Field Technician Networking And Storage

QP Code: ELE/Q4606

Version: 3.0

NSQF Level: 4

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Contents

Qualification Pack

ELE/Q4606: Field Technician Networking And Storage

Brief Job Description

The individual also known as service technician provides after sale support services to customers, typically, at their premises and is responsible for attending to customer complaints, installing newly purchased products, troubleshooting system problems and, configuring hardware equipment such as servers, storage and other related networking devices.

Personal Attributes

The job requires the individual to be able to build interpersonal relationships and critical thinking. The individual must be willing to travel to client premises in order to attend to calls at different locations.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. ELE/N4601: Engaging with the customers

2. ELE/N4612: Installing, configuring and setting up the networking and storage system

3. ELE/N4613: Troubleshooting and fix equipment

4. ELE/N9905: Work effectively at the workplace

5. ELE/N1002: Apply health and safety practices at the workplace

6. DGT/VSQ/N0102: Employability Skills (60 Hours)

Qualification Pack (QP) Parameters

Sector	Electronics
Sub-Sector	Consumer Electronics & IT Hardware
Occupation	After Sales Support
Country	India
NSQF Level	4
Credits	20

Aligned to NCO/ISCO/ISIC Code	NCO-2004/NIL
Minimum Educational Qualification & Experience	8th grade pass with 2 years of NTC (plus 2 year of NAC/relevant experience) OR 10th grade pass (plus 2 year of NTC/NAC/relevant experience) OR 12th Class OR Certificate-NSQF (level 3 in maintenance Technician) with 2 Years of experience
Minimum Level of Education for Training in School	8th Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	27/06/2025
NSQC Approval Date	27/01/2022
Version	3.0
Reference code on NQR	2022/EHW/ESSC/06646
NQR Version	1.0

Remarks:

NA

ELE/N4601: Engaging with the customers

Description

This NOS unit is about interacting with and understanding the customers requirements.

Scope

The scope covers the following :

- This unit/task covers the following:
- Interact with the customer prior to visit
- Interpret customer requirements to suggest possible solutions

Elements and Performance Criteria

Interact with the customer prior to visit

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

PC1. call the customer based on inputs logged into customer care to understand their problem

PC2. check with customer about time for visit, field work and confirm location

PC3. interpret location requirement for placement of system during and after installation

Interpret customer's requirements to suggest possible solutions

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

PC4. enquire from the customer about the problem by asking open and close ended questions

PC5. inform customers on whether the module has to be replaced or repaired with reasons and possible solutions

PC6. communicate to the customers the resolution time taken, repair process and possible cost for the service or inclusion under warranty and seek approval from the customer

PC7. provide a note to the customer about the problem(s), actions taken and the cost associated and retain a copy

PC8. provide appropriate invoice for any purchase of module or parts by customer

PC9. apprise the customer on precautions to be taken post repairs to avoid recurrence of problem

PC10. educate the customer about other useful products and annual maintenance contract

PC11. seek feedback from the customers on completion of work

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. company's products and recurring problems

KU2. company's policies on customer care and code of conduct

KU3. behavioural aspects and etiquette to be followed at customer's premises

KU4. basic electronics of system hardware

KU5. hardware maintenance

KU6. relevant reference sheets, manuals and documents to carry in the field

KU7. precautions to be taken while handling field calls and dealing with customers

Generic Skills (GS)

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

GS1. listen carefully and interpret requirement

GS2. write instructions and other information clearly

GS3. communicate in English/local language

GS4. follow etiquette when interacting with customers as per company policy such as politenes,not entering bedroom without permissions, patience etc.

GS5. read and comprehend details/ information

GS6. seek inputs to assess the problems

GS7. suggest customer on possible solutions

GS8. communicate to the customer complete information clearly

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Interact with the customer prior to visit	**9**	**12**	**-**	**4**
PC1. call the customer based on inputs logged into customer care to understand their problem	2	3	-	2
PC2. check with customer about time for visit, field work and confirm location	3	4	-	1
PC3. interpret location requirement for placement of system during and after installation	4	5	-	1
Interpret customer's requirements to suggest possible solutions	**31**	**38**	**-**	**6**
PC4. enquire from the customer about the problem by asking open and close ended questions	5	5	-	1
PC5. inform customers on whether the module has to be replaced or repaired with reasons and possible solutions	3	4	-	1
PC6. communicate to the customers the resolution time taken, repair process and possible cost for the service or inclusion under warranty and seek approval from the customer	4	5	-	1
PC7. provide a note to the customer about the problem(s), actions taken and the cost associated and retain a copy	4	5	-	-
PC8. provide appropriate invoice for any purchase of module or parts by customer	4	5	-	1
PC9. apprise the customer on precautions to be taken post repairs to avoid recurrence of problem	4	5	-	1
PC10. educate the customer about other useful products and annual maintenance contract	4	5	-	1
PC11. seek feedback from the customers on completion of work	3	4	-	-
NOS Total	**40**	**50**	**-**	**10**

