

## **NSQF QUALIFICATION FILE**

**Approved in 15<sup>th</sup> NSQC Meeting – NCVET – 27<sup>th</sup> January, 2022**

### **CONTACT DETAILS OF THE BODY SUBMITTING THE QUALIFICATION FILE**

#### **Name and address of submitting body:**

Electronics Sector Skills Council of India(ESSCI)

Head Office: 155, 2nd Floor, ESC House

Okhla Industrial Area - Phase 3, New Delhi - 110020

Tel: +91 -84477-38-501

#### **Name and contact details of individual dealing with the submission**

**Name:** Dr. Abhilasha Gaur

**Position in the organisation:** COO

**Address if different from above:** Same as above

**Tel number(s):**

**E-mail address:** ceo@essc-india.org

#### **List of documents submitted in support of the Qualifications File**

1. Model Curriculum

#### **Model Curriculum to be added which will include the following:**

- **Indicative list of tools/equipment to conduct the training**
- **Trainers qualification**
- **Lesson Plan**
- **Distribution of training duration into theory/practical/OJT component**

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- SUMMARY

1	<b>Qualification Title:</b> Field Technician - Air Conditioner
2	<b>Qualification Code, if any:</b> ELE/Q3102
3	<b>NCO code and occupation:</b> NCO-2004/7233.50 After Sales Service
4	<b>Nature and purpose of the qualification (Please specify whether qualification is short term or long term):</b> This is a long term Qualification, which will enable participants to take up a challenging career as a Field Technician - Air Conditioner.
5	<b>Body/bodies which will award the qualification:</b> Electronics Sector Skills Council of India
6	<b>Body which will accredit providers to offer courses leading to the qualification:</b> Electronics Sector Skills Council of India
7	<b>Whether accreditation/affiliation norms are already in place or not , if applicable (if yes, attach a copy) :</b> Yes
8	<b>Occupation(s) to which the qualification gives access:</b> After Sales Service
9	<b>Job description of the occupation:</b> Field Technician – Air Conditioner provides after sales service to customers where he/she needs to interact with customers to diagnose the problem and assess possible causes. The individual identifies and rectifies minor problems or replaces faulty modules for failed parts or recommends factory repair for bigger faults.
10	<b>Licensing requirements:</b> N/A
11	<b>Statutory and Regulatory requirement of the relevant sector (documentary evidence to be provided):</b> N/A
12	<b>Level of the qualification in the NSQF:</b> Level 4
13	<b>Anticipated volume of training/learning required to complete the qualification:</b> 600 Hours
14	<b>Indicative list of training tools required to deliver this qualification:</b> Personal Protective Equipment: safety glasses, head protection, rubber gloves, safety footwear, warning signs and tapes, fire extinguisher, first aid kit, fire extinguishers and warning signs. Basic electrical and electronic components Air conditioners, electrical and mechanical modules, tools such as multi-meter, oscilloscope, temperature meter, pressure gauges, etc., job sheet, manuals, reference sheets, supporting accessories, tools and fitments, brazing sticks, brazing torches, fluxes Basic tool kit: screw driver, multi-meter, clamp meter etc.

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15	<b>Entry requirements and/or recommendations and minimum age:</b> 8th Grade Pass + NTC (2 years after 8th) + 2 Year NAC/relevant Experience) OR 10th Grade pass + 2 Year NTC/NAC/ relevant experience OR Certificate-NSQF (Level-3 in Maintenance Technician) with 2 Years of relevant Experience OR 12th Class and 18 Years		
16	<b>Progression from the qualification (Please show Professional and academic progression):</b> Field Engineer- RACW		
17	<b>Arrangements for the Recognition of Prior learning (RPL):</b> RPL will be based on the same approved Qualification Pack and Assessment Criteria mentioned in the Qualification Pack by Electronics Sector Skills Council of India (ESSCI)		
18	<b>International comparability where known (research evidence to be provided):</b> Yet to establish		
19	<b>Date of planned review of the qualification:</b> 02/06/2025		
20	<b>Formal structure of the qualification</b> <b>Mandatory components</b>		
	<b>Title of component and identification code/NOSs/Learning outcomes</b>	<b>Estimated size (learning hours)</b>	<b>Level</b>
(i)	Bridge Module (Role and Responsibilities of a Field Technician- Air Conditioner)	30	4
(ii)	Engage with customer for service (ELE/N3101)	225	4
(iii)	Perform installation and repair of air conditioner (ELE/N3108)	225	4
(iv)	Work effectively at the workplace (ELE/N9905)	30	4

