

QUALIFICATION FILE

Service Technician – Home Appliances

☒ 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	Service Technician – Home Appliances													
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)- 2022/EHW/ESSC/06633 & V 3	Qualification Name of existing/previous version: Service Technician – Home Appliances												
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-044772025-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	A Service Technician – Home Appliances is responsible to interact with customers to Install the appliance or diagnose the problem to assess possible causes of malfunction. Once the problem and causes have been identified, the individual rectifies the problems or replaces faulty modules/failed parts or recommends factory repairs.													
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>NA</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 Consumer Electronics & IT Hardware b. Age: NA		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	12th grade or equivalent	NA	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	NA													
2	10th grade or equivalent	3 years relevant experience													
3	Certificate-NSQF (Level-3 in relevant domain)	3 years of relevant experience													
10.	Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	17	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>210:00</td> <td>150:00</td> <td>00:00</td> <td rowspan="2">510</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	210:00	150:00	00:00	510	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	210:00	150:00	00:00	510																		
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-2015/7421.0701																					
15.	Progression path after attaining the qualification <i>(Please show Professional and Academic progression)</i>	Sr. technician (Consumer Goods)																					
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	Engage with customer for service	ELE/N3101 & V4.0	Core	4	7	60	90	60	0	210	40	50	0	10	100	40
2	Perform installation and repair of appliances	ELE/N3112 & V5.0	Core	4	9	60	120	90	0	270	40	50	0	10	100	40
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					17	150	210	150	0	510	100	130	0	20	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 (Mechanical/Electronics/Electrical) with 1 years industrial and 1 year training experience in the field of Electronics. 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 (Mechanical/Electronics/Electrical) with 2 years industrial and 1 year training experience in the field of Electronics. 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

1.	Assessor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Diploma/ITI (Mechanical/Electronics/Electrical) with 2 years industrial and 1 year training experience in the field of Electronics. Or Certified in relevant CITS Trade
2.	Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Diploma/ITI (Mechanical/Electronics/Electrical) with 3 years industrial and 2 year training experience in the field of Electronics. Or Certified in relevant CITS Trade
3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Diploma/ITI (Mechanical/Electronics/Electrical) with 4 years industrial and 3 year training experience in the field of Electronics. Or Certified in relevant CITS Trade.
4.	Assessment Mode (Specify the assessment mode)	Blended
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
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: 2500
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 (<i>Mandatory</i>)	Attached
2.	Annexure: List of tools and equipment relevant for qualification (<i>Mandatory, except in case of online course</i>)	Attached
3.	Annexure: Detailed Assessment Criteria (<i>Mandatory</i>)	Attached
4.	Annexure: Assessment Strategy (<i>Mandatory</i>)	Attached
5.	Annexure: Blended Learning (<i>Mandatory, in case selected Mode of delivery is "Blended Learning"</i>)	Filled
6.	Annexure: Multiple Entry-Exit Details (<i>Mandatory, in case qualification has multiple Entry-Exit</i>)	Filled
7.	Annexure: Acronym and Glossary (<i>Optional</i>)	Attached
8.	Supporting Document: Model Curriculum (<i>Mandatory – Public view</i>)	Attached
9.	Supporting Document: Career Progression (<i>Mandatory - Public view</i>)	Attached
10.	Supporting Document: Occupational Map (<i>Mandatory</i>)	Attached
11.	Supporting Document: Assessment SOP (<i>Mandatory</i>)	
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	A Service Technician – Home Appliances is responsible for installing the appliances and finding the faults and repairing the same of the various appliances as per instructions and standard operating procedures.	4

	involving standard and non-standard practices. • Perform the repairing processes. • Follow all guidelines and instructions. • Adhere to industry work practices to achieve productivity and quality standards • Check the working of the appliances	Hence Level 4	
Professional and Technical Skills/ Expertise/ Professional Knowledge	Factual and theoretical knowledge in broad contexts within a field of work or study. • Knowledge of various materials, repairing processes, working of various home appliances. • Know the instructions and guidelines to achieve productivity and quality standards	A Service Technician – Home Appliances should know the different processes involved in finding the faults and repairing of various home appliances, their working and the guidelines to achieve productivity and quality standards. 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	A Service Technician – Home Appliances should be able to use basic tools in correct way to repair the faults in the appliances. 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 of various home appliances • Guidelines and instructions for repairing	A Service Technician – Home Appliances needs to know the repairing procedures, working of various home appliances. 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	A Service Technician – Home Appliances should record the issues and report about the same to 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

