

Model Curriculum

Loin Loom Weaver

SECTOR : TEXTILE
SUB-SECTOR : HANDLOOM & KHADI
OCCUPATION : HANDLOOM WEAVING
REF ID : TSC/Q7307, V 1.0
NSQF LEVEL : 4



Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

TEXTILE SECTOR SKILL COUNCIL

for the

MODEL CURRICULUM

Complying to National Occupational Standards of Job
Role/ Qualification Pack: 'LOIN LOOM WEAVER'
QP No. 'TSC/Q7307' NSQF Level 4

Date of Issuance: **Feb, 11th, 2019**

Valid up to: **Feb, 11th, 2021**

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



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Loin Loom Weaver

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Loin Loom Weaver”, in the “Textile” Sector and aims at building the following key competencies amongst the learner

Program Name	Loin Loom Weaver		
Qualification Pack Name & Reference ID.	TSC/Q7307, v 1.0		
Version No.	1.0	Version Update Date	11.02.2019
Pre-requisites to Training	Basic Literacy and Numeracy		
Training Outcomes	<p>After completing this programme, participants will be able to:</p> <ul style="list-style-type: none"> • Weave the fabric using loin loom • Manage the work area, tools and machines as per Handloom cluster guidelines • Demonstrate team working in Handloom sector • Describe the importance of health, safety and security at Handloom sector work place • Summarize the work place requirements in Handloom sector 		

This course encompasses 5 out of 5 National Occupational Standards (NOS) of “Loin Loom Weaver” Qualification Pack issued by “TSC: Textile Sector Skill Council”

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1.	<p>Fabric Design Analyzation</p> <p>Theory Duration (hh:mm) 12:00</p> <p>Practical Duration (hh:mm) 33:00</p> <p>Corresponding NOS Code TSC/N7310</p>	<ul style="list-style-type: none"> Identify the fabric parameters for weaving Sketch the fabric structure as per the requirement Identify the correct yarn count for weaving as per product requirement Calculate the weft and warp yarn requirement for desired length of fabric Use the appropriate yarn color for weaving as per product specification Describe woven fabric parameters Draft a fabric specification sheet as per given parameters 	<ul style="list-style-type: none"> Loin Loom Setup Lease rods Bamboo Sticks Warp and Weft yarns
2.	<p>Yarn Preparation and Gaiting</p> <p>Theory Duration (hh:mm) 14:00</p> <p>Practical Duration (hh:mm) 36:00</p> <p>Corresponding NOS Code TSC/N7310</p>	<ul style="list-style-type: none"> Demonstrate warp sheet preparation as per the warp design specification Demonstrate weft yarn preparation as per the pattern specification Demonstrate extra weft yarn preparation as per the extra weft motif requirement Build heddle thread tie up on heddle shaft as per fabric structure requirement Assemble the loin loom setup at the desired location for weaving Demonstrate lease rod arrangement as per the fabric specification Arrange the bamboo sticks as per the weave requirements Define the requirements for warp sheet tension Define the requirements of defect free yarn usage in loin loom weaving Demonstrate the gaiting activity within the given time frame Describe the check points in loin loom gaiting as per the fabric specification 	<ul style="list-style-type: none"> Loin Loom Setup Lease rods Bamboo Sticks Warp and Weft yarns

Sr. No.	Module	Key Learning Outcomes	Equipment Required
3.	<p>Loin Loom Weaving</p> <p>Theory Duration (hh:mm) 12:00</p> <p>Practical Duration (hh:mm) 33:00</p> <p>Corresponding NOS Code TSC/N7310</p>	<ul style="list-style-type: none"> Describe the sequence of primary actions in the loom Describe the sequence of secondary motions in the loom Demonstrate shedding operation as per weave pattern Demonstrate picking operation as per design requirement Demonstrate beating operation using bamboo stick Demonstrate take up/ turning of woven fabric Demonstrate knotting of broken yarns as per the knot specification Demonstrate the weft yarn replenishment as per the design requirement Create extra weft design as per the specification sheet 	<ul style="list-style-type: none"> Loin Loom Setup Lease rods Bamboo Sticks Warp and Weft yarns
4.	<p>Quality Control and Finishing</p> <p>Theory Duration (hh:mm) 12:00</p> <p>Practical Duration (hh:mm) 33:00</p> <p>Corresponding NOS Code TSC/N7310</p>	<ul style="list-style-type: none"> Demonstrate fabric cutting and finishing activity Demonstrate tussling and trimming as per design requirements Produce defect free fabric as per the design specification Demonstrate folding and packing of the finished fabric Explain the fabric defects and rectification methods Describe the various designing and finishing methods Define the quality requirements of the Hand-woven fabrics Describe the quality requirements of raw materials required for loin loom weaving 	<ul style="list-style-type: none"> Loin Loom Setup Lease rods Bamboo Sticks Warp and Weft yarns
5.	<p>Work area, tools and machine maintenance</p> <p>Theory Duration (hh:mm) 08:00</p> <p>Practical Duration (hh:mm) 15:00</p> <p>Corresponding NOS Code TSC/9005</p>	<ul style="list-style-type: none"> Handle the yarns, lease rods as per specification Demonstrate correct lifting procedure for warp sheet, Heddles, Lease rods Work in correct posture Identify the damaged tools and materials Segregate wastes as per the direction Dispose the waste safety as per specification Clean the work place in regular basis 	<ul style="list-style-type: none"> Loin Loom Setup Lease rods Bamboo Sticks Warp and Weft yarns