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(v)	Apply health and safety practices at the workplace (ELE/N1002)	30	4
(vi)	Employability Skills (60 Hours) (DGT/VSQ/N0102)	60	4
	<b>Total:</b>	600 hrs	

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**SECTION 1**

**ASSESSMENT**

21	<p><b>Body/Bodies which will carry out assessment:</b> Electronics Sector Skills Council of India</p>
22	<p><b>How will RPL assessment be managed and who will carry it out?</b> Give details of how RPL assessment for the qualification will be carried out and quality assured.</p> <p>The RPL assessment will be carried out through pre assessment, identifying the skills gaps, provide bridge training to cover the competency gap and then conduct final assessment of the candidates.</p>
23	<p><b>Describe the overall assessment strategy and specific arrangements which have been put in place to ensure that assessment is always valid, reliable and fair and show that these are in line with the requirements of the NSQF.</b></p> <p>Assessment is done through third parties who are affiliated to ESSCI as Assessment Body. Assessors are trained &amp; certified by ESSCI through Training of Assessors program. The assessment involves two processes. The first process is gathering the evidence of the competency of individuals. The second part of the assessment process is the judgement as to whether a person is competent or not. The assessment plan contains the following information:</p> <ul style="list-style-type: none"> <li>• What will be assessed, i.e. the competency based on each NOS</li> <li>• How assessment will occur i.e. methods of assessment</li> <li>• When the assessment will occur</li> <li>• Where the assessment will take place i.e. context of the assessment (workplace/simulation)</li> <li>• The criteria for decision making i.e. those aspects that will guide judgements and</li> </ul> <p>Where appropriate, any supplementary criteria used to make a judgement on the level of performance.</p> <p>The assessment is conducted through theory, viva voce and practical.</p>

Please attach most relevant and recent documents giving further information about assessment and/or RPL.

Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

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### ASSESSMENT EVIDENCE

**Complete a grid for each component as listed in “Formal structure of the qualification” in the Summary.**

*NOTE: this grid can be replaced by any part of the qualification documentation which shows the same information – i.e. Learning Outcomes to be assessed, assessment criteria and the means of assessment.*

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**24. Assessment evidences**

**Title of Component:** Field Technician- Air Conditioner

**CRITERIA FOR ASSESSMENT OF TRAINEES**

**Job Role** Field Technician- Air Conditioner

**Qualification Pack** ELE/Q3102

**Sector Skill Council** Electronics Sector Skills Council of India

**Guidelines for Assessment**

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on this criterion.
6. To pass the Qualification Pack, every trainee should score a minimum of 70% of aggregate marks to successfully clear the assessment.
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>ELE/N3101: Engage with customer for service</b>				
<i>Interact with the customer</i>	<b>32</b>	<b>41</b>		<b>8</b>
<b>PC1.</b> analyse the details of customer complaint registered at customer care or installation schedule	5	6		1

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PC2. connect with the customer to confirm problem telephonically and fix time for visit	4	6		1
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PC3. collect appropriate tools, parts, relevant reference sheets, manuals and documents	4	6		2
PC4. visit the customer premises as per the scheduled date and time for service as per the requirement	4	6		1
PC5. check about warranty status of appliance and annual maintenance contract	4	6		1
PC6. gather detailed information pertaining to age of appliance, status of upkeep, symptoms and history of problems in the appliance	5	6		1
PC7. 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
<i>Suggest possible solutions</i>	<b>8</b>	<b>9</b>		<b>2</b>
PC8. suggest possible solutions with the time required, costs involved and methodology for servicing	4	5		1
PC9. seek customer's approval on further action	4	4		1
<b>TOTAL</b>	<b>40</b>	<b>50</b>		<b>10</b>

### ELE/Q3108: Perform installation and repair of air conditioner

<i>Perform pre-installation checks</i>	<b>10</b>	<b>7</b>		<b>1</b>
PC1. analyze the work requirements by interacting with the supervisor	2	1		0
PC2. plan to visit customer premises to understand the installation position of air conditioner such as window, split, high, low, etc	2	1		0
PC3. check that the location meets structural requirements such as	2	2		1

