

Textile Dyeing machine operator

- ☒ Short Term Training (STT) ☐ Long Term Training (LTT) ☒ Apprenticeship
☒ Upskilling ☐ Dual/Flexi Qualification ☐ For ToT ☐ For ToA
☒ General ☐ Multi-skill (MS) ☐ Cross Sectoral (CS) ☐ Future Skills ☐ OEM

NCrF/NSQF Level: 2

Submitted By:

Textile Sector Skill Council

Contact Details:

Dr. Swapna Mishra
Chief Executive Officer,
M: 98182-17453

Textile Sector Skill Council,
Unit 1011-1013, 10th Floor, Ambadeep Building,
14 Kasturba Gandhi Marg,
New Delhi – 110001.

Table of Contents

Section 1: Basic Details	.....
Section 2: Module Summary	.....
NOS/s of Qualifications	.....
Mandatory NOS/s:	.....
Elective NOS/s:	.....
Optional NOS/s:	.....
Assessment - Minimum Qualifying Percentage	.....
Section 3: Training Related	.....
Section 4: Assessment Related	.....
Section 5: Evidence of the Need for the Qualification	.....
Section 6: Annexure & Supporting Documents Check List	.....
Annexure 1: Evidence of Level	.....
Annexure 2: Tools and Equipment	.....
Annexure 3: Industry Validations Summary	.....
Annexure 4: Training & Employment Details	.....
Annexure 5: Blended Learning - NA	.....
Annexure 6: Detailed Assessment Criteria	.....
Annexure 7: Assessment Strategy	.....
Annexure 8: Acronym and Glossary	.....

Section 1: Basic Details

1.	Qualification Name	Textile Dyeing machine operator	
2.	Sector/s	Textile & Handlooms	
3.	Type of Qualification ☐ New ☒ Revised ☐ Has Electives/ Options ☐ OEM	NQR Code & version of the existing /previous qualification: QG-02-TX-01893-2024-V1.1-TSC	Qualification Name of the existing/previous version: Textile Dyeing machine operator
4.	a. OEM Name b. Qualification Name (Wherever applicable)	NA NA	
5.	National Qualification Register (NQR) Code & Version	QG-02-TX-04096-2025-V2-TSC	6. NCrF/NSQF Level: 2
7.	Award (Certificate/Diploma/Advance Diploma/ Any Other) (Wherever applicable specify multiple entry/exits also & provide details in annexure)	Certificate	
8.	Brief Description of the Qualification	A Dyeing Machine Operator is responsible for pretreatment and dyeing operations. The job requires the individual to have thorough knowledge of process flow and material flow in a processing mill for fabric production and he should know the important functions and operations of textile dyeing machines.	

9.	Eligibility Criteria for Entry for a Student/Trainee/Learner/Employee	a. Entry Qualification & Relevant Experience: <table border="1" data-bbox="793 233 1789 410"> <tr> <th data-bbox="793 233 898 370">S. No.</th> <th data-bbox="898 233 1360 370">Academic/Skill Qualification (with Specialization - if applicable)</th> <th data-bbox="1360 233 1789 370">Relevant Experience (with Specialization - if applicable)</th> </tr> <tr> <td data-bbox="793 370 898 410">1</td> <td data-bbox="898 370 1360 410">Ability to read and write</td> <td data-bbox="1360 370 1789 410">Nil</td> </tr> </table> 18 Years				S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Relevant Experience (with Specialization - if applicable)	1	Ability to read and write	Nil						
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Relevant Experience (with Specialization - if applicable)															
1	Ability to read and write	Nil															
10.	Credits Assigned to this NOS- Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	11 Credits		11. Common Cost Norm Category (I/II/III) (wherever applicable): I													
12.	Any Licensing Requirements for Undertaking Training on This Qualification	Not Applicable															
13	Training Duration by Modes of Training Delivery (Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)	☒ Offline Only ☐ Online Only ☐ Blended <table border="1" data-bbox="1073 1008 1759 1222"> <tr> <th data-bbox="1073 1008 1318 1117">Training Delivery Mode</th> <th data-bbox="1318 1008 1472 1117">Theory (Hours)</th> <th data-bbox="1472 1008 1625 1117">Practical (Hours)</th> <th data-bbox="1625 1008 1759 1117">Total (Hours)</th> </tr> <tr> <td data-bbox="1073 1117 1318 1182">Classroom (offline)</td> <td data-bbox="1318 1117 1472 1182">87</td> <td data-bbox="1472 1117 1625 1182">183</td> <td data-bbox="1625 1117 1759 1182">270</td> </tr> <tr> <td data-bbox="1073 1182 1318 1222">Online</td> <td data-bbox="1318 1182 1472 1222">-</td> <td data-bbox="1472 1182 1625 1222">-</td> <td data-bbox="1625 1182 1759 1222">-</td> </tr> </table> (Refer Blended Learning Annexure for details)				Training Delivery Mode	Theory (Hours)	Practical (Hours)	Total (Hours)	Classroom (offline)	87	183	270	Online	-	-	-
Training Delivery Mode	Theory (Hours)	Practical (Hours)	Total (Hours)														
Classroom (offline)	87	183	270														
Online	-	-	-														

