

**Lesson Plan for the odd Semester started w.e.f MARCH-2023**

Name of the Teacher with Designation Prem Singh W/I

Discipline : MECH.ENGG.

Semester : 2 ND SEM

Subject : FITTING & PLUMBING SHOP-II

Lesson Plan Duration : 15 weeks (From 06 MARCH-2023 to 23/06/2023)

Work Load (Practical) per week , Practical's : 06

Week	Practical	
	Practical Day	Topic
1 <sup>st</sup>		<p>2.1 Safety Precautions of concerned shop and use of personal protective equipment (PPE), demonstration of tools, equipment, sample jobs, Best practices in the concerned shop.</p> <p>2.2 Handling of measuring instruments, Use of dial gauges and feeler gauges.</p> <p>2.3 Demonstration of various types of drills, taps and dies.</p> <p>2.4 Introduction to tapping and dieing</p> <p>2.5 file and make angle, surfaces (Bevel gauge accuracy 1 degree) make simple open and sliding fits Inside square fit, make combined open and sliding fit, straight sides</p> <p>Job I To perform drilling and reaming operation on mild steel flat.</p> <p>Job II To make assembly for V shape or square shape fit.</p>
2 <sup>nd</sup>		CONTINUED
3 <sup>rd</sup>		CONTINUED
4 <sup>th</sup>		CONTINUED
5 <sup>th</sup>		CONTINUED
6 <sup>th</sup>		CONTINUED
7 <sup>th</sup>		<p>2.6 Sliding fitting, Diamond fitting, Lapping flat surfaces using lapping plate. Application of lapping, material for lapping tools, lapping abrasives, charging of lapping tool. Surface finish importance, equipment for testing-terms relation to surface finish.</p> <p>2.7 Introduction to various types of threads (internal and external)-</p>

		<p>single start, multi-start, left hand and right hand threads.</p> <p><b>2.8 Description and demonstration of various types of drills, taps and dies. Selection of dies for threading, selection of drills, taps and reamers for tapping operations.</b></p> <p><b>2.9 Introduction to use of plumbing tools like pipe wrench , plumber vice and materials like Putty, thread, duct(Teflon) tape, epoxy resin, araldite, m-seal.</b></p> <p><b>2.10 Precautions while drilling soft metals, e.g. copper, brass, aluminium etc.</b></p> <p><b>Job III Radius form filing on the corners</b></p> <p><b>Job IV To make step assembly.</b></p> <p><b>Job V To make overhead tank assembly with GI/C-PVC pipes and joints.</b></p>
8 <sup>th</sup>		CONTINUED
9 <sup>th</sup>		CONTINUED
10 <sup>th</sup>		CONTINUED
11 <sup>th</sup>		CONTINUED
12 <sup>th</sup>		CONTINUED
13 <sup>th</sup>		Revision Job. 1,2,3,4,5
14 <sup>th</sup>		CONTINUED
15 <sup>th</sup>		CONTINUED