

# Model Curriculum

## 1. Jute Screen Printer

**SECTOR: HANDICRAFTS AND CARPET**  
**SUB-SECTOR: HAND CRAFTED TEXTILES**  
**OCCUPATION: NATURAL FIBRE CRAFTS**  
**REF ID: HCS/Q7404, V1.0**  
**NSQF LEVEL: 4**



## Certificate

### CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

**HANDICRAFTS AND CARPET SECTOR SKILL COUNCIL**

for the

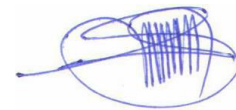
### MODEL CURRICULUM

Complying to National Occupational Standards of  
Job Role/ Qualification Pack: **Jute Screen Printer-OP No. 'HCS/Q 7404 NSQF Level 4**

Date of Issuance: **November 10<sup>th</sup>, 2017**

Valid up to: **November 9<sup>th</sup>, 2019**

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



Authorised Signatory  
(Handicrafts and Carpet Sector Skill Council)

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# Jute Screen Printer

## CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Jute Screen Printer”, in the “Handicrafts and Carpet” Sector/Industry and aims at building the following key competencies amongst the learner

<b>Program Name</b>	<b>Jute Screen Printer</b>		
<b>Qualification Pack Name &amp; Reference ID.</b>	HCS/Q7404, v1.0		
<b>Version No.</b>	1.0	<b>Version Update Date</b>	10/11/2017
<b>Pre-requisites to Training</b>	Basic Literacy		
<b>Training Outcomes</b>	<p><b>After completing this programme, participants will be able to:</b></p> <ul style="list-style-type: none"> <li>• Take charge of shift from Jute Screen Printer</li> <li>• Hand over shift to Jute Screen Printer</li> <li>• Carry out preparatory activity of screen making</li> <li>• Prepare the screen as per design and as per work order</li> <li>• Carry out preparatory activities for preparing the jute fabric by scouring/bleaching/dyeing and drying etc. to make it ready for printing</li> <li>• Preparation of Print Paste with utmost care and proper instruction</li> <li>• Fix and set the designed screen, and arrange to put the Print Paste on screen.</li> <li>• Operate the squeeze for printing specified design as per work order on specified preferred jute fabric</li> <li>• Clean the screen and squeeze on a regular basis &amp; carry out preventive maintenance of it.</li> <li>• Maintain the work area, tools and machines.</li> <li>• Exercise commitment and trust, communication, adaptability and creative freedom</li> <li>• Comply with health, safety and security requirements at work</li> <li>• Recognize hazards</li> <li>• Work towards self-development, team work and organizational standards.</li> </ul>		







Sr. No.	Module	Key Learning Outcomes	Equipment Required
		<p>printing blanket for sticking</p> <ul style="list-style-type: none"> <li>• Ensure fabric is fed/laid as crease-free and lint/ dust free and surface is ready for printing from all aspects</li> <li>• Place the specified screens with design as per work order on and above the table in sequence for varying number of colours etc. and those are to be put on Printing Table or Printing Head of the machine according to the colours to be printed</li> <li>• Set the repeat according to the design to be printed as per measurement and marks on the screen</li> <li>• Get all dyes or Pigments &amp; printing chemical/ auxiliaries (like Binder, Catalyst, Thickener or Kerosene oil or Tarpine oil) etc. are ready in specific quantity weighted</li> <li>• Get and check the recipe / instruction and mix the gum/synthetic thickener/oil in water emulsion thickener, binder &amp; other auxiliaries first to get the required viscosity by stirring well with stirrer</li> <li>• Dissolve and add specified dyes/ intake pigments emulsion to the above said thickening paste according to the shade and design to be printed on the cloth hand filter the coloured print paste to avoid choke up of design screen</li> <li>• Check and put screen to 'zero' position on the print machine or print table blanket for proper fabric printing before starting to print fabric</li> <li>• Make the Screen print table and fabric laid on it (with glue on table blanket)and start of the printing &amp; keep the squeeze ready and adjusting squeeze pressure by trial printing if registration is poor or uneven or proper</li> <li>• Maintain synchronized feed/laying of specified fabric for print in machine or Print Screen Table</li> <li>• Carry out printing with proper squeeze pressure and check for pin holes defects &amp; other defects due to blockage of screen or any other reason</li> <li>• Take out the printed fabric and send to drying and stretching and /or curving and clean the screens, after printing is stopped for longer periods</li> <li>• Make sure the fabric is dried and stretched/curved properly after printing</li> <li>• Keep the print table/Screens/Squeeze</li> </ul>	



