

## Qualification Pack



# Electrician - Smart Energy and IoT-enabled Systems OEM Name-Electrician

QP Code: ELE/Q5804

Version: 2.0

NSQF Level: 4

Electronics Sector Skills Council of India || 155, 2nd Floor, ESC House Okhla Industrial Area-Phase 3  
New Delhi- 110020 || email:anu@essc-india.org

## Qualification Pack

# Contents

ELE/Q5804: Electrician - Smart Energy and IoT-enabled Systems OEM Name- Electrician .....	3
<i>Brief Job Description</i> .....	3
Applicable National Occupational Standards (NOS) .....	3
<i>Compulsory NOS</i> .....	3
<i>Qualification Pack (QP) Parameters</i> .....	3
ELE/N5806: Planning, Design & Installation of Electrical and Electronic Sub System .....	5
ELE/N5805: Testing, Commissioning, Maintenance, Fault Finding & Repair .....	10
DGT/VSQ/N0101: Employability Skills (30 Hours) .....	15
Assessment Guidelines and Weightage .....	20
<i>Assessment Guidelines</i> .....	20
<i>Assessment Weightage</i> .....	21
Acronyms .....	22
Glossary .....	23

## Qualification Pack

# ELE/Q5804: Electrician - Smart Energy and IoT-enabled Systems OEM

## Name- Electrician

### Brief Job Description

The individual installs, programs, and maintains electrical and automation systems, follows safety and quality standards, provides customer service, and keeps accurate digital records.

### Personal Attributes

The job requires the individual to be physically fit and work in high-decibel noise environment.

### Applicable National Occupational Standards (NOS)

#### Compulsory NOS:

1. [ELE/N5806: Planning, Design & Installation of Electrical and Electronic Sub System](#)
2. [ELE/N5805: Testing, Commissioning, Maintenance, Fault Finding & Repair](#)
3. [DGT/VSQ/N0101: Employability Skills \(30 Hours\)](#)

### Qualification Pack (QP) Parameters

<b>Sector</b>	Electronics
<b>Sub-Sector</b>	Industrial Automation
<b>Occupation</b>	Engineering-I&A
<b>Country</b>	India
<b>NSQF Level</b>	4
<b>Credits</b>	18
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/7411.0100

## Qualification Pack

<b>Minimum Educational Qualification &amp; Experience</b>	12th grade Pass (12th grade or equivalent) with NA of experience OR 10th grade pass (10th Grade or equivalent ) with 3 Years of experience Relevant Experience in Electronics & Electrical Domain OR Previous relevant Qualification of NSQF Level (Certificate-NSQF (Level 3 in relevant domain)) with 3 Years of experience Relevant Experience in Electronics & Electrical Domain
<b>Minimum Level of Education for Training in School</b>	10th Class
<b>Pre-Requisite License or Training</b>	NA
<b>Minimum Job Entry Age</b>	16 Years
<b>Last Reviewed On</b>	NA
<b>Next Review Date</b>	18/11/2028
<b>NSQC Approval Date</b>	16/12/2025
<b>Version</b>	2.0
<b>Reference code on NQR</b>	QG-04-EH-04688-2025-V2-ESSC
<b>NQR Version</b>	2

### Remarks:

NA

## Qualification Pack

# ELE/N5806: Planning, Design & Installation of Electrical and Electronic Sub System

### Description

This NOS unit is about to Understanding Different Type of standard, Drawing & Installation Description and Manuals to obtain the entire electrical & electronics sub system of the product/solution.

### Scope

The scope covers the following :

- Introduction to Job Role & Work Requirements
- Prepare materials and tools & Safety Practices
- Assembly of electrical sub-system

### Elements and Performance Criteria

#### *Introduction to Job Role & Work Requirements*

To be competent, the user/individual on the job must be able to:

**PC1.** Understand the scope of the Electrician role, including planning, designing, installing, and maintaining electrical and electronic sub-systems in residential, commercial, and industrial setups.

