

GOVERNMENT POLYTECHNIC JAJPUR		
DEPARTMENT OF MECHANICAL ENGINEERING		
LESSON PLAN -2024-25(Winter)		
Discipline: MECHANICAL ENGINEERING	Semester:	Name of the Teaching faculty: Sushanta Kumar Mohanta
Subject: ME LAB-I (Pr-2)	No of Days/Week class allotted: 2	Semester from Date: 1/7/24 To Date: 8/11/24 No of weeks: 15
Week	Class Day	Topics
1st	1st (2P) Gr 1 & 2	<b>Determine End reactions in a simply supported beam using Parallel force Apparatus.</b> Syllabus ,Lesson Plan,Exam and Evaluation Scheme,Aim of the Experiment Theory
	2nd (2P) Gr 1 & 2	Tools and Equipment Required,Demonstration ,Determine End Reaction in a Simply Supported beam using Parallel Force Apparatus.
2nd	1st (2P) Gr 1 & 2	Taking Readings For Calculation of end Reaction by Students.
	2nd (2P) Gr 1 & 2	Viva ,Record Checking
3rd	1st (2P) Gr 1 & 2	<b>Determination of Youngs Modulus using Searle's Apparatus</b> Aim of the Expt.,Theory
	2nd (2P) Gr 1 & 2	Tools and Equipment Required,Demonstration of Expt.
4th	1st (2P) Gr 1 & 2	Determination of Youngs Modulus using Searle's Apparatus,Taking Readings For Calculation by Students.
	2nd (2P) Gr 1 & 2	viva ,Record Checking
5th	1st (2P) Gr 1 & 2	<b>Determination of Torsional Rigidity of a Shaft using Torsion Testing Machine.</b> Aim of the Expt.,Theory
	2nd (2P) Gr 1 & 2	Tools and Equipment Required,Demonstration of Expt.,Precaution and Handling of Machine Tool,Demonstration of Expt.
6th	1st (2P) Gr 1 & 2	Taking Readings For Calculation of Torsional Rigidity by Students.
	2nd (2P) Gr 1 & 2	viva ,Record Checking
7th	1st (2P) Gr 1 & 2	<b>Determination of Salients Points(Youngs Modulus ,Yield Point,Fracture Point) from Stress-Strain Curve using Universal Testing Machine.</b> Aim of the Expt.,Theory
	2nd (2P) Gr 1 & 2	Tools and Equipment Required,Demonstration of Expt.,Precaution and Handling of Machine Tool,Demonstration of Expt.

8th	1st (2P) Gr 1 & 2	Determination of Salients Points (Youngs Modulus, Yield Point, Fracture Point) from Stress-Strain Curve using Universal Testing Machine, Taking Readings For Calculation by Students.
	2nd (2P) Gr 1 & 2	viva, Record Checking
9th	1st (2P) Gr 1 & 2	<b>Determination of Hardness number by Rockwell/Vickers Hardness Testing Machine, Aim of the Expt., Theory</b>
	2nd (2P) Gr 1 & 2	Tools and Equipment Required, Demonstration of Expt., Precaution and Handling of Machine Tool, Demonstration of Expt.
10th	1st (2P) Gr 1 & 2	Determination of Hardness number by Rockwell/Vickers Hardness Testing Machine, Taking Readings For Calculation by Students.
	2nd (2P) Gr 1 & 2	viva, Record Checking
11th	1st (2P) Gr 1 & 2	<b>Determination of Toughness using Impact Testing Machine (Charpy/Izod) Aim of the Expt., Theory</b>
	2nd (2P) Gr 1 & 2	Tools and Equipment Required, Demonstration of Expt., Precaution and Handling of Machine Tool, Demonstration of Expt.
12th	1st (2P) Gr 1 & 2	Determination of Hardness number by Rockwell/Vickers Hardness Testing Machine, Taking Readings For Calculation by Students.
	2nd (2P) Gr 1 & 2	viva, Record Checking
13th	1st (2P) Gr 1 & 2	<b>Determination of Flash Point and Fire Point, Aim of the Expt., Theory</b>
	2nd (2P) Gr 1 & 2	Apparatus and Consumables Required, Precaution and Handling, Demonstratic
14th	1st (2P) Gr 1 & 2	Taking Readings For Calculation by Students, Viva, Record Checking.
	2nd (2P) Gr 1 & 2	<b>Joules Experiment, Establishment of relation between work and Heat.</b>
15th	1st (2P) Gr 1 & 2	Apparatus and Consumables Required, Precaution and Handling, Demonstratic
	2nd (2P) Gr 1 & 2	viva, Record Checking

Sushanta K. Mohanta  
Sign of Faculty