Sr. No.	Module	Key Learning Outcomes	Equipment Required
		<p>and Print machine always clean at all times and clean the printing blanket before changing to new design or new matching</p> <ul style="list-style-type: none"> <li>• Check the screens for any defect and repair/replace following preventive maintenance schedule and ensure that the print machine and stirrer and dryer etc. running smoothly</li> <li>• Check that all controls of screen printing and print fixation drying/stirring machine</li> <li>• Clean the printing blanket before changing to new design or new shade matching</li> </ul>	
4	<p><b>Maintain work area and tools in handloom sector</b></p> <p><b>Theory Duration</b> (hh:mm) 10:00</p> <p><b>Practical Duration</b> (hh:mm) 20:00</p> <p><b>Corresponding NOS Code</b> HCS/N9005</p>	<ul style="list-style-type: none"> <li>• Handle materials and tools safely and correctly</li> <li>• Use correct lifting and handling procedures</li> <li>• Use materials in a manner to minimize waste</li> <li>• Maintain a clean and hazard free working area</li> <li>• Maintain the tools and equipment used</li> <li>• Carry out running maintenance within agreed schedules one's responsibility</li> <li>• Identify damaged tools and materials and take action according to the standards followed</li> <li>• Ensure that the correct tools and yarn required are in place</li> <li>• Work in the correct posture</li> <li>• Use cleaning equipment and methods appropriate for the work to be carried out</li> <li>• Dispose of waste safely in the designated location</li> <li>• Store cleaning equipment safely after use</li> <li>• Carry out cleaning according to schedule and limits of responsibility</li> </ul>	Laptop, white board, marker, projector, first aid kit, PPE
5	<p><b>Working in a team in handloom sector</b></p> <p><b>Theory Duration</b> (hh:mm) 10:00</p> <p><b>Practical Duration</b> (hh:mm) 20:00</p> <p><b>Corresponding NOS Code</b> HCS/N9006</p>	<ul style="list-style-type: none"> <li>• Be accountable to the own role in whole process</li> <li>• Perform all roles with full responsibility</li> <li>• Be effective and efficient at workplace</li> <li>• Properly communicate about workplace policies</li> <li>• Talk politely with other team members and colleagues</li> <li>• Submit daily report of own performance</li> <li>• Adjust in different work situations</li> <li>• Give due importance to others' point of view</li> <li>• Avoid conflicting situations</li> <li>• Improve upon the existing techniques to</li> </ul>	Laptop, white board, marker, projector, first-aid kit, PPE



Sr. No.	Module	Key Learning Outcomes	Equipment Required
	<b>Practical Duration</b> (hh:mm) 20:00  <b>Corresponding NOS Code</b> HCS/N9008	and colleagues <ul style="list-style-type: none"> <li>• Communicate politely</li> <li>• Avoid conflicts and miscommunication</li> <li>• Know the organisational standards</li> <li>• Implement them in your performance</li> <li>• Motivate others to follow them</li> </ul>	
	<b>Total Duration</b>  <b>Theory Duration</b> <b>100:00</b>  <b>Practical Duration</b> <b>200:00</b>	<b>Unique Equipment Required:</b> Laptop, white board, marker, projector, first aid kit, PPE, screen, wooden block and nails, frame, rope for binding the screen cloth, squeezers, stove, hand gloves, scissor, beaker – plastic/glass, glass rod, spatula, thermometer, weighing balance, wooden stick, shade card, tumbler/ gamla	