**PC2.** Gain awareness of safety standards, energy-efficient solutions, smart and IoT-enabled systems, and renewable energy components.

**PC3.** Communicate with the supervisor to understand day to day working requirements.

**PC4.** Apply approved drawings, job instructions, or manuals, including digital formats like AutoCAD or BIM.

#### *Prepare materials and tools & Safety Practices*

To be competent, the user/individual on the job must be able to:

**PC5.** Collect required consumables, along with smart devices, IoT modules, energy-efficient components, and renewable energy modules.

**PC6.** Inspect boards, panels, and components for damage, loose connections, or incorrect parts, including surge protection and solar PV components.

**PC7.** Identify and deal with workplace hazards such as sharp edges, exposed wiring, or incorrect installation areas.

**PC8.** Use PPE kit and Apply fire safety and ESD practices while handling flammable materials and electrical equipment.

#### *Assembly of electrical sub-system*

To be competent, the user/individual on the job must be able to:

**PC9.** Assemble electrical sub-systems following SOPs, ensuring correct handling of smart/renewable installations.

**PC10.** Interpret drawings and job instructions accurately, including IoT/automation schematics for residential, commercial, and industrial setups.

**PC11.** Identify and report errors or inadequate components, including digital/smart modules.

## Qualification Pack

- PC12.** Install wiring, control panels, and distribution boards according to setup type (residential, commercial, or industrial), following energy-efficient and smart system standards.
- PC13.** Ensure proper earthing, surge protection, and isolation points for each setup
- PC14.** Maintain clear documentation of installations, including digital logs or BIM updates, for future maintenance or audits.
- PC15.** Follow emergencies, rescue, and first-aid procedures applicable during installation tasks.

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** company's policies on: incentives, personnel management
- KU2.** company's code of conduct
- KU3.** importance of individuals role in the work flow
- KU4.** organization culture
- KU5.** company's reporting structure
- KU6.** company's documentation policy
- KU7.** electro-mechanical assembly instructions
- KU8.** general principles of wiring and assembly
- KU9.** circuit design, block diagram of the product being assembled and functioning of its different modules
- KU10.** fundamentals of electricity such as Ohms law, difference between Ac and DC, series and parallel connections

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** use computers for documentation
- GS2.** complete forms such as work orders, invoices, maintenance records
- GS3.** read warnings, instructions and other text material on product labels, components, etc.
- GS4.** read job sheets or work orders
- GS5.** receive and ask for clarifications from supervisor on the job requirement
- GS6.** follow standard operating procedures while making decisions
- GS7.** take approval from supervisor in case the decision has to be made for exceptions
- GS8.** supervisor and co-workers to achieve smooth workflow
- GS9.** superior and co-workers to share knowledge and learning
- GS10.** ensure quality standards and standard operating procedures are maintained

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Job Role &amp; Work Requirements</i>	<b>10</b>	<b>16</b>	-	-
<b>PC1.</b> Understand the scope of the Electrician role, including planning, designing, installing, and maintaining electrical and electronic sub-systems in residential, commercial, and industrial setups.	-	-	-	-
<b>PC2.</b> Gain awareness of safety standards, energy-efficient solutions, smart and IoT-enabled systems, and renewable energy components.	-	-	-	-
<b>PC3.</b> Communicate with the supervisor to understand day to day working requirements.	-	-	-	-
<b>PC4.</b> Apply approved drawings, job instructions, or manuals, including digital formats like AutoCAD or BIM.	-	-	-	-
<i>Prepare materials and tools &amp; Safety Practices</i>	<b>10</b>	<b>16</b>	-	-
<b>PC5.</b> Collect required consumables, along with smart devices, IoT modules, energy-efficient components, and renewable energy modules.	-	-	-	-
<b>PC6.</b> Inspect boards, panels, and components for damage, loose connections, or incorrect parts, including surge protection and solar PV components.	-	-	-	-
<b>PC7.</b> Identify and deal with workplace hazards such as sharp edges, exposed wiring, or incorrect installation areas.	-	-	-	-
<b>PC8.</b> Use PPE kit and Apply fire safety and ESD practices while handling flammable materials and electrical equipment.	-	-	-	-
<i>Assembly of electrical sub-system</i>	<b>20</b>	<b>28</b>	-	-
<b>PC9.</b> Assemble electrical sub-systems following SOPs, ensuring correct handling of smart/renewable installations.	-	-	-	-

## Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> Interpret drawings and job instructions accurately, including IoT/automation schematics for residential, commercial, and industrial setups.	-	-	-	-
<b>PC11.</b> Identify and report errors or inadequate components, including digital/smart modules.	-	-	-	-
<b>PC12.</b> Install wiring, control panels, and distribution boards according to setup type (residential, commercial, or industrial), following energy-efficient and smart system standards.	-	-	-	-
<b>PC13.</b> Ensure proper earthing, surge protection, and isolation points for each setup	-	-	-	-
<b>PC14.</b> Maintain clear documentation of installations, including digital logs or BIM updates, for future maintenance or audits.	-	-	-	-
<b>PC15.</b> Follow emergencies, rescue, and first-aid procedures applicable during installation tasks.	-	-	-	-
<b>NOS Total</b>	<b>40</b>	<b>60</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	ELE/N5806
<b>NOS Name</b>	Planning, Design & Installation of Electrical and Electronic Sub System
<b>Sector</b>	Electronics
<b>Sub-Sector</b>	Industrial Automation
<b>Occupation</b>	Engineering-I&A
<b>NSQF Level</b>	4
<b>Credits</b>	9
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	16/12/2025
<b>Next Review Date</b>	18/11/2028
<b>NSQC Clearance Date</b>	16/12/2025

## Qualification Pack

# ELE/N5805: Testing, Commissioning, Maintenance, Fault Finding & Repair

### Description

This NOS unit is about to Testing, commissioning, maintenance, fault finding & repair of the electrical & electronics system.

### Scope

The scope covers the following :

- Testing and commissioning & Safety Practices
- Maintenance and fault repair

### Elements and Performance Criteria

#### *Testing and commissioning & Safety Practices*

To be competent, the user/individual on the job must be able to:

**PC1.** Test installations before energizing for safety, using modern test kits such power quality analyzer, etc

**PC2.** Verify correct operation of energized installations, including smart MCCBs, RCDs/RCBOs, digital relays, and renewable energy systems.

**PC3.** Configure and program devices and bus-systems, including KNX, DALI, Modbus, IoT/cloud-based systems, and app-controlled automation.

**PC4.** Ensure installations are fully functional and demonstrate operations to the customer, including remote/app-based control and energy monitoring.

**PC5.** Identify and deal with workplace hazards during testing and troubleshooting, including live circuits and smart/IoT devices.

**PC6.** Apply fire safety practices while performing commissioning or repair on energized equipment.

#### *Maintenance and fault repair*

To be competent, the user/individual on the job must be able to:

**PC7.** Troubleshoot and diagnose faults in electrical systems, including short/open circuits, incorrect polarity, high loop impedance, bad connections, smart/IoT modules, and renewable energy systems.

**PC8.** Repair or replace faulty components, including smart sensors, IoT modules, EV charging systems, and renewable energy device

**PC9.** Verify installations comply with current standards, including updated IEC/IS codes and energy-efficient installation guidelines.

**PC10.** Perform maintenance tasks across residential, commercial, and industrial setups, ensuring continuity, safety, and integration with smart/IoT/renewable systems.

**PC11.** Use advanced diagnostic and testing tools, including multimeters, clamp meters, network testers, and power quality analyzers.

**PC12.** Maintain proper documentation of tests, repairs, and upgrades, including digital logs for smart systems.

## Qualification Pack

- PC13.** Follow emergencies, rescue, and first-aid procedures during maintenance or fault repair tasks.
- PC14.** Apply effective waste management and recycling practices for components, packaging, and electrical scrap.
- PC15.** Suggest improvements for energy efficiency and smart system upgrades in existing installations.

