

QUALIFICATION FILE

Assembly Operator -TV

☒ 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: 4

Submitted By:

Electronics Sector Skills Council of India (ESSCI)

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Section 1: Basic Details

1.	Qualification Name	Assembly Operator - TV													
2.	Sector/s	Electronics													
3.	Type of Qualification: ☐ New ☒ Revised ☐ Has Electives/Options ☐ OEM	NQR Code & version of existing/previous qualification: (change to previous, once approved)- QG-04-EH-02738-2023-V1.1-ESSC & V 3	Qualification Name of existing/previous version: Assembly Operator - TV												
4.	a. OEM Name b. Qualification Name (Wherever applicable)	NA													
5.	National Qualification Register (NQR) Code & Version (Will be issued after NSQC approval)	QG-04-EH-044892025-V2-ESSCI	6. NCrF/NSQF Level: 4												
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	The individual at work is responsible for assembling various modules of modern televisions—including LED, QLED, and Smart TVs—into the main frame using appropriate screws, connectors, and tools at different stages of the assembly line. The individual must ensure precision and minimal errors, as the assembly process operates in a continuous flow.													
9.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	a. Entry Qualification & Relevant Experience: <table border="1"> <thead> <tr> <th>S. No.</th> <th>Academic/Skill Qualification (with Specialization - if applicable)</th> <th>Required Experience (with Specialization - if applicable)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>12th grade or equivalent</td> <td>No experience required</td> </tr> <tr> <td>2</td> <td>10th grade or equivalent</td> <td>3 years relevant experience</td> </tr> <tr> <td>3</td> <td>Certificate-NSQF (Level-3 in relevant domain)</td> <td>3 years of relevant experience</td> </tr> </tbody> </table> # Relevant Experience in Electronics Manufacturing Services		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	12th grade or equivalent	No experience required	2	10th grade or equivalent	3 years relevant experience	3	Certificate-NSQF (Level-3 in relevant domain)	3 years of relevant experience
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)													
1	12th grade or equivalent	No experience required													
2	10th grade or equivalent	3 years relevant experience													
3	Certificate-NSQF (Level-3 in relevant domain)	3 years of relevant experience													
		b. Age: NA													
10.	Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	15	11. Common Cost Norm Category (I/II/III) (wherever applicable): I												

12.	Any Licensing requirements for Undertaking Training on This Qualification <i>(wherever applicable)</i>	NA																					
13.	Training Duration by Modes of Training Delivery <i>(Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)</i>	☐ Offline ☐ Online ☒ Blended <table border="1"> <thead> <tr> <th>Training Delivery Modes</th> <th>Theory (Hours)</th> <th>Practical (Hours)</th> <th>OJT Mandatory (Hours)</th> <th>OJT Recommended (Hours)</th> <th>Total (Hours)</th> </tr> </thead> <tbody> <tr> <td>Classroom (offline)</td> <td>00:00</td> <td>180:00</td> <td>120:00</td> <td>00:00</td> <td rowspan="2">450</td> </tr> <tr> <td>Online</td> <td>150:00</td> <td>00:00</td> <td>00:00</td> <td>00:00</td> </tr> </tbody> </table> <i>(Refer Blended Learning Annexure for details)</i>					Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)	Classroom (offline)	00:00	180:00	120:00	00:00	450	Online	150:00	00:00	00:00	00:00
Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)																		
Classroom (offline)	00:00	180:00	120:00	00:00	450																		
Online	150:00	00:00	00:00	00:00																			
14.	Aligned to NCO/ISCO Code/s <i>(if no code is available mention the same)</i>	NCO-2015/8212.1401																					
15.	Progression path after attaining the qualification <i>(Please show Professional and Academic progression)</i>	Assembly Supervisor																					
16.	Other Indian languages in which the Qualification & Model Curriculum are being submitted	Hindi																					
17.	Is similar Qualification(s) available on NQR-if yes, justification for this qualification	☐ Yes ☒ No URLs of similar Qualifications:																					
18.	Is the Job Role Amenable to Persons with Disability	☐ Yes ☒ No If "Yes", specify applicable type of Disability:																					
19.	How Participation of Women will be Encouraged	No gender sensitization																					
20.	Are Greening/ Environment Sustainability Aspects Covered <i>(Specify the NOS/Module which covers it)</i>	☒ Yes ☐ No (Employability Skills (30 hours))																					
21.	Is Qualification Suitable to be Offered in Schools/Colleges	Schools ☐ Yes ☒ No Colleges ☒ Yes ☐ No																					
22.	Name and Contact Details of Submitting / Awarding Body SPOC <i>(In case of CS or MS, provide details of both Lead AB & Supporting ABs)</i>	Name: Saleem Ahmed Email: ceo@essc-india.org Contact No.: 011 – 8447738501 Website: https://www.essc-india.org/																					
23.	Final Approval Date by NSQC: 07.10.2025	24. Validity Duration: 3 Years			25. Next Review Date: 07.10.2028																		