14.	Aligned to NCO/ ISCO Code/s (if no code is available mention the same)	NCO-2015/8154.1	
15.	Progression Path After Attaining the Qualification, wherever applicable <i>(Please show Professional and Academic progression)</i>	Assistant Fitter - Processing	
16.	Other Indian languages in which the Qualification & Model Curriculum are being submitted	Hindi	
17.	Is similar NOS available on NQR-if yes, justification for this qualification	☐ Yes ☒ No URLs of similar Qualifications:	
18.	Is the NOS Amenable to Persons with Disability	☐ Yes ☒ No If "Yes", specify applicable type of Disability:	
19.	How participation of women will be encouraged?	This Qualification/NOS is made suitable for all categories of learners including the individuals, Students, professionals with the prescribed entry qualification.	
20.	Are Greening/ Environment Sustainability Aspects Covered (Specify the NOS/Module which covers it)	☒ Yes ☐ No TSC/N9015 - Follow machine, safety and organizational guidelines in textile sector TSC/N9016 - Follow teamwork, adaptability, and communication guidelines in textile sector	
21.	Is Qualification Suitable to be Offered in Schools/Colleges	Schools ☐ Yes ☒ No Colleges ☐ Yes ☒ No	
22.	Name and Contact Details Submitting / Awarding Body SPOC <i>(In case of CS or MS, provide details of both Lead AB & Supporting ABs)</i>	Name: Mr. Vignesh Raja Email: raja@texskill.in Contact No.: 7502954383 Website: https://texskill.in/	
23.	Final Approval Date by NSQC: 08.05.2025	24. Validity Duration: 3 years	25. Next Review Date: 08.05.2028

Section 2: Module Summary

NOS/s of Qualifications

(In exceptional cases these could be described as components)

Mandatory NOS/s:

Specify the training duration and assessment criteria at NOS/ Module level. For further details refer curriculum document.

Th.-Theory **Pr.**-Practical **OJT**-On the Job **Man.**-Mandatory Training **Rec.**-Recommended Proj.-Project

S. n o	NOS Module Name	NOS/Module Code & Version (if applicable)	Core/ Non Core	NCrF / NSQF Level	Credit as per NCrF	Training Duration					Assessment Marks					
						Th.	Pr.	OJT. Man	OJT. Rec	Total	Th.	Pr.	Pr oj.	Viv a	Total	Weightage (if applicable)
1	Carryout shift change, production and quality analyse at Jigger machine department	TSC/N5220, V 1.0	Core	2	5	45	105			150	200	410		50	660	70
2	Follow machine, safety and organizational guidelines in textile sector	TSC/N9015, V 2.0	Non Core	4	2.5	25	50			75	65	80		50	195	20
3	Follow teamwork, adaptability, and communication guidelines in textile sector	TSC/N9016, V 2.0	Non Core	4	0.5	5	10			15	15	20		10	45	5
4	Employability Skills	DGT/VSQ/N0101, V 1.0	Non Core	2	1	12	18			30	20	30			50	5
Duration (in Hours) / Total Marks					9	87	183			270	300	540		110	950	100

Elective NOS/s:

S. no	NOS Module Name	NOS/Module Code & Version (if applicable)	Core/ Non Core	NCrF/ NSQF Level	Credits as per NCrF	Training Duration					Assessment Marks					
						Th.	Pr.	OJT. Man	OJT. Rec	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (if applicable)
1	Carryout shift change, production and quality analyse at Jigger machine department	TSC/N5220, V 1.0	Core	2	5	45	105			150	200	410		50	660	70
2	Carryout shift change, production and quality analyse at soft flow dyeing department	TSC/N5221, V 1.0	Core	2	5	45	105			150	200	410		50	660	70
3	Carryout shift change, production and quality analyse at package dyeing department	TSC/N5222, V 1.0	Core	2	5	45	105			150	200	410		50	660	70
Duration (in Hours) / Total Marks					15	135	315			450	600	1230		150	1980	210

Optional NOS/s:

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1.																
2.																
Duration (in Hours) / Total Marks																

Assessment - Minimum Qualifying Percentage**Please specify any one of the following:**Minimum Pass Percentage – Aggregate at qualification level: **50%**

Pass Percentage of the Qualification is scheme specific, Unless specified by scheme, it is 50% or else scheme guidelines will override it.

(Every Trainee should score specified minimum aggregate passing percentage at qualification level to successfully clear the assessment.)

Section 3: Training Related

1.	Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	• Ability to read & and write with 5 years of relevant experience (Min 1 year in production + Min 4 years as trainer +) • Grade 8 with two years of (NTC/ NAC) with Successfully passed Trainer Qualification MEP/Q2601, v2.0– Trainer (VET and Skills), Minimum pass percentage 80 percent and TSC/Q5207, v3.0 Textile Dyeing machine operator, Minimum pass percentage 80 percent
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Diploma/Degree/Masters/PhD in textile with at least 15/10/8/5 years of experience in textile sector with minimum 8/5/4/3 years in teaching/conducting training in Textile Research Associations, CoEs, Govt Textile organizations/ SIMA/ running textile mill
3.	Tools and Equipment Required for the Training	☒ Yes ☐ No (If "Yes", details to be provided in Annexure)
4.	In Case of Revised NOS, details of Any Upskilling Required for Trainer	Not Applicable

Section 4: Assessment Related

1.	Assessor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	• Diploma (10th Class + 3 years) in the relevant trade with 4 years of relevant experience (or) • Diploma (12th Class +2 years) in the relevant trade with 3 year of relevant experience (or) • UG (3-years) in the relevant trade with 2 years of relevant experience with successfully passed MEP/Q2701, v2.0 – Assessor (VET and Skills), Minimum pass percentage 80 percent and TSC/Q5207, v3.0 Textile Dyeing machine operator, Minimum pass percentage 80 percent
2.	Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines), (wherever applicable)	UG in any field

3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Diploma/Degree/Masters/PhD in textile with at least 15/10/8/5 years of experience in textile sector with minimum 8/5/4/3 years in teaching/conducting training in Textile Research Associations, CoEs, Govt Textile organizations/ SIMA/ running textile mill
4.	Assessment Mode (Specify the assessment mode)	Offline
5.	Tools and Equipment Required for Assessment	☐ Same as for training ☒ Yes ☐ No (details to be provided in Annexure-if it is different for Assessment)

Section 5: Evidence of the Need for the Qualification

Provide Annexure/Supporting documents name.

