Model Curriculum

Inlay Artisan - Stonecraft

SECTOR: HANDICRAFTS AND CARPET
SUB-SECTOR: HANDICRAFTS (STONECRAFT)
OCCUPATION: STONE CRAFTING
REF ID: HCS/Q1504, V1.0
NSQF LEVEL: 4

Skill India

Handicrafts and Carpet Sector Skill Council

N·S·D·C National Skill Development Corporation
Transforming the skill landscape

Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

HANDICRAFTS AND CARPET SECTOR SKILL COUNCIL

for the

MODEL CURRICULUM

Complying to National Occupational Standards of
Job Role/ Qualification Pack: '**Inlay Artisan - Stonecraft'**-QP No. '**HCS/Q1504 NSQF Level 4'**

Date of Issuance: **May 24th, 2018**

Valid up to: **May 23rd, 2020**

** Valid up to the next review date of the Qualification Pack*

Authorised Signatory
(Handicrafts and Carpet Sector Skill Council)

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Inlay Artisan - Stonecraft

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a "Inlay Artisan - Stonecraft", in the "Handicrafts and Carpet" Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	**Inlay Artisan - Stonecraft**		
Qualification Pack Name & Reference ID.	HCS/Q1504, v1.0		
Version No.	1.0	**Version Update Date**	24/05/2018
Pre-requisites to Training	Preferably 5th pass		
Training Outcomes	**After completing this programme, participants will be able to:** • Understand customer's requirements • Put customer's design idea / concept on the paper • Select stones for the motif • Shape semiprecious and precious stones as per the design • Engrave the marble • Polish the marble with motif • Achieve productivity and quality standards • Interact with supervisor or superior • Work as a team by coordinating with colleagues within and outside the department • Report and Document • Follow safety procedure and practices • Achieve safety standards • Adopt healthy work practices • Achieve work productivity while maintaining health • People management • Product planning • Procurement of raw materials • Market interfacing • Manage finance • Keep records		

This course encompasses 5 out of 5 Compulsory NOS (National Occupational Standards) of "Inlay Artisan - Stonecraft" Qualification Pack issued by "Handicrafts and Carpet Sector Skill Council".

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	**Introduction** **Theory Duration** (hh:mm) 05:00 **Practical Duration** (hh:mm) 00:00 **Corresponding NOS Code** Bridge Module	• Get an introduction to Stone craft products • Know the responsibility of an Inlay artisan • Learn about various Stone craft products in India • Get acquainted with the tools and equipments used by Inlay Artisan - Stonecraft	Laptop, white board, marker, projector
2	**Create inlay work on marble** **Theory Duration** (hh:mm) 20:00 **Practical Duration** (hh:mm) 80:00 **Corresponding NOS Code** HCS/N1505	• Understand the specific requirements related to pattern, size and colour combination • Capture customer's idea of colour scheme and tonality of the design • Draw the pattern in symmetric sections using traditional geometric tools and create the final sketch of the design • Trace the final sketch of the design on a brass sheet • Cut out the brass sheet as per the design to make templates of every component of the design • Select variety of semiprecious and precious stones for the motif • Select the base marble as per required size on which the pattern is to be developed • Choose various shades of these stones to give the right gradation and shading to the motif • Operate the hand driven tool known as "Saan & Kamaani" having an emery wheel • Hold piece of the gem stone in the fingertips and touch it repeatedly with the moving emery wheel in specific pattern so as to give it shape as per the motif requirements • Shape all the gem stones of different sizes and colour required for the motif • Place all the gem stones shaped as per the motif on the base marble • Arrange them at specific positions according to the motif design • Trace the contours of these stones one-by-one with a fine pointed chisel or a lead to get an outline of each element on the marble	Laptop, white board, marker, projector, first aid kit, PPE, Products And Stones, Work Bench, Table Lamp, Eye Glass, Round burr, Cup burr, Hart burr, Drill bits, Honey Bees Wax, Stone Pusher, Prong Lifter, Shelac, Digital Vernier Calliper, Hammering Hand Piece, Prong setting product, Bezel setting product, Pave setting product, Strong Motor, Grinder, Metal Weigher, Black Saan, Oil Saan, Yellow Saan, Red Saan, Prong Cutter, Churi Bully, Velvet Tray, Katti, Knife Gravers, Flat gravers, Half Round Gravers, Table Brush, Lighter, Supari, Metal Sheet Diamond Chalni, Files, Tweezers, Supadi

