

**MAHARASHTRA STATE BOARD OF VOCATIONAL EDUCATION EXAMINATION, MUMBAI**

1	Name of Syllabus	<b>C. C. IN CABINET AND FURNITURE MAKING (303129)</b>						
2	Max. No's of Student	25 Students						
3	Duration	6 Months						
4	Type	Part Time						
5	No's Of Days / Week	6 Days						
6	No's Of Hours /Days	4 hrs.						
7	Space Required	1) Workshop = 600 sq feet 2) Class Room = 200 sq feet TOTAL = 800 sq feet						
8	Entry Qualification	8 <sup>th</sup> Pass						
9	Objective Of Syllabus/ introduction	<p>Introduction – the syllabus cabinet &amp; furniture making has been evolved in such a way that after completion of course of 1 year , the student would acquire good working skill in cabinet &amp; furniture making. He would also gain confidence to operate machines such as circular saw , wood turning lathe , planning machine .</p> <p><b>Objective:-</b></p> <p>1) Develop proper knowledge of carpentry tools &amp; joints .</p> <p>2) Develop skill in various types of wood joints.</p> <p>3) Develop confidence and entrepreneurship by arrangement industrial visit and lectures of personnel from industries .</p>						
10	Employment Opportunity	The Student may start his own business / May get employment in furniture making company/shop						
11	Teacher's Qualification	ITI / NCVT In Carpentry						
12	Training System	<b>Training System Per Week</b>						
		Theory		Practical		Total		
		6hrs		18hrs		24hrs		
13	Exam. System	Sr. No.	Paper Code	Name of Subject	TH/PR	Hours	Max. Marks	Mini. Marks
		1	<b>30312911</b>	Carpentry	TH - I	3 hrs.	100	35
		2	<b>30312921</b>	Wooden Turning and Joints	PR - I	3 hrs.	100	50
		3	<b>30312922</b>	Cabinet Furniture Making	PR - II	6 hrs.	200	100
				TOTAL			<b>400</b>	<b>185</b>



**Syllabus :- C. C. IN CABINET AND FURNITURE MAKING****THEORY - I Carpentry**

<b>Sr No</b>	<b>Topics Name</b>
<b>1</b>	Introduction to the institute and in particular to the Carpentry Trade safety precautions Observed by the trainees
<b>2</b>	Basic Mathematical Units & Calculation
<b>3</b>	Sketches Of Geometrical Figure , Joints etc
<b>4</b>	Notes on common hand tools and making tools.
<b>5</b>	Care and maintenance of hand tools including tempering
<b>6</b>	Timber varieties, & their properties defects & diseases preservation. Notes on available forms of timber in market & identification and their uses.
<b>7</b>	Seasoning and preservation. Notes on available forms of timber in market and identification and their uses.
<b>8</b>	Remedies for defective timber
<b>9</b>	<u>Joinery Work</u> common in joinery work & properties and uses of different joints uses in furniture and cabinet making.
<b>10</b>	uses in furniture and cabinet making.
<b>11</b>	Special joints for paneling etc.
<b>12</b>	uses and applications, Application, methods and uses of Tongue and glove, dowels and special tools required for such jobs.
<b>13</b>	Artificial and prepared materials used in carpentry, their varieties properties, uses, and application in different jobs.
<b>14</b>	Notes on functions and fixing accessories like, hinges, castors, slides, handles, fasteners, locks, latches etc.,
<b>15</b>	Properties, uses and applications of adhesives (notes on) notes on surface finishing its properties, uses and applications. Notes on surface finishing materials, uses, properties and applications. Notes on metallic fixing and fastening materials their uses, application and identification in market-screws, nails, pegs, nut-bolts, etc.,
<b>16</b>	Notes on varieties of power, operated hand tools for various jobs their operation, care and maintenance
<b>17</b>	Notes on wood working machines with uses, care and maintenance.
<b>18</b>	Notes on, glaziers work, shutters, flaps, lids, lockers, doors & fittings.
<b>19</b>	Notes on making jigs, templates, saddles etc., use and application of the same.
<b>20</b>	Notes on construction & corrections of furniture etc., for both wooden and laminated articles
<b>21</b>	Notes on repairs of articles in common use.
<b>22</b>	Estimating cost of material required for jobs.
<b>23</b>	Estimation of repair jobs, (material requirements).
<b>24</b>	<u>Booking of jobs</u> – Requirements for job Booking, whether possible to undertake certain jobs by considering available equipments, material & skill, analysis of processes in making certain jobs. Estimate of including total cost finishing. Revision.