1.	Latest Skill Gap Study (not older than 2 years) (Yes/No): Yes. Link - https://texskill.in/map_22/map.html
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): Yes Link - https://texskill.in/map_22/map.html
3.	Government /Industry initiatives/ requirement (Yes/No): Yes
4.	Number of Industry validation provided: 20
5.	Estimated number of people to be trained: 1000
6.	Evidence of Concurrence/Consultation with Line/State Departments (In case of regulated sectors): (Yes/No): Yes If "No", why:

Section 6: Annexure & Supporting Documents Check List

Specify Annexure Name / Supporting document file name

1.	Annexure: NCrf/NSQF level justification based on NCrf/NSQF descriptors (Mandatory)	Attached. Annexure 1
2.	Annexure: List of tools and equipment relevant for NOS (Mandatory, except in case of online course)	Attached. Annexure 2
3.	Annexure: Detailed Assessment Criteria (Mandatory)	Attached. Annexure 6
4.	Annexure: Assessment Strategy (Mandatory)	Attached. Annexure 6
5.	Annexure: Blended Learning (Mandatory, in case selected Mode of delivery is Blended Learning)	Attached. Annexure 5
6.	Annexure: Multiple Entry-Exit Details (Mandatory, in case qualification has multiple Entry-Exit)	No
7.	Annexure: Acronym and Glossary (Optional)	Attached. Annexure 8
8.	Supporting Document: Model Curriculum (Mandatory – Public view)	Attached. Annexure 9
9.	Supporting Document: Career Progression (Mandatory - Public view)	Attached. Annexure 10
10.	Supporting Document: Occupational Map (Mandatory)	Attached. Annexure 11
11.	Supporting Document: Assessment SOP (Mandatory)	Attached. Annexure 7
12.	Any other document you wish to submit:	NA

Annexure 1: Evidence of Level

NCrF/NSQF Level Descriptors	Key requirements of the job role/ outcome of the qualification	How the job role/ outcomes relate to the NCrF/NSQF level descriptor	NCrF/NSQF Level
Professional Theoretical Knowledge/Process	Fundamental knowledge - Basic working/ operational knowledge in the area of work. - Understands basic materials, tools, applications in a limited context. - For self-help group member/ micro-entrepreneur basic working knowledge of business activity, raw material, finished product/ service, and local market. - Able to understand and perform repetitive tasks under instructions and supervision. - Understand the basic quality, safety and general hygiene norms. Familiarity with environmental aspects.	A Dyeing machine operator carry out process that are repetitive on regular basis for running the dyeing machine smoothly with instructions from his supervisor. This operator is responsible for dyeing process carried out on fabric in this machine with little application of understanding. For unprecedented situations, he has to report to the supervisor. Hence NSQF Level is 2	NSQF Level 2
Professional and Technical Skills/ Expertise/ Professional Knowledge	Limited finite skills - Limited related skills in predefined context. - Performs structured tasks in a limited range of functional roles. - Uses known solutions to familiar problems. - Skill to identify and use relevant tools and materials	A dyeing machine operator understands context of work and quality with respect to process flow and material flow and safety standards in a typical textile processing unit and responsibilities of a dyeing machine operator. The operator should also know the various defects in the fabric due to yarn, weaving or processing & their remedy. He should understand functions and methodology for operating different material handling equipment & various operations of	NSQF Level 2

	in a limited context of work and quality. For self-help group members, micro-entrepreneurs working skills for making or manufacturing (handicraft, traditional items, etc) service & marketing etc.	dyeing machine. . Hence NSQF Level is 2.	
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	Employment readiness - Ability to read and write and do simple computational math – numeracy and literacy. - Receive and transmit written and oral messages/ communication clearly. - Works within a team as assistant - Understanding of safety, hygiene and environment, social, political and religious diversity. - Have broader but basic Employability Skills including basic self-employment/ entrepreneurial Mind-set for mini businesses - Have understanding of use of Financial and Digital literacy, Aadhar and Mobile, digital payments etc.	. A dyeing machine operator should be able to Receive and transmit written and oral messages local/regional language for making daily work report, write grievance complaint application, comprehends written instructions, and communicates with the supervisor and others appropriately and convey information effectively. The operator applies basic arithmetic and algebraic functions required for machine operations Hence NSQF Level is 2	NSQF Level 2
Broad Learning Outcomes/Core Skill	Carry out the Predefined tasks The candidate may carry out a job requiring limited range	A dyeing machine operator assist in professional works like taking charge and handing over of the shift, patrolling the machine and for ensuring quality production.	NSQF Level 2

	of routine and predictable activities. • Tasks are mostly performed under instructions and supervision • Focus on practice of skill and work, both predefined and new. • For self-help group members, micro-entrepreneurs (JSS) end to end clear understanding of process and delivery. • Understands basic safety and general hygiene norms.	<i>He performs routine operations with limited service skills</i> like operating the machine, use of various checking tools such as thermometer, ph paper etc, various dyestuffs used & the time or no. of turns required for exhaustion/ fixation of color, color coding adopted for different products in the processing unit, the importance of running maintenance and regular cleaning, demonstrate the organization's rules, codes and guidelines (including timekeeping). Safety procedures to be followed in the machine. In case of unexpected faults or issues the operator will report to the shift supervisor Hence NSQF Level is 2	
Responsibility	Assistant • Works mostly under instruction and supervision. • Limited responsibility for delivery and quality of work. • For self-help group members, micro-entrepreneurs (JSS) end to end responsibility of production and marketing in local markets.	A dyeing machine <i>operator works under instruction and close supervision</i> like takes charge of the shift after discussing in detail the issues faced with respect to the quality, production and safety, reports to the shift superior, maintaining work area, tools and machines and contributes in making the workplace healthy, safe and secure and follows the industry & organizational compliance. The dyeing machine operator has <i>no responsibility</i> for his own work and learning. Hence NSQF Level is 2	NSQF Level 2