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	ELE/N4601
NOS Name	Engaging with the customers
Sector	Electronics
Sub-Sector	Consumer Electronics & IT Hardware
Occupation	After Sales Support
NSQF Level	4
Credits	TBD
Version	3.0
Last Reviewed Date	27/01/2022
Next Review Date	27/06/2025
NSQC Clearance Date	27/01/2022

ELE/N4612: Installing, configuring and setting up the networking and storage system

Description

This NOS unit is about installing the networking, servers and storage equipment as per the customer requirement. It includes configuring and setting up the system and ensuring effective system functioning to satisfy the customer.

Scope

The scope covers the following :

- This unit/task covers the following:
- Install network, server, storage devices and set up the software
- Complete the installation task
- Educate the customer about system usage

Elements and Performance Criteria

Install network,server,storage devices and set up the software

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

PC1. prepare installation kit of tools and manuals as per installation manual to be carried along to the customer location

PC2. check site conditions, open the packaging of new product and take out the hardware carefully

PC3. interpret the system design requirement of customer and place the system at a location as preferred by customer

PC4. • connect all the hardware devices such as servers, storage device, networking
• devices and connect battery, plug in and switch on the system

PC5. comply with standard operating procedures for installation and zero defect handling of hardware modules such as PCB by following standard operating procedure

PC6. comply with temperature requirement and other conditions for servers

PC7. perform configuration of networking device such as router by building a configuration file

PC8. • log and upload the configuration of networking equipment
•

PC9. install the appropriate application software as per server and storage requirement and the network device driver

Complete the installation task

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

PC10. connect the networking device, servers or storage and check system functions

PC11. perform unit and integration testing as per design requirement

PC12. perform testing of product functionality after hardware, software, operating system and peripheral integration with reference to the installation manual

PC13. measure and meet multipart calls norm against benchmark

PC14. complete the installation within agreed turn around time (TAT) to close the call in single visit

PC15. comply with the quality benchmarks of the company for task completion

Educate the customer about system usage

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

PC16. provide training to the customer on usage and maintanence of system hardware and software as per the recommended procedures

PC17. inform customer about warranty, other terms and conditions on the hardware devices and cost estimates of other new installations

PC18. provide adequate information about the hardware devices, operating procedure, maintenance and temperature control to the customer

PC19. resolve the device related queries and issues raised by the customer

PC20. provide all the appropriate documents including invoice to the customer

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. use of hardware equipment manufacturer recommended tools

KU2. specification and the procedures to be followed for setting up the server system

KU3. networking, its purpose and functionalities to assemble and set up server and storage system

KU4. different types of servers and storage hardware equipment and their standard installation procedure

KU5. design architecture for system configuration

KU6. operate and load networking driver

KU7. assembling and dismantling of components / modules in hardware equipment

KU8. different types of IT hardware products and functionalities

KU9. quality standards to be followed

KU10. how to operate the system and other hardware peripherals

KU11. company's portfolio of products and that of competitors

KU12. computer operation and use of Microsoft word, excel for documentation and reporting

Generic Skills (GS)

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

GS1. read job sheet and/or instructions clearly as well as standard operating procedure

