.			
25		7th	1st		Definition & properties of steam.			
26			2nd		Use of steam table & Mollier chart			
27			3rd		Non-flow & flow processes of vapour.			
28			4th		Non-flow & flow processes of vapour.			
29		8th	1st		Determine the changes in properties & solve simple numerals.			
30			2nd		Determine the changes in properties & solve simple numerals.			
31			3rd		Determine the changes in properties & solve simple numerals.			
32			4th		Revision			
33		9th	1st		Classification of boiler			
34			2nd		Types of boiler			
35			3rd		Important terms connected with boiler			
36			4th		Comparision between firetube & watertube boiler.			
37		10th	1st		Description & working of Cochran Boiler			
38			2nd	12	Description & working of Babcock & Wilcox Boiler			
39			3rd		Description & working of Babcock & Wilcox Boiler			
40			4th		Description & working of Lancashire Boiler			
41	RCH		1st		Boiler Draught			

42	MAI	11th	2nd		Boiler Mountings			
43			3rd		Boiler Accssessories			
44			4th		Doubt Clearing class.			
45		12th	1st	8	Carnot cycle with vapour.			
46			2nd		Derive work & efficiency			
47			3rd		Rankine cycle in P-V, T-S &H-S diagram			
48			4th		Derive work & efficiency of Rankine cycle			
49		13th	1st		Effect of various end condition in Rankine cycle			
50			2nd		Reheat cycle & Regenerative cycle			
51			3rd		Simple problems on Carnot vapour cycle & Rankine cycle.			
52			4th		Doubt clearing class on staem power cycle.			
53	APRIL	14th	1st	8	Modes of heat transfer & Fourier's law of heat conducton & thermal conductivity.			
54			2nd		Newton's law of cooling & Radiation heat transfer(Stifan-Boltzman &Kirchoff's law)			
55			3rd		Newton's law of cooling & Radiation heat transfer(Stifan-Boltzman &Kirchoff's law)			
56			4th		Newton's law of cooling & Radiation heat transfer(Stifan-Boltzman &Kirchoff's law)			
57		15th	1st		Black body radiation,emissivity			
58			2nd		Black body radiation,emissivity			
59			3rd		absorptivity & transmissivity.			
60			4th		absorptivity & transmissivity.			

Dharma prakash Samal