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. 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	TV Assembly Work Requirements & Techniques	ELE/N5105 & V1.0	Core	4	10	90	120	90	0	300	40	60	0	0	100	60
2	Reporting, Productivity, Quality, and Safety Standards in TV Assembly	ELE/N3909 & V2.0	Core	4	4	30	60	30	0	120	40	60	0	0	100	20
3	Employability Skills (30 hours)	DGT/VSQ/N0101 & V1.0	Non-core	4	1	30	0	0	0	30	20	30	0	0	50	20
Duration (in Hours) / Total Marks					15	150	180	120	0	450	100	150	0	0	250	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 (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																

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: 70 % (Every Trainee should score specified minimum aggregate passing percentage at qualification level to successfully clear the assessment.)

Minimum Pass Percentage – NOS/Module-wise: % (Every Trainee should score specified minimum passing percentage in each mandatory and selected elective NOS/Module 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)	Diploma/ ITI (Electronics/Mechanical) with 2 years industrial and 1 year training experience in the field of Electronics assembly line. Or Certified in relevant CITS Trade
2	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Diploma/ ITI (Electronics/Mechanical) with 3 years industrial and 2-year training experience in the field of Electronics assembly line. Or Certified in relevant CITS Trade
3	Tools and Equipment Required for Training	☒ Yes ☐ No (If "Yes", details to be provided in Annexure)
4	In Case of Revised Qualification, Details of Any Upskilling Required for Trainer	NA

Section 4: Assessment Related

Assessor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Diploma/ ITI (Electronics/Mechanical) with 3 years industrial and 2-year training experience in the field of Electronics assembly line. Or Certified in relevant CITS Trade
Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Diploma/ ITI (Electronics/Mechanical) with 3 years industrial and 2-year training experience in the field of Electronics assembly line. Or Certified in relevant CITS Trade
Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Diploma/ ITI (Electronics/Mechanical) with 4 years industrial and 3-year training experience in the field of Electronics assembly line. Or Certified in relevant CITS Trade.
Assessment Mode (Specify the assessment mode)	Blended
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
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): Yes
3.	Government /Industry initiatives/ requirement (Yes/No): Yes
4.	Number of Industry validation provided: 23
5.	Estimated nos. of persons to be trained and employed: 500
6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: 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 level/NSQF descriptors (Mandatory)	Attached
2.	Annexure: List of tools and equipment relevant for qualification (Mandatory, except in case of online course)	Attached
3.	Annexure: Detailed Assessment Criteria (Mandatory)	Attached
4.	Annexure: Assessment Strategy (Mandatory)	Attached
5.	Annexure: Blended Learning (Mandatory, in case selected Mode of delivery is "Blended Learning")	Filled
6.	Annexure: Multiple Entry-Exit Details (Mandatory, in case qualification has multiple Entry-Exit)	Filled
7.	Annexure: Acronym and Glossary (Optional)	Attached
8.	Supporting Document: Model Curriculum (Mandatory – Public view)	Attached
9.	Supporting Document: Career Progression (Mandatory - Public view)	Attached
10.	Supporting Document: Occupational Map (Mandatory)	Attached
11.	Supporting Document: Assessment SOP (Mandatory)	
12.	Any other document you wish to submit:	

Annexure: 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	Demands a wide range of specialized technical skill, clarity of knowledge and practice in broad range of activity involving standard and non-standard practices.	An Assembly Operator – TV is responsible for responsible for fitting in the different modules of the television set into the frame using appropriate screws and connectors during the different stages of the assembly process. The individual is	4

