

WORKSHOP PRACTICES LABORATORY

Purpose: To familiarise with the basic manufacturing processes and to study the various tools and equipment. Essentially, the students should know the labour involved, machinery or equipment necessary, time required to fabricate, and should be able to estimate the cost of the product or job work.

S. No.	Experiment Name	Equipment Used
1	To study the Carpentry Processes	
2	To study and identify the carpentry tools	
3	To prepare a T-Lap Joint	Carpenter's vice, Steel ruler, Jack Plane, Tri Square, Marking Gauge, 25 mm Firmer Chisel, Cross Cut Saw, Tennon Saw, Scriber, and Mallet
4	To prepare a Dovetail Lap Joint	Carpenter's Vice, Steel ruler, Jack Plane, Tri Square, Marking Gauge, 25 mm Firmer Chisel, Cross Cut Saw, Tennon Saw, Scriber and Mallet
5	To prepare a Mortise and Tenon Joint	Carpenter's vice, Steel ruler, Jack Plane, Tri Square, Marking Gauge, 25 mm Firmer Chisel, Cross Cut Saw, Tennon Saw, Scriber and Mallet, 6 mm Mortise Chisel
6	To prepare a Corner Joint	Arc Welding machine, Mild Steel Electrodes, Electrode holder, Ground Clamp, Flat Nose Tong, Face Shield, Apron, Hand Glove, Metallic Worktable, Bench Vice, Rough Flat file, Tri Square, Steel Ruler, Wire Brush, Ball Pin Hammer, Chipping Hammer, Chisel, and Grinding Machine.
7	To study the Welding Process with Mechanism	

8	To prepare a Lap Welding Joint	Arc Welding machine, Mild Steel Electrodes, Electrode holder, Ground Clamp, Flat Nose Tong, Face Shield, Apron, Hand Glove, Metallic Worktable, Bench Vice, Rough Flat file, Tri Square, Steel Ruler, Wire Brush, Ball Pin Hammer, Chipping Hammer, Chisel, and Grinding machine.
9	To prepare a Butt-Welding Joint	Arc Welding machine, Mild Steel Electrodes, Electrode holder, Ground Clamp, Flat Nose Tong, Face Shield, Apron, Hand Glove, Metallic Worktable, Bench Vice, Rough Flat file, Tri Square, Steel Ruler, Wire Brush, Ball Pin Hammer, Chipping Hammer, Chisel, and Grinding machine.
10	To cut and Prepare V- Joint from Metal using Hex blade	Work Bench, Bench vice, Steel Rule, Calliper, Scriber and Surface Gauge, Punches, Try square, Hacksaw, Files, File Card
11	To study the Lathe Machine and its operation with one Turning Job	Material: Mild steel rod of diameter 25 mm and length 105 mm; Tools: Single point cutting tool, Vernier Calliper, Chuck key and Tool Post Key
12	To study the process of Milling	Demonstration only
13	To study the process of Drilling	Demonstration only