Batch Size: 30

S. No.	Tool / Equipment Name	Specifications	Quantity for specified Batch size
1	Clamp Meter	Nos	6
2	Digital Multimeter	Nos	6
3	Electrical Drill	Nos	3
4	Lead Solder	Nos	6
5	Soldering Iron with Lead and stand	Nos	6
6	Spanner Set	Nos	6
7	TDS Meter	Nos	6
8	Water Pressure Gauge	Nos	6
9	Water Purifier	Nos	3
10	Water Purifier	Nos	3
11	Water Purifier	Nos	3
12	Screw Driver Set	Nos	6
13	Soldering Flux	Nos	6
14	Adhesive	Nos	5
15	Automatic Washing Machine	Nos	1
16	Brazing Rod	Nos	2
17	Digital Thermometer	Nos	2
18	Single and Double Door Refrigerator	Nos	1

19	Flaring Tool	Nos	2
20	Gas Cylinder	Nos	2
21	Hack Saw	Nos	5
22	Hammer	Nos	5
23	Line Tester	Nos	10
24	Plier	Nos	5
25	Pressure Gauge	Nos	5
26	Screw Driver Set	Nos	5
27	Automatic Washing Machine	Nos	1
28	Single Door Refrigerator	Nos	1
29	Window and Split inverter Air Conditioner	Nos	2
30	Tube Bender	Nos	5
31	Tube Cutter	Nos	5
32	Vacuum Pump	Nos	2
33	Weighing Scale	Nos	1
34	Window inverter Air Conditioner	Nos	2
35	Capillary Guage	Nos	6
36	Compound Guage	Nos	6
37	Megger	Nos	6
38	Measuring Tape (5 Mtrs)	Nos	6
39	Pressure Gauge	Nos	1
40	PPE ESD Safety Kit	Pair	6
41	Safety Shoes	Pair	6

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Whiteboard
2. Projector
3. Computer/Laptop
4. Chairs
5. Tables
6. Whiteboard marker

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 TECKNIKI 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	Ephicacy Lifescience Analytics	Rahul Kumar Kaushik	Senior Software Engineer	2nd Main Rd, Sarvobhogam Nagar, Arekere, Bengaluru, Karnataka 560076	8859885973	Rahul.Kaushik@ephicacy.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@svc colleges.edu.in	
8	Rastriya Khushali Sansthan	Ramkaran Sinsinwar	President	VOP Tajsar Fatehpur Rajasthan	6350658040	Rkstajsar1998@gmail.com	

9	Sri Rajaram Shikshan Sansthan	Rajendra Parsad	Principle		8808696968	rajendraitijnp@gmail.com	
10	Nexgen Exhibitions Pvt. Ltd.	Saurabh Purwar	Director	1201/1206 Pragati Tower, 26 Rajendra Place, New Delhi-110008, India	9457306691	fbvidgo@gmail.com	
11	Siemens Limited	Manoj Belgaonkar	Head – Regulations, Standards and QM	R&D Centre, Thane Belapur Road, Airoli, Navi Mumbai 400708	9820682825	manoj.belgaonkar@siemens.com	
12	Tata Consultancy Services	Sheepra Kaushik	Consultant – Product Development	Kensington B Wing, Hiranandani SEZ, Powai, Mumbai 400076	8433595090	sheepra.sharma@tcs.com	
13	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	
14	Artificial Intelligence Technologies	Rohit Kumar Sharma	Manager – Product Development	A-21, sector 4, Block A, Kailash Colony, Greater Kailash, New Delhi	9927564461	rohit.sharma@aituniversal.com	
15	Shri Prasad Sharma Shikshan Sansthan Myana	Suresh		Gautam Budha Nagar UP	8433476571		
16	Shree Hari Shikshan Sansthan Aaspura	Mukesh Kumar	SPOC	Rajasthan 341508	7877239952	Harikct2024@gmail.com	
17	Evergreen Education Trust	Faizanbazaz	Director	217, Pehari Colony Jammu 180005	7006341193	eetturst@gmail.com	
18	IIAE Educational Society	Barinder Singh	President		9829745313	ivyindiaprojects@gmail.com	