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** Knowledge of Testing and Earthing
- KU2.** Understanding of New Installation and check parameter
- KU3.** Knowledge of software KNX, DALI & Modbus based system
- KU4.** Knowledge to understand full function & installation
- KU5.** company's reporting structure
- KU6.** Understanding of Troubleshooting and provide solution
- KU7.** electro-mechanical related debugging
- KU8.** general principles of wiring and assembly
- KU9.** Calibration of measuring instruments
- KU10.** circuit design, block diagram of the product being assembled and functioning of its different modules
- KU11.** fundamentals of electricity such as Ohms law, difference between Ac and DC, series and parallel connections

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** use computers for documenting
- GS2.** complete forms such as work orders, invoices, maintenance records
- GS3.** read warnings, instructions and other text material on product labels, components, etc.
- GS4.** read job sheets or work orders
- GS5.** receive and ask for clarifications from supervisor on the job requirement
- GS6.** follow standard operating procedures while making decisions
- GS7.** take approval from supervisor in case the decision has to be made for exceptions
- GS8.** supervisor and co-workers to achieve smooth workflow
- GS9.** superior and co-workers to share knowledge and learning
- GS10.** ensure quality standards and standard operating procedures are maintained

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Testing and commissioning &amp; Safety Practices</i>	<b>15</b>	<b>24</b>	-	-
<b>PC1.</b> Test installations before energizing for safety, using modern test kits such power quality analyzer, etc	-	-	-	-
<b>PC2.</b> Verify correct operation of energized installations, including smart MCCBs, RCDs/RCBOs, digital relays, and renewable energy systems.	-	-	-	-
<b>PC3.</b> Configure and program devices and bus-systems, including KNX, DALI, Modbus, IoT/cloud-based systems, and app-controlled automation.	-	-	-	-
<b>PC4.</b> Ensure installations are fully functional and demonstrate operations to the customer, including remote/app-based control and energy monitoring.	-	-	-	-
<b>PC5.</b> Identify and deal with workplace hazards during testing and troubleshooting, including live circuits and smart/IoT devices.	-	-	-	-
<b>PC6.</b> Apply fire safety practices while performing commissioning or repair on energized equipment.	-	-	-	-
<i>Maintenance and fault repair</i>	<b>25</b>	<b>36</b>	-	-
<b>PC7.</b> Troubleshoot and diagnose faults in electrical systems, including short/open circuits, incorrect polarity, high loop impedance, bad connections, smart/IoT modules, and renewable energy systems.	-	-	-	-
<b>PC8.</b> Repair or replace faulty components, including smart sensors, IoT modules, EV charging systems, and renewable energy device	-	-	-	-
<b>PC9.</b> Verify installations comply with current standards, including updated IEC/IS codes and energy-efficient installation guidelines.	-	-	-	-
<b>PC10.</b> Perform maintenance tasks across residential, commercial, and industrial setups, ensuring continuity, safety, and integration with smart/IoT/renewable systems.	-	-	-	-

## Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC11.</b> Use advanced diagnostic and testing tools, including multimeters, clamp meters, network testers, and power quality analyzers.	-	-	-	-
<b>PC12.</b> Maintain proper documentation of tests, repairs, and upgrades, including digital logs for smart systems.	-	-	-	-
<b>PC13.</b> Follow emergencies, rescue, and first-aid procedures during maintenance or fault repair tasks.	-	-	-	-
<b>PC14.</b> Apply effective waste management and recycling practices for components, packaging, and electrical scrap.	-	-	-	-
<b>PC15.</b> Suggest improvements for energy efficiency and smart system upgrades in existing installations.	-	-	-	-
<b>NOS Total</b>	<b>40</b>	<b>60</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	ELE/N5805
<b>NOS Name</b>	Testing, Commissioning, Maintenance, Fault Finding & Repair
<b>Sector</b>	Electronics
<b>Sub-Sector</b>	Industrial Automation
<b>Occupation</b>	Engineering-I&A
<b>NSQF Level</b>	4
<b>Credits</b>	8
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	16/12/2025
<b>Next Review Date</b>	18/11/2028
<b>NSQC Clearance Date</b>	16/12/2025