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		• Remove these shaped gem stones from the base marble and keep them in a chronological order • Engrave the marble using hand held chisels with great care to make grooves which correspond exactly with the shaped gem stones • Inlay all the shaped gem stones into their corresponding groves one-by-one using specially prepared glue • Apply the modern wax or special prepared mixture of polishing compounds on the marble with final motif • Accurately capture customer's requirements for motif • Create the design sketch very precisely as per customer's requirements • Select semiprecious and precious stones properly to give the right gradation and shading to the motif as per customer's specifications • Shape the gem stones very precisely as per the motif design • Engrave the marble such that all the grooves correspond exactly with the gemstones • Inlay the gem stones in the marble with such accuracy that there is no visible gap between the edge of the gem stone and the marble	
3	**Coordinate with colleagues and work as a team** **Theory Duration** (hh:mm) 05:00 **Practical Duration** (hh:mm) 15:00 **Corresponding NOS Code** HCS/N9901	• Receive job order and instructions from reporting supervisor • Understand the work output requirements, targets, performance indicators and incentives • Deliver quality work on time and report any anticipated reasons for delays • Report on any grievances, production defects and any potential hazards • Communicate on process flow improvements • Communicate maintenance and repair schedule proactively to the supervisor • Receive feedback on work standards • Interact and clarify doubts on design, usage of materials & tools, quality & standards compliance, etc • Report in time for shortage or need of raw materials • Handover completed work to supervisor • Communicate to the colleagues from within and other departments, clearly and effectively on all aspects to carry	Laptop, white board, marker, projector, first-aid kit, PPE

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		out the work among the team • Maintain the etiquettes, use polite language, demonstrate responsible and disciplined behaviours to the colleagues • Interact with colleagues from different functions and understand the nature of their work • Put team over individual goals and multi task or share work where necessary supporting the colleagues • Resolve conflicts and ensure smooth workflow • Interact and understand the production requirement for the day from the previous and successive processing department and work accordingly • Communicate and discuss work flow related difficulties in order to find solutions with mutual agreement • Receive feedback from Quality Control and rework in order to complete work on time • Share information with colleagues to enable efficient delivery of work • Highlight any errors of colleagues, help to rectify and ensure quality output • Work with cooperation, coordination, communication and collaboration, with shared goals and supporting each others performance • Document all the details accurately relating to one's role as required • Report on the work completed and keep it in records	
4	**Maintain safe work environment** **Theory Duration** (hh:mm) 20:00 **Practical Duration** (hh:mm) 30:00 **Corresponding NOS Code** HCS/N9902	• Comply with safety procedures while on work to prevent accidents • Take adequate safety measures while handling materials, chemicals and tools • Wear appropriate personal protective gears such as gloves, protective goggles, masks etc. while working • Undertake basic safety checks before operation of all tools and electrical equipments • Wear appropriate and recommended clothing as per the work environment (eg: working in a furnace area) • Follow recommended material handling procedure to control material and personal damage • Perform all procedures as per company's work instructions for controlling operational risk • perform the duties in a manner which	Laptop, white board, marker, projector, first aid kit, PPE

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		minimizes environmental damage • Dispose of waste safely and correctly in a designated area as per company's SOP • Report any accidents, incidents or problems without delay to the supervisor and take necessary immediate action to reduce further danger • Ensure zero accident at workplace • Adhere to safety standards and ensure no material damage	
5	**Maintain personal health** **Theory Duration** (hh:mm) 15:00 **Practical Duration** (hh:mm) 25:00 **Corresponding NOS Code** HCS/N9903	• Always cover the mouth and nose with a dust mask while working and keep on changing when it gets blocked with dust • Follow work instructions strictly to reduce the amount of pollution at the work place e.g. wet the rock / craft material before working on it • Wear protective goggles over eyes and replace them when scratches on it obscure the vision • Wear gloves as per the materials used for making handicraft to avoid blisters; scratches and cuts • Undergo preventive health checkups at regular intervals • Take prompt treatment from the doctor in case of illness • Follow SOPs for dealing with blisters; scratches; accidental fires or any other type of emergencies at work • Ensure no productivity loss or absenteeism from work due to illness • Ensure no long term ill effect on the personal health	Laptop, white board, marker, projector, first-aid kit, PPE
6	**Basic business management** **Theory Duration** (hh:mm) 15:00 **Practical Duration** (hh:mm) 25:00 **Corresponding NOS Code** HCS/N9904	• Allot work to the employees of the unit according to their skill and experience • Train the employees of his/her unit with the appropriate skills required to make market relevant and quality products • Motivate the employees • Handle the grievances/issues that are raised by the employees • Manage the employee expectations • Gather and analyse the cues from the market • Ascertain the customer preference • Create product lines based on current market preference • Create product lines that are unique and able to price high • Price the products according to market trends	Laptop, white board, marker, projector, first-aid kit, PPE

