

### GOVERNMENT OF INDIA MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP DIRECTORATE GENERAL OF TRAINING

## **COMPETENCY BASED CURRICULUM**

# **WOOD CARVING ARTISAN**

(Duration: One Year)

## **CRAFTSMEN TRAINING SCHEME (CTS)**

**NSQF LEVEL- 3.5** 



## **SECTOR – HANDICRAFTS & CARPETS**



# **WOOD CARVING ARTISAN**

## (Traditional Trade)

(Designed in 2024)

Version: 1.0

## **CRAFTSMEN TRAINING SCHEME (CTS)**

## NSQF LEVEL – 3.5

Developed By

Ministry of Skill Development and Entrepreneurship

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S No.	Topics	Page No.
1.	Course Information	1
2.	Training System	2-5
3.	Job Role	6
4.	General Information	7-8
5.	Learning Outcome	9
6.	Assessment Criteria	10-12
7.	Trade Syllabus	13-27
8.	Annexure I (List of Trade Tools & Equipment)	28-30
9.	Annexure II (List of Trade experts)	31-32
10.	Abbreviations	33



## **1. COURSE INFORMATION**

During the one-year duration of Wood Carving Artisan trade a candidate is trained on professional skill, professional knowledge & Employability skill related to job role. In addition to this a candidate is entrusted to undertake project work and extra- curricular activities to build up confidence.

Wood Carving is an art of making the decorative items from the suitable type of wood by hands with the help of varied manual hand carving tools or power portable carving tools. The broad components covered under Professional Skill subject are as below: -

- Knowledge of making the selection of suitable type of wood for wood carving.
- Knowledge of doing different carpentry operations on wood in carpentry shop as per need prior to carving.
- Measurement and estimation of wood for a desired job.
- Setting of carving vice in practical workshop.
- Selection of proper tools, equipment and machinery for a proper work.
- Safe working practices at work place.
- Knowledge of using wood carving tools, equipment, machinery safely and efficiently by following safety precautions.
- Knowledge of checking the moisture of wood by using either electric moisture meters or by using Oven-dry method.
- Knowledge of making the sketches/drawings of various motifs/designs of carving on drawing sheets/wood either by hand or by auto-cad.
- Knowledge of carving on wood either by manual hand tools or by small electric hand tools/machinery.
- Knowledge of making the different interesting wood carving items ranging from small decorative item to big furniture item.
- Knowledge of making the items marketable.
- Knowledge of becoming the successful entrepreneurs.



#### 2.1 GENERAL

The Directorate General of Training (DGT) under Ministry of Skill Development & Entrepreneurship offers a range of vocational training courses catering to the need of different sectors of the economy/ labour market. The vocational training programs are delivered under the aegis of Directorate General of Training (DGT). Craftsman Training Scheme (CTS) with variants and Apprenticeship Training Scheme (ATS) are two pioneer programs of DGT for strengthening vocational training.

Wood Carving Artisan trade under CTS is one of the newly designed courses. CTS courses are delivered nationwide through a network of ITIs. The course is of one-year duration. It mainly consists of Domain area and Core area. In the Domain area (Trade Theory and Practical) impart professional skills and knowledge, while the core area (Employability Skill) imparts requisite core skills, knowledge, and life skills. After passing out the training program, the trainee is awarded National Trade Certificate (NTC) by DGT which is recognized worldwide.

#### Candidates broadly need to demonstrate that they are able to:

- Read and interpret technical parameters/ documentation, executes work, identify necessary materials and tools.
- Perform tasks with due consideration to safety rules, accident prevention regulations.
- Apply professional knowledge & employability skills while performing the job and maintenance work.
- Check the work as per drawing and specification, identify and rectify faults/defects.
- Document the parameters related to the task undertaken.

#### **2.2 PROGRESSION PATHWAYS**

- Can join Wood Carving Industry/ handicraft department as Craftsman Wood Carving and will progress further as Senior Craftsman Wood Carving, Supervisor and can rise up to the level of Manager.
- Can become Entrepreneur in the related field.
- Can join Apprenticeship programs in different types of industries leading to a National Apprenticeship certificate (NAC).
- Can join Crafts Instructor Training Scheme (CITS) in the trade for becoming an instructor in ITIs.
- Can join Advanced Diploma (Vocational) courses under DGT as applicable.



#### **2.3 COURSE STRUCTURE**

Table below depicts the distribution of training hours across various course elements during a period of one-year: -

S No.	Course Element	Notional Training Hours
1	Professional Skill (Trade Practical)	840
2	Professional Knowledge (Trade Theory)	240
3	Employability Skills	120
	Total	1200

Every year 150 hours of mandatory OJT (On the Job Training) at nearby industry, wherever not available then group project is mandatory

On the Job Training (OJT)/ Group Project	150
Optional Courses (10th/ 12th class certificate along with ITI certification or add on short term courses)	240

Trainees of one-year or two-year trade can also opt for optional courses of up to 240 hours in each year for 10th/ 12th class certificate along with ITI certification or add on short term courses.

#### 2.4 ASSESSMENT & CERTIFICATION

The trainee will be tested for his skill, knowledge and attitude during the period of course through formative assessment and at the end of the training programme through summative assessment as notified by the DGT from time to time.

a) The Continuous Assessment (Internal) during the period of training will be done by **Formative Assessment Method** by testing for assessment criteria listed against learning outcomes. The training institute has to maintain an individual trainee portfolio as detailed in assessment guideline. The marks of internal assessment will be as per the formative assessment template provided on <u>www.bharatskills.gov.in</u>

b) The final assessment will be in the form of summative assessment. The All-India Trade Test for awarding NTC will be conducted by Controller of examinations, DGT as per the guidelines. The pattern and marking structure is being notified by DGT from time to time. **The learning outcome and assessment criteria will be the basis for setting question papers for final assessment. The examiner during final examination will also check the individual trainee's** 



profile as detailed in assessment guideline before giving marks for practical examination.