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distance from power supply, distance from windows/doors being opened frequently				
<b>PC4.</b> inform customer about any pre installations/masonry/electrical work to be carried out	2	1		0
<b>PC5.</b> mark position for placement of indoor/outdoor units to get customer confirmation on position and installation on next visit	2	2		0
<i>Install the air conditioner</i>	<b>16</b>	<b>22</b>		<b>3</b>
<b>PC6.</b> remove the air conditioner packaging without causing any damage and ensure that it matches the customer order in terms of colour and make	1	2		0
<b>PC7.</b> check that all supporting accessories are available in the pack	2	2		1
<b>PC8.</b> inspect that tools and fitments required for the installation are available	2	2		1
<b>PC9.</b> dispose off the packaging material waste as per company's norms	1	2		0
<b>PC10.</b> measure the location to drill holes ensuring that no internal wiring damage takes place	2	2		0
<b>PC11.</b> mount the indoor unit and ensure that the screws are fastened securely	1	2		0
<b>PC12.</b> place the outdoor unit at a suitable location and attach it firmly to wall/floor	1	2		0
<b>PC13.</b> connect the indoor and the outdoor units using the field copper pipe of appropriate size and interconnecting cables	1	3		0
<b>PC14.</b> fill in additional gas if the distance between the indoor and the outdoor units is more than what is recommended	1	1		0

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<b>PC15.</b> align the air conditioner as per the instructions manual and make necessary power supply connections	2	2		0
<b>PC16.</b> demonstrate the features/utility to customer for the new installation while explaining the precautions to be taken while using the air conditioner	2	2		1
<i>Analyze symptoms, identify and rectify faults</i>	<b>11</b>	<b>17</b>		<b>5</b>
<b>PC17.</b> analyze usage pattern of the air conditioner from the customer	2	2		0
<b>PC18.</b> diagnose the fault based on customer interaction and initial inspection by carrying out basic tests such as power supply inspection, volt ampere test, etc.	1	2		1
<b>PC19.</b> separate and inspect every module of the unit if the fault is not identified through basic tests	1	2		1
<b>PC20.</b> plan to send air conditioner to factory for in-depth diagnosis, if problem cannot be identified at site	1	1		0
<b>PC21.</b> repair or replace faulty part as per requirement at customer location or send it to service center on time in case immediate repair is not possible for specialized parts such as PCB	1	3		2
<b>PC22.</b> plan second visit to replace dysfunctional module/part after collecting it from service center	1	1		0
<b>PC23.</b> carry out brazing operation at the customer premise or pass the complaint on to a specialist in-charge of handling brazing, if the fault identified is a gas leak	1	2		1
<b>PC24.</b> reassemble the unit after rectifying identified fault	1	2		0
<b>PC25.</b> check that all the modules of the unit work as per specifications and confirm functionality to the customer	1	1		0

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<b>PC26.</b> collect necessary payment from the customer as per rate sheet/ communication from customer care and provide the receipt	1	1		0
<i>Complete documentation</i>	<b>3</b>	<b>4</b>		<b>1</b>
<b>PC27.</b> fill in customer acknowledgement form and seek customer's signature	1	1		0
<b>PC28.</b> complete documentation for recording installation/repair of air conditioner and update the company ERP software for tracking/future references	1	2		1
<b>PC29.</b> inform customer care and supervisor about job completion	1	1		0
<b>TOTAL</b>	<b>40</b>	<b>50</b>		<b>10</b>
<b>ELE/N9905: Work effectively at the workplace</b>				
<i>Communicate effectively at the workplace</i>	<b>5</b>	<b>13</b>	-	-
<b>PC1.</b> exchange information and instruction with colleagues, and seek clarifications and feedback as necessary	1	3	-	-
<b>PC2.</b> assist colleagues where required	1	3	-	-
<b>PC3.</b> follow business communication etiquette in all interactions and communicate in appropriate formats (online, digital, and in-person)	1	4	-	-
<b>PC4.</b> document and share all relevant information with stakeholders in agreed formats and as per agreed timelines	2	3	-	-
<i>Work effectively</i>	<b>6</b>	<b>13</b>	-	-
<b>PC5.</b> identify and obtain clarity regarding organisational, team and own goals and targets	1	2	-	-
<b>PC6.</b> prioritise and plan work in order to achieve goals and targets	1	2	-	-
<b>PC7.</b> monitor own and team performance as per agreed plan	1	2	-	-