**Grand Total Course Duration: 300 Hours, 0 Minutes**

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

## Trainer Prerequisites for Job role: “Jute Screen Printer” mapped to Qualification Pack: “HCS/Q7404, v1.0”

Sr. No.	Area	Details
1	<b>Description</b>	Jute Screen Printer is responsible for preparation of Screen and Printing Paste, and applying that Printing Paste through Screens of specific design. He is also responsible for printing Jute fabric as per specific design without damaging either fabric or screen. He/She should know how to print without any print defect or design distortion.
2	<b>Personal Attributes</b>	A Jute Screen Printer should have good capability of drawing, eyesight, matching skills for preparation of Screen and Print Paste, and running squeeze on Screen using suitable Print Paste. He/she should also have good interpersonal skills for exchange of design ideas and understand the reasons of defect in printing.
3	<b>Minimum Educational Qualifications</b>	10 <sup>th</sup> Pass
4a	<b>Domain Certification</b>	Certified for Job Role: “Jute Screen Printer” mapped to QP: “HCS/Q7404, v1.0”. Minimum accepted score is 80%
4b	<b>Platform Certification</b>	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	<b>Experience</b>	<ul style="list-style-type: none"> <li>• Total 3 Years experience</li> <li>• 2 Years of sector-specific experience,</li> <li>• Min. 1 year of teaching experience.</li> </ul>

### CRITERIA FOR ASSESSMENT OF TRAINEES

**Job Role:** Jute Screen Printer

**Qualification Pack:** HCS/Q7404

**Sector Skill Council:** Handicrafts and Carpet

**Guidelines for Assessment:**

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 Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on these criteria.
5. To pass the Qualification Pack, every trainee should score a minimum of 80% 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.
7. In case of *unsuccessful completion*, the trainee may seek reassessment on the Qualification Pack.

Assessable Outcomes	Assessment Criteria	Total Marks	Out of	Theory	Practical Skills
HCS/N7408 Take charge of shift and hand over shift to Jute Screen Printer	PC1.come at least 10 - 15 minutes earlier to the work place	<b>100</b>	4	1	3
	PC2.collect or bring the necessary operational tools required by this Screen Printing department like tracing paper, drawing, glue, tapes, pencil/ pen/black ink, dichromate/Sensitizer, chemicals, PVA, gel, brush, squeeze screen, working light set, dryer		5	1	4
	PC3.meet the previous shift Jute Screen Printer and discuss with him/her regarding the issues faced by them with respect to the design quality, print paste quality, production, spare parts, accessories/ safety or any other specific instruction etc.		6	1	5
	PC4.understand jute fabric being printed & preparatory process undergone before printing		4	1	3
	PC5.ensure the technical details as mentioned on the job card display for each jute screen printer		5	1	4
	PC6.check for the availability of thickner/ binder/ catalyst/others ingredient for preparation of Print Paste correctly with required viscosity		6	1	5
	PC7.check the cloth and print paste for next batch to be printed is ready near the Print table		5	1	4