Sr. No.	Module	Key Learning Outcomes	Equipment Required
6.	<p>Team Work</p> <p>Theory Duration (hh:mm) 09:00</p> <p>Practical Duration (hh:mm) 14:00</p> <p>Corresponding NOS Code TSC/N9006</p>	<ul style="list-style-type: none"> • Discuss the importance of team work • List out the advantages of team work • Explain the NGO/ SHG/ Society policies • Submit daily report of their own performance • Report daily work done to supervisory as per company's protocol. 	<ul style="list-style-type: none"> • Loin Loom Setup • Lease rods • Bamboo Sticks • Warp and Weft yarns
7	<p>Health & Safety</p> <p>Theory Duration (hh:mm) 14:00</p> <p>Practical Duration (hh:mm) 32:00</p> <p>Corresponding NOS Code TSC/N9007</p>	<ul style="list-style-type: none"> • Discuss the importance of general safety Rules • Discuss the importance of a healthy environment in the work place • Handle the tools and waste as per company standard • Monitor the work place for possible health hazards • Identify and select right firefighting equipment • Describe the evacuation methods during emergency period 	<ul style="list-style-type: none"> • Loin Loom Setup • Lease rods • Bamboo Sticks • Warp and Weft yarns
8	<p>Organizational Compliance</p> <p>Theory Duration 09:00 (hh:mm)</p> <p>Practical Duration 14:00 (hh:mm)</p> <p>Corresponding NOS Code TSC/N9008</p>	<ul style="list-style-type: none"> • Describe the role and responsibilities of team members • Communicate with team mates politely • Discuss the company rules and standards to the team • Discuss the new methods to develop the existing work practice • Describe the reporting procedure 	<ul style="list-style-type: none"> • Loin Loom Setup • Lease rods • Bamboo Sticks • Warp and Weft yarns

Sr. No.	Module	Key Learning Outcomes	Equipment Required
Total Duration: (hh:mm) 300:00 Theory Duration (hh:mm) 90:00 Practical Duration (hh:mm) 210:00	Unique Equipment Required: Loin Loom Setup, Lease rods, Bamboo stick, Warp and Weft yarns		

Grand Total Course Duration: 300 Hours, 0 Minutes

(This syllabus/ curriculum has been approved by TSC: Textile Sector Skill Council)

Trainer Prerequisites for Job role: “Loin Loom Weaver” mapped to Qualification Pack: “Loin Loom Weaver / TSC/Q7307, Version 1.0”

Sr. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “ <u>Loin Loom Weaver / TSC/Q7307, Version 1.0</u> ”.
2	Personal Attributes	Aptitude for conducting training, and pre / post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well-organized and focused, eager to learn and keep oneself updated with the latest in the mentioned field.
3	Minimum Educational Qualifications	Basic Literacy and Numeracy
4a	Domain Certification	Certified for Job Role: Loin Loom Weaver” mapped to QP: “ <u>Loin Loom Weaver / TSC/Q7307, Version 1.0</u> ”. Minimum accepted score 80%.
4b	Platform Certification	Required that the Trainer is certified for MEP/Q 0102 Job Role: “Trainer” with at least 80% score
5	Experience	Minimum 7 years’ experience in relevant sector

Annexure: Assessment Criteria

CRITERIA FOR ASSESSMENT OF TRAINEES

Job Role: Loin Loom Weaver

Qualification Pack: TSC/Q7307

Sector Skill Council Textile Sector Skill Council

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. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/ option NOS/ set of NOS.
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criterion.
6. To pass the Qualification Pack, every trainee should score a minimum of 70% in aggregate marks to successfully clear the assessment
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

Compulsory:

Total Marks: 650	Compulsory NOS			Marks Allotted	
Assessable Outcomes	Assessment Criteria	Total Marks	Out of	Theory	Skills Practical
TSC/N7310 Carry our weaving operation on loin loom	PC1. Analyze the fabric parameters for weaving. i.e., Warp color, Weft Colour, Fabric structure, Extra weft design, warp count, weft count, ends per inch, picks per inch, number of multiple sheds required for inserting extra weft.		50	20	30
	PC2. Arrange required defect free warp yarn sheet and weft yarn package for Weaving.		35	10	25
	PC3. Arrange necessary number of Bamboo lease rods and beating rod and their positions as per the weave structure.		15	5	10
	PC4. Prepare the yarn hank for warping and ensure it is defect free.		20	4	16
	PC5. Prepare warp sheet as the per the required fabric specification. i.e., Length, Width, No of warp ends, color pattern and design to be woven.		25	5	20
	PC6. Tie up the shedding heddles to the heddle stick through the warp sheet to facilitate shed formation as per the fabric structure requirement.		20	4	16
	PC7. Mount the warp sheet in loop form over the		20	6	14

Total Marks: 650	Compulsory NOS			Marks Allotted	
Assessable Outcomes	Assessment Criteria	Total Marks	Out of	Theroy	Skills Practical
	loom rods at adequate tension for weaving.				
	PC8. Arrange the lease and fix required number bamboo lease rods as per the extra weft design.		15	5	10
	PC9. Prepare the weft yarn for winding as per weft color requirement.		10	4	6
	PC10. Wind the weft yarn for base fabric on pirn or wooden stick manually or by winding machine.		10	2	8
	PC11. Prepare the extra weft yarn as per the design requirement.		10	2	8
	PC12. Adjust the backstrap or loom rods to get required warp tension for weaving.		20	5	15
	PC13. Open the shed by lifting the heddle stick.		15	5	10
	PC14. Insert the Base weft/ extra figuring weft as per the design.		25	5	20
	PC15. Perform beat up using beating stick.		10	2	8
	PC16. Roll the loom rods anti clock wise to get the length of warp sheet forward for weaving.		20	6	14
	PC17. Maintain proper warp sheet tension.		20	5	15
	PC18. lay the weft pick evenly parallel to the previous pick without slackness/loop to ensure the selvedge's are clean.		20	5	15
	PC19. Attend warp breakages and weft breakage as per design specification.		15	5	10
	PC20. Maintain even beat up force throughout the weaving.		10	4	6
	PC21. Maintain the quality as per customer specification.		5	2	3
	PC22. Cut the warp sheet carefully and do finishing. i.e., Tassling, trimming.		5	2	3
	PC23. Join the woven fabrics as per specification.		5	2	3
		Total	400	115	285
TSC/N9005 Maintain work area and tools in handloom sector	PC1. Handle materials and tools safely and correctly		5	2	3
	PC2. Use correct lifting and handling procedures		3	1	2
	PC3. Use materials in a manner to minimize waste		3	1	2
	PC4. Maintain a clean and hazard free working area		3	1	2
	PC5. Maintain the tools and equipment used for winding		5	2	3
	PC6. Carry out maintenance and/or cleaning within one's responsibility		5	2	3

Total Marks: 650	Compulsory NOS			Marks Allotted	
Assessable Outcomes	Assessment Criteria	Total Marks	Out of	Theroy	Skills Practical
	PC7. Identify damaged tools and materials and take action according to the standards followed	50	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
		Total	50	19	31
TSC/N9006 Working in a team in handloom sector	PC1. Be accountable to one's own role in the whole process	50	6	2	4
	PC2. Perform all roles with full responsibility		5	2	3
	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
		Total	50	20	30
TSC/N9007 Maintain health, safety and security at work place in handloom sector	PC1. comply with health and safety related instructions applicable to the workplace		6	2	4
	PC2. use and maintain personal protective equipment as per protocol		6	2	4
	PC3. carry out own activities in line with approved guidelines and procedures		4	1	3
	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

Total Marks: 650	Compulsory NOS			Marks Allotted	
Assessable Outcomes	Assessment Criteria	Total Marks	Out of	Theory	Skills Practical
	PC8. minimize health and safety risks to self and others due to own actions	100	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. recognize other possible security issues existing in the workplace		4	1	3
	PC17. plan the safety techniques		5	2	3
	PC18. recognize different measures to curb the hazards		4	1	3
	PC19. implement the programs		5	2	3
	PC20. communicate the safety plans to everyone		4	1	3
	PC21. attach disciplinary rules with the implementation		4	1	3
		Total	100	33	67
TSC/N9008 Comply with work place requirements in handloom sector	PC1. Perform own duties effectively	50	5	2	3
	PC2. Take responsibility for own actions		5	2	3
	PC3. Be accountable towards the job role and assigned duties		5	2	3
	PC4. Take initiative and innovate the existing methods		3	1	2
	PC5. Focus on self-learning and improvement		5	2	3
	PC6. Co-ordinate with all team members and colleagues		5	2	3
	PC7. Communicate politely		5	2	3
	PC8. Avoid conflicts and miscommunication		5	2	3
	PC9. Know the organizational standards		5	2	3
	PC10. Implement them in your performance		5	2	3
	PC11. improve upon the existing techniques to increase process efficiency		2	1	1
		Total	50	20	30