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		• Decide the best way to market the product lines • Make a list of raw materials required according to the product lines • Ascertain the quantity and right price to procure the materials • Identify the right locations/agents from where the raw materials can be procured • Negotiate to get the best price • Ensure quality materials are procured • Ensure the procured materials are stored in appropriate conditions • Maintain the bills and record the prices of procurement for future reference • Maintain healthy vendor relationships • Identify the nearest market • Analyze the prevalent price for product lines • Decide on the most effective means to access the market • Plan for cost effective transportation to the market • Position the product according to market requirements • Manage customer expectations • Analyze and ascertain the cost of production • Maintain the book of accounts related to the business • Own and operate a bank account • Identify cost effective means of running business • Identify various aspects of business that require recording • Create formats for recording • Make various records pertaining to all aspects of business • Maintain these records with periodic updation • Maintain necessary documents as per local government and regulatory requirement • Analyze the records and glean various trends from the same	
	Total Duration **Theory Duration 80:00** **Practical Duration 175:00**	**Unique Equipment Required:** Laptop, white board, marker, projector, first aid kit, PPE, Products And Stones, Work Bench, Table Lamp, Eye Glass, Round burr, Cup burr, Hart burr, Drill bits, Honey Bees Wax, Stone Pusher, Prong Lifter, Shelac, Digital Vernier Calliper, Hammering Hand Piece, Prong setting product, Bezel setting product, Pave setting product, Strong Motor, Grinder, Metal Weigher, Black Saan, Oil Saan, Yellow Saan, Red Saan, Prong Cutter, Churi Bully, Velvet	

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		Tray, Katti, Knife Gravers, Flat gravers, Half Round Gravers, Table Brush, Lighter, Supari, Metal Sheet Diamond Chalni, Files, Tweezers, Supadi	

Grand Total Course Duration: **255 Hours, 0 Minutes**

*(This syllabus/ curriculum has been approved by **Handicrafts and Carpet Sector Skill Council)***

Trainer Prerequisites for Job role: "Inlay Artisan - Stonecraft" mapped to Qualification Pack: "HCS/Q1504, v1.0"

Sr. No.	Area	Details
1	**Description**	The individual at work is responsible for cutting many different coloured semiprecious and precious gem stones into various sizes as per the pre-decided pattern, engrave the base marble as per the sizes of these gem stones followed by laying the gem stones into the groves of that base marble with adhesive very precisely.
2	**Personal Attributes**	The job requires the individual to have: eye-hand coordination, manual dexterity, finger dexterity, good near vision, the ability to quickly move two hands to grasp, no colour blindness, manipulate or assemble objects and ability to work for long hours in sitting and bending position.
3	**Minimum Educational Qualifications**	10th Pass
4a	**Domain Certification**	Certified for Job Role: "Inlay Artisan - Stonecraft" mapped to QP: "HCS/Q1504, v1.0". Minimum accepted score is 80%
4b	**Platform Certification**	Recommended that the Trainer is certified for the Job Role: "Trainer", mapped to the Qualification Pack: "MEP/Q0102". Minimum accepted % as per respective SSC guidelines is 80%.
5	**Experience**	• Total 3 Years experience • 2 Years of sector-specific experience, • Min. 1 year of teaching experience.

CRITERIA FOR ASSESSMENT OF TRAINEES

Job Role: Inlay Artisan – Stonecraft
Qualification Pack: HCS/Q1504, v1.0
Sector Skill Council: Handicrafts and Carpet

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for each PC.
2. Each NOS will be assessed both for theoretical knowledge and practical
3. The assessment will be based on knowledge bank of questions created by the SSC.
4. Individual assessment agencies will create unique question papers for theory and skill practical part for each candidate at each examination/training center
5. To pass the Qualification Pack, every trainee should score a minimum of 70% in every NOS
6. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack

		Total Marks (500)			
HCS/N1504	**Create inlay work on marble**				
NOS Element	Performance Criteria		**Out of**	**Theory**	**Skills Practical**
Understanding customer's requirements	PC1. sit with the customer to understand the specific requirements related to pattern, size and colour combination	100	1	0	**1**
	PC2. capture customer's idea of colour scheme and tonality of the design		1	0	**1**
Putting customer's design idea / concept on the paper	PC3. draw the pattern in symmetric sections using traditional geometric tools and create the final sketch of the design		6	1	**5**
	PC4. trace the final sketch of the design on a brass sheet		5	0	**5**
	PC5. cut out the brass sheet as per the design to make templates of every component of the design		3	0	**3**
Selecting stones for the motif	PC6. select variety of semiprecious and precious stones for the motif		4	1	**3**
	PC7. select the base marble as per required size on which the pattern is to be developed		4	1	**3**
	PC8. choose various shades of these stones to give the right gradation and shading to the motif		4	1	**3**
Shaping semiprecious and precious stones as per the design	PC9. operate the hand driven tool known as "Saan & Kamaani" having an emery wheel		4	1	**3**
	PC10. hold piece of the gem stone in the fingertips and touch it repeatedly with the moving emery wheel in specific pattern so as to give it shape as per the motif		8	1	**7**