#### **2.4.1 PASS REGULATION**

For the purposes of determining the overall result, weightage of 100% is applied for six months and one year duration courses and 50% weightage is applied to each examination for two years courses. The minimum pass percent for Trade Practical and Formative assessment is 60% & for all other subjects is 33%.

#### 2.4.2 ASSESSMENT GUIDELINE

Appropriate arrangements should be made to ensure that there will be no artificial barriers to assessment. The nature of special needs should be taken into account while undertaking the assessment. Due consideration should be given while assessing for teamwork, avoidance / reduction of scrap / wastage and disposal of scrap / waste as per procedure, behavioral attitude, sensitivity to the environment and regularity in training. The sensitivity towards OSHE and self-learning attitude are to be considered while assessing competency.

Assessment will be evidence based comprising the following:

- Job carried out in labs/workshop
- Record book/ daily diary
- Answer sheet of assessment
- Viva-voce
- Progress chart
- Attendance and punctuality
- Assignment
- Project work
- Computer based multiple choice question examination
- Practical Examination

Evidences and records of internal (Formative) assessments are to be preserved until forthcoming examination for audit and verification by examining body. The following marking pattern to be adopted for formative assessment:

Performance Level	Evidence	
(a) Marks in the range of 60%-75% to be allotte	ed during assessment	
For performance in this grade, the candidate	Demonstration of good skills and accuracy	
should produce work which demonstrates	in the field of work/ assignments.	
attainment of an acceptable standard of	<ul> <li>A fairly good level of neatness and</li> </ul>	



craftsmanship with occasional guidance, and due regard for safety procedures and practices	<ul> <li>Occasional support in completing the task/ job.</li> </ul>	
(b) Marks in the range of 75%-90% to be allott		
For this grade, a candidate should produce work which demonstrates attainment of a reasonable standard of craftsmanship, with little guidance, and regard for safety procedures and practices	<ul> <li>Good skill levels and accuracy in the field of work/ assignments.</li> <li>A good level of neatness and consistency to accomplish job activities.</li> <li>Little support in completing the task/job.</li> </ul>	
(c) Marks in the range of more than 90% to be	allotted during assessment	
For performance in this grade, the candidate, with minimal or no support in organization and execution and with due regard for safety procedures and practices, has produced work which demonstrates attainment of a high standard of craftsmanship.	<ul> <li>High skill levels and accuracy in the field of work/assignments.</li> <li>A high level of neatness and consistency to accomplish job activities.</li> <li>Minimal or no support in completing the task/ job.</li> </ul>	



**Wood Carver, Hand;** carves floral and artistic designs on wooden surfaces for decorative purposes using fine chisels and hand tools. Studies sketches and dimensions of ornamental designs to be carved. Finishes and smoothens required portion of wood surface, visualises finished product and transfers design on wood surface by tracing over drawing and carbon paper with pencil or stylers. Clamps furniture part or wood piece in vice and roughs out design by cutting along marked lines on wood using chisels and mallet. Selects carving chisels, gravers, gauges, files etc. and determines sequence of their use according to intricacy of design. Cuts, trims or touches up roughed out design to desired finish using hand tools. Taps stippling tool with mallet to stipple design (dotted work). Verifies dimensions of carving with foot rule and dividers and makes modifications if necessary. Makes holes to provide for inlay work, if necessary, and smoothens carved designs by rubbing with sand papers of different grades. May polish finished article. May draw full size design from sample or imagination for tracing on wood. May design and sharpen carving tools.

#### Reference NCO-2015: -

a) 7522.1200 – Wood Carver, Hand

#### **Reference NOSs:**

a)	HSC/N9467	f)	HSC/N9472
b)	HSC/N9468	g)	HSC/N9473
c)	HSC/N9469	h)	HSC/N9474
d)	HSC/N9470	i)	HSC/N9475
e)	HSC/N9471	j)	HSC/N9476



## **4. GENERAL INFORMATION**

Name of the Trade	WOOD CARVING ARTISAN	
NCO - 2015	7522.1200	
NOS Covered	HSC/N9467, HSC/N9468, HSC/N9469, HSC/N9470, HSC/N9471, HSC/N9472, HSC/N9473, HSC/N9474, HSC/N9475, HSC/N9476	
NSQF Level	Level-3.5	
Duration of Craftsmen Training	One Year (1200 Hours + 150 hours OJT/ Group Project)	
Entry Qualification	Passed 10 <sup>th</sup> class examination	
Minimum Age	14 years as on first day of academic session.	
Eligibility for PwD	LD, CP, LC, DW, AA, LV, HH, AUTISM, SLD	
Unit Strength (No. of Student)	20	
Space Norms	96 Sq. m	
Power Norms 5 KW		
Instructors Qualification	n for:	
(i) Wood Carving Artisan Trade	B.Voc/Degree in wood technology from recognized Engineering College/ university with one-year experience in the relevant field. OR Three years Diploma in wood technology from a recognized board of education with two years' experience in the relevant field. OR NTC/ NAC passed in the trade of "Wood Work Technician"/"Carpenter"/ "Wood Carving Artisan" with three years' experience in the relevant field. OR Registered Wood Carving Artisan of handicraft department of Central/ State govt. with 05 years' experience. Essential Qualification:	
Relevant Regular / RPL variants of National Craft Instructor (NCIC) under DGT. Note: - Out of two Instructors required for the unit of		