List of Tools and Equipment

Sr. No	Equipment Name	Minimum number of Equipment required (per batch of 30 trainees)
1.	Jigger Machine	2
2.	Fabric	100
3.	Empty Fabric Rolls Or Suitable Trolleys	1
4.	Soft Flow Dyeing Machine	1
5.	Fabric	500
6.	Empty Fabric Rolls Or Suitable Trolleys	1
7.	Package Dyeing Unit	2
8.	Yarn Package Of Cone Cheese	100
9.	Empty Cone Cheese Carriers	5

Batch Size: 30**Classroom Aids**

The aids required to conduct sessions in the classroom are:

1. Charts
2. Posters
3. Projector
4. Writing Board
5. Seating capacity for 30 candidates
6. Computer/ Laptop Specification
7. Scanner
8. Printer

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile (if available)
1	North East Development Consortium (NEDC)	Jayanta Baruah	Chief Executive Officer	Guwahati	9864958553	nedc2009@gmail.com	—
2	Uttam Textiles	Hemantbhai	Owner	Surat	9374526010	—	—
3	Durga Processors Pvt Ltd	Dilip Kotadiya	HR Head	Surat	9824160935	hrd.durga@dppl.co.in	—
4	Digi Venmanya	Karthik	Head	Attayampatti	7708032166	digivenmanga@gmail.com	—
5	JCT Limited	Ashwani Thapar	General Manager	Phagwara	9876015157	athapar@jctltd.com	—
6	Sri Kannapiran Mills Ltd	G.Gurunathan	General Manager	Sipcot, Perundurai	9865259591	gurunathan.ao@kgfabriks.com	—
7	Matiy Mitra Mills	Shyam Sundar	MD	Erode	8667401256	callshyamsun@gmail.com	—
8	TBL Education (I) Pvt Ltd	Neetika Gupta	National Head	Guwahati	9582941460	Tbl.eduindia@gmail.com	—
9	Valeur Fabtex Pvt Ltd	Harsh Chamaria	Director	New Delhi	9910211484	director@valeurfabtex.com	—
10	MM Weaves,	Ms.Sujatha	Proprietor	Attayampatti	9842196774	weavesmm@gmail.com	—
11	Chanu Creations	Kshetrimayum Indira Devi	Proprietor	Imphal	9821115226	chanucreations.skillindia@gmail.com	—
12	Mohan Spintex India Limited	Ravuri Thandav Krishna	Dy. General Manager, Admin	Place: Mallavalli	9492297269, 9490163798	hrm@mohanspintex.com	—
13	Nitin Spinners Ltd	P.N.Joshi	General Manager, HR	Bhilwara	—	nsi@nitinspinners.com	—
14	Reliance Chemotex	G.S.Rathore	Factory Manager	Udaipur	+91 294 2491489 / 90	udaipur@reliancechemotex.com	—
15	Kumaraguru College of Technology	Dr.G.Ramakrishnan	Professor	Coimbatore	0422-2661171	ramakrishnan.g.ft@kct.ac.in	—
16	Eeshanau Foundation	Chaningleima Oinam	Secretary	Imphal	9856031407 / 8974998624	chaningoinam@gmail.com	—
17	Kb Philanthropy 5	Laishram Monoranjan Singh	CEO	Imphal	9612001798	Kbphilanthropy5@gmail.com	—
18	The Southern India Mills Association	D. Suresh Ananda Kumar	Dy. Secretary General	Coimbatore	9790466668	suresh@simamills.org	—
19	Textile Committee	Dr.K.S.Muralidhara	Jt. Director (RSA)	Mumbai	022 66527523	secy.tc@nic.in	—
20	Individual	G.Somasundaram	Advisor	Bangalore	9343756560	soms28@gmail.com	—

Annexure 4: Training & Employment Details

Year	Estimated Training # of Total Candidates	Estimated training # of Women	Estimated training # of People with Disability
2026	1000	200	NA
2027	1000	200	NA
2028	1000	200	NA

Training, Assessment, Certification, and Placement Data for previous versions of qualifications:

Qualification Version	Year	Total Candidates				Women				People with Disability			
		Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed
2	2022	39	35	33	17	NA. Data Requested from NSDC	NA. Data Requested from NSDC	NA. Data Requested from NSDC	NA. Data Requested from NSDC	-	-	-	-
1	2021	40	36	34	17	NA. Data Requested from NSDC	NA. Data Requested from NSDC	NA. Data Requested from NSDC	NA. Data Requested from NSDC	-	-	-	-
1	2020	0	0	0	0	NA. Data Requested from NSDC	NA. Data Requested from NSDC	NA. Data Requested from NSDC	NA. Data Requested from NSDC	-	-	-	-

Applicable for revised qualifications only, data to be provided year-wise for past 3 years.

List Schemes in which the previous version of Qualification was implemented:

1. PMKVY
2. Digital India Corporation. Ministry of Electronics and Information Technology

Content availability for previous versions of qualifications:

☒ Participant Handbook ☐ Facilitator Guide ☐ Digital Content ☐ Qualification Handbook ☐ Any Other:

Languages in which Content is available: English

Annexure 5: Blended Learning - NA**Blended Learning Estimated Ratio & Recommended Tools:**

Not Applicable

Refer NCVET “Guidelines for Blended Learning for Vocational Education, Training & Skilling” available on:<https://ncvet.gov.in/sites/default/files/Guidelines%20for%20Blended%20Learning%20for%20Vocational%20Education,%20Training%20&%20Skill%20i%20ng.pdf>

