

GOVERNMENT POLYTECHNIC JAJPUR

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

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DEPARTMENT OF PRECISION MANUFACTURING ENGINEERING

LESSON PLAN (2025-26)

Discipline: PME	Semester: 3rd	Name of the Teaching faculty: Manas Kumar Mishra
Subject: PT Lab	No of Days/Week class allotted: 2	Semester from Date: 14/07/25 To Date: 15/11/25 of weeks: 18
Week	Class Day	Topics
1st	1st	Syllabus, Lesson plan, COs, Assessment process, Introduction to machine shop, safety in machine shop
	2nd	Facing and Plain Turning: Performing basic turning operations to create flat surfaces and cylindrical shapes
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	2nd	Step Turning: Creating stepped profiles on workpieces.
3rd	1st	Taper Turning: Producing tapered sections using various methods.
	2nd	Knurling: Adding textured patterns to workpieces.
4th	1st	Use of Lathe Accessories: Employing accessories such as driving plates, steady rests, and different centers for specialized operations
	2nd	Maintenance Practices: Conducting basic maintenance tasks on lathe machines, including lubrication and preventive care.
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	2nd	Record checking, Assessment, viva
6th	1st	Introduction to milling, types of milling m/c, parts and their functions
	2nd	Types of milling cutters: End mills, face mills, slab mills, and special cutters.
7th	1st	Machine setup procedures
	2nd	Work holding devices and Workpiece clamping method, Tool selection and setup
8th	1st	Operations performed: Face milling
	2nd	plain milling, step milling
9th	1st	End milling, slot milling
	2nd	Up milling and down milling
10th	1st	Gang milling, side milling
	2nd	Record checking, Assessment, viva
11th	1st	Introduction to Grinding, Grinding wheels, specifications.
	2nd	Types of grinding, Rough grinding, Precision grinding.
12th	1st	Perform operations on precision grinding- Centreless grinders
	2nd	Centreless grinders

13th	1st	Surface grinders
	2nd	Horizontal spindle reciprocating table surface grinder
14th	1st	Plain surface Grinding
	2nd	Cylindrical grinding
15th	1st	Tool angle grinding
	2nd	Record checking, Assessment, viva
16th	1st	Left out experiments if any.
	2nd	Left out experiments if any.

Nishu
14.7.21
Sign of Teacher