

LESSON PLAN FOR THE ACADEMIC SESSION 2026-27(WINTER)

Discipline: Mechanical Engg. (Group-I)	Semester: 5 th	Name of the Teaching Faculty: PRABIR KUMAR SWAIN Designation: Lecturer S-II Name of the Supporting Faculty : SUJIT KUMAR SAHU(Lab.Asst. Workshop)
Subject: Manufacturing Engg. Lab-II(PR-03)	No. of days/week class allotted:02	Semester From: 01.07.2026 to 05.11.2026 No. of weeks: 15
Week	Class Day	Theory/Practical Topics
1 ST	1 st	Expt. No-1 Drilling of three different hole sizes i.e. 10mm,9mm, and 7mm maintaining uniform distance between them on M.S. Flat surface. → Demonstration of Pillar Drilling machine and its different parts along with practical work. →Cutting of M.S. Flats of Required sizes → Filing of M.S. flat pieces as per required dimensions.
	2 nd	→Drilling of three different hole sizes i.e. 10mm 9 mm, and 7mm at a uniform distance.
2 ND	1 st	→Drilling exercise to be done. →Checking the rough copy and fair records.
	2 nd	Expt. No-2 To make a hexagon from round bar without indexing using milling machine. →Demonstration of vertical milling machine and its different parts along with practical work. →Cutting of M.S. round bar of Required size to make hexagon without indexing.
3 RD	1 st	→Milling experiment to be continued.
	2 nd	→Milling of hexagon to be completed. →Checking the rough copy and fair records.
4 TH	1 st	Expt. No-3 Dismantling and Servicing of Drilling Machine Components and Reassembly. →To dismantle drill machine chuck from its mandrel (arbor) and assemble it.
	2 nd	→To dismantle drill machine chuck from its mandrel (arbor) and assemble it. →Checking the rough copy and fair records.
5 TH	1 st	Expt. No.-4 Generation of spur gear teeth on a round bar. →Cutting of M.S. round bar(Round plate) of required size. →Turning of mentioned bar to standard size for making spur gear teeth around its circumference. →Drilling a suitable hole at the center of circular plate as per the mandrel size.
	2 nd	→Making of spur gear teeth.
6 TH	1 st	→Making of spur gear teeth.
	2 nd	→Making of spur gear teeth. →Checking the rough copy and fair record.
7 TH	1 st	Expt. No.-5 Grind Cutting Tools to Required Angles. →Demonstration of H.S.S. cutting tool bit of Lathe Machine with no cutting tip. →Grinding of H.S.S. cutting tool bit to required angles.
	2 nd	→Grinding of H.S.S. cutting tool bit to required angles. →Checking the rough copy and fair records.
8 TH	1 st	Expt. No.-6 Shaping step block: cut dovetail angle at 60°, 90°,120°. →Cutting of metal (Round bar)of size 40mm for step block preparation. →Demonstration of Shaper machine parts along with its functions.

	2 nd	→Preparation of step block.
9 th	1 st	→Preparation of step block.
	2 nd	→Preparation of step block. →Checking the rough copy and fair records.
10 TH	1 st	Job .No.-07 Grinding flat surface on a surface grinder using magnetic chuck and clamping device. →Demonstration of Surface Grinder Machine parts and its functions. →Cutting of M.S. flat for grinding of flat surface.
	2 nd	→Checking the rough copy and fair records.
11 TH	1 st	Job No: 08 Dismantling and servicing of shaper head components and reassembly. →To guide the students for dismantling and servicing of shaper head components.
	2 nd	→Reassembling of shaper head components. →Checking the rough copy and fair records.
12 TH	1 st	Job No: 09 Dismantling and servicing of Milling Machine components and reassembling. →Dismantling of overhanging arm, brace and spindle.
	2 nd	→Reassembling of overhanging arm, brace and spindle.
13 TH	1 st	→Checking the rough copy and fair records.
	2 nd	→Checking the rough copy and fair records.
14 TH	1 st	→Checking the rough copy and fair records.
	2 nd	→Calling for viva test.
15 TH	1 st	→Calling for viva test.
	2 nd	→Calling for viva test.
TOTAL NO. OF CLASSES=60		

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