	requirements				
	PC11. shape all the gem stones of different sizes and colour required for the motif		6	1	**5**
Engraving the marble	PC12. place all the gem stones shaped as per the motif on the base marble		4	1	**3**
	PC13. arrange them at specific positions according to the motif design		4	1	**3**
	PC14. trace the contours of these stones one-by-one with a fine pointed chisel or a lead to get an outline of each element on the marble		6	1	**5**
	PC15. remove these shaped gem stones from the base marble and keep them in a chronological order		4	1	**3**
	PC16. engrave the marble using hand held chisels with great care to make grooves which correspond exactly with the shaped gem stones		4	1	**3**
	PC17. inlay all the shaped gem stones into their corresponding groves one-by-one using specially prepared glue		4	1	**3**
Polishing the marble with motif	PC18. apply the modern wax or special prepared mixture of polishing compounds on the marble with final motif		4	1	**3**
Achieving productivity and quality standards	PC19. accurately capture customer's requirements for motif		4	1	**3**
	PC20. create the design sketch very precisely as per customer's requirements		4	1	**3**
	PC21. select semiprecious and precious stones properly to give the right gradation and shading to the motif as per customer's specifications		4	1	**3**
	PC22. shape the gem stones very precisely as per the motif design		4	1	**3**
	PC23. engrave the marble such that all the grooves correspond exactly with the gemstones		4	1	**3**
	PC24. inlay the gem stones in the marble with such accuracy that there is no visible gap between the edge of the gem stone and the marble		4	1	**3**
	TOTAL POINTS		100	20	80
HCS/N9901	**Coordinate with colleagues and work as a team**				
NOS Element	**Performance Criteria**		Out of	Theory	Skills Practical
Interact with supervisor	PC1. receive job order and instructions from reporting supervisor	100	4	3	1
	PC2. understand the work output requirements, targets, performance indicators and incentives		5	4	1

	PC3.	deliver quality work on time and report any anticipated reasons for delays		5	1	4
	PC4.	report on any grievances, production defects and any potential hazards		4	2	2
	PC5.	communicate on process flow improvements		4	2	2
	PC6.	communicate maintenance and repair schedule proactively to the supervisor		4	1	3
	PC7.	receive feedback on work standards		4	2	2
	PC8.	interact and clarify doubts on design, usage of materials & tools, quality & standards compliance, etc		5	2	3
	PC9.	report in time for shortage or need of raw materials		4	1	3
	PC10.	handover completed work to supervisor		4	2	2
Work as a team by coordinating with colleagues within and outside the department	PC11.	communicate to the colleagues from within and other departments, clearly and effectively on all aspects to carry out the work among the team		5	2	3
	PC12.	maintain the etiquettes, use polite language, demonstrate responsible and disciplined behaviours to the colleagues		5	2	3
	PC13.	interact with colleagues from different functions and understand the nature of their work		4	2	2
	PC14.	put team over individual goals and multi task or share work where necessary supporting the colleagues		4	2	2
	PC15.	resolve conflicts and ensure smooth workflow		4	1	3
	PC16.	interact and understand the production requirement for the day from the previous and successive processing department and work accordingly		4	1	3
	PC17.	communicate and discuss work flow related difficulties in order to find solutions with mutual agreement		4	1	3
	PC18.	receive feedback from Quality Control and rework in order to complete work on time		5	1	4