	• Perform the assembling of various types of TV. • Perform testing of TV after assembly. • Follow all guidelines and instructions. • Adhere to industry work practices to achieve productivity and quality standards. • Check the working of the appliances.	expected to minimize errors at every stage since the assembly line is continuously in motion.	
Professional and Technical Skills/ Expertise/ Professional Knowledge	Factual and theoretical knowledge in broad contexts within a field of work or study. • Knowledge of assembly requirements, assembly process, working of various type of TVs • Know the instructions and guidelines to achieve productivity and quality standards	An Assembly Operator – TV should know the assembling process, their working and the guidelines to achieve productivity and quality standards. Also able to test the components of the assembly. Hence Level 4	4
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study. • Communicate with customer, team and supervisor to understand the work requirement • Identify the errors in orders • Maintain inventory • Complete the documentation of maintenance and service records	An Assembly Operator – TV should be able to use basic tools in the correct way to assemble and test the components. He/she works after getting work requirements from supervisor or other team members. Hence Level 4	4
Broad Learning Outcomes/Core Skill	• Assembly procedures • Working and testing of various components • Guidelines and instructions for repairing	An Assembly Operator – TV needs to know the assembling procedures, working of various components and testing the same. The technician should keep the workplace clean and managed Hence Level 4	4

Responsibility	Responsibility of completing the work assigned and reporting the same as per standards. • Understand the job role and follow the organizational policy • Record and report about the work status • Follow safety regulations at work place • Work along with colleagues and supervisors	An Assembly Operator – TV should record the issues and report about the same to the supervisor and also update the status of the work as per organizations policy. Hence Level 4	4
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Annexure: Tools and Equipment (Lab Set-Up)

List of Tools and Equipment

S. No.	Tool / Equipment Name	Quantity for specified	Specifications
1	Drawings and Work Manuals	5	Kits
2	Assembling TV set/LCD TV set	3	Kits
3	The components and modules according to the bill of materials (BOM)	30	
4	Electrical & Electronics components	30	each table per 3 students
5	Labels, Cabinet, Machine Traveller sheet, etc., used in assembly process	30	
6	ESD Precautions kit	5	
7	ESD Mat	5	
8	Wrist Strap	30	
9	ESD Apron	30	
10	ESD CAP	30	
11	ESD Finger cots for all fingers	30	
12	ESD Slippers pair or Shoe pair	30	
13	Axial components lead separating tool from Tape manual or Auto	1	
14	Radial component lead separating tool from tape manual or Auto	1	
15	Axial components lead bending tool - manual or Auto	1	
16	Radial component lead bending tool - manual or Auto	1	1 for 3 students , for one conveyor
17	IC Lead Straightner	1	
18	ESD BINs	1	
19	Manual Assembly Jig or conveyor	1	
20	Lead Solder	6	
21	Soldering Flux	6	

22	Soldering Iron	6	
23	Screw driver Set	6	

Batch Size: 30

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Whiteboard and Marker
2. Projector
3. Computer/Laptop
4. Chairs
5. Tables

Annexure: Industry Validations Summary

Provide the summary information of all the industry validations in table. This is not required for OEM qualifications.

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile (if available)
1	Nagdeo Education Welfare Society	Vijay Nagdeo	General Manager	Ward No. 11 Junnardeo Dist. Chhindwara M.P. 480551	9425461093	Vijaynagdeo02@gmail.com	
2	Access Edutech Pvt. Ltd.	Sanjay Kumar Mishra	Director	96, Vrindavan Nagar Ayodhya Bypass Road Bhopal	7000650224	sanjaymishra@accessedutech.com	
3	Shiv shakti techniki evam samanaya shikshan sansthan	Jitendra Kumar Garg	President	B 32 Mahesh nagar jaipur rajasthan-302015	9782912782	jitendra.garg303@gmail.com	
4	YADUVANSHI PRIVATE ITI	YADVENDRA	PRINCIPAL	TC229199 - Yaduvanshi pvt iti, hasampur the- neemkathana dist-sikar rajasthan pin code no -332718	8432882688	yaduvanshicollege2008@gmail.com	