## Qualification Pack

### DGT/VSQ/N0101: Employability Skills (30 Hours)

#### Description

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

#### Scope

The scope covers the following :

- Introduction to Employability Skills
- Constitutional values - Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

#### Elements and Performance Criteria

##### *Introduction to Employability Skills*

To be competent, the user/individual on the job must be able to:

**PC1.** understand the significance of employability skills in meeting the job requirements

##### *Constitutional values - Citizenship*

To be competent, the user/individual on the job must be able to:

**PC2.** identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices

##### *Becoming a Professional in the 21st Century*

To be competent, the user/individual on the job must be able to:

**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*

To be competent, the user/individual on the job must be able to:

**PC4.** speak with others using some basic English phrases or sentences

##### *Communication Skills*

To be competent, the user/individual on the job must be able to:

**PC5.** follow good manners while communicating with others

**PC6.** work with others in a team

## Qualification Pack

### *Diversity & Inclusion*

To be competent, the user/individual on the job must be able to:

**PC7.** communicate and behave appropriately with all genders and PwD  
**PC8.** report any issues related to sexual harassment

### *Financial and Legal Literacy*

To be competent, the user/individual on the job must be able to:

**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*

To be competent, the user/individual on the job must be able to:

**PC12.** operate digital devices and use its features and applications securely and safely  
**PC13.** use internet and social media platforms securely and safely

### *Entrepreneurship*

To be competent, the user/individual on the job must be able to:

**PC14.** identify and assess opportunities for potential business  
**PC15.** identify sources for arranging money and associated financial and legal challenges

### *Customer Service*

To be competent, the user/individual on the job must be able to:

**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*

To be competent, the user/individual on the job must be able to:

**PC19.** create a basic biodata  
**PC20.** search for suitable jobs and apply  
**PC21.** identify and register apprenticeship opportunities as per requirement

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

**KU1.** need for employability skills  
**KU2.** various constitutional and personal values  
**KU3.** different environmentally sustainable practices and their importance  
**KU4.** Twenty first (21st) century skills and their importance  
**KU5.** how to use basic spoken English language  
**KU6.** Do and dont of effective communication  
**KU7.** inclusivity and its importance  
**KU8.** different types of disabilities and appropriate communication and behaviour towards PwD  
**KU9.** different types of financial products and services

## Qualification Pack

- KU10.** how to compute income and expenses
- KU11.** importance of maintaining safety and security in financial transactions
- KU12.** different legal rights and laws
- KU13.** how to operate digital devices and applications safely and securely
- KU14.** ways to identify business opportunities
- KU15.** types of customers and their needs
- KU16.** how to apply for a job and prepare for an interview
- KU17.** apprenticeship scheme and the process of registering on apprenticeship portal

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** communicate effectively using appropriate language
- GS2.** behave politely and appropriately with all
- GS3.** perform basic calculations
- GS4.** solve problems effectively
- GS5.** be careful and attentive at work
- GS6.** use time effectively
- GS7.** maintain hygiene and sanitisation to avoid infection

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	<b>1</b>	<b>1</b>	-	-
<b>PC1.</b> understand the significance of employability skills in meeting the job requirements	-	-	-	-
<i>Constitutional values - Citizenship</i>	<b>1</b>	<b>1</b>	-	-
<b>PC2.</b> identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	<b>1</b>	<b>3</b>	-	-
<b>PC3.</b> 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>	<b>2</b>	<b>3</b>	-	-
<b>PC4.</b> speak with others using some basic English phrases or sentences	-	-	-	-
<i>Communication Skills</i>	<b>1</b>	<b>1</b>	-	-
<b>PC5.</b> follow good manners while communicating with others	-	-	-	-
<b>PC6.</b> work with others in a team	-	-	-	-
<i>Diversity &amp; Inclusion</i>	<b>1</b>	<b>1</b>	-	-
<b>PC7.</b> communicate and behave appropriately with all genders and PWD	-	-	-	-
<b>PC8.</b> report any issues related to sexual harassment	-	-	-	-
<i>Financial and Legal Literacy</i>	<b>3</b>	<b>4</b>	-	-
<b>PC9.</b> use various financial products and services safely and securely	-	-	-	-

## Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> calculate income, expenses, savings etc.	-	-	-	-
<b>PC11.</b> approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
<i>Essential Digital Skills</i>	<b>4</b>	<b>6</b>	-	-
<b>PC12.</b> operate digital devices and use its features and applications securely and safely	-	-	-	-
<b>PC13.</b> use internet and social media platforms securely and safely	-	-	-	-
<i>Entrepreneurship</i>	<b>3</b>	<b>5</b>	-	-
<b>PC14.</b> identify and assess opportunities for potential business	-	-	-	-
<b>PC15.</b> identify sources for arranging money and associated financial and legal challenges	-	-	-	-
<i>Customer Service</i>	<b>2</b>	<b>2</b>	-	-
<b>PC16.</b> identify different types of customers	-	-	-	-
<b>PC17.</b> identify customer needs and address them appropriately	-	-	-	-
<b>PC18.</b> follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship &amp; Jobs</i>	<b>1</b>	<b>3</b>	-	-
<b>PC19.</b> create a basic biodata	-	-	-	-
<b>PC20.</b> search for suitable jobs and apply	-	-	-	-
<b>PC21.</b> identify and register apprenticeship opportunities as per requirement	-	-	-	-
<b>NOS Total</b>	<b>20</b>	<b>30</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	DGT/VSQ/N0101
<b>NOS Name</b>	Employability Skills (30 Hours)
<b>Sector</b>	Cross Sectoral
<b>Sub-Sector</b>	Professional Skills
<b>Occupation</b>	Employability
<b>NSQF Level</b>	2
<b>Credits</b>	1
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	16/12/2025
<b>Next Review Date</b>	18/11/2028
<b>NSQC Clearance Date</b>	16/12/2025

### Assessment Guidelines and Assessment Weightage

#### Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Element/ 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 Element/ PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
6. To pass the Qualification Pack assessment, every trainee should score the Recommended Pass % aggregate for the QP.
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

## Qualification Pack

**Minimum Aggregate Passing % at QP Level : 70**

(**Please note:** Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

### Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
ELE/N5806.Planning, Design & Installation of Electrical and Electronic Sub System	40	60	-	-	100	40
ELE/N5805.Testing, Commissioning, Maintenance, Fault Finding & Repair	40	60	-	-	100	40
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	20
<b>Total</b>	<b>100</b>	<b>150</b>	<b>-</b>	<b>-</b>	<b>250</b>	<b>100</b>

## Qualification Pack

### Acronyms

<b>NOS</b>	National Occupational Standard(s)
<b>NSQF</b>	National Skills Qualifications Framework
<b>QP</b>	Qualifications Pack
<b>TVET</b>	Technical and Vocational Education and Training

## Qualification Pack

### Glossary

<b>Sector</b>	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
<b>Sub-sector</b>	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
<b>Occupation</b>	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
<b>Job role</b>	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
<b>Occupational Standards (OS)</b>	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
<b>Performance Criteria (PC)</b>	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
<b>National Occupational Standards (NOS)</b>	NOS are occupational standards which apply uniquely in the Indian context.
<b>Qualifications Pack (QP)</b>	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
<b>Unit Code</b>	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
<b>Unit Title</b>	Unit title gives a clear overall statement about what the incumbent should be able to do.
<b>Description</b>	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
<b>Scope</b>	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.

## Qualification Pack

<b>Knowledge and Understanding (KU)</b>	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
<b>Organisational Context</b>	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
<b>Technical Knowledge</b>	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
<b>Core Skills/ Generic Skills (GS)</b>	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
<b>Electives</b>	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
<b>Options</b>	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.