	must have Degree/Diploma and other must have NTC/NAC Qualification or Registered Artisan. However, both of them must possess NCIC in any of its variants.		
(ii) Employability Skill	MBA/ BBA / Any Graduate/ Diploma in any discipline with Two years'		
	experience with short term ToT Course in Employability.		
	(Must have studied English/ Communication Skills and Basic Computer at 12th / Diploma level and above)		
	OR		
	Existing Social Studies Instructors in ITIs with short term ToT Course in		
	Employability.		
(iii) Minimum Age	21 Years		
for Instructor			
List of Tools and Equipment	As per Annexure – I		



Learning outcomes are a reflection of total competencies of a trainee and assessment will be carried out as per the assessment criteria.

#### **5.1 LEARNING OUTCOMES**

- 1. Build confidence and competence in delivering effective self-introductions across diverse professional scenarios, familiarize with training institute and the Trade of Training. (NOS: HCS/N9467)
- 2. Recognize rich heritage crafts and brief history of different arts and crafts. (NOS: HCS/N9468)
- 3. Identify walnut trees, wood, wood carving, apply measuring marking and testing different instruments and other holding devices with following safety precautions. (NOS: HCS/N9469)
- 4. Perform various carpentry/carving operations either manually by hands or by power portable tools, specially router machine with different types of router bit/ carpentry machinery for wood carving workshop maintaining with safety precaution. (NOS: HCS/N9470)
- 5. Identify and select wood for the specified ornamental job. (NOS: HCS/N9471)
- 6. Select various manual hand tools, power portable machinery, equipment and raw material for the specified job in the carpentry workshop. (NOS: HCS/N9472)
- Operate various tools and machinery for completion of the specified wood carving job. (NOS: HCS/N9473)
- Interpret various wood for wood carving e.g., fruit-bearing and not fruit-bearing walnut trees, different types of walnut tree, various good qualities of walnut trees or good qualities of walnut wood, walnut wood carving, its types, khatmb and so on. (NOS: HCS/N9474)
- 9. Develop Competency of making different items of wood carving ranging from small decorative item to big furniture item and decorative assembled job. (NOS: HCS/N9475)
- 10. Decorate the job and make it attractive for the customers and for the market with help of various marketing management techniques. (NOS: HCS/N9476)



	LEARNING OUTCOMES	ASSESSMENT CRITERIA	
1.	Build confidence and	Self-introduction in different fields.	
	competence in delivering	Demonstration and practice by trainees on what main important	
	effective self-introductions	tips to be followed to give self-introduction in different fields.	
	across diverse professional	Demonstrate on showing different tools and equipment of	
	scenarios, familiarize with	Wood Carving Artisan.	
	training institute and the Trade of Training.	Following various steps of wood carving process.	
	(NOS: HCS/N9467)		
2.	0	Identify different heritage crafts.	
	crafts and brief history of	Brief history of different arts and crafts.	
	different arts and crafts. (NOS: HCS/N9468)		
	(1003.1103/103408)		
3.	Identify walnut trees,	Explain the trade terminologies like wood, Wood Carving,	
	wood, wood carving, apply	maximum moisture content, fibre saturation point, moisture	
	measuring marking and	content, tree, plant, herb, shrub, root system, shoot system, etc.	
	testing different	Trade terminologies like wood, Wood Carving Artisan, maximum	
	instruments and other	moisture content, fibre saturation point, moisture content, tree,	
	holding devices with	plant, herb, shrub, root system, shoot system, etc.	
	following safety	Apply the trade terminologies like wood, Wood Carving Artisan,	
	precautions.	maximum moisture content, fibre saturation point, moisture	
	(NOS: HCS/N9469)	content, tree, plant, herb, shrub, root system, shoot system, etc.	
		Calculating the moisture content of wood either by inserting	
		moisture meters or by oven dry method.	
4.	Perform various	Identify on showing/adopting different safety precautions during	
	carpentry/carving operations either manually by hands or by power portable tools/ machinery on wood in the carpentry/	carpentry operations manually by hands on wood.	
		Showing/adopting different safety precautions during carpentry	
		operations by power portable tools/machinery on wood.	
		Use of running hand tools/power portable tools/machinery in	
	carving workshop following	carpentry shop.	
	safety precaution. (NOS: HCS/N9470)	Demonstrate Virtual/photography/Videography on running of	



		various manual hand tools/power portable tools/machinery in carpentry/carving shop.
5.	Identify and select wood for the specified ornamental job. (NOS: HCS/N9471)	<ul> <li>Explain the term identification of wood and its importance for a specified job with the help of various features and examples.</li> <li>Plan &amp; select wood for the specified job.</li> <li>Demonstrate on what important physical properties are needed in selection of wood for a specified job.</li> <li>Apply mechanical properties are needed in selection of wood for</li> </ul>
		a specified job.
6.	Select various manual hand tools, power portable machinery, equipment and raw material for the specified job in the carpentry workshop. (NOS: HCS/N9472)	Select & ensure various manual hand tools for a specified job in the carpentry shop. Demonstrate various power portable tools for a specified job in the carpentry shop.
		Select various power portable machinery for a specified job in the carpentry shop. Raw material required for a specified job in the carpentry shop.
7.	Operate various tools and machinery for completion of the specified wood carving job. (NOS: HCS/N9473)	Select power portable tools for a specified job in the carpentry shop. Demonstrate the use of various equipment for a specified job in the carpentry shop.
		Select & apply appropriate measuring instruments of various manual hand tools/power portable tools/machinery and equipment for a specified job in the carpentry shop.
8.	Interpret various wood for wood carving e.g., fruit- bearing and not fruit- bearing walnut trees, different types of walnut tree, various good qualities of walnut trees or good qualities of walnut wood, walnut wood carving, its types, khatmb and so on. (NOS: HCS/N9474)	Select & apply fruit-bearing and not fruit-bearing walnut trees. Evaluate different types of walnut trees. Understand and select various good qualities of walnut trees or walnut wood working jobs. Analyze walnut wood carving and its main important types.