PC8.ensure the required Screen preparation chemicals/gels, dyes and pigments and chemicals like binder, catalyst, softner, wetting agent, kerosene/tarpin oil etc. are already weighed & prepared	6	1	5
PC9.check the error free, design imprinted and clean Print Screen and clean work areas	5	1	4
PC10.know from the previous shift printer for any deviation in the above and pass on the same knowledge of his/ her shift to the printer of next shift	4	2	2
PC11.take over the charge of present shift from the outgoing jute screen printer with sufficient brief of quality , process, shift etc.	6	1	5
PC12.ensure in providing the details regarding jute fabric quality & the process printing design running and Printing Paste in stock remained etc.	5	1	4
PC13.provide all relevant information regarding the loss of production/defects in printing and if any damage occur to the fabric or prints.	6	2	4
PC14.ensure the proper fitting of clips etc. for screen printing table	4	1	3
PC15.ensure the next lot of fabric to be printed is ready near the table already set & arranged properly	5	1	4
PC16.ensure the required Screen preparatory chemicals, Nylon Screen cloth, dyes & chemicals, binder etc. for the next lotor next shift of Screen printing work for jute fabric	5	1	4
PC17.get clearance from the incoming counterpart Jute Screen Printer before leaving the work spot	4	2	2
PC18.report to his/ her shift superiors as well as superiors of the incoming shift when the jute printer of next shift doesn't report	5	2	3
PC19.ensure the shift has to be properly handed over with all detailed information to the incoming shift Jute Screen Printer	4	1	3
PC20.report to his/ her shift superior about the design /defects/print paste quality /fabric quality / production and safety during Screen printing, issues/ any other issue faced in his/ her shift and should leave the department only after getting clearence for the same from his/ her superiors	6	2	4

		Total	100	25	75
HCS/N7409 Responsibility of Jute Screen Printer	PC1.stretch the screen cloth on the back side of the frames evenly (creaseless) and fix it temporarily to keep for few hours	100	3	1	2
	PC2.re-stretch the mesh cloth again & stick it to the frame with glue or with cord/nails		3	1	2
	PC3.decrease the screen thoroughly using screen degreaser		3	1	2
	PC4.understand the design and colour combination mentioned in the work order, how to prepare the design on tracing with colour separation		3	1	2
	PC5.check the art work or the design film to be exposed / prepared		2	1	1
	PC6.cut the Nylon Screen fabric design required number of mesh as per size of screen/ screen frame		2	0	2
	PC7.draw the design as per color used on tracing paper		3	2	1
	PC8.check the design repeat and design measurement		2	0	2
	PC9.check the number of colours used and need to be printed in the specified design and do colour separation		2	1	1
	PC10.clean the screen frames and choose correct error free / defect free screen		2	0	2
	PC11.select the right mesh size of screen cloth depending upon the type of design to be printed (fine/coarse cloth)		3	1	2
	PC12.apply solvent resistant PVA Gel emulsion with Sensitiser mixed, evenly to the screen by brush		3	1	2
	PC13.dry the screen completely in dark before exposure, in low temperature dryer		2	0	2
	PC14.maintain optimum drying conditions in the drying chamber		3	1	2
	PC15.ensure the drying area is warm, dust free and dark (no light)		2	0	2
	PC16.put the traced design over and above the screen mesh cloth and fix with glue and Tape with marking point properly placed		3	1	2
	PC17.expose the screen with design tracing paper fixed at the back to be placed to light exposure unit		2	0	2

PC18. wash the exposed screen thoroughly to get the design part cleared and another part is hardened after two hours exposure	2	0	2
PC19.dry the screen completely for use	2	0	2
PC20.summarize the task mentioned in the work order (design, number of colours, fabrics, back ground colour of fabrics, Repeat unit/Border etc.)	3	1	2
PC21.ensure that the specified screen are properly washed and clean	2	0	2
PC22.check the fabric for its whiteness /colour /specification etc. and load the fabric from the batch/trolley in the center of the screen printing table or screen printing machine	3	1	2
PC23.apply glue /adhesive material to the printing blanket for sticking	2	0	2
PC24.ensure fabric is fed/laid as crease- free and lint/ dust free and surface is ready for printing from all aspects	2	0	2
PC25.place the specified screens with design as per work order on and above the table in sequence for varying number of colours etc. and those are to be put on Printing Table or Printing Head of the machine according to the colours to be printed	3	1	2
PC26.set the repeat according to the design to be printed as per measurement and marks on the screen	3	1	2
PC27.get all dyes or Pigments & printing chemical / auxiliaries (like Binder, Catalyst, Thickener or Kerosene oil or Tarpine oil) etc. are ready in specific quantity weighted	3	1	2
PC28.get and check the recipe / instruction and mix the gum/synthetic thickener/oil in water emulsion thickener, binder & other auxiliaries first to get the required viscosity by stirring well with stirrer	3	1	2
PC29.dessolve and add specified dyes/ intake pigments emulsion to the above said thickening paste according to the shade and design to be printed on the cloth and filter the coloured print paste to avoid choke up of design screen	3	1	2
PC30.check and put screen to 'zero' position on the print machine or print table blanket for proper fabric printing before starting to print fabric	3	1	2