19	Bergen Associates Pvt Ltd.	Soubam Sunil	Manager	305-306, Magnum House-I, Commercial Complex, Karampura, New Delhi – 110015	9311780832	s.soubam@bergengroupindia.com	
20	Sankalp Education and development society	Jafruddin Khan	SPOC		8104049522		
21	Ramyash Pvt ITI	Ramyash	Principel	Jamalpur	9454738298	Yashvantayadav964@gmail.com	
22	B M Upadhyay Shiksha Samiti	K K Upadhyay	SPOC	Agra	9149158684	Kk7500081234@gmail.com	
23	Shri Solasar Balaji Shikshan	Nand Kishor Gurjar	SPOC	Rajasthan	9358734466	shribalajiitisujangarh@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	750	NA	NA
2026-27	750	NA	NA
2027-28	1000	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	1121	1095	853	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.0	2023-24	415	398	324	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.0	2024-25	7302	5981	5650	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. 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	Theory Marks	Practical Marks	Project Marks	Viva Marks
ELE/N3101: Engage with customer for service	Introduction and Interact with the customer	32	41	-	8
	PC1. Interact with customers to diagnose the issues, identifies and fixes minor faults or replaces modules, and recommends factory repair for major problems	2	1		1
	PC2.analyse the details of customer complaint registered at customer care or installation schedule	4	5	-	1
	PC3. connect with the customer to use mobile CRM apps and real-time service tracking system to interact professionally with customers and provide personalized support.	4	6	-	1
	PC4.collect appropriate tools, parts, relevant reference sheets, manuals and documents	4	6	-	1
	PC5.visit the customer premises as per the scheduled date and time for service as per the requirement	4	6	-	1
	PC6.check about warranty status of appliance and annual maintenance contract	4	6	-	1
	PC7.gather detailed information pertaining to age of appliance, status of upkeep, symptoms and history of problems in the appliance	4	6	-	1
	PC8.provide information to the customer about the warranty and problem in detail along with the precautions to be taken in order to avoid recurrence of problem	6	5	-	1
	Suggest possible solutions	8	9	-	2
	PC9.suggest possible solutions with the time required, costs involved and methodology for servicing	4	5	-	1
	PC10.seek customer's approval on further action	4	4		1
	NOS Total	40	50	-	10
ELE/N3112: Perform installation and repair of appliances	Prepare for installation of the appliance	6	6		2
	PC1. Integrate components and perform visual and functional inspections to ensure proper connectivity and alignment of parts such as control boards, sensors, motors, compressors (in inverter ACs), and drum assemblies (in automatic washing machines).	0	1	-	0
	PC2. visit customer location as scheduled and provide guidance to the customer for pre-installation requirement as per the appliance w.r.t structure, plug point, drainage, plumbing etc.	1	0	-	1

PC3. make measurements at the location identified and drill holes, if required, ensuring no internal wiring damage takes place	1	1	-	0
PC4. remove the packaging from the appliance delivered at the customer location	1	1	-	0
PC5. verify that the product matches the customer's order with all supporting accessories	0	1	-	0
PC6. check the availability of all tools and fitments for the installation	1	1	-	0
PC7. clear up the packaging material waste and dispose as per company's norms	1	1	-	0
PC8. seek customer's input on placing/positioning the appliance near a plug point, in obstruction-free area, while maintaining the required distance from wall and floor	1	0	-	1
<i>Install refrigerator at customer location</i>	3	5	-	1
PC9. perform steps to fit water-disposal beaker, handle, shelves, basket and side buckets	1	1	-	0
PC10. connect the refrigerator to power supply and set cooling/freezer temperature knobs according to the season so as to demonstrate features/utility	1	2	-	1
PC11. inform the customer about the precautions to be taken while using the refrigerator and heating of outside walls of the refrigerator	1	1	-	0
PC12. verify thermostat settings are appropriate as per the requirement	0	1	-	0
<i>Install inverter air conditioner at customer location</i>	6	10	-	2
PC13. provide information to the customer about requirement of concealed drainage and electric conduits	1	1	-	0
PC14. Install and repair smart home appliances using IoT integration, CMR mobile apps for setup, and advanced fault detection systems for efficient and accurate repairs.	1	1	-	0
PC15. place the outdoor unit at a suitable location and attach it firmly to wall/floor	1	1	-	0
PC16. connect the indoor and the outdoor units using the field copper pipe of appropriate size	1	1	-	0
PC17. fill in additional gas if the distance between the indoor and the outdoor units is more than recommended	1	3	-	1
PC18. perform steps to make necessary power supply connections and align the inverter air conditioner as per the instructions manual	1	3	-	1
<i>Install automatic washing machine at customer location</i>	7	8	-	1
PC19. remove all transport pins or anything lying in the drum of the automatic washing machine before starting the machine	1	1	-	0
PC20. check the necessary plumbing installations required for water inlet and outlet	1	1	-	0

