

1	Name of Syllabus	<b>C.C. IN FURNITURE MAKING AND REPAIRING (303109)</b>																																									
2	Max. No's of Student	25 students.																																									
3	Duration	6 Month																																									
4	Type	Part Time																																									
5	No's Of Days / Week	6 Days																																									
6	No's Of Hours /Days	4 Hrs																																									
7	Space Required	Workshop = 300 Sq feet Class Room = 200 Sq feet TOTAL = 500 Sq feet																																									
8	Entry Qualification	7 <sup>th</sup> passed																																									
9	Objective Of Syllabus/ introduction	Introduction – the syllabus of furniture making & repairing has been evolved in such a way that after completion of course of 6 months, the student would acquire good working skill in furniture making & repairing . He would also gain confidence to operate machines such as circular saw , wood turning lathe , planning machine . <b>Objective:-</b> 1) Develop proper knowledge of carpentry tools & joints . 2) Develop skill in various types of wood joints. 3) Develop confidence and entrepreneurship by arrangement industrial visit and lectures of personnel fro m industries .																																									
10	Employment Opportunity	Self employment /wage employment /employment																																									
11	Teacher's Qualification	ITI/NCVT in carpentry																																									
12	Training System	<table><tr><th colspan="3">Training System Per Week</th></tr><tr><td>Theory</td><td>Practical</td><td>Total</td></tr><tr><td>6 Hours</td><td>18 Hours</td><td>24 Hours</td></tr></table>							Training System Per Week			Theory	Practical	Total	6 Hours	18 Hours	24 Hours																										
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	<b>THEORY - I FURNITURE MAKING &amp; REPAIRING</b>
1	Introduction to Carpenter trade General safety and work shop safety.
2	Classification of tools required for furniture and cabinet measuring and marking tools such as Fourfold Wooden foot rule. Try square, saws of different types. Description and uses.
3	Planes description, types and uses setting metal plane, function of each part, use of marking gauge.
4	Chisels Description different type and uses. Grinding & sharpening of chisels.
5	Growth of trees , cross section of tree trunk different part defects and diseases of timber.
6	Joinery, classification of joints, groups an names of framing Joints, trenching and housing Joints, Description types and uses.
7	Dovetail Joints, Description types, pin size uses etc Moisture content in wood and it effect on wood.
8	Widening and lengthening Joints description. Types and uses.
9	Lengthening joints such as table scarf etc. Seasoning of timber, Different types and advantages and disadvantages of timber.
10	Holding. Striking tools, clamps Hammer description, types & uses.
11	Special Saws, description, types and uses, file types, grade uses sharpening and setting of saw blade.
12	Description of different parts & function of Band saw. Safety precautions to be observed while using the saw.
13	Description & different parts of wood Turing Lathe, Special wood turning tool their types and functions.
14	Adhesive, types and applications Description of other raw materials such as nails, screw and sand paper, uses and market for of such materials, screw Drivers, Description and types.
15	Fabricated board such as plywood. Hence manufacturing process, Market for advantages & disadvantages of using plywood over any other solid wood.
16	-----do-----
17	Special saw, Description, types size use.
18	Portable power tools, description, type's spares and uses such as Drilling, fret saw. Drill bits and other bits Ratchet brace.
19	-----do-----
20	Manufacturing process of office Rack, estimation of material time for such article.
21	Method of preparation of surface for staining. Staining tools and equipments require for such Job. Polishing material and application.
22	Manufacturing process of office table, estimation of materials and timing, process of making surface finishing & polishing process. Hinges, types and uses.
23	-----do-----
24	Repairing and reconditioning of old furniture.
25	REVISION

SR.NO	PRACTICAL - I WOOD JOINT
1	Introduction to the trade; equipments & Machineries in workshop.
2	Use of measuring tools and marking tools, Reading of steel rule. Marking of work with help of try square & steel rule. Sawing wood along and across the grains & curve cutting. Use of bench hook and bench vice.
3	Planning practice. Planning to the size, planning of end grains, and proper technique of planning wood for the end.
4	Chiseling practice demonstration and use of different types of chisels.
5	Joints Demonstration & making framing Joints, Halving Joints.
6	Practice of tenon Joint plain and Haunch bridge Joints.
7	Demonstration of making Dovetail Joints single and common dovetail, lapped dovetail.
8	Demonstration on making of Butt Joints , (Rebate) Joints and tongue & Groove Joints.
9	Demonstration of different scarf joints, table scarf.
10	Making of small frame involving some framing joint such as miter and tenon and Mortise Joints.
11	Use of special Saw, Compass saw framing saw, demonstration and practical with these saws.
12	Band saw machine, removing & refitting saw blade. Cutting wood straight, angular and curve with band saw.
	<b>PRACTICAL - II WOODEN ARTICLE</b>
13	Making of simple chisel and file handles on wood working Lathe machine.
14	Making simple Job such as office tray, Table Rack etc.
15	Making of job such as tee poy, fixing of Sunmica, Sketching practice (free hand) of simple articles by isometric View.
16	-----do-----
17	Use of special saws, compass saw framing saw flat saw cutting of different design with help of such saws.
18	Making of Layout of stool, calculation of timber required for stool.
19	-----do-----
20	Making Layout of office Rack. Using small batten with simple Joints.
21	Making of small box (like first Aid) using of Sunmica or making of surface polishing process.
22	Making layout of office table. Making surface finishing & polishing.
23	-----do-----
24	Repair work of old furniture.
25	REVISION

