

GOVERNMENT POLYTECHNIC JAIPUR

A/ P: Ragadi, Block: Korei, Dist.: Jajpur, Odisha- 755019

Website: <https://www.gpjajpur.org> E-mail: principalgpjajpur@yahoo.co.in Contact: 9437155107

GOVERNMENT POLYTECHNIC JAIPUR

DEPARTMENT OF MECHANICAL ENGINEERING

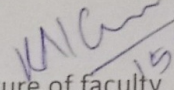
LESSON PLAN (2022-2023)

Discipline: Electrical	Semester: 3RD	Name of the Teaching faculty: Kedarnath Jena
Subject: ME LAB (Pr.1)	No of Days/Week class allotted: 3	Semester from Date: 15.09.2022 To Date: 22.01.2023 No of weeks: 15
Week	Class Day	Topics
1st	2nd (3p), Gr 2	Determine M. A, V.R and efficiency of screw jack .
		i) Aim of the expt, Theory
		ii) Tools and Equipments required
		iii) Demonstration
2nd	1st (3p), Gr 1	iv) Taking readings and calculates M.A, V.R and Efficiency by students
		Determine M. A, V.R and efficiency of screw jack .
		i) Aim of the expt, Theory
		ii) Tools and Equipments required
	2nd (3p), Gr 2	iii) Demonstration
		iv) Taking readings and calculates M.A, V.R and Efficiency by students
		i) Record check and viva.
		Determine Co-efficient of friction of bearing.
3rd	2nd (3p), Gr 1	i) Aim of the expt, Theory
		ii) Tools and Equipments required
		iii) Demonstration
		iv) Taking readings and calculate Co-efficient of friction by students
	3rd (3p), Gr 2	ii) Record check and viva.
		Determine Youngs modulus by Searles apparatus.
		i) Aim of the expt, Theory
		ii) Tools and Equipments required
4th	2nd (3p), Gr 1	iii) Demonstration
		i) Taking readings and calculate Youngs modulus by students
	3rd (3p), Gr 2	ii) Record check and viva.
		Determine Youngs modulus by Searles apparatus.
		i) Aim of the expt, Theory
		ii) Tools and Equipments required
		iii) Demonstration
		iv) Taking readings and calculate Youngs modulus by students
		Determine Youngs modulus by Searles apparatus.
		i) Aim of the expt, Theory

5th	2nd (3p), Gr 1	ii) Tools and Equipments required
		iii) Demonstration
		i) Taking readings and calculate Youngs modulus by students
	3rd (3p), Gr 2	i) Record check and viva.
		Determine M. A, V.R and efficiency of wheel train .
		i) Aim of the expt, Theory
6th	2nd (3p), Gr 1	ii) Tools and Equipments required
		iii) Demonstration
		i) Record check and viva.
	3rd (3p), Gr 2	Determine M. A, V.R and efficiency of wheel train .
		i) Aim of the expt, Theory
		i) Taking readings and calculate M. A, V.R and efficiency by students
7th	2nd (3p), Gr 1	ii) Record check and viva.
		Determination of Bending stress in beam using strain gauge.
		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
8th	2nd (3p), Gr 1	Determination of Bending stress in beam using strain gauge.
		i) Aim of the expt, Theory
		ii) Tools and Equipments required
	3rd (3p), Gr 2	iii) Demonstration
		iv) Taking readings and calculate Bending stress by students
		i) Record check and viva.
9th	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
		ii) Tools and Equipments required
	3rd (3p), Gr 2	iii) Demonstration
		i) Taking readings and calculate tensile stress and youngs modulus by students
		ii) Record check and viva.

10th	2nd (3p), Gr 1	i) Taking readings and calculate tensile stress and young's modulus by students
		ii) Record check and viva.
	2nd (3p), Gr 2	Study of pressure measuring devices such as (a) Piezometer(b) Simple manometer.
		i) Construction.
ii) Working.		
11th	2nd (3p), Gr 1	iii) Record check and viva.
		Study of pressure measuring devices such as (a) Piezometer(b) Simple manometer.
		i) Construction.
	2nd (3p), Gr 2	ii) Working.
		i) Record check and viva.
		Study of venturimeter.
12th	2nd (3p), Gr 1	i) Construction.
		ii) Working.
		i) Record check and viva.
	2nd (3p), Gr 2	Study of venturimeter.
		i) Aim of the expt, Theory
		ii) Tools and Equipments required
13th	2nd (3p), Gr 1	iii) Demonstration
		iv) Taking readings, calculate and verify bernouli's theorem by students
		Verification of bernouli's theorem.
	2nd (3p), Gr 2	i) Aim of the expt, Theory
		ii) Tools and Equipments required
		iii) Demonstration
14th	2nd (3p), Gr 1	iv) Taking readings, calculate and verify bernouli's theorem by students
		Model study of Centrifugal pumps, Francis, Kaplan and pelton wheel turbines.
		i) Construction.
	2nd (3p), Gr 2	ii) Working.
		i) Record check and viva.
		Model study of Centrifugal pumps, Francis, Kaplan and pelton wheel turbines.
14th	2nd (3p), Gr 1	i) Construction.
		ii) Working.
		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.
		Study of Cochran Boiler and demonstration of Steam engine.

15th	2nd (3p), Gr 1	i) Construction.
		ii) Working.
		i) Record check and viva.
	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.


 Signature of faculty
 15.09.22