S. No.	Select the Components of the NOS	List Recommended Tools – for all Selected Components	Offline: Online Ratio
1	☐ Theory/ Lectures - Imparting theoretical and conceptual knowledge	Computer, CAD Software, Graph Paper, Fabric Sample, Sketch Pens	20:80
2	☐ Imparting Soft Skills, Life Skills and Employability Skills /Mentorship to Learners	Computer, Projector	20:80
3	☐ Showing Practical Demonstrations to the learners	Computer, Projector	20:80
4	☐ Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	Computer, Projector	20:80
5	☐ Tutorials/ Assignments/ Drill/ Practice	Computer, CAD Software, Graph Paper, Fabric Sample, Sketch Pens	20:80
6	☐ Proctored Monitoring/ Assessment/ Evaluation/ Examinations	Computer, CAD Software, Graph Paper, Fabric Sample, Sketch Pens	20:80
7	☐ On the Job Training (OJT)/ Project Work Internship/ Candidate Training	Computer, CAD Software, Graph Paper, Fabric Sample, Sketch Pens	20:80

Annexure 6: Detailed Assessment Criteria

Module	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
TSC/N9015: Follow machine, safety & organizational guidelines in Textile sector	Maintaining the work area, tools and machines	10	10	-	6
	1. handle materials, machinery, equipment and tools as per standard procedure	1	1	-	1
	2. use appropriate material handling equipment and tools as per standard procedure	1	1	-	1
	3. keep the equipment, machine and work area clean using appropriate cleaning tools as per standard procedure	1	1	-	-
	4. undertake minor routine maintenance of equipment and tools as per standard maintenance procedure	1	1	-	1
	5. maintain record for defective and unsafe equipment and tools	1	1	-	-
	6. verify that machine guards are in place as per standard specifications	1	1	-	1
	7. follow specified ergonomics for the assigned job role in textile sector	1	1	-	-
	8. collect and store worn-out spare parts at specified location	1	1	-	1
	9. report the condition of worn out parts as per standard procedure	2	2	-	1
	Greening and energy conservation in textile sector	7	10	-	6
	10. segregate wastes such as recyclable, non-recyclable, hazardous as per standard protocol	3	4	-	2
	11. optimize usage of material and resources including water, electricity in various tasks	2	3	-	2
	12. switch off the machines and lights when not in use	2	3	-	2
	Health, safety and response to emergencies at textile sector	32	40	-	28

13. use Personal Protective Equipment (PPEs) like body protector, ear plugs, nose mask, head cap, etc. as per guidelines	2	3	-	2
14. identify abnormal sounds emanating from faulty or worn out machine parts and take appropriate action	2	3	-	2
15. avoid dependency on any type of intoxicants	2	3	-	2
16. maintain social distance as per the instruction at workplace	2	3	-	2
17. report hazardous material to superiors at workplace	2	3	-	2
18. use the various appropriate fire extinguishers on different types of fires correctly	2	3	-	2
19. follow the specified steps in case of electricity failure	2	3	-	2
20. lift heavy objects using correct lifting procedures	2	3	-	2
21. recall emergency exits, safe spots, etc. of workplace	2	3	-	2
22. practice mock drills and evacuation procedures organized by industry	2	3	-	1
23. assist others to reach to safe spots in emergency situations	2	3	-	1
24. provide basic first aid for injury to peers and report to superiors	2	2	-	1
25. interpret different signs, alarms and take action appropriately	2	2	-	1
26. follow the guidelines while working in hazards atmosphere	2	1	-	2
27. assist in designing the safety plans with peers and superiors	2	1	-	2
28. follow the approved safety plans at workplace	2	1	-	2
Organizational standards and policies	16	20	-	10

	29. perform assigned duties as per organization's protocol within scheduled time period	2	3	-	2
	30. follow organization policies, quality standards, rules and regulations for working in textile sector	2	4	-	1
	31. motivate colleagues to follow operational guidelines of organization	2	3	-	1
	32. wear specified uniform and follow etiquette as per standard guidelines for the textile sector	3	3	-	2
	33. maintain hygienic working atmosphere as per protocol of the textile sector	3	4	-	2
	34. submit lost and found articles as per standard protocol	4	3	-	2
	NOS Total	65	80	-	50
Module	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
TSC/N9016. Follow teamwork, adaptability and communication guidelines in Textile sector	Teamwork, trust and communication	10	15	-	5
	1. contribute to create a positive work environment in the team	1	1	-	-
	2. carry out tasks as per instructions received from superiors	1	1	-	1
	3. contribute to team work as per allocated responsibility to complete the task by using appropriate tools and methods	1	1	-	-
	4. build trust with team mates and superiors	1	2	-	-
	5. implement the ideas after superior's approval at work place	-	1	-	-
	6. communicate clearly with the team members as per standard protocol	1	1	-	1
	7. use suggested hand signs, vocal sound signals to convey the information in the production area	-	1	-	-
	8. listen effectively to the ideas and concerns of the peers	-	1	-	-
	9. use correct and respectful terms while communicating as per industry policy	1	1	-	1

	10. express views proactively and effectively	1	1	-	-
	11. make efforts to resolve difference of opinion with superiors and team members	1	1	-	1
	12. report to superior for problems identified in assigned duty	1	1	-	-
	13. report the daily performance to superior in prescribed manner and formats	1	2	-	1
	Adaptability	5	5	-	5
	14. adapt to flexible work environment for the assigned task	1	1	-	1
	15. adapt to work with various members of different ethnicity, gender and PwD without biases	1	1	-	1
	16. consider opinions of colleagues, fitters, superiors for the assigned task	1	1	-	1
	17. plan the work-routine within the limits of the responsibility	1	1	-	1
	18. adopt new ideas after due approval from superior for improving the productivity	1	1	-	1
	NOS Total	15	20	-	10
Module	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Elective 1 - TSC/N5220: Carryout shift change, production and quality analyse at Jigger machine department	Taking charge of shift from Jigger machine operator	9	10		11
	1. come at least 10 - 15 minutes earlier to the work place	1	1	-	1
	2. bring the necessary operational tools to the department	-	-	-	1
	3. meet the previous shift operator and discuss with him/ her regarding the issues faced by him with respect to the quality, production, spare, safety or any other specific instruction etc	1	1	-	1

