

ACADEMIC SESSION: 2023-24(WINTER -2023)

DISCIPLINE:ELECTRICAL ENGINEERING			Semester:3RD	Name of the teaching faculty: ASHISH MEHER	
Subject: Element of mechanical Engg			Semester from date:01.08.2023 to 30.11.2023		
SL NO	DATE	CHAPTER	THEORY TOPIC NAME	NO OF PERIODS	
1.	01.08.2023	THERMODYNAMICS	State Unit of Heat and work	1	
2.	02.08.2023		Ist law of thermodynamics ,	1	
3.	04.08.2023		State Laws of perfect gases	1	
4.	07.08.2023		Determine relationship of specific heat of gases at constant volume and constant volume	1	
5.	08.08.2023		Determine relationship of specific heat of gases at constant volume and constant pressure	1	
6.	09.08.2023		Solve simple problems	1	
7.	11.08.2023	PROPERTIES OF STEAM	Properties of steam	1	
8.	14.08.2023		Basic concept of steam table	1	
9.	16.08.2023		Use steam table for solution of simple problem	1	
10.	18.08.2023		Explain total heat of wet dry and superheated steam	1	
11.	21.08.2023		Solve simple problems	1	
12.	22.08.2023		Working principle of Boiler	1	
13.	23.08.2023	BOILERS	State type of Boiler	1	
14.	25.08.2023		Explain different type of boiler	1	
15.	28.08.2023		Vertical and horizontal boiler, Low and high pressure boiler	1	
16.	29.08.2023		Describe Cochran boiler	1	
17.	01.09.2023		Describe Babcock Wilcox boiler	1	
18.	04.09.2023		Working principal of Babcock Wilcox boiler	1	
19.	05.09.2023		Boiler Mountings	1	
20.	08.09.2023		Explain Boiler accessories	1	
21.	11.09.2023		Explain Boiler accessories	1	
22.	12.09.2023		Explain the principle of steam engine	1	
23.	13.09.2023		Explain the construction of steam engine	1	

24.	15.09.2023	STEAM ENGINE	Explain working principle of steam engine	1	
25.	22.09.2023		Draw indicator diagram	1	
26.	25.09.2023		Theoretical Indicator diagram without clearance	1	
27.	26.09.2023		Theoretical Indicator diagram with clearance	1	
28.	27.09.2023		Calculate Mean effective pressure,	1	
29.	29.09.2023		Calculate IHP and BHP and mechanical efficiency.	1	
30.	03.10.2023		Solve Simple problem of steam engine	1	
31.	04.10.2023		Solve Simple problem of steam engine	1	
32.	06.10.2023		STEAM TURBINE	State type of Steam turbine	1
33.	09.10.2023			Describe impulse Turbine	1
34.	10.10.2023	Describe reaction Turbine		1	
35.	11.10.2023	Draw velocity triangle		1	
36.	13.10.2023	Describe Kaplan Turbine		1	
37.	16.10.2023	Differentiate between impulse and reaction Turbine		1	
38.	17.10.2023	CONDENSER		Explain the function of condenser . Type of Condenser	1
39.	18.10.2023		Jet condenser,	1	
40.	20.10.2023		Surface condenser	1	
41.	30.10.2023		Differentiate between jet condenser and surface condenser.	1	
42.	31.10.2023		IC ENGINE	Internal Combustion Engine .Explain working of 2 stroke petrol and Diesel engines.	1
43.	01.11.2023	Explain working of 4 stroke petrol .		1	
44.	03.11.2023	Explain working of 4 stroke Diesel engines		1	
45.	06.11.2023	Differentiate 2 stroke and 4 stroke petrol and Diesel engines		1	
46.	07.11.2023	HYDROSTATICS	Describe properties of fluid	1	
47.	08.11.2023		Determine pressure at a point	1	
48.	10.11.2023		pressure measuring Instruments	1	
49.	13.11.2023		Piezometer,	1	
50.	14.11.2023		U-tube manometer Mechanical Gauge	1	
51.	15.11.2023	HYDROKINAMITICS	Different type of flow	1	
52.	17.11.2023		Deduce equation of continuity of flow	1	
53.	20.11.2023		Explain energy of flowing liquid	1	
54.	21.11.2023		State and explain Bernoulli's	1	

			theorem	
55.	22.11.2023	HYDRAULIC DEVICES AND PNEUMATICS	Intensifier	1
56.	24.11.2023		Hydraulic lift	1
57.	28.11.2023		Accumulator	1
58.	29.11.2023		Hydraulic ram	1

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