5	Ephicity Lifescience Analytics	Rahul Kumar Kaushik	Senior Software Engineer	2nd Main Rd, Sarvobhogam Nagar, Arekere, Bengaluru, Karnataka 560076	8859885973	Rahul.Kaushik@ephicity.com	
6	Nagravision India Pvt. Ltd.	Avinash Yadav	Manager- System Administrator	RMZ Centennial, Tower C unit 301 and 302, Mahadevapura Post ITPL Road, Bangalore	9808326626	avinash.yadav@nagra.com	
7	Sri Venkateswara College of Engineering	Dr C Chandrasekhar	Head R & D & Professor in ECE	Karakmbadi Road, Tirupati 517507	9177217190	dr.chandrasekhar.c@sv colleges.edu.in	
8	Sunita Technology	Sunita	Owner	New Delhi 110020			
9	Rastriya Khushali Sansthan	Ramkaran Sinsinwar	President	VOP Tajsar Fatehpur Rajasthan	6350658040	Rkstajsar1998@gmail.com	
10	Sri Rajaram Shikshan Sansthan	Rajendra Parsad	Principle		8808696968	rajendraitijnp@gmail.com	
11	Nexgen Exhibitions Pvt. Ltd.	Saurabh Purwar	Director	1201/1206 Pragati Tower, 26 Rajendra Place, New Delhi-110008, India	9457306691	fbvidgo@gmail.com	
12	Siemens Limited	Manoj Belgaonkar	Head – Regulations, Standards and QM	R&D Centre, Thane Belapur Road, Airoli, Navi Mumbai 400708	9820682825	manoj.belgaonkar@siemens.com	
13	Tata Consultancy Services	Sheepra Kaushik	Consultant – Product Development	Kensington B Wing, Hiranandani SEZ, Powai, Mumbai 400076	8433595090	sheepra.sharma@tcs.com	
14	Conduent- https://www.conduent.com	Prince Jain	Senior Business Analyst	7 to 9th Floor & 6 to 9th Floor, Building No.5 & 6, Plot No 20&21, Candor Tech Space, IT/ITES SEZ., Noida, Uttar Pradesh 201304	8439385780	prince.jain@conduent.com	

15	Artificial Intelligence Technologies	Rohit Kumar Sharma	Manager Product Development –	A-21, sector 4, Block A, Kailash Colony, Greater Kailash, New Delhi	9927564461	rohit.sharma@aituniversitysal.com	
16	Shri Prasad Sharma Shikshan Sansthan Myana	Suresh		Gautam Budha Nagar UP	8433476571		
17	Evergreen Education Trust	Faizanbazaz	Director	217, Pehari Colony Jammu 180005	7006341193	eetturst@gmail.com	
18	Bergen Associates Pvt Ltd.	Soubam Sunil	Manager	305-306, Magnum House-I, Commercial Complex, Karampura, New Delhi – 110015	9311780832	s.soubam@bergengroupindia.com	
19	Sankalp Education and development society	Jafruddin Khan	SPOC		8104049522		
20	Ramyash Pvt ITI	Ramyash	Principel	Jamalpur	9454738298	Yashvantiyadav964@gmail.com	
21	B M Upadhyay Shiksha Samiti	K K Upadhyay	SPOC	Agra	9149158684	Kk7500081234@gmail.com	
22	Shri Solasar Balaji Shikshan	Nand Kishor Gurjar	SPOC	Rajasthan	9358734466	shribalajiitisujangarh@gmail.com	
23	Rastriya Khushali Sansthan	Ramkaran Sinsinwar	President	VOP Tajsar Fatehpur Rajasthan	6350658040	Rkstajsar1998@gmail.com	

Annexure: Training Details

Training and Employment Projections:

Year	Total Candidates	Women	People with Disability
	Estimated Training # Total	Estimated Training # Women	Estimated Training # PwD
2025-26	150	NA	NA
2026-27	150	NA	NA
2027-28	200	NA	NA

Data to be provided year-wise for next 3 years

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
3.0	2022-23	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.0	2023-24	8	8	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.0	2024-25	168	145	139	NA	NA	NA	NA	NA	NA	NA	NA	NA

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.