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<b>PC8.</b> complete duties accurately, systematically and within required timeframes	1	2	-	-
<b>PC9.</b> express emotions appropriately at the workplace and manage own response to heightened emotions	1	2	-	-
<b>PC10.</b> maintain orderliness and cleanliness in the work area	1	3	-	-
<i>Maintain and enhance professional competence</i>	<b>8</b>	<b>7</b>	-	-
<b>PC11.</b> identify own strengths and weaknesses in relation to goals and targets	1	1	-	-
<b>PC12.</b> adapt self, service, or product to meet success criteria	1	1	-	-
<b>PC13.</b> seek and select opportunities for continuous professional development	1	1	-	-
<b>PC14.</b> formulate a professional development plan to enhance capabilities	2	1	-	-
<b>PC15.</b> build or contribute to the organizational knowledge base of cases, clients, issues, solutions, and innovations	1	1	-	-
<b>PC16.</b> examine developments and trends in field of work and their potential impact on work	1	1	-	-
<b>PC17.</b> take feedback from peers, supervisors and clients to improve own performance and practices	1	1	-	-
<i>Work in a disciplined and ethical manner</i>	<b>11</b>	<b>16</b>	-	-
<b>PC18.</b> perform tasks as per workplace standards, organisational policies and legislative requirements	2	2	-	-
<b>PC19.</b> display appropriate professional appearance at the workplace and adhere to the organisational dress code	1	2	-	-
<b>PC20.</b> demonstrate responsible and disciplined behaviour at the workplace such as punctuality; completing tasks as per given time and standards; demonstrating professional behaviour at all times, adopting environment-friendly practices, etc.	1	2	-	-

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PC21. identify the cause of conflict and options for resolution with peers or escalate grievances and problems to appropriate authority as per procedure for conflict resolution	2	2	-	-
PC22. protect the rights of the client and organisation when delivering services	1	2	-	-
PC23. ensure services are delivered equally to all clients regardless of personal and cultural beliefs	1	2	-	-
PC24. operate within an agreed ethical code of practice and report unethical conduct to the appropriate authorities	2	2	-	-
PC25. follow organisational guidelines and legal requirements on disclosure and confidentiality	1	2	-	-
<i>Uphold social diversity at the workplace</i>	<b>10</b>	<b>11</b>	-	-
PC26. recognize and evaluate biased practices against underrepresented groups like women and persons with disabilities, in workplace systems and processes	2	2	-	-
PC27. identify and report discrimination and harassment based on gender, disability, or cultural difference at the workplace	2	2	-	-
PC28. use inclusive or neutral language and gestures in all interactions	2	2	-	-
PC29. respect the personal and professional space of others	2	2	-	-
PC30. access grievance redressal mechanisms as per legislations	2	3	-	-
<b>NOS Total</b>	<b>40</b>	<b>60</b>	-	-
<b>ELE/N1002: Apply health and safety practices at the workplace</b>				
<i>Deal with workplace hazards</i>	<b>20</b>	<b>31</b>	-	-
PC1. identify job-site hazards and possible causes of accident in the workplace	2	3	-	-
PC2. perform work complying to organizational safe working practices and observing hazard signs displayed on containers, equipment and in various work areas such as inside buildings, in open areas and public spaces, etc.	3	4	-	-