4. understand the fabric being processed & process running on the machine	1	1	-	1
5. ensure the technical details are mentioned on the job card display on the machine	1	1	-	1
6. check for the availability of the spare trolley/batching trolley for unloading the fabric	1	1	-	1
7. check the next batch to be processed is ready near the machine	1	1	-	1
8. ensure the required dyes & chemicals are already weighed & prepared	1	1	-	1
9. check the cleanliness of the machines & other work areas	1	1	-	1
10. question the previous shift operator for any deviation in the above and bring the same to the knowledge of his/ her shift superior as well as that of the previous shift	1	1	-	1
11. take over the shift from the outgoing operator in a proper manner	-	1	-	1
Handing Over Shift to Jigger machine operator	9	10		11
12. ensure proper communication regarding fabric quality & the process running on the machine while providing the details	-	1	-	1
13. provide all relevant information regarding the stoppages or breakdown in the machine, any damage to the fabric or machine	1	1	-	1
14. ensure the empty trolley is near the machine for unloading the fabric	1	1	-	1
15. ensure the next lot to be processed, which is already stitched & arranged properly is ready near the machine	1	1	-	1
16. ensure the required dyes & chemicals for the next lot or next process are weighed & prepared	1	1	-	1
17. get clearance from the incoming counterpart before leaving the work spot	-	-	-	1

18. report to his/ her shift superiors as well as that of the incoming shift operator in case his/ her counterpart doesn't report for the incoming shift	1	1	-	1
19. ensure ,the shift has to be properly handed over to the incoming shift operator	1	1	-	1
20. report to his/ her shift superior about the quality / production / safety issues/ any other issue faced in his/ her shift and leave the department only after getting concurrence for the same from his/ her superiors	1	1	-	1
21. collect the wastes from waste collection bags, weigh them and transport to storage area	1	1	-	1
22. ensure the machine and its work place is clean	1	1	-	1
Carry out preparatory activities for operations in the machine	50	110		5
1. understand the task mentioned in the work order	9	18	-	1
2. ensure that the machine is empty & clean	9	18	-	1
3. load the fabric from the batch trolley in the center of the machine	9	18	-	1
4. ensure fabric is crease-less and evenly fed onto the machine	8	18	-	1
5. prepare the chemical/dye-stuff required for the batch	8	19	-	-
6. inject the chemical in the machine tank/dispenser	7	19	-	1
Operate the machine for specified tasks as per Work Order	50	110		5
7. know the operations of the machine & the plc/ control mechanism programs	-	-	-	-
8. read & understand the process being followed to do the task	9	18	-	1

9. check the ph, temp & other parameters during the process	9	18	-	1
10. maintain even temp across the width of machine	9	18	-	1
11. maintain even & minimum tension on the fabric	8	18	-	1
12. drain the machine once sample is approved	9	18	-	1
13. unload the fabric from the machine after completion of the process	9	18	-	1
Clean the machine on a regular basis and carryout preventive maintenance activities	22	43		5
14. make sure the machine is kept clean at all times ,before loading, while running & after unloading the fabric	5	9	-	1
15. follow the preventive maintenance schedule & ensure the machine is running smoothly	4	8	-	1
16. check that all controls are functioning properly	4	9	-	1
17. ensure the right quality of water , steam & air is available for proper functioning of machine	4	8	-	1
18. cool down the machine after completion of job	5	9	-	1
Cutting the sample after specified time/ no. of turns	20	43		5
1. cut sample as per the time / no. of turn mentioned in the work order to avoid any delay	5	10	-	1
2. cut proper size of the sample	5	11	-	2
3. cut the sample from same place every time	5	11	-	1
4. clean hands or cutting tools to avoid soiling of the sample	5	11	-	1
Developing, soaping, washing & drying the sample	20	43		5

	5. Develop the sample as per developing techniques for various types of dyestuffs used in the process such as direct, reactive, vat, sulphur etc.	6	13	-	1
	6. Soap the sample as per SOP for various types of dyestuffs	7	15	-	2
	7. Dry the sample at clean & dust free place	7	15	-	2
	Comparing the sample with the standard	20	41		3
	8. compare the sample with the standard attached to the work order or in the master file	10	20	-	1
	9. take the sample to your supervisor if the sample is not matching to the standard for decision	10	21	-	2
	NOS Total	200	410		50
Module	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Elective 2 - TSC/N5222: Carryout shift change, production and quality analysis at s Package dyeing department	Taking charge of shift from Package Dyeing machine operator	9	10		11
	1. come at least 10 - 15 minutes earlier to the work place	-	1	-	1
	2. bring the necessary operational tools to the department	1	1	-	1
	3. meet the previous shift operator and discuss with him/ her regarding the issues faced by them with respect to the quality, production, spare, safety or any other specific instruction etc.	1	1	-	1
	4. understand the fibre / yarn being processed & process running on the machine	1	1	-	1
	5. ensure the technical details are mentioned on the job card display on the machine	1	1	-	1
	6. should check for the availability of the spare trolley for unloading the yarn packages	-	-	-	1
	7. should check the next batch to be processed is ready near the machine	1	1	-	1

8.must ensure the required dyes & chemicals are already weighed & prepared	1	1	-	1
9.should check the cleanliness of the machines & other work areas	1	1	-	1
10.question the previous shift operator for any deviation in the above and should bring the same to the knowledge of his/ her shift superior as well as that of the previous shift.	1	1	-	1
11.take over the shift from the outgoing operator in a proper manner	1	1	-	1
Handing over shift to Package Dyeing machine operator	9	10		11
1.ensure in providing the details regarding yarn quality & the process running on the machine	-	1	-	1
2.provide all relevant information regarding the stoppages or breakdown in the machine, any damage to the yarn or machine.	1	1	-	1
3.ensure the empty trolley is near the machine for unloading the yarn packages	1	1	-	1
4.ensure the next lot to be processed is ready near the machine	1	1	-	1
5.ensure the required dyes & chemicals for the next lot or next process are weighed & prepared	1	1	-	1
6.get clearance from the incoming counterpart before leaving the work spot	-	-	-	1
7.report to his/ her shift superiors as well as that of the incoming shift operator in case his/ her counterpart doesn't report for the incoming shift	1	1	-	1
8.ensure the shift has to be properly handed over to the incoming shift operator	1	1	-	1
9.report to his/ her shift superior about the quality / production / safety issues/ any other issue faced in his/ her shift and should leave the department only after getting concurrence for the same from his/ her superiors	1	1	-	1