Content availability for previous versions of qualifications:

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

Languages in which Content is available:

1. Hindi
2. English

Annexure: Blended Learning

Blended Learning Estimated Ratio & Recommended Tools:

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&%20Skilling.pdf>

S. No.	Select the Components of the Qualification	List Recommended Tools – for all Selected Components	Offline : Online Ratio
1	☒ Theory/ Lectures - Imparting theoretical and conceptual knowledge	• Books/ e-books • Presentations • Reference Material • Audio / Video Modules	30:70
2	☒ Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	• Self-Learning Videos • Broadcasts • Mobile Learning • Curated Digital content	30:70
3	☒ Showing Practical Demonstrations to the learners	• Video Content • E-Resource library • AR/ VR/ XR	30:70
4	☒ Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	• Training tools (tools list attached) • Video Play • Presentations	30:70
5	☒ Tutorials/ Assignments/ Drill/ Practice	• Online Question Bank • Mobile Quick test app • MCQ based tests	30:70
6	☒ Proctored Monitoring/ Assessment/ Evaluation/ Examinations	• Assessment engine for Essays • Up-loadable file examinations • Mock test sessions	30:70
7	☒ On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training	• Online tests • Offline assessments	30:70

Annexure: Detailed Assessment Criteria

Detailed assessment criteria for each NOS/Module are as follows:

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theor y Marks	Practical Marks	Project Marks	Viva Marks
ELE/N5105: TV Assembly Work Requirements & Techniques	Introduction and Understanding Work Requirements	4	8	-	-
	PC1. Describe the role and responsibilities of a Sr. Operator – TV Assembly; explain the process of assembling LED, QLED, and Smart TVs using suitable tools and connectors while ensuring accuracy and efficiency in a continuous assembly line environment	1	2	-	-
	PC2. Communicate with the supervisor to determine daily production targets and plan daily production activities based on the provided instructions.	1	2	-	-
	PC3. Refer to updated drawings, job manuals, and work instructions.	1	2	-	-
	PC4. Check for the availability of components, modules, and tools required for the assembly.	1	2	-	-
	Assembly Techniques for CRT & Plasma TVs	20	28	-	-
	PC5. Secure and mount the CRT tube onto the assembly frame with proper brackets and degaussing coil wiring.	2	2	-	-
	PC6. Align and install the plasma screen onto the designated mounting frame and secure it with necessary screws.	2	3	-	-
	PC7. Attach the speaker to the front cabinet of the television.	1	2	-	-
	PC8. Connect the auxiliary/speaker PCB to the system.	2	2	-	-
	PC9. Connect the main PCB, power supply board, and display driver board to the assembly.	2	3	-	-
	PC10. Wire necessary grounding connections and safety circuits.	1	2	-	-
	PC11. Perform voltage checks and necessary adjustments to avoid display distortions in CRT and plasma screens.	2	3	-	-
	PC12. Make adjustments such as white balance calibration, color accuracy tuning, and audio-video synchronization tests.	2	3	-	-
	PC13. Attach the back cover and prepare the unit for final testing and packaging.	2	2	-	-
	PC14. Verify that the finished assembly meets the required specifications and quality standards.	2	3	-	-
	PC15. Inspect the aesthetics of the front and back panels for defects.	2	3	-	-
	Assembly Techniques for LCD, LED, OLED, QLED, Mini-LED, Micro-LED TVs	16	24	-	-

	PC16. Fix necessary screws into the chassis before placing the backlight screen.	1	2	-	-
	PC17. Place and secure the backlight screen properly onto the chassis.	2	3	-	-
	PC18. Assemble the main PCB, power supply board, and display driver board to form the motherboard.	2	3	-	-
	PC19. Attach the speaker to the front cabinet of the television.	1	2	-	-
	PC20. Connect the electronic sub-assembly to the already assembled sub-system.	2	3	-	-
	PC21. Integrate additional electronic modules such as smart TV components and wireless connectivity modules.	2	3	-	-
	PC22. Attach the front screen securely to the frame and align it properly with the sub-assembly.	2	3	-	-
	PC23. Inspect the aesthetics of the front cabinet and back panel before finalization.	2	3		
	PC24. Inspect the backlight screen for aesthetics before fixing.	2	2		
	NOS Total	40	60	-	-
ELE/N3509: Reporting, Productivity, Quality, and Safety Standards in TV Assembly	Reporting to Supervisor	9	12	-	-
	PC1. Highlight any errors identified in previous assembly steps.	3	4	-	-
	PC2. Report defective or inadequate components for corrective action.	3	4	-	-
	PC3. Notify the supervisor about shortages of consumables such as screws, connectors, adhesives, and thermal pads.	3	4	-	-
	Achieving Productivity, Quality, and Safety Standards	21	33	-	-
	PC4. Meet 100% of the target number of products to be manufactured per day.	3	4	-	-
	PC5. Achieve 100% completion of planned work as per schedule.	3	4	-	-
	PC6. Maintain a zero-error assembly process as per company standards.	3	4	-	-
	PC7. Use grounded wrist straps and other electrostatic precautions as applicable.	3	5	-	-
	PC8. Keep the work area clean and organized, and report any issues in the assembly line promptly.	3	4	-	-
	PC9. Complete work without hazards and follow clean work protocols.	2	4	-	-
	PC10. Ensure proper labeling of products as per guidelines.	2	4	-	-
	PC11. Ensure compliance with safety regulations and company policies.	2	4	-	-
	Workplace Safety and Waste Management	10	15		
	PC12: Identify risks like sharp tools, glass panels, static electricity; follow all safety signs and instructions.	2	3		