<ol> <li>Develop Competency of making different items of wood carving ranging from small decorative item to big furniture item and decorative assembled job. (NOS: HCS/N9475)</li> </ol>	Making of different decorative items of woods. Select & apply small decorative carpentry jobs. Make house hold decorative items like tea trays, fruit bowls, jewelry boxes, letter carving name panels etc. Make different types of creative items.
10. Decorate the job and make it attractive for the customers and for the market with help of various marketing management techniques. (NOS: HCS/N9476)	Handle the job that has been completed or how to deal with this accordingly. Explain various marketing techniques.

## 7. TRADE SYLLABUS



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SYLLABUS FOR WOOD CARVING ARTISAN TRADE			
DURATION: ONE YEAR			
Reference		Professional Skills	Professional Knowledge
Duration	Learning Outcome	(Trade Practical)	(Trade Theory)
Professional Skill 84 Hrs. Professional Knowledge 21 Hrs.	Build confidence and competence in delivering effective self- introductions across diverse professional scenarios, familiarize with training institute and the Trade of Training	<ol> <li>Practice and refine self- introduction skills, receiving constructive feedback from the instructor and peers.</li> <li>Develop versatility in communication and increase confidence in varied professional settings.</li> <li>Acquire a comprehensive understanding of the training institute's layout, facilities, and support services, fostering a sense of belonging and familiarity within the campus environment.</li> <li>Gain insights into the technological infrastructure of the training institute by visiting labs and smart classrooms.</li> <li>Witness and engage in hands-on experiences in various workshops, gaining practical insights into the skills trainees are learning.</li> <li>Gain familiarity with the wood carving trade by visiting the practical workshop, understanding the layout, tools, and materials used in wood</li> </ol>	<ul> <li>Introduction between trade Instructors and selected trainees.</li> <li>Key components of an effective self-introduction, including tone, structure, and relevance to the trade or profession.</li> <li>Industry-specific nuances and best practices for self- introductions to equipped with essential tips to tailor introductions effectively to different professional contexts.</li> <li>Familiarization with the training institute.</li> <li>Explain in detail the course information of the wood carving trade.</li> </ul>



ood Carving Artis	an			
		carving. Identify the essential tools and equipment used in wood carving. Setup and use a carving vice through a brief demonstration and hands- on practice. Select suitable wood for carving through a brief demonstration and hands- on practice. Practice sharpening of carving tools to ensures the efficiency and safety of the carving process. Demonstrate and practice		
Professional Skill 84 Hrs. Professional Knowledge 21 Hrs.	Recognize rich heritage crafts and brief history of different arts and crafts.	various steps of wood carving process. Photography demonstration on different heritage crafts. Videography demonstration on different heritage crafts.	•	Familiarization with the main rich heritage crafts. Brief history of different arts and crafts.
Professional Skill 84 Hrs. Professional Knowledge 21 Hrs.	Identify walnut trees, wood, wood carving, apply measuring marking and testing different instruments and other holding devices with following safety precautions.	Interpret the trade terminologies like wood, Wood Carving Artisan, maximum moisture content, fibre saturation point, moisture content, tree, plant, herb, shrub, root system, shoot system, etc. either in class of professional knowledge or in class of professional skill. Photo and video demonstration on explaining the trade	•	Brief knowledge about the trade terminologies; tree (its root system and shoot system), wood and its formation, maximum moisture content, fibre saturation point (FSP), Equilibrium moisture content, moisture content and its calculation formula, carving-vice, etc. Characteristics of wood. Hardwoods and Softwoods. Description of stress, strain and hooks law.



ood Curving Artis				
			terminologies like wood, Wood Carving Artisan, maximum moisture content, fibre saturation point, moisture content, tree, plant, herb, shrub, root system, shoot system, etc. either in class of professional knowledge or in class of professional skill.	<ul> <li>Physical and mechanical properties of wood.</li> </ul>
		16.	Calculate the moisture content of wood either by inserting moisture meters or by oven dry method.	
		17.	Practice on seasoning of wood with various seasoning methods.	
		18.	Identify various parts of wood in an exogenous tree trunk with the help of a labelled diagram.	
		19.	Show the difference between hardwood and softwood.	
		20.	Identify physical and mechanical properties of wood.	
		21.	Virtual/ photography/ videography/ Verbal Demonstration on showing also the rest trade related terminologies.	
Professional Skill 84 Hrs. Professional Knowledge 21 Hrs.	Perform various carpentry/carving operations either manually by hands or by power portable tools,		Follow different safety precautions during carpentry operations manually by hands/ power portable tools/ machinery on wood.	<ul> <li>Parts of tree and their functions.</li> <li>Explain the growth of tree.</li> <li>Study about the three sections of wood i.e., transverse, radial and</li> </ul>
	specially router machine with	23.	Follow different safety precautions during carving	<ul><li>tangential section.</li><li>Description about the parts</li></ul>