10.collect the wastes from waste collection bags, weigh them and transport to storage area	1	1	-	1
11.ensure the machine and its work place is clean	1	1	-	1
Carry out preparatory activities for operations in the machine	50	110		5
12.understand the task mentioned in the work order	9	18	-	1
13.ensure that the machine is empty & clean	9	18	-	1
14.receiving the material to be processed	9	18	-	1
15.loading the material to be processed in the carrier	8	18	-	1
16.closing the machine lid & ensuring the safety locks are in place	8	19	-	-
17.fill & start the machine as per specified MLR	7	19	-	1
18.prepare & inject the dyes / chemicals in the machine	9	18	-	1
Operate the machine for specified tasks as per Work Order	50	110		5
19.know the operations of the machine & the plc/control mechanism programs	10	22	-	1
20.read & understand the process being followed to do the task	10	22	-	1
21.check the ph, temp & other parameters during the process	10	22	-	1
22.attend to the machine signals for manual intervention	10	22	-	1
23.ensure the rate of heating/ cooling, final temp & hold time is as programmed	10	22	-	1
Clean the machine on a regular basis and carryout preventive maintenance activities	22	43		5

	24.make sure the machine is kept clean at all times ,before loading, while running & after unloading the fabric	7	14	-	1
	25.follow the preventive maintenance schedule & ensure the machine is running smoothly	7	14	-	2
	26.ensure the right quality of water, steam & air is available	8	15	-	2
	Taking out the sample after specified hold time	20	43		5
	take out the sample after hold time to avoid any delay	10	21	-	2
	close the lid & restart the machine after drawing the sample	10	22	-	3
	Developing, soaping, washing & drying the sample	20	42		5
	Develop the sample as per SOP techniques for various types of dyestuffs used in the process such as direct, reactive, vat, sulphur etc.	6	14	-	1
	Soap the sample as per SOP for soaping for various dyestuffs	6	14	-	2
	Dry the sample at clean & dust free place	8	14	-	2
	Comparing the shade with the standard sample	20	42		3
	compare the sample with the standard attached to the work order or in the master file	10	21	-	1
	take the sample to your supervisor if the sample is not matching to the standard for decision	10	21	-	2
	NOS Total	200	410		50
Module	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Elective 3 - TSC/N5221: Ca	Taking charge of shift from Soft Flow Dyeing machine operator	9	10		11

Carryout shift change, production and quality analyse at soft flow dyeing department

1.report at least 10 - 15 minutes earlier to the work place and meet the previous shift soft flow dyeing machine operator and discuss with him/ her regarding the issues faced by them with respect to the quality, production, spare, safety or any other specific instruction etc.	1	1	-	2
2.ensure to bring the necessary operational tools to the department	1	1	-	1
3.understand the fabric being processed and the process running on the machine	1	1	-	1
4.ensure the technical details are mentioned on the job card display on the machine	1	1	-	1
5.check for the availability of the spare trolley for unloading the fabric	1	1	-	1
6.ensure the next batch to be processed is ready near the machine	-	1	-	1
7.ensure the required dyes and chemicals are already weighed and prepared	1	1	-	1
8.check the cleanliness of the machines and other work areas	1	1	-	1
9.obtain information from the previous shift operator for any deviation in the above and bring the same to the knowledge of your shift superior as well that of the previous shift	1	1	-	1
10.take charge of the shift from the outgoing Soft Flow Dyeing machine operator in a proper manner	1	1	-	1
Handing over shift to Soft Flow Dyeing machine operator	9	10		11
11.provide all the details regarding fabric quality and the process running on the machine	1	1	-	2
12.inform regarding the stoppages or breakdown in the machine, any damage to the fabric or machine	1	1	-	1
13.ensure the empty trolley is near the machine for unloading the fabric	1	1	-	1
14.check that the next lot to be processed is ready	1	1		1

near the machine already stitched and arranged properly			-	
15.get clearance from the incoming counterpart before leaving the work spot	1	1	-	1
16.report to your shift superiors as well as that of the incoming shift operator in case your counterpart doesn't report for the incoming shift	1	1	-	1
17.report to your shift superior about the quality / production / safety issues/ any other issue faced in your shift and should leave the department only after getting concurrence for the same from your superiors	1	2	-	2
18.collect the wastes from waste collection bags, weigh them and transport to storage area	1	1	-	1
19.ensure the machine and its work place is clean	1	1	-	1
Carry out preparatory activities for operations in the machine	51	110	-	5
20.understand the task mentioned in the work order	12	27	-	1
21.load the fabric from the batch/trolley in all chambers of the machine equally	13	27	-	1
22.fill required quantity of water & close all safety doors properly	13	28	-	1
23.prepare the chemical/dye-stuff required for the batch and inject the chemical in the machine tank/dispenser	13	28	-	2
Operate the machine for specified tasks as per work order	51	110	-	5
24.check the pH temperature and other parameters during the process	10	22	-	1
25.maintain even temperature across the width of machine	10	22	-	1
26.maintain even and minimum tension on the fabric	10	22	-	1
27.drain the machine once sample is approved	10	22	-	1

