

**SYLLABUS
FOR**

ORNAMENTAL WOOD CARVING

**UNDER CODE OF REGULATION FOR
INDUSTRIAL SCHOOLS**

**FOR APPROVAL
DEPARTMENT OF EMPLOYMENT AND
TRAINING,
GUINDY, CHENNAI - 600032**

SYLLABUS COMMITTEE MEMBERS :

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TRADE : ORNAMENTAL WOOD CARVING
SYLLABUS

Name of the Trade	ORNAMENTAL WOOD CARVING
Qualification	VIII th STD Passed
Duration	Two Years
Number of Trainees	20
No. of Practical Hours	32 Hrs / Week
No. of Theory Hours	8 Hrs / Week
No. of Workshop Cal & Sci Hours	2 Hrs / Week
No. of Engg. Drawing Hours	2 Hrs / Week
Space Required (In Sq.m)	Practical Hall : 600 Sq.ft. Theory Class : 200 Sq.ft
Power required	4 Kw

No. of Tools & Equipment

$$22 + 30 + 5 = 57$$

1ST YEAR SYLLABUS

Weeks	Theory / Maths / Drawing	Practical
01 to 10	<p>Importance of the Trade in the industrial development of the country. Introduction to the General safety, causes of the accident and its remedies Personal Duties of trainees, Discipline, relationship, medical facilities and other extra curricular activities of the institute.</p> <p>Safety precautions to carpentry and carving hand tools, work shop discipline and safety first aid etc. Introduction to the hand tools, classifications, Names and uses. Measuring and marking and testing of tools – types, sizes, used etc.</p> <p>Growth of a tree, Cross sections / copier trunk, Parts their formation and function Identification of timbers</p> <p>Introduction of drawing types of drawing different types of lines used in drawing. Different types of instruments used in drawing study</p>	<p>Familiarisation with the Institute, work shop sections and general places and wood working section and wood working machine, shop, Introduction to the safety rules in shop floor and to the fire fighting equipments.</p> <p>Identification of hand tools, demonstration and using of measuring and marking tools.</p> <p>Sawing practices – using different types of saws.</p> <p>Identification of timbers, showing defects knots shakes grains etc.</p>
11 to 16	<p>Study about different types of sand paper and polishing.</p> <p>Explaining different types of sand papers and their utilization.</p> <p>System of Units – British, Metrie and SI units for length, are and volume etc.</p> <p>Study on drawing in the centre portion, measuring, explaining measurement details and drawing trial picture.</p>	<p>Study about How to draw free hand drawing and traditional drawings.</p> <p>Study the method of drawing square shape, rectangular shape, triangular shape with light and shade.</p> <p>Practical training of sand papering by using sand papers NO. 80, 100, 120 on 12" size wood. Verifying surface by using tri-square, scale and correcting the surface.</p>

17 to 18	Study the advance type of free hand drawing	Free hand drawing
19 to 20	Study about the use of wood filler after sand papering. Explaining process of closing minute holes of the wood so as to safeguard the wood from natural defects.	Practical training to clean the sand prepare wood piece and applying wood filler by using plate piece.
21	Revision	
22 to 25	Introduction of polishing of wood by various type of wood polishes. Explaining the process of wood polishing. Explaining process of polishing by using steel wool.	Preparation sponge – pack and polishing Two Coats on finished wood surface.
26 to 28	Study about different types of Padmants and decorating the ancient pillar with padmants. Explaining the methods of measurement to draw the designs.	Traditional drawing four petals padmam. Four petals padmam with corner design.
29	Nature drawing, drawing trial pictures of various natural plants like plantain tree etc.	Drawing the natural plants by going it's places and seeing practically in shadows method.
30 to 32	Introduction of Carpentry works. Study on various types of wood and knowing wires of the wood and handling the tools. Study the method of measuring wood.	Sharpening the chisels by using oil and stone powder on the wood.
33 to 34	Mensuration Calculation of timber required for a work. Calculating area, volume of geometrical shapes.	Marking the wood and cutting by using hand saw. Finishing the wood by using hand plainer.
35 to 37	Teaching the preparation of square design, running design with single point, double points and three points' leaves	Traditional drawing 16 th petals square design with corner design.
38 to 40	Joints. Explanation of measurement methods for doing the work of half groove joint.	Practical training of half- groove joint
41	Drawing nature creepers, flowers of leaves and converting into design.	Nature drawing converting nature drawing to traditional drawing
42	Study tour	

43 to 48	Teaching of joint : Groove joint (or) L. Joint. Explaining the measurement methods.	Creating groove joint with proper measurements by using hand chisels.
46 to 48	Decorating the rectangular object with designs	Traditional drawing running design
49 to 51	Advance studies of wood filler colour mixing different types of polishes Explaining method of using portable drilling machine and sander.	Colour mixing – practical. Practical training of using portable drilling machine and sander.
52	Revision	