GS2. listen carefully and interpret their requirement

GS3. be patient and courteous with all types of customers

GS4. report on any customer concerns to superiors without delay

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Install network,server,storage devices and set up the software	**17**	**23**	**-**	**3**
PC1. prepare installation kit of tools and manuals as per installation manual to be carried along to the customer location	-	1	-	-
PC2. check site conditions, open the packaging of new product and take out the hardware carefully	-	3	-	-
PC3. interpret the system design requirement of customer and place the system at a location as preferred by customer	-	1	-	-
PC4. • connect all the hardware devices such as servers, storage device, networking • devices and connect battery, plug in and switch on the system	2	3	-	-
PC5. comply with standard operating procedures for installation and zero defect handling of hardware modules such as PCB by following standard operating procedure	5	3	-	1
PC6. comply with temperature requirement and other conditions for servers	4	3	-	1
PC7. perform configuration of networking device such as router by building a configuration file	3	3	-	1
PC8. • log and upload the configuration of networking equipment •	-	3	-	-
PC9. install the appropriate application software as per server and storage requirement and the network device driver	3	3	-	-
Complete the installation task	**8**	**12**	**-**	**2**
PC10. connect the networking device, servers or storage and check system functions	-	1	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. perform unit and integration testing as per design requirement	3	3	-	1
PC12. perform testing of product functionality after hardware, software, operating system and peripheral integration with reference to the installation manual	3	3	-	1
PC13. measure and meet multipart calls norm against benchmark	-	1	-	-
PC14. complete the installation within agreed turn around time (TAT) to close the call in single visit	2	3	-	-
PC15. comply with the quality benchmarks of the company for task completion	-	1	-	-
Educate the customer about system usage	**15**	**15**	**-**	**5**
PC16. provide training to the customer on usage and maintanence of system hardware and software as per the recommended procedures	3	3	-	1
PC17. inform customer about warranty, other terms and conditions on the hardware devices and cost estimates of other new installations	3	3	-	1
PC18. provide adequate information about the hardware devices, operating procedure, maintenance and temperature control to the customer	3	3	-	1
PC19. resolve the device related queries and issues raised by the customer	3	3	-	1
PC20. provide all the appropriate documents including invoice to the customer	3	3	-	1
NOS Total	**40**	**50**	**-**	**10**

National Occupational Standards (NOS) Parameters

NOS Code	ELE/N4612
NOS Name	Installing, configuring and setting up the networking and storage system
Sector	Electronics
Sub-Sector	Consumer Electronics & IT Hardware
Occupation	After Sales Support
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	27/01/2022
Next Review Date	19/07/2023
NSQC Clearance Date	19/01/2023

ELE/N4613: Troubleshooting and fix equipment

Description

This unit is about troubleshooting hardware related problems in networking, servers and storage equipment by diagnosing and replacing faulty module at client premises.

Scope

The scope covers the following :

- This unit/task covers the following:
- Interpret customer complaint
- Diagnose the problem
- Replace the faulty module
- Apprise the customer after repair/replacement
- Complete documentation

Elements and Performance Criteria

Interpret customer complaint

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

PC1. interact with customer on telephone for better understanding of concern before the visit

PC2. analyse the warranty, terms and conditions with relation to the product

PC3. identify the type of problem and carry relevant tools and equipment based on customer complaint and as per standard operating procedure

PC4. commence field trip based on type of complaint and carry troubleshooting instruction sheet

PC5. assess whether replacement or repair of module may be required along with the turn around time as per Service Level Agreement(SLA)

PC6. carry only 100% approved and verified field replacable parts for repairing or replacing

Diagnose the problem

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

PC7. assess the frequently encountered problems in the storage system and solution for them

PC8. conduct root-cause analysis to identify and diagnose the likely problem/issue in networking device

PC9. coordinate with remote technical team to diagnose and confirm the issues faced in the storage system using standard disgnostic procedure

PC10. perform disassembling to check each part of networking, servers / storage system to isolate the failed module

PC11. determine whether the part should be replaced or needs to be repaired

PC12. analyse whether it can be repaired on field or at company's test centre

Replace/Repair the faulty module

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

PC13. confirm acceptance from the customer before replacing module or sending for repairs to company

PC14. perform the steps to disassemble the system, remove and replace and re-assemble the system, if the module has to be replaced

PC15. use manual hand soldering iron unit to solder the components or parts, if soldering needs to be done

PC16. perform steps to reinstall the software or fix the issues, if there is any operating system error or software related issues

PC17. resolve the common problems faced with peripherals and networking devices

PC18. coordinate with remote technical helpdesk to seek any assistance on field to perform diagnosis and troubleshooting

PC19. escalate the problems which cannot be addressed at field level to the superior

Apprise the customer after repair/replacement

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

PC20. perform testing of product or functions after new hardware modules or software is installed

PC21. complete the function within the agreed Turn Around Time (TAT) and in a single visit complying with quality standards

PC22. report percentage of call closure in multiple visits against benchmark

PC23. instruct customer on use of and procedures to be followed for operating the system or hardware after repair/replacement

PC24. ask the customer to fill up a customer satisfaction feedback form for the work performed

Complete documentation

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

PC25. submit the feedback form on customer satisfaction level with respect to the product repair/replacement

PC26. accurately report work status through proper documentation as per company's standards

PC27. create knowledge bank on the complex repairs made through documentation

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. different types of equipment and peripherals in a pack