ooa Carving Artis				
	different types of router bit/ carpentry machinery for wood carving workshop maintaining with safety precaution	25.	operations manually by hands/ by power portable tools/ machinery on wood. Demonstrate (Meagre Virtual demonstration/ photography demonstration/ videography) different safety precautions during carpentry and carving operations either manually by hands or power portable tools/ machinery on wood. Practice on running of various manual hand tools/power portable tools/machinery in carpentry and carving shop. Virtual/ photography/ Videography demonstration on running of various manual hand tools/ power portable tools/machinery in carpentry and carving shop.	of cross section of exogenous tree trunk with a labelled diagram.
Professional Skill 84 Hrs. Professional Knowledge 21 Hrs.	Identify and select wood for the specified ornamental job.		Identify and select wood and its importance for a specified job as per the application. Identify and select physical and mechanical properties needed in selection of wood for a specified job.	<ul> <li>Define timber, its advantages over the other materials and qualities of a good timber.</li> <li>Description about Seasoning of wood or timber.</li> <li>Qualities of different locally used timber.</li> </ul>
			Identify defected / defect free wood for selection of a specified job. Practice on calculation of moisture content either by	<ul> <li>Classification and grading of timber as per ISI.</li> <li>Explain diagnostic features for identification of different woods.</li> </ul>



ood Carving Artis	an		
		<ul> <li>inserting the moisture meters into the wood or with the help of oven dry method while doing the demonstration on selection of wood for a specified job.</li> <li>31. Practice on seasoning of wood with the help of various seasoning method while doing the demonstration on selection of wood for a specified job.</li> </ul>	<ul> <li>Identification of timber and its importance.</li> <li>Study of wood or timber grains.</li> <li>Description of timber or wood defects.</li> <li>Description of different raw materials used in wood industry.</li> <li>S Description of wood carving, its types, its history and potential.</li> </ul>
Professional Skill 84 Hrs. Professional Knowledge 21 Hrs.	Select various manual hand tools, power portable machinery, equipment and raw material for the specified job in the carpentry workshop.	<ul> <li>32. Show the selection of various manual hand tools and power portable machinery for a specified job in the carpentry shop.</li> <li>33. Identify and select various power portable machinery and equipment for a specified job in the carpentry shop.</li> <li>34. Identify and select raw material for a specified job in the carpentry shop.</li> <li>35. Virtual/ Photography/ Videography demonstration on showing the selection of various manual hand tools, power portable tools, power portable machinery and raw material for a specified job in the carpentry shop.</li> </ul>	<ul> <li>etc. used in carpentry shop.</li> <li>Familiarization and safe use of different manual hand tools/ power portable carpentry, tools, equipment and machinery used in carpentry shop.</li> <li>Familiarization and safe use of different manual hand tools/power portable carving tools, equipment, machinery.</li> <li>Familiarization of different types of carpentry operations for a specified</li> </ul>
		17	



			process.
Professional Skill 84 Hrs. Professional Knowledge 21 Hrs.	Operate various tools and machinery for completion of the specified wood carving job	<ul> <li>36. Practice on running of manual hand and power portable tools for a specified job in the carpentry shop.</li> <li>37. Practice on running of power portable machine and equipment for a specified job in the carpentry shop.</li> </ul>	<ul> <li>Study about main planers, their types and uses.</li> <li>Study about main chisels, their types and uses.</li> </ul>
		38. Virtual Demonstration or showing the running of various manual hand tools/ power portable tools/ machinery and equipment for a specified job in the carpentry shop	<ul> <li>Study of different types of adhesives used in the manufacturing of timber articles.</li> <li>Description of different main types of carpentry</li> </ul>
		<ul> <li>39. Practice on sawing operations either by manual hand tools or by power portable tools of wood/ specified job in th carpentry shop.</li> </ul>	<ul> <li>Description of different types of fasteners and their uses.</li> <li>Power bolt and its functions.</li> </ul>
		<ul> <li>40. Practice on planning operation either by manual hand tools or by power portable tools of wood/specified job in the carpentry shop.</li> </ul>	<ul> <li>Description of boring tools and their functions.</li> <li>Hand drill and its use and types, portable electric hand drill and different types of drill bits.</li> </ul>
		41. Practice on chiselling operation either by manual hand tools or by power portable tools of wood/specified job in the carpentry shop.	e
		42. Practice of jointing operation either by manual hand tools or by power portable tools of wood/specified job in the	e



		carpentry shop.	
	43.	Practice of moulding	
		operation either by	
		manual hand tools or by	
		power portable tools of	
		wood/specified job in the	
		carpentry shop.	
	ЛЛ	Virtual demonstration on	
		showing how the different	
		carpentry operations is	
		being carried out on	
		wood/specified job either	
		by manual hand tools or by	
		power portable tools in	
		the carpentry shop.	
	45.	Virtual/ Photography/	
		Videography	
		demonstration on showing	
		setting of carving vice and	
		setting of specified job on	
		the vice in an efficient	
		way.	
	46.	Practice on selection of	
		wood for carving vice.	
	47.	Practice on setting of	
		carving vice in an efficient	
		way.	
	48.	Practice of showing	
		different types of clamping	
		devices.	
	49.	Practice on showing	
		setting of specified job on	
		the carving vice in an	
		efficient way.	
	50.	Practice on drawing/	
		sketching of various	
		motifs/ designs of wood	
		carving on the drawing	
		notebook with the help of	
		free-hands.	
	51.	Practice on	