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<b>PC3.</b> use appropriate personal protective equipment (PPE) for specific tasks and work conditions, contaminant (concentration w.r.t air) requirements and severity of hazard while conforming to the Indian/International standards	3	4	-	-
<b>PC4.</b> follow standard safety procedures while handling tool/ equipment, hazardous substances and while working in hazardous environments	3	4	-	-
<b>PC5.</b> dispose electronic waste (such as toxins; metals such as lead, cadmium, barium; flame retardant plastics, welding slag etc.) as per industry approved techniques	2	4	-	-
<b>PC6.</b> avoid damage of components due to negligence in electrostatic discharge (ESD) procedures	2	3	-	-
<b>PC7.</b> locate general health and safety equipment in the workplace such as fire extinguishers; first aid equipment; safety instruments, clothing and installations (fire exits, exhaust fans)	2	3	-	-
<b>PC8.</b> maintain appropriate posture while handling heavy objects	1	3	-	-
<b>PC9.</b> apply good housekeeping practices at all	2	3	-	-
<i>Apply fire safety practices</i>	4	9	-	-
<b>PC10.</b> take preventive measures to prevent fire hazards	2	3	-	-
<b>PC11.</b> · use appropriate fire extinguishers for different types of fires · Types of fires: Class A: e.g. ordinary solid combustibles, such as wood, paper, cloth, plastic, charcoal, etc.; Class B: flammable liquids and gases, such as gasoline, propane, diesel fuel, tar, cooking oil, and similar substances; Class C: e.g. electrical equipment such as appliances, wiring, breaker	1	3	-	-
<b>PC12.</b> exhibit rescue and first-aid techniques in case of fire or electrocution	1	3	-	-
<i>Follow emergencies, rescue and first-aid procedures</i>	6	13	-	-

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<b>PC13.</b> administer appropriate first aid to victims in case of bleeding, burns, choking, electric shock, poisoning etc.	1	3	-	-
<b>PC14.</b> administer first aid to victims in case of a heart attack or cardiac arrest due to electric shock,	1	2	-	-
<b>PC15.</b> participate regularly in emergency procedures such as raising alarm, safe/efficient, evacuation, correct means of taking shelter and escaping, correct assembly point, roll call, correct return to work	2	4	-	-
<b>PC16.</b> use correct method to move injured people and others during an emergency	2	4	-	-
<i>Effective waste management/recycling practices</i>	<b>5</b>	<b>12</b>	-	-
<b>PC17.</b> identify recyclable and non-recyclable, and hazardous waste generated	1	3	-	-
<b>PC18.</b> segregate waste into different categories	1	2	-	-
<b>PC19.</b> ensure disposal of non-recyclable waste appropriately	1	2	-	-
<b>PC20.</b> deposit non-recyclable and reusable material at identified location	1	3	-	-
<b>PC21.</b> follow processes specified for disposal of hazardous waste	1	2	-	-
<b>NOS Total</b>	<b>35</b>	<b>65</b>	-	-

<b>DGT/VSQ/N0102: Employability Skills (60 Hours)</b>				
<b>Assessment Criteria for Outcomes</b>	<b>Theory Marks</b>	<b>Practical Marks</b>	<b>Project Marks</b>	<b>Viva Marks</b>
<i>Introduction to Employability Skills</i>	1	1	-	-
PC1. identify employability skills required for jobs in various industries	-	-	-	-
PC2. identify and explore learning and employability portals	-	-	-	-
<i>Constitutional values - Citizenship</i>	1	1	-	-

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PC3. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
PC4. follow environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	2	4	-	-
PC5. recognize the significance of 21st Century Skills for employment	-	-	-	-
PC6. practice the 21st Century Skills such as Self- Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
<i>Basic English Skills</i>	2	3	-	-
PC7. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
PC8. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
PC9. write short messages, notes, letters, e-mails etc. in English	-	-	-	-
<i>Career Development &amp; Goal Setting</i>	1	2	-	-
PC10. understand the difference between job and career	-	-	-	-
PC11. prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
<i>Communication Skills</i>	2	2	-	-
PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
PC13. work collaboratively with others in a team	-	-	-	-
<i>Diversity &amp; Inclusion</i>	1	2	-	-

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PC14. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
<i>Financial and Legal Literacy</i>	2	3	-	-
PC16. select financial institutions, products and services as per requirement	-	-	-	-
PC17. carry out offline and online financial transactions, safely and securely	-	-	-	-
PC18. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
<i>Essential Digital Skills</i>	3	4	-	-
PC20. operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
PC22. use basic features of word processor, spreadsheets, and presentations	-	-	-	-
<i>Entrepreneurship</i>	2	3	-	-
PC23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
PC24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
PC25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
<i>Customer Service</i>	1	2	-	-
PC26. identify different types of customers	-	-	-	-
PC27. identify and respond to customer requests and needs in a professional manner.	-	-	-	-

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PC28. follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship &amp; Jobs</i>	2	3	-	-
PC29. create a professional Curriculum vitae (Résumé)	-	-	-	-
PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
PC31. apply to identified job openings using offline /online methods as per requirement	-	-	-	-
PC32. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
<b>NOS Total</b>	<b>20</b>	<b>30</b>	-	-

Outcomes to be assessed/NOSs to be assessed	Assessment criteria for the outcome
Provided in the above section	
<b>Means of assessment 1</b> 1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its	

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importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.