	PC7. Identify damaged tools and materials and take action according to the standards followed		5	2	3
	PC8. Ensure that the correct tools and yarn required are in place		3	1	2
	PC9. Work in the correct posture		3	1	2
	PC10. Use cleaning equipment and methods appropriate for the work to be carried out		3	1	2
	PC11. Dispose of waste safely in the designated location		4	2	2
	PC12. Store cleaning equipment safely after use		3	1	2
	PC13. Carry out cleaning according to schedule and limits of responsibility		5	2	3
		<b>Total</b>	<b>50</b>	<b>19</b>	<b>31</b>
HCS/N9006 Working in a team in handloom sector	PC1. Be accountable to the own role in whole process	50	6	2	4
	PC2. Perform all roles with full responsibility		5	1	4
	PC3. Be effective and efficient at workplace		4	2	2
	PC4. Properly communicate about workplace policies		5	2	3
	PC5. Talk politely with other team members and colleagues		5	2	3
	PC6. Submit daily report of own performance		6	2	4
	PC7. Adjust in different work situations		5	2	3
	PC8. Give due importance to others' point of view		5	2	3
	PC9. Avoid conflicting situations		5	2	3
	PC10. Improve upon the existing techniques to increase process efficiency		4	2	2
		<b>Total</b>	<b>50</b>	<b>19</b>	<b>31</b>
HCS/N9007 Maintain health, safety and security at work place	PC1. Comply with health and safety related instructions applicable to the workplace	100	6	2	4
	PC2. Use and maintain personal protective equipment as per protocol		6	2	4

in handloom sector	PC3.Carry out own activities in line with approved guidelines and procedures	4	1	4
	PC4.Maintain a healthy lifestyle and guard against dependency on intoxicants	4	1	3
	PC5.Follow environment management system related procedures	4	1	3
	PC6.Store materials and tools in line with manufacturer's and Cooperative Society/ NGO/ SHG requirements	4	2	2
	PC7.Safely handle and move waste and debris	4	2	2
	PC8.Minimize health and safety risks to self and others due to own actions	6	2	4
	PC9.Monitor the work place and work processes for potential risks and threats	6	2	4
	PC10.Carry out periodic walk –through to keep work area free from hazards and obstructions, if assigned	6	2	4
	PC11.Participate in mock drills/ evacuation procedures organized at the workplace	4	2	2
	PC12.Undertake first aid, fire-fighting and emergency response training, if asked to do so	6	2	4
	PC13.Take action based on instructions in the event of fire, emergencies or accidents	6	2	4
	PC14.Follow Cooperative Society/NGO/SHG procedures for evacuation when required	4	1	3
	PC15.Identify different kinds of possible hazards (environmental, personal, ergonomic, and chemical) of the industry	4	1	3
	PC16.Recognise other possible security issues existing in the workplace	4	1	3
	PC17.Planning the safety techniques	5	2	3
	PC18.Recognise different measures to curb the hazards	4	1	3
	PC19.Implementing the programs	5	2	3
	PC20.Communicate the safety plan to everyone	4	1	3
	PC21.Attach disciplinary rules with the implementation	4	1	3