	drawing/sketching of	
	various motifs/designs of	
	wood carving on the	
	specified job with the help	
	of free-hands.	
52	Practice on learning the	
52.	following Auto CAD (2D):	
	Introduction: file	
	management, user	
	interface, basic settings,	
	navigation bar, steering	
	wheel, view port.	
53.	Drawing tools: line,	
	polyline, circle, arc	
	rectangle, polygon ellipse,	
	elliptical arc, spline,	
	splineedit, xline, ray,	
	points measure, divide,	
	region wipe out, helix,	
	donut, revision cloud,	
	hatch, gradient.	
54.	Practice on	
	drawing/sketching of	
	various motifs/designs of	
	wood carving on the	
	drawing sheets with the	
	help of an Auto-CAD.	
55.	Practice on learning the	
	following Auto CAD (2D):	
	Modify tools: move, copy,	
	rotate, scale stretch, fillet,	
	chamfer erase, offset,	
	explode array, polar array,	
	path array trim, extend,	
	mirror, edit polyline, edit	
	spline, edit hatch edit	
	array, break, break at point	
	blend vertex, joint,	
	overkill, lengthen.	
56	Utilities tools: distance,	
50.		
	radius, angle area, volume,	



<ul> <li>quick select, quick</li> <li>calculator, point, id point.</li> <li>57. Practice on learning the</li> <li>following Auto CAD (2D):</li> <li>Clip board: copy, cut,</li> <li>paste, paste as a block,</li> <li>paste special.</li> <li>58. Basic concept of layers,</li> <li>dimensioning.</li> <li>59. practice on drawing/</li> <li>sketching of various</li> <li>motifs/ designs of wood</li> <li>carving on the specified</li> <li>job with the help of an</li> <li>Auto-CAD.</li> <li>60. Practice of making chinar</li> <li>leaf motif, vine leaf motif,</li> <li>daffodil motif, lotus motif,</li> <li>rose motif, etc. on the</li> <li>drawing notebook with the</li> </ul>	
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leaf motif, vine leaf motif, daffodil motif, lotus motif, rose motif, etc. on the	
daffodil motif, lotus motif, rose motif, etc. on the	
rose motif, etc. on the	
drawing notebook with the	
help of free hands.	
61. Practice of making chinar	
leaf motif, vine leaf motif, daffodil motif, lotus motif,	
rose motif, etc. on the	
drawing sheets with the	
help of Auto-CAD	
commands or with the	
help of CNC wood carving	
machines.	
62. Show the selection of	
various manual hand tools	
for a specified job in the	
wood carving practical	
workshop.	
63. Select various power	
portable tools for a	
specified job in the wood	
carving practical	
workshop.	
64. Select various power	



Carving Artisan	
	portable machinery for a specified job in the wood carving practical workshop.
	65. Select various equipment for a specified job in the wood carving practical workshop.
	66. Select raw material for a specified job in the wood carving practical workshop.
	67. Virtual/Photography/Video graphy demonstration on showing the selection of various manual hand tools, power portable tools, power portable machinery and raw material for a specified job in the wood carving practical workshop.
	68. Practice on running of manual hand tools for a specified job in the wood carving workshop.
	69. Practice on running of power portable tools for a specified job in the wood carving workshop.
	<ul> <li>70. Practice on running of power portable machinery for a specified job in the wood carving workshop.</li> </ul>
	71. Practice on using the various equipment for a specified job in the wood carving workshop.
	72. Virtual demonstration on running of manual hand tools/ power portable



		tools/ machinery and
		equipment in the
		carpentry/carving
		workshop.
	73.	Practice on sharpening of
		manual hand tools of
		carpentry shop.
	74.	Practice on sharpening of
		manual hand tools of
		carving workshop.
	75.	Practice on setting of
		different carpentry
		tools/machinery/
		equipment with the help
		of assembling various
		parts in an efficient way.
	76.	Practice on setting of
		different carving tools/
		machinery/ equipment/
		devices with the help of
		assembling various parts in
		an efficient way.
	77.	Virtual demonstration on
		sharpening and setting of
		carpentry/ carving tools,
		machinery, equipment and
		devices in an efficient way.
	78.	Practice of doing/following
		different operations/steps
		for successful wood
		carving process on the
		specified job.
	79	Practice of making the
	/ 5.	different sketches/
		designs/ motifs on the
		specified job either by
		free-hands or by inserting
		the different Auto-CAD
		commands.
	80	Practice of doing the
	00.	outlining of the design on
	1	



			the specified job either by manual hand-tools or by power portable wood carving tools or by inserting the different commands of Computer Numeric Control (CNC)		
		81.	wood carving machines. Practice on carving out the unwanted wood from the design either by manual hand tools or by power portable wood carving tools or by CNC wood		
		82.	carving machines. Practice on Beating of desired design of the specified job with help of mallet and nail or with the help of any carving tool/technique.		
		83.	Practice on Finishing of job either by sand papers or by power portable sanders.		
		84.	Practice on Polishing of job either with spirit or wax polish or with any other wood touch.		
		85.	Practice of providing stone rubbing to the job with the help of any Gem stone so that the job or product would become marketable/saleable efficiently or successfully.		
Professional Skill 84 Hrs. Professional Knowledge	Interpret various wood for wood carving e.g., fruit- bearing and not fruit-bearing	86.	Virtual demonstration on fruit-bearing, not fruit- bearing walnut trees and different types of walnut trees.	•	Study of different types of walnut trees. Fruit bearing and non-fruit bearing Walnut Trees and their use in walnut wood