## **Practical - I - Wooden Turning & Joints**

<b>Sr No</b>	<b>Topics Name</b>
<b>1</b>	Use of different measuring and marking tools for the carpenter particularly for cabinet and furniture maker.
<b>2</b>	Sharpe ring of tools like firmer chisel, mortise chisel, planer blades etc. and Drilling holes, including continuous chain drilling.
<b>3</b>	Simple operations like cutting with saw in different manners and ripping.
<b>4</b>	Planning practice and making planks to size and level Application of marking and mortise gauges.
<b>5</b>	Marking for tennoning by using mortise gauge. Try square and other marking materials.
<b>6</b>	Marking for mortise perpendicular to each member.
<b>7</b>	Marking joints in angular positions. Use of carpenter vice.
<b>8</b>	Preparing tongue and glove dowe fixing of panels and boards b packet brewing.
<b>9</b>	Various Type of Joints
<b>10</b>	Job exercises, involving simple joints, by using timber and formed materials.
<b>11</b>	Surface finishing.
<b>12</b>	Operate power hand tools such as disc/band sander, tongue and groove, saw, drilling, etc.,

## **Practical – II Cabinet Furniture Making**

<b>13</b>	Operate simple wood working machines to prepare simple jobs.
<b>14</b>	Marking for jobs involving cutting at curvatures, profile marking and shaping jobs to size and position by using different files.
<b>15</b>	Making of jobs like frames for posters, photo, various types of Furniture's, cabinets etc.
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## **Project Report**

The project Report for starting his own Enterprises/ Venture/Business should be prepared by each student

## **LIST OF TOOLS AND EQUIPMENT.**

1.	Riles two fold steel	24"	4 Nos.
2.	Caliper inside	6"	1 No.
3.	Caliper outside	6"	4 Nos.
4.	Marking knife		3 Nos.
5.	Screw driver (Hat bhide)	12	4 Nos.
6.	Square, try	8"	4 Nos.
7.	Saw hand	18"	8 Nos.
8.	Saw, tenon	12"	8 Nos.
9.	Chisels firmer 1/8" <u>to 1"</u> By 1/8" set of 8		
10.	Mallet 1 Kg. with handle	1	06 Nos.
11.	Hammer Cross Pain Carpenter 1/2 lbs. with handle.		4
12.	Plane Jack 14" Iron Stock 2" cutter.		8
13.	Plane smoothing Iron 1¾ " outer		8
14.	Plane jack wooden stock 2" cutter		4"
15.	File 3 corner or triangular 2 <sup>nd</sup> out 5"		15"
16.	Chisel mortice 1/8" to 3/4" by 1/4" set of 6		4 sets
17.	Gauge, Mortice 1/8" and marking		8+8
18.	Stone oil 8"x2"x1".		2
19.	Trammel		2 Nos.
20.	Clamp 6"		4 "
21.	Saw set Stanley type		4 "
22.	Saw compass	16"	4 "
23.	Saw hand	26"	2 "
24.	Saw vice	10m	1
25.	Tape measuring steel	-	1"
26.	Pincer 6"		8"
27.	Compass Wing 12"		4"
28.	Goggles pair		4"
29.	Plane rabbet adjustable with cutter set.		8"
30.	Plane grooving 1/4" 1/8" cutter etc.		4 Nos.
31.	Plane plough fitted with screw and set of cutters		4 "
32.	Hammer, claw 1½" Lbs.		4 "
33.	Screw driver 16" flat.		4 "
34.	Screw driver 9"		8 "

35.	File rasp bastered 10"	8 "
36.	Bit ratchet brace 10"	4 "
37.	Bit centre ¼ , 5/16, 3/8" and 1" set of	4 sets
38.	Auger ½" 5/8", 3/4", 7/8, & 1 set of 5	3 sets
39.	Miter Box 24" x 24"	4 Nos.
40.	Spoke shave 2" cutter	8 "
41.	Punch nail	6 "
42.	Scriber 6"	2 "
43.	Centre punch	2 "
44.	Chisel cold flat 3/4"	4 "
45.	File flat rough 14"	4 "
46.	File half round	4 "
47.	File round 2 <sup>nd</sup> cut	
48.	Working table 3' x 2' x 3' height	4 "
49.	Hand drill 1/4" capacity	2 "
50.	Twist drill 1/8"	8 "
51.	Cramp, bar carpenter 4ft.	4 "
52.	Cramp " 6 ft.	4 "
53.	Steel Almirah 6'x4'x18"	1
54.	Steel lockers with 8 drawers (Standard size)	2
55.	Fire buckets	4
56.	Fire extinguisher	2
57.	Bench grinder 6" wheels	
58.	Planer 12"	1
59.	Saw circular 12" dia with Motor.	
60.	Lathe, wood working with set of cutters.	1
61.	Number punch 1/4"	-

### Reference Books

Sr No	Books Name	Authors'
1	Carpentry completer course	S.H.Bawa
2	Workshop Tech. I	Hajara Chaudhari

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