	PC13: Use PPE such as gloves, anti-static bands, and safety shoes; handle tools and parts with care.	2	3		
	PC14: Be alert to fire risks from circuits, soldering units, and packaging; use the right fire extinguisher if needed.	2	3		
	PC15: Provide first aid for cuts, shocks, or burns; follow emergency and reporting procedures.	2	3		
	PC16: Sort and dispose of plastic, metal, glass, and e-waste properly; keep the TV assembly area clean and safe.	2	3		
	NOS Total	40	60	-	-
DGT/VSQ/N0101 - Employability Skills (30 hours)	Introduction to Employability Skills	1	1	-	-
	PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
	Constitutional values – Citizenship	1	1	-	-
	PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
	Becoming a Professional in the 21st Century	1	3	-	-
	PC3.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	-	-
	PC4. speak with others using some basic English phrases or sentences	-	-	-	-
	Communication Skills	1	1	-	-
	PC5. follow good manners while communicating with others	-	-	-	-
	PC6. work with others in a team				
	Diversity & Inclusion	1	1	-	-
	PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
	PC8. report any issues related to sexual harassment	-	-	-	-
	Financial & Legal Literacy	3	4	-	-
	PC9. use various financial products and services safely and securely	-	-	-	-
	PC10. calculate income, expenses, savings etc.	-	-	-	-
	PC11. approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
	Essential Digital Skills	4	6	-	-

PC12. operate digital devices and use its features and applications securely and safely	-	-	-	-
PC13. use internet and social media platforms securely and safely	-	-	-	-
Entrepreneurship	3	5	-	-
PC14. identify and assess opportunities for potential business	-	-	-	-
PC15. identify sources for arranging money and associated financial and legal challenges	-	-	-	-
Customer Service	2	2	-	-
PC16. identify different types of customers	-	-	-	-
PC17. identify customer needs and address them appropriately	-	-	-	-
PC18. follow appropriate hygiene and grooming standards	-	-	-	-
Getting ready for apprenticeship & jobs	1	3	-	-
PC19. create a basic biodata	-	-	-	-
PC20. search for suitable jobs and apply	-	-	-	-
PC21. identify and register apprenticeship opportunities as per requirement	-	-	-	-
NOS Total	20	30	-	-
Grand Total	100	150	-	0

Annexure: 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
 - On the Job:
 - Each module (which covers the job profile of Sr. Operator Assembly-TV) will be assessed separately.
 - The candidate must score 50% in each module to successfully complete the OJT.
 - Tools of Assessment that will be used for assessing whether the candidate is having desired skills and etiquette of dealing with customers, understanding needs & requirements, assessing the customer and perform Soft Skills effectively:
 - Videos of Trainees during OJT
 - Answer Sheets of Question Banks
 - Assessing the Log Book entries of Trainees at Employer location
 - Employer Performance Feedback.
 - Assessment of each Module will ensure that the candidate is able to:
 - Understand the basic principles of AC, DC and electronic circuits.
 - Work effectively at the workplace
 - Basic health and safety practice.

Annexure: Acronym and Glossary**Acronym**

Acronym	Description
AA	Assessment Agency
AB	Awarding Body
ISCO	International Standard Classification of Occupations
NCO	National Classification of Occupations
NCrF	National Credit Framework
NOS	National Occupational Standard(s)
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework
OJT	On the Job Training

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.
Long Term Training	Long-term skilling means any vocational training program undertaken for a year and above. https://ncvet.gov.in/sites/default/files/NCVET.pdf