ood Carving Artis	an		
36 Hrs.	walnut trees, different types of walnut tree, various good qualities of walnut trees or good qualities of walnut wood, walnut wood carving, its types, khatmb and so on.	87. Virtual demonstration about various good qualities of walnut trees or walnut wood and different steps to be followed for walnut wood carving process.	<ul> <li>carving cottage industries.</li> <li>Study about the characteristics and qualities of walnut wood.</li> <li>Different uses of walnut wood.</li> <li>Brief information about the raw-materials (i.e., walnut wood, sandpapers, fevicol, fasteners and other fittings, etc.) used in walnut wood carving cottage industries.</li> <li>Understanding of basics of the walnut, timber (raw- material) like its colour, texture, grains, sheen, etc.</li> <li>Information regarding seasoning of walnut wood or timber</li> <li>Effect of factors like temperature and humidity on walnut timber.</li> </ul>
Professional Skill 78 Hrs. Professional Knowledge 27 Hrs.	Develop Competency of making different items of wood carving ranging from small decorative item to big furniture item and decorative assembled job.	<ul> <li>88. Practice on showing competency by making of different items of wood carving like: <ul> <li>napkin holders,</li> <li>tissue holders,</li> <li>tea trays,</li> <li>fruit bowls,</li> <li>jewellery boxes,</li> <li>letter carving name panels,</li> <li>chinar leaf with base,</li> <li>3Danimal/sculptural carved items,</li> <li>carved furniture,</li> <li>honour boards, carved doors and so on.</li> </ul> </li> </ul>	<ul> <li>Introduction to walnut Wood carving.</li> <li>Different types of Walnut wood carving</li> <li>Study of origin of the wood carving heritage.</li> <li>Description of different steps to be followed for walnut wood carving process.</li> </ul>
Professional	Decorate the job	89. Virtual Demonstration and	Define the term market.





### SYLLABUS FOR CORE SKILLS

1. Employability Skills (Common for all CTS trades) (120 Hrs)

Learning outcomes, assessment criteria, syllabus and Tool List of Core Skills subjects which is common for a group of trades, provided separately in <u>www.bharatskills.gov.in/ www.dgt.gov.in</u>



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	LIST OF TOOLS & EQUIPMENT WOOD CARVING ARTISAN (for Batch of 20 Candidates)		
S No.	Name of the Tools and Equipment	Specification	Quantity
A. Train	ees Tools/ Equipment		
1.	Handmade wood carving tools sets (of good metal) Description for 1 – set or 24 pieces;	<ul> <li>General big carving chisels (zelan) = 3 no. (of varied straight cutting edge sizes)</li> <li>Carving chisels of both sided straight cutting edge (Purtoshwol) = 3 no. (of varied straight cutting edge sizes)</li> <li>Carving chisels of one sided straight cutting edge (Beereh) = 3 no. (of varied straight cutting edge sizes)</li> <li>Carving gouges with max. curved cutting edge (Sabirgee) = 6 no. (of varied curved cutting edges sizes)</li> <li>Carving gouges with medium curved cutting edge (Adawuth Nariwol) = 3 no. (of varied curved cutting sizes)</li> <li>Carving gouges with low curved cutting edge (Mochrith Nariwol) = 6 no. (of varied curved cutting edge sizes)</li> </ul>	20 sets
2.	Handmade wood carving tools sets (of good metal)	20 pieces/set	20 sets
3.	Wood carving mallets (of hardwood)		20 nos.
4.	Hand saw, hammer, plier, nail removal tool (Angoor), clamps (big and small) try – square, compass, inch tape, steel – rule, etc.		5 nos. Each
5.	Electric hand – cutter, Electric hand – planer, Electric hand – jig – saw, Electric hand – drill,		2 nos. Each



od Carvin	ng Artisan		
	Electric hand – router with		
	various types of router bits,		
	Electric hand sander		
6.	Power portable hand carving		10 nos.
	tool (or electric hand carving		
	tool)		
7.	Desktop Computer	CPU: 32/64 Bit i3/i5/i7 or latest	05 nos.
		processor, Speed: 3 GHz or Higher.	
		RAM: 4 GB DDR-III or Higher, Wi-Fi	
		Enabled. Network Card: Integrated	
		Gigabit Ethernet, with USB Mouse,	
		USB Keyboard and Monitor (Min. 17	
		Inch. Licensed Operating System and	
		Antivirus compatible with trade	
		related software.	
8.	UPS		As required
9.	Portable wood curving CNC	latest configurations	1 no.
	machine		
10.	Auto CAD system	latest configurations	1 nos./each pc
11.	Wood carving vice	6'X1.5'X2"	10 nos.
12.	Scanner cum Printer		2 nos.
B. Raw	Materials		
13.	Sand paper	Cloth type & paper type	As required
14.	Wax polish		As required
15.	Sprit polish		As required
16.	Lakhdana		As required
17.	Coloured powder nails		As required
18.	Hinges		As required
19.	Hanging clips		As required
20.	Workshop uniform		20 nos.
21.	Thumb guaeds		As required
22.	White cloth		As required
23.	Sketch pens		As required
24.	Hard & Soft brushes		As required
25.	First aid kit		As required
C. Gene	eral shop outfit, furniture and Mate	rials	
26.	Fire Extinguisher		01 no.
27.	Instructor Chairs		02 nos.
28.	Instructor table		02 nos.
29.	Computer Table		05 nos.
30.	Computer Chairs		20 nos.