2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below.)
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on these criteria.

### **Means of assessment 2**

Add boxes as required.

### **Pass/Fail**

1. To pass the Qualification Pack, every trainee should score a minimum of 70% in every NOS.
2. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.

**NSQF QUALIFICATION FILE**Approved in 15<sup>th</sup> NSQC Meeting – NCVET – 27<sup>th</sup> January, 2022**SECTION 2****25.EVIDENCE OF LEVEL****OPTION A**

<b>Title/Name of qualification/component: Field Technician- Air Conditioner</b>			<b>Level: 4</b>
<b>NSQF Domain</b>	<b>Outcomes of the Qualification/Component</b>	<b>How the outcomes relates to the NSQF level descriptors</b>	<b>NSQF Level</b>
Process	Interact with customer effectively to install air conditioner at premises and provide after sales repair services	Theoretical & Practical skill required for assisting in installing/repairing/servicing air conditioners or performing the task individually. Since the individual is required to take instructions from supervisors, hence this is level 4.	4
Professional knowledge	Knowledge related to air conditioner installation, diagnosing faults, assessing possible causes and repairing them in a scheduled manner	Factual and theoretical knowledge in the field of installing /repairing/servicing of air conditioner. No deeper knowledge or skills are required for this individual; hence this is level 4.	4
Professional skill	Punctuality, amenable behaviour, patience, trustworthiness, integrity and critical thinking	Range of cognitive and practical skill required for the installing /repairing/servicing of air conditioner. Hence this is level 4.	4
Core skill	Effective skill in writing, reading and oral communication (listening and speaking skills) with required clarity	Skill to communicate written or oral with required clarity, but not to manage/supervise others. Hence this is level 4.	4

**NSQF QUALIFICATION FILE****Approved in 15<sup>th</sup> NSQC Meeting – NCVET – 27<sup>th</sup> January, 2022**

<b>Title/Name of qualification/component: Field Technician- Air Conditioner</b>		<b>Level: 4</b>	
<b>NSQF Domain</b>	<b>Outcomes of the Qualification/Component</b>	<b>How the outcomes relates to the NSQF level descriptors</b>	<b>NSQF Level</b>
Responsibility	Responsible for completing the assigned task, effective team working, safety of self and in workplace	Accountable for own work and learning in the domain of installing /repairing/servicing of air conditioner and hence this is level 4.	4

**SECTION 3**

**EVIDENCE OF NEED**

26	<b>What evidence is there that the qualification is needed? What is the estimated uptake of this qualification and what is the basis of this estimate?</b>		
	<b>Basis</b>	<b>In case of SSC</b>	<b>In case of other Awarding Bodies (Institutes under Central Ministries and states departments)</b>
	<p><b>Need of the qualification</b> The Indian electronics industry is one of the largest and fastest-growing industries in the world. This sector comprises majorly consumer electronic products manufacturing and servicing.</p> <p>Indian electronic market is expected to reach a turnover of US\$ 400 billion in 2022, up from US\$ 69.6 billion in 2012.</p> <p>According to an Indian Brand Equity Foundation (IBEF) report, the market is projected to grow at a compound annual growth rate (CAGR) of 29.4</p>	<p>The SSC would undertake market study and would enclosed demand forecast for the proposed job role both on short-term and long-term basis to substantiate the requirement of the Qualification proposed. The SSC can produce the data from primary or authorized secondary sources as well.</p>	<p>The Submitting Body would produce any reputable and reliable research reports, such as labour market information reports; occupational mapping or similar research carried out by Ministry/State/Any other authentic source forecasting the demand for the proposed qualification</p>