PC21. connect the machine's drain hose with the sewage pipe to ensure proper drainage	1	1	-	0
PC22. identify the water inlet valve in the household plumbing	1	1	-	0
PC23. ensure that the valve is turned off while connecting the PVC hose water inlet of the automatic washing machine to the valve	0	1	-	0
PC24. connect the waste water outlet from the automatic washing machine to the waste system such that the dirty water does not get siphoned back into the automatic washing machine	1	1	-	0
PC25. perform steps to make inlet, outlet and power supply connections securely using the correct tools and equipment for installation	1	1	-	1
PC26. operate and check that there are no leaks and the machine is in a safe and stable condition	1	1	-	0
<i>Install water purifier at customer location</i>	6	6	-	1
PC27. inform the customer about requirement of adequate water pressure at the inlet source	1	0	-	0
PC28. mount the filter and ensure that the screws are fastened securely	1	1	-	0
PC29. drain the inlet line before connecting it to the water purifier and connect the outlet pipe to the drain (if applicable)	1	1	-	0
PC30. ensure that the filter is aligned as per instructions in the installation manual	1	1	-	0
PC31. run the purifier to ensure there are no leaks and demonstrate the features/utility to the customer	1	1	-	1
PC32. place a piece of cloth or towel under the unit in order to avoid any water spills on the floor	0	1	-	0
PC33. explain maintenance procedures to be followed while using the water purifier	1	1	-	0
<i>Diagnose, repair and replace the faulty module of appliance</i>	10	13	-	3
PC34. diagnose the fault based on customer interaction, usage pattern and initial inspection	1	1	-	1
PC35. unplug the appliance to carry out further inspection	1	1	-	0
PC36. perform basic tests such as power supply inspection, volt ampere test and earth test power supply	1	2	-	1
PC37. inspect every module of the unit separately if the fault is not identified through basic tests	1	1	-	1
PC38. send it to factory for in-depth diagnosis if problem does not get identified at site	1	1	-	0

	PC39. repair/replace component at location, if the fault identified is due to damage of components	1	1	-	0
	PC40. schedule next appointment if the part can't be replaced on site	1	1	-	0
	PC41. reassemble the unit to check that all the modules of the unit are working as per specifications	1	1	-	0
	PC42. demonstrate functionality of the unit to the customer	0	1	-	0
	PC43. provide information to the customer about cleaning procedures and precautions to be taken in order to avoid recurrence of problem	0	1	-	0
	PC44. complete all documentation procedures for complaint closure	1	1	-	0
	PC45. collect necessary payments from the customer	1	1	-	0
	<i>Work Ethics and Health & Safety</i>	2	2	-	0
	PC46. Follow workplace discipline, grooming, and ethical behaviour standards.	1	0	-	0
	PC47. Use appropriate PPE and tools; follow safety procedures at the site.	0	1	-	0
	PC48. Handle emergencies and report safety incidents as per protocol.	0	1	-	0
	PC49. Work honestly, protect customer property, and ensure quality service.	1	0	-	0
	NOS Total	40	50	-	10
	<i>Introduction to Employability Skills</i>	1	1	-	-
DGT/VSQ/N0101 - Employability Skills (30 hours)	PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
	<i>Constitutional values – Citizenship</i>	1	1	-	-
	PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
	<i>Becoming a Professional in the 21st Century</i>	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.	-	-	-	-
	<i>Basic English Skills</i>	2	3	-	-
	PC4. speak with others using some basic English phrases or sentences	-	-	-	-
	<i>Communication Skills</i>	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	130	-	20

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 Service Technician – Home Appliances) will be assessed separately.

1. The candidate must score 50% in each module to successfully complete the OJT.
2. 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.
3. 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