SECOND YEAR

Weeks	Theory / Maths / Drawing	Practical
01	Review of 1st year topics Theory Topics Maths topics Drawing topics	Safety measures
02 to 03	Traditional Drawing : Teaching the use of Annam bird in the Art field which is prepared beautifully by the skill of imagination	Drawing Annam bird again by using the own imagination of the trainees by changing "Karukkany"
04 to 06	Teaching the method sand papering on sculptures and explaining the designs of sculptures	Practical training of sand papering on "Eight petals round shaped lotus" made by wood.
07 to 08	Nature drawing- Tall coconut tree and neem tree. Explaining how to draw with natural appearance	Drawing by seeing the trees practically in the size of 7 cm × 5.5 cm in the process of light and shade
09 to 11	Explaining the appearance of lioness fixed in pillars of the ancient temples	Drawing : Simham Imaginary : Simham
12 to 15	Sandpapering advanced sand papering four petals flower design	Practical preparation of four petals flower and applying wood filler and polishing suitably
16 to 19	Explanation on drawing elephant picture	Traditional drawing elephant. Imaginary elephant
29	Nature drawing – Bunch of grapes prepared by plaster of Paris	Light and shade drawing "Bunch of Grapes" Light and shade drawing "Dove" Bird.
21 to 23	Sand papering II stage, Polishing II stage	Four petals flower II model, sand papering and polishing
24 to 25	Introduction of portable router machine and portable Jigsaw machine. Introduction of wood carving and explaining carving works in details.	Practical on using the machine for art works. Explain 24 varieties chisels practically and their usage.
26 to 28	Explaining the appearance of Maharam	Traditional drawing Maharam – Imaginary Maharam

29 to 30	Explaining the method drawing for the conversion of full size into half size.	Drawing the Annam bird in light and shade process by referring the sculpture made by plaster of Paris and converting it into traditional drawing.
31 to 33	Sharpening the chisels by using oil stone and water emery.	Practical of sharpening the chisels of different sizes and shapes by using oil stone and water emery.
34 to 37	Teaching the methods of using various chisels on various types carving works.	Carving practical eight petals round shaped lotus.
38 to 40	Teaching II stage of carving works	Carving practical four petals flower square design
41 to 42	Teaching the method of drawing "Nandhi" which are seen in ancient temples.	Nandhi exercise. Imaginary Nandhi. Drawing the man of work in the method of light and shade.
43 to 45	Carving III stage which contains minute work and sophisticated designs	Practical carving III stage flower.
46	Study tour	
47 to 50	I. Introduction on designs of international styles III. Introduction of modern machineries usable for carving works	Drawing the designs of International styles
51 to 52	Revision	

List of Tools & Equipments for a unit or Batch of 20 Trainees wood carving for me unit

TRAINEES KIT

Sl.No.	Description	Quantity
1.	Rule Sixs 1 meter (inch and mm)	20
2.	Marking knife, 200mm length	20
3.	Carpentry square 200mm	20
4.	Square, bevel 50mm	20
5.	Carpenter marking gauge	20
6.	Carpenter mortice gauge	20
7.	Wooden Hand Planer	20
8.	Chisel, firmer, (bevel edge) 6, 10, 15mm (3 Nos.)	20
9.	Chisel, mortice 6, 10, 15mm (3 Nos.)	20
10.	Screw driver 300mm (cabinet maker)	20
11.	Carvers mallet	20
12.	Hammer, claw (500 gr)	20

CARVING CHISELS

13.	Straight and bend chisels	20
14.	Straight bend and curve gauges	20
15.	'V' or parting tool	20
16.	Chip carving knife	20
17.	Panthu Chisels	20
18.	Suruthu Chisels	20
19.	Kuzhaivu Chisels	20
20.	Thekil Chisels	20
21.	Nagah Chisels	20
22.	Keelre Chisels	20

List of Tools & Equipments of Ornamental wood carving for one unit

GENERAL OUTFIT

Sl.No.	Description	Quantity
1.	Measuring Tape 3 meter	1 No.
2.	Oil stone (carboundam) universal silicon carbide cambination rough and fine) 200 x 50 x 25mm	4 Nos.
3.	Wing camposs 300mm	2 Nos.
4.	Spirit level 300mm	2 Nos.
5.	Rip saw 600mm	4 Nos.
6.	Cross cut saw (600mm)	4 Nos.
7.	Fret saw frame and blade 150mm and 300mm	2 Nos.
8.	Router plane	4 Nos.
9.	Moulding plane set	4 Nos.
10.	Gauge chiesel finer 6mm, 10, 12, 16, 20mm	1 No.
11.	Pincer 50mm	1 No.
12.	File half round wood RASP 300mm	4 Nos.
13.	Needle file 100mm	2 Nos.
14.	Hand drill 6mm	1 No.

Sl.No.	Description	Quantity
15.	'C' Clamp 150mm	1 No.
16.	'T' Bar Gamp 4' Lg	1 No.
17.	Carpenter vice 250mm jaw	1 No.
18.	Carving tool set	4 Set
19.	Carpenters work bench 2400 x 600 x 800mm	1 No.
20.	Oil can	4 Nos.
21.	Steel lockers 20 compartment with individual lock	1 No.
22.	Steel almirah with shelves 1980 x 910 x 480mm	1 No.
23.	Instructor table	1 No.
24.	Instructor chair	1 No.
25.	Stool	1 No.
26.	Black Board with easel	1 No.
27.	Materials rack	1 No.

28.	Spanner Double Ended set of 14	1 Set.
29.	Fire extinguisher	2 Nos.
30.	Fire buckets	4 Nos.

General Installation and Accessories

Sl.No.	Description	Quantity
1.	Jigsaw Machine	1 No.
2.	Portable Router – Different Type	1 No.
3.	Hand Drill machine	1 No.
4.	Portable Sander	1 No.
5.	Spray Gun	1 No.