## NSQF QUALIFICATION FILE

Approved in 15<sup>th</sup> NSQC Meeting – NCVET – 27<sup>th</sup> January, 2022

	per cent during the period 2015-2020		
	<p>Industry Relevance We are in the process of taking industry validation.</p>	<p>The SSC would undertake validation of the job roles with actual end-user industry where such employment are going to be generated and absorbed instead of generic validation of industry. The SSC would submit the endorsements from users/intended users of the qualification clearly supporting or otherwise the need for trained people against specific job role. <i>(The industry validation format to be used)</i></p>	<p>The Submitting Body would submit the list of industry participation while preparation of the curriculum/ course content of the qualifications. These could include minutes of the meeting/ reports of these consultations</p>
	<p>Usage of the qualification: This Qualification Pack will be used across PDA device servicing industry which is organised</p>	<p>The SSC would submit details of the employment generated (wherever applicable) and realised by virtue of training in the Qualifications of the sector earlier submitted for NSQF alignment.</p> <p>In case of unorganized sector, case studies or evidences may be given</p>	<p>The submitting body would submit the details of trained and placed data in the proposed qualification (if an existing qualification is being proposed for NSQF alignment)</p> <p>Information about the success of the qualification should be given (e.g. uptake figures, examples of use in recruitment and placement rates (if known) should be given. However, many of the bodies that do not have placement tracking mechanism established in place</p>

## NSQF QUALIFICATION FILE

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			<p>would provide necessary endorsements by the state/ ministry stating that a tracking mechanism would be institutionalized and placement records shall be provided annually or later, depending on length of qualification.</p>
	<p>Estimated uptake</p> <p>The electronics products segment contributed 82% to the overall market in 2015, while the rest comprised electronic components.</p> <p>The Electronic Products industry in India was valued at \$ 61.8 bn in 2015.</p> <p>One of the largest electronics markets in the world anticipated reaching \$ 400 bn by 2025</p> <p>The Consumer Electronics and Appliances Industry in India is expected to become the fifth largest in the world by 2025.</p> <p>The electronics market is projected to grow at a CAGR of</p>	<p>The SSC would submit the estimated uptake of the qualification and What steps were carried out to test the likely uptake of the qualification? The basis of this estimate should include data about the number of jobs or places in courses of learning which will be available to people who are awarded the qualification.</p>	<p>The Submitting Body should submit the estimated uptake by reflecting the number of the takers for this qualification for at least two years from submission of the qualification</p>

## NSQF QUALIFICATION FILE

Approved in 15<sup>th</sup> NSQC Meeting – NCVET – 27<sup>th</sup> January, 2022

	17% during 2014-2020.		
27	<b>Recommendation from the concerned Line Ministry of the Government/Regulatory Body. To be supported by documentary evidences</b>  N/A		
28	<b>What steps were taken to ensure that the qualification(s) does (do) not duplicate already existing or planned qualifications in the NSQF? Give justification for presenting a duplicate qualification</b>  This is the first time that this Qualification is being made. The national qualification register as well as the Qualification Packs with NSDC have been checked		
29	<b>What arrangements are in place to monitor and review the qualification(s)? What data will be used and at what point will the qualification(s) be revised or updated? Specify the review process here</b> <ul style="list-style-type: none"><li>• Agencies have been appointed by the SSC to interact with training providers to gather feedback in implementation.</li><li>• Monitoring of results of assessments</li><li>• Employer feedback will be sought post-placement</li><li>• A formal review is scheduled in a year</li></ul>		

Please attach most relevant and recent documents giving further information about any of the topics above.

Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

**SECTION 4**

**EVIDENCE OF PROGRESSION**

30	<p>What steps have been taken in the design of this or other qualifications to ensure that there is a clear path to other qualifications in this sector?</p> <p><b>Show the career map here to reflect the clear progression</b></p> <ol style="list-style-type: none"><li>1. Discussing the growth trajectory within each occupation after studying organisational charts of various industry players across small, medium and large scale organizations.</li><li>2. Exploring various lateral career opportunities for the discussed qualification</li><li>3. Ensuring that there is a clear role up in terms of performance criteria qualification experience and skill requirement from lower NSQF Level to higher levels in the hierarchy.</li></ol> <div data-bbox="580 824 1070 1128" style="text-align: center;"><pre>graph BT; A[Field Technician- Air Conditioner] --&gt; B[Field Engineer- RACW]</pre></div>
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