32.	Steel Almirah		02 nos.
33.	White board	1200mm x 900mm	02 nos.
34.	White board marker		01 Box
35.	Duster		05 nos.
36.	Cotton cloth (duster)		05 nos.
37.	Metal Rack	100cmX 150cm X 45cm	04 nos.
38.	Lockers with 16 drawers standard size		02 nos.
39.	Smart interactive board		01 no.
40.	Split AC (with Stabilizer)		As required
41.	Notebooks for trainees theory and practical		52 Nos. each
42.	Pencils, erasers, sharpeners		52 Nos. each
43.	Notice board		01 nos.
44.	Wall clock		01 nos.
<b>Note: -</b> Internet facility is desired to be provided in the class room.			



The DGT sincerely acknowledges contributions of the Industries, State Directorates, Trade Experts, Domain Experts, trainers of ITIs, NSTIs, faculties from universities and all others who contributed in revising the curriculum.

Special acknowledgement is extended by DGT to the following expert members who had contributed immensely in this curriculum.

List of Expert members participated for fina	lizing the course curriculum of Wood Carving
Artisan trade held on 01 <sup>st</sup> & 02 <sup>nd</sup> February, 202	4 at Srinagar (Jammu & Kashmir).

S No.	Name & Designation	Organization	Remarks
1.	Shri Sudershan Kumar - JKAS, Director	Skill Development - J&K	Chairman
2.	Shri Sanjay Kumar - ISDS, Director	CD, DGT - MSDE	Member
3.	Shri G.C. Rama Murthy - ISDS, Joint Director	CD, DGT - MSDE	Member
4.	Shri Khan Farooq Ahmed, Joint Director (Nodal Officer)	Skill Development, Kashmir	Member
5.	Shri G M Bhat, Joint Director	Skill Development, Jammu	Member
6.	Shri Mohd Shafi Bhat, Principal	Govt Women Polytechnic Srinagar	Member
7.	Shri V.K. Saksena - ISDS, Deputy Director	NSTI Jammu (Srinagar Extension)	Member
8.	Shri Mohd Ashraf Wani, Principal (Senior Scale)	Govt ITI Srinagar	Member
9.	Smt Foziya Yousuf Illahi, HoD	Govt Women Polytechnic Srinagar	Member
10.	Shri Ali Mohammad Khan, HoD	K.G. Polytechnic, Srinagar	Member
11.	Shri S. Bandyopadhyay - ISDS, Assistant Director	DGT - MSDE	Member
12.	Shri Sajad Hussain Naqueeb, Assistant Director (Trgs)	DSD Office Srinagar	Member
13.	Shri Ravi Gupta, Assistant Director	DSD Office Srinagar	Member
14.	Shri Surinder Kumar, Assistant Director	Handicraft & Handloom Department, Kashmir	Member
15.	Shri Javid Ahmed Ganai, Principal	Govt ITI Baramulla	Member



16.	Shri Imran Wajahat, Principal	Govt ITI Anantnag	Member
17.	Shri P.K. Bairagi, Training Officer	CSTARI - Kolkata	Member
18.	Shri B.K. Nigam, Training Officer	CSTARI - Kolkata	Member
19.	Shri Nazir Ahmad, Technical Asstt	JD Office Jammu	Member
20.	Shri Subhash Chander Sharma, Handicraft Training Officer	Handicraft & Handloom Department, Jammu	Member
21.	Shri Mir Ashraf Ahmad, Asstt Handicraft Training Officer (Industry Expert)	Handicraft & Handloom Department, Kashmir	Member
22.	Shri Imtiyaz Ahmad, Industry Expert	Handicraft & Handloom Department, Kashmir	Member
23.	Shri Rajeev Pandita, President (Industry Expert)	Rural Artisan Welfare Society, Jammu (NGO)	Member
24.	Shri Abdul Hamid Kak, Proprietor (Industry Expert)	Valley Arts Inn (Wood Carving)	Member
25.	Smt Nelofar Jan, Proprietor (Industry Expert)	New Bhat Handicrafts, Srinagar	Member
26.	Shri Riyaz Ahmad, Proprietor (Industry Expert)	New Bhat Handicraft, Srinagar	Member
27.	Shri Arshad Hussain Bhat, Proprietor (Industry Expert)	Central Cottage Industries Srinagar	Member
28.	Shri Nayeem Ahmad Baba, Director (Trade Expert)	NCVET Assesment Agency	Member
29.	Shri Farooq Ahmad Najar, Trade Expert (Wood Carving Artisan)	Govt ITI Srinagar	Member
30.	Shri Mohd Ishaq Bhat, Trade Expert, (Wood Carving Artisan)	K.G. Polytechnic, Srinagar	Member
31.	Shri Muzafar Ahmad Bhat, Trade Expert (Wood Carving Artisan)	K.G. Polytechnic, Srinagar	Member



#### **ABBREVIATIONS:**

CTS	Craftsmen Training Scheme
ATS	Apprenticeship Training Scheme
CITS	Craft Instructor Training Scheme
DGT	Directorate General of Training
MSDE	Ministry of Skill Development and Entrepreneurship
NTC	National Trade Certificate
NAC	National Apprenticeship Certificate
NCIC	National Craft Instructor Certificate
LD	Locomotor Disability
СР	Cerebral Palsy
MD	Multiple Disabilities
LV	Low Vision
НН	Hard of Hearing
ID	Intellectual Disabilities
LC	Leprosy Cured
SLD	Specific Learning Disabilities
DW	Dwarfism
MI	Mental Illness
AA	Acid Attack
PwD	Person with disabilities