28.unload the fabric from the machine after completion of the process	11	22	-	1
Clean the machine on a regular basis and carryout preventive maintenance activities	20	44		5
29.ensure that the machine is kept clean at all times, before loading, while running and after unloading the fabric	5	11	-	1
30.follow the preventive maintenance schedule for the machine to run smoothly	5	11	-	1
31.check that all controls are functioning properly	5	11	-	1
32.ensure the right quality of water, steam and air is available	5	11	-	2
Cutting the sample	20	44	-	5
33.cut proper size of sample as per the time / no. of turn mentioned in the work order to avoid any delay	8	15	-	2
34.ensure to cut the sample from same place every time	6	15	-	2
35.clean hands or cutting tools to avoid soiling of the sample	6	14	-	1
Developing, soaping, washing and drying the sample	20	42	-	5
36.develop the sample as per standard techniques for various types of dyestuffs used in the process such as direct, reactive, vat, sulphur etc	6	14	-	1
37.soap the sample using soaping chemical, temp and no. of soaping/ washings as specified for different dyestuff	6	14	-	2
38.dry the sample at a clean and dust free place	8	14	-	2
Comparing the shade with the standard sample	20	40		3
39.compare the sample with the standard attached to the work order or in the master file	10	20	-	1
40.take the sample to your supervisor if the sample is not matching to the standard for decision	10	20	-	2

	NOS Total	200	410		50
DGT/VSQ/N0101: Employability Skills	Introduction to Employability Skills	1	1	-	-
	understand the significance of employability skills in meeting the job requirements	-	-	-	-
	Constitutional values – Citizenship	1	1	-	-
	identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices.	-	-	-	-
	Becoming a Professional in the 21st Century	1	3	-	-
	explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
	Basic English Skills	2	3	-	-
	speak with others using some basic English phrases or sentences	-	-	-	-
	Communication Skills	1	1	-	-
	follow good manners while communicating with others	-	-	-	-
	work with others in a team	-	-	-	-
	Diversity & Inclusion	1	1	-	-
	communicate and behave appropriately with all genders and PwD	-	-	-	-
	report any issues related to sexual harassment	-	-	-	-
	Financial and Legal Literacy	3	4	-	-
	use various financial products and services safely and securely	-	-	-	-
	calculate income, expenses, savings etc.	-	-	-	-
	approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
	Essential Digital Skills	4	6	-	-
	operate digital devices and use its features and applications securely and safely	-	-	-	-
	use internet and social media platforms securely and safely	-	-	-	-

Entrepreneurship	3	5	-	-
identify and assess opportunities for potential business	-	-	-	-
identify sources for arranging money and associated financial and legal challenges	-	-	-	-
Customer Service	2	2	-	-
identify different types of customers	-	-	-	-
identify customer needs and address them appropriately.	-	-	-	-
follow appropriate hygiene and grooming standards.	-	-	-	-
Getting ready for apprenticeship & Jobs	1	3	-	-
create a basic biodata	-	-	-	-
search for suitable jobs and apply	-	-	-	-
identify and register apprenticeship opportunities as per requirement	-	-	-	-
NOS Total	20	30	-	-

Annexure 7: Assessment Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the Candidate on the required competencies of the program.

Mention the detailed assessment strategy in the provided template.

1. Assessment System Overview:

- Batches assigned to the assessment agencies for conducting the assessment on SDMS/SIP or email
- Assessment agencies send the assessment confirmation to VTP/TC looping SSC
- Assessment agency deploys the ToA certified Assessor for executing the assessment
- SSC monitors the assessment process & records

2. Testing Environment:

- Confirm that the centre is available at the same address as mentioned on SDMS or SIP
- Check the duration of the training.
- Check the Assessment Start and End time to be as 10 a.m. and 5 p.m.
- If the batch size is more than 30, then there should be 2 Assessors.

- Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.
 - Check the mode of assessment—Online (TAB/Computer) or Offline (OMR/PP).
 - Confirm the number of TABs on the ground are correct to execute the Assessment smoothly.
 - Check the availability of the Lab Equipment for the particular Job Role.
3. Assessment Quality Assurance levels / Framework:
- Question papers created by the Subject Matter Experts (SME)
 - Question papers created by the SME verified by the other subject Matter Experts
 - Questions are mapped with NOS and PC
 - Question papers are prepared considering that level 1 to 3 are for the unskilled & semi-skilled individuals, and level 4 and above are for the skilled, supervisor & higher management
 - Assessor must be ToA certified & trainer must be ToT Certified
 - Assessment agency must follow the assessment guidelines to conduct the assessment
4. Types of evidence or evidence-gathering protocol:
- Time-stamped & geotagged reporting of the assessor from assessment location
 - Centre photographs with signboards and scheme specific branding
 - Biometric or manual attendance sheet (stamped by TP) of the trainees during the training period
 - Time-stamped & geotagged assessment (Theory + Viva + Practical) photographs & videos
5. Method of verification or validation:
- Surprise visit to the assessment location
 - Random audit of the batch
 - Random audit of any candidate
6. Method for assessment documentation, archiving, and access
- Hard copies of the documents are stored
 - Soft copies of the documents & photographs of the assessment are uploaded / accessed from Cloud Storage
 - Soft copies of the documents & photographs of the assessment are stored in the Hard Drives

Annexure 8: Acronym and Glossary**Acronym**

Acronym	Description
AA	Assessment Agency
AB	Awarding Body
NCrF	National Credit Framework
NOS	National Occupational Standard(s)
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework

Glossary

Term	Description
National Occupational Standards (NOS)	NOS define the measurable performance outcomes required from an individual engaged in a particular task. They list down what an individual performing that task should know and also do.
Qualification	A formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards
Qualification File	A Qualification File is a template designed to capture necessary information of a Qualification from the perspective of NSQF compliance. The Qualification File will be normally submitted by the awarding body for the qualification.
Sector	A grouping of professional activities on the basis of their main economic function, product, service or technology.