	PC19. share information with colleagues to enable efficient delivery of work		6	3	3
	PC20. highlight any errors of colleagues, help to rectify and ensure quality output		4	2	2
	PC21. work with cooperation, coordination, communication and collaboration, with shared goals and supporting each others performance		4	1	3
Report and Document	PC22. document all the details accurately relating to one's role as required		4	1	3
	PC23. report on the work completed and keep it in records		4	1	3
	TOTAL POINTS		100	40	60
HCS/N9902	**Maintain safe work environment**				
NOS Element	**Performance Criteria**		Out of	Theory	Skills Practical
Follow safety procedure and practices	PC1. comply with safety procedures while on work to prevent accidents	100	8	2	6
	PC2. take adequate safety measures while handling materials, chemicals and tools		8	2	6
	PC3. wear appropriate personal protective gears such as gloves, protective goggles, masks etc. while working		8	2	6
	PC4. undertake basic safety checks before operation of all tools and electrical equipments		9	2	7
	PC5. wear appropriate and recommended clothing as per the work environment (eg: working in a furnace area)		9	2	7
	PC6. follow recommended material handling procedure to control material and personal damage		8	2	6
	PC7. perform all procedures as per company's work instructions for controlling operational risk		8	4	4
	PC8. perform the duties in a manner which minimizes environmental damage		6	2	4
	PC9. dispose of waste safely and correctly in a designated area as per company's SOP		8	2	6
	PC10. report any accidents, incidents or problems without delay to the supervisor and take necessary immediate action to reduce further danger		8	4	4
Achieve safety standards	PC11. ensure zero accident at workplace		10	2	8

	PC12. adhere to safety standards and ensure no material damage		10	2	8
	TOTAL POINTS		100	28	72
HCS/N9903	**Maintain personal health**				
NOS Element	**Performance Criteria**		Out of	Theory	Skills Practical
Adopt healthy work practices	PC1. always cover the mouth and nose with a dust mask while working and keep on changing when it gets blocked with dust	100	12	4	8
	PC2. follow work instructions strictly to reduce the amount of pollution at the work place e.g. wet the rock / craft material before working on it		10	2	8
	PC3. wear protective goggles over eyes and replace them when scratches on it obscure the vision		10	2	8
	PC4. wear gloves as per the materials used for making handicraft to avoid blisters; scratches and cuts		10	2	8
	PC5. undergo preventive health checkups at regular intervals		10	2	8
	PC6. take prompt treatment from the doctor in case of illness		11	3	8
	PC7. follow SOPs for dealing with blisters; scratches; accidental fires or any other type of emergencies at work		11	4	7
Achieve work productivity while maintaining health	PC8. ensure no productivity loss or absenteeism from work due to illness		13	3	10
	PC9. ensure no long term ill effect on the personal health		13	3	10
	TOTAL POINTS		100	25	75
HCS/N9904	**Basic business management**				
NOS Element	**Performance Criteria**		Out of	Theory	Skills Practical
People management	PC1. allot work to the employees of the unit according to their skill and experience	100	3	1	2
	PC2. train the employees of his/her unit with the appropriate skills required to make market relevant and quality products		3	1	2
	PC3. motivate the employees		2	1	1
	PC4. handle the grievances/issues that are raised by the employees		2	1	1
	PC5. manage the employee expectations		2	1	1
Product planning	PC6. gather and analyse the cues from the market		2	1	1

	PC7.	ascertain the customer preference	3	1	2
	PC8.	create product lines based on current market preference	3	1	2
	PC9.	create product lines that are unique and able to price high	3	1	2
	PC10.	price the products according to market trends	3	1	2
	PC11.	decide the best way to market the product lines	3	1	2
Procurement of raw materials	PC12.	make a list of raw materials required according to the product lines	2	0	2
	PC13.	ascertain the quantity and right price to procure the materials	3	1	2
	PC14.	identify the right locations/agents from where the raw materials can be procured	3	1	2
	PC15.	negotiate to get the best price	3	0	3
	PC16.	ensure quality materials are procured	4	1	3
	PC17.	ensure the procured materials are stored in appropriate conditions	3	1	2
	PC18.	maintain the bills and record the prices of procurement for future reference	3	1	2
	PC19.	maintain healthy vendor relationships	3	1	2
Market interfacing	PC20.	identify the nearest market	3	1	2
	PC21.	analyze the prevalent price for product lines	3	2	1
	PC22.	decide on the most effective means to access the market	2	1	1
	PC23.	plan for cost effective transportation to the market	3	1	2
	PC24.	position the product according to market requirements	3	1	2
	PC25.	manage customer expectations	2	0	2
Financial management	PC26.	analyze and ascertain the cost of production	3	1	2
	PC27.	maintain the book of accounts related to the business	3	1	2
	PC28.	own and operate a bank account	4	2	2
	PC29.	identify cost effective means of running business	3	1	2
Record keeping	PC30.	identify various aspects of business that require recording	3	2	1
	PC31.	create formats for recording	3	2	1
	PC32.	make various records pertaining to all aspects of business	3	2	1
	PC33.	maintain these records with	3	2	1

	periodic updation				
	PC34. maintain necessary documents as per local government and regulatory requirement		3	2	1
	PC35. analyze the records and glean various trends from the same		3	2	1
	TOTAL POINTS		100	40	60