## **DEPARTMENT OF MECHANICAL ENGINEERING**

LESSON PLAN (2022-2023)				
Discipline: Electrical	Semester: 3RD	Name of the Teaching faculty: Mr. Ajay Kumar Sahoo		
Subject: ME LAB	No of Days/Week class alloted: 3	Semester from Date: 15.09.2022 To Date: 22.12.2022 No of weeks: 15		
Week	Class Day	Topics		
1st	2000	Determine M. A, V.R and efficiency of screw jack .  i) Aim of the expt, Theory  ii) Tools and Equipments required  iii) Demonstration  iv) Taking readings and calculates M.A, V.R and Efficiency by students		
2nd	1st (3p), Gr 1	Determine M. A, V.R and efficiency of screw jack .  i) Aim of the expt, Theory  ii) Tools and Equipments required  iii) Demonstration  iv) Taking readings and calculates M.A, V.R and Efficiency by students		
	2nd (3p), Gr 2	i) Record check and viva.  Determine Co-efficient of friction of bearing. i) Aim of the expt, Theory ii) Tools and Equipments required iii) Demonstration		
3rd	2nd (3p), Gr 1	i) Record check and viva.  Determine Co-efficient of friction of bearing. i) Aim of the expt, Theory ii) Tools and Equipments required iii) Demonstration		
	3rd (3p), Gr 2	i) Taking readings and calculate Co-efficient of friction by students ii) Record check and viva.		
4th	2nd (3p), Gr 1	i) Taking readings and calculate Co-efficient of friction by students ii) Record check and viva.		
	3rd (3p), Gr 2	Determine Youngs modulus by Searles apparatus.  i) Aim of the expt, Theory  ii) Tools and Equipments required  iii) Demonstration  i) Taking readings and calculate Youngs modulus by students		
5th	2nd (3p), Gr 1	Determine Youngs modulus by Searles apparatus.  i) Aim of the expt, Theory  ii) Tools and Equipments required  iii) Demonstration  i) Taking readings and calculate Youngs modulus by students  i) Record check and viva.  Determine M. A, V.R and efficiency of wheel train.		
	l	betermine w. A, v.n and efficiency of wheel train.		

	2rd /2n) Cr 2	i) Aim of the expt, Theory
	3rd (3p), Gr 2	ii) Tools and Equipments required
		iii) Demonstration
	T .	i) Record check and viva.
		Determine M. A, V.R and efficiency of wheel train .
6th	2nd (3p), Gr 1	i) Aim of the expt, Theory
		ii) Tools and Equipments required
		iii) Demonstration
		i) Taking readings and calculate M. A, V.R and efficiency by students
	3rd (3p), Gr 2	ii) Record check and viva.
	2nd (3p), Gr 1	i) Taking readings and calculate M. A, V.R and efficiency by students
		ii) Record check and viva.
		is a fire-regard a wareness a new coord mentioned and consider or a second seco
	2.1/2.1.6.2	Determination of Bending stress in beam using strain gauge.
7th		i) Aim of the expt, Theory
	3rd (3p), Gr 2	ii) Tools and Equipments required
		iii) Demonstration
		iv) Taking readings and calculate Bending stress by students
		Determination of Bending stress in beam using strain gauge.
		i) Aim of the expt, Theory
	2nd (3p), Gr 1	ii) Tools and Equipments required
		iii) Demonstration
		iv) Taking readings and calculate Bending stress by students
8th		i) Record check and viva.
	3rd (3p), Gr 2	Study of Universal Testing Machine and determine tensile stress and
		Youngs modulus of M.S specification.
		i) Aim of the expt, Theory
		ii) Tools and Equipments required
		iii) Demonstration
		i) Record check and viva.
	2nd (3p), Gr 1	Study of Universal Testing Machine and determine tensile stress and
		Youngs modulus of M.S specification.
		i) Aim of the expt, Theory
9th		ii) Tools and Equipments required
		iii) Demonstration
		i) Taking readings and calculate tensile stress and youngs modulus by
	3rd (3p), Gr 2	Istudents
	314 (3p), G1 Z	ii) Record check and viva.
	<u> </u>	i) Taking readings and calculate tensile stress and youngs modulus by
	2nd (3p), Gr 1	students
		ii) Record check and viva.
		Study of pressure measuring devices such as (a) Piezometer(b) Simple
10th	2nd (3p), Gr 2	manometer.
		i) Construction.
		ii) Working.
		iii) Record check and viva.
		Study of pressure measuring devices such as (a) Piezometer(b) Simple
	1	Imanometer.

Ī	2nd (3n) Gr 1	i) Construction.
11th	2110 (50), 51 1	ii) Working.
		i) Record check and viva.
		Study of venturimeter.
		i) Construction.
	2nd (3p), Gr 2	ii) Working.
		i) Record check and viva.
<b>12</b> th	2nd (3p), Gr 1	Study of venturimeter.
		i) Construction.
		ii) Working.
		i) Record check and viva.
		Verification of bernoulis theorem.
	2nd (3p), Gr 2	i) Aim of the expt, Theory
		ii) Tools and Equipments required
		iii) Demonstration
		iv) Taking readings, calculate and verify bernoulis theorem by students
<i>→</i>		Verification of bernoulis theorem.
		i) Aim of the expt, Theory
	2nd (3n) Gr 1	ii) Tools and Equipments required
	2110 (50), 01 1	iii) Demonstration
		iv) Taking readings, calculate and verify bernoulis theorem by students
13th		Model study of Centrifugal pumps, Francies, Kaplan and pelton wheel
		turbines.
	2nd (3p), Gr 2	
		ii) Working.
		i) Record check and viva.
8		Model study of Centrifugal pumps, Francies, Kaplan and pelton wheel
	2nd (3p), Gr 1	turbines.
		3-3-3-3-2-3
		ii) Working.
14th		i) Record check and viva.
	2nd (3p), Gr 2	Study of Cochran Boiler and demonstration of Steam engine.
		i) Construction.
		ii) Working.
		i) Record check and viva.
9		Study of Cochran Boiler and demonstration of Steam engine.
	2nd (3p), Gr 1	i) Construction.
		ii) Working.
		i) Record check and viva.
15th	2nd (3p), Gr 2	Study and Demonstration of Diesel engine and Petrol engine.
		i) Construction.
		ii) Working.
		i) Record check and viva.
16th	2nd (3p), Gr 1	Study and Demonstration of Diesel engine and Petrol engine.
		i) Construction.
		ii) Working.
		i) Record check and viva.
		T. 1. 220, a direct dia firm