## LIST OF TOOLS AND EQUIPMENTS

Sr.No.	NAME AND DISCRIPTION OF TOOLS	REQ.QTY.
	<b>A) Trainees Tool Kit</b>	
1.	Four fold foot rule-600 mm.	10 nos.
2.	Carpenter Screw driver-300 mm.	08 nos.
3.	Try square-200 mm.	10 nos.
4.	Hand saw-450 mm.	10 nos.
5.	Tenon saw-300 mm.	08 nos.
6.	Firmer chisel 3 mm.to 20mm. By 3mm.	08 nos.
7.	Mortise chisel 3 mm. to 20 mm. by 3 mm. set of 6.	08 nos.
8.	Claw hammer – 400 gms.	08 nos.
9.	Jack, iron-350 mm. X 45 mm. cutter.	10 nos.
10.	Plane smoothing iron – 225 mm X 45 mm. cutter.	10 nos.
11.	File 3 corner 125 mm. slim taper.	08 nos.
12.	Gauge marking &Practice combine – 150 mm	08 nos.
13.	Tape measuring 3 mtrs metal.	05 nos.
14.	Pincer nail – 150 mm.	08 nos.
15.	Punch nail – 3 mm X 100 mm.	05 nos.
16.	Hammer ball pen – 400 gms.	05 nos.
17.	File Rasp- 200 mm.	05 nos.
18.	Scriber – 150 mm.	05 nos.
19.	File flat -300 mm. 2 <sup>nd</sup> cut.	05 nos.
20.	File Half Roun – 300 mm.. 2 <sup>nd</sup> cut.	05 nos.
21.	Store oil – 200 mm X 30 mm X 25 mm.	05 nos.
22.	Spring divider -150 mm.	05 nos.
23.	Mallet wooden	10 nos.
24.	Oil stone 200 mm X 50 mm X 25 mm.	05 nos.
	<b>B) General out fit</b>	
1.	Work Bench -1500mm X 750mm.	5 nos.
2.	Carpenter's vice -325mm. Jaw	08 nos.
3.	Steel Almira with shelves-1980mm X 910mm X 4800mm Depth.	1 nos.
4.	Trainee's Locker with 20 pigeons	1 nos.
5.	Wing compos – 300 mm.	4 nos.
6.	Trammel points with beam.	4 nos.
7.	Spirit level metal – 200 mm.	1 nos.
8.	Rip saw - 600 mm.	4 nos.
9.	Compass saw – 400 mm.	4 nos.
10.	Key hole saw – 250 mm.	2 nos.
11.	Fret saw with blade - 200 mm.	1 nos.
12.	Plane Rebate with utter – 150 mm X 12 mm. cutter.	2 nos.
13.	Plane Rounding with cutter – 150 mm X	2 nos.
14.	Plane plough 150 with cutter 3mm to 12mm	2 nos.
15.	Spoke shave plane -50 mm. by 2mm. cutter.	4 nos.
16.	Gauge chisel -6mm t 18mm X3mm set of 5 (Firmer and scribing)	4 sets each
17.	Screw Driver, carpenter-450 mm.	4 nos.
18.	Hand drill M/c - 6mm. capacity	4 nos.
19.	Ratchet brace-250 mm.	1 nos.
20.	Rose bit -20 mm.	2 nos.
21.	'G' clamp -150 mm.	4 nos.
22.	'G' clamp -200 mm.	4 nos.
23.	'T' clamp-1.25 mm.	2 nos.

24.	'T' clamp -1.75 mm.	2 nos.
25.	Instructor's Table.	1 nos.
26.	Chair with arm.	1 nos.
27.	Black board – 1800 mm X 1200 mm.	1 nos.
28.	Surface plate – 900 mm X 900 mm.	1 nos.
<b>C) General Installation.</b>		
1.	Wood turning Lathe machine, 150 mm. centre Height, 1.75 m. Bed with turning tool set, Chuck centre and face plate.	1 nos.
2.	Band saw motorized with provision of Joining the saw blade (Narrow type)	1 nos.
3.	Bench Grinder Double Ended – 200 mm. wheel.	1 nos.
4.	Drill machine -12mm capacity.	1 nos.
5.	Circular saw machine -300mm. Blade.	1 nos.
6.	Portable drill Machine -12 mm.	1 nos.
7.	Disk and bobbin sander Motorized.	1 nos.

**Reference book s:-**

- 1) Carpentry theory :- BAWA
- 2) Work shop tech. :- Hajara chaudahri

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