KU2. company's sales and after sales support policy

KU3. company's policy on product's warranty and other terms and conditions

KU4. different electrical and mechanical modules in the product

KU5. different models of devices and their repair procedures

KU6. use other specific devices for repairs such as soldering iron, multimeter, POST cards

KU7. procedures to be followed for trouble shooting and standards to follow

KU8. peripherals and their standard operating procedure for disassembling and re-assembling

KU9. controls of different peripherals

KU10. tools required for repair such as soldering iron, multimeter

Generic Skills (GS)

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

GS1. listen carefully and interpret their requirement

GS2. write all complaints in the log book

GS3. read and comprehend instructions and standard operating procedure

GS4. improve work processes

GS5. reduce repetition of errors and spot process disruptions and delays

GS6. report on any issues raised by customers to superiors without delay

GS7. communicate in English/local language

GS8. be patient and courteous with all types of customers

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Interpret customer complaint	**6**	**12**	**-**	**2**
PC1. interact with customer on telephone for better understanding of concern before the visit	-	2	-	-
PC2. analyse the warranty, terms and conditions with relation to the product	2	2	-	1
PC3. identify the type of problem and carry relevant tools and equipment based on customer complaint and as per standard operating procedure	2	2	-	-
PC4. commence field trip based on type of complaint and carry troubleshooting instruction sheet	-	2	-	-
PC5. assess whether replacement or repair of module may be required along with the turn around time as per Service Level Agreement(SLA)	2	2	-	1
PC6. carry only 100% approved and verified field replacable parts for repairing or replacing	-	2	-	-
Diagnose the problem	**12**	**9**	**-**	**4**
PC7. assess the frequently encountered problems in the storage system and solution for them	2	3	-	-
PC8. conduct root-cause analysis to identify and diagnose the likely problem/issue in networking device	2	-	-	1
PC9. coordinate with remote technical team to diagnose and confirm the issues faced in the storage system using standard disgnostic procedure	2	3	-	1
PC10. perform disassembling to check each part of networking, servers / storage system to isolate the failed module	2	3	-	-
PC11. determine whether the part should be replaced or needs to be repaired	2	-	-	1

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. analyse whether it can be repaired on field or at company's test centre	2	-	-	1
Replace/Repair the faulty module	**10**	**20**	**-**	**2**
PC13. confirm acceptance from the customer before replacing module or sending for repairs to company	-	3	-	-
PC14. perform the steps to disassemble the system, remove and replace and re-assemble the system, if the module has to be replaced	2	4	-	1
PC15. use manual hand soldering iron unit to solder the components or parts, if soldering needs to be done	2	4	-	-
PC16. perform steps to reinstall the software or fix the issues, if there is any operating system error or software related issues	-	3	-	-
PC17. resolve the common problems faced with peripherals and networking devices	2	2	-	1
PC18. coordinate with remote technical helpdesk to seek any assistance on field to perform diagnosis and troubleshooting	2	2	-	-
PC19. escalate the problems which cannot be addressed at field level to the superior	2	2	-	-
Apprise the customer after repair/replacement	**8**	**8**	**-**	**1**
PC20. perform testing of product or functions after new hardware modules or software is installed	2	2	-	1
PC21. complete the function within the agreed Turn Around Time (TAT) and in a single visit complying with quality standards	2	2	-	-
PC22. report percentage of call closure in multiple visits against benchmark	2	2	-	-
PC23. instruct customer on use of and procedures to be followed for operating the system or hardware after repair/replacement	2	1	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC24. ask the customer to fill up a customer satisfaction feedback form for the work performed	-	1	-	-
Complete documentation	**4**	**1**	**-**	**1**
PC25. submit the feedback form on customer satisfaction level with respect to the product repair/replacement	-	1	-	-
PC26. accurately report work status through proper documentation as per company's standards	2	-	-	-
PC27. create knowledge bank on the complex repairs made through documentation	2	-	-	1
NOS Total	**40**	**50**	**-**	**10**

National Occupational Standards (NOS) Parameters

NOS Code	ELE/N4613
NOS Name	Troubleshooting and fix equipment
Sector	Electronics
Sub-Sector	Consumer Electronics & IT Hardware
Occupation	After Sales Support
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	27/01/2022
Next Review Date	27/06/2025
NSQC Clearance Date	27/01/2022

ELE/N9905: Work effectively at the workplace

Description

This unit is about the communicating and managing work effectively at the workplace as well as taking measures to enhance own competence and working in a disciplined and ethical manner.

Scope

The scope covers the following :

- Communicate effectively at the workplace
- Work effectively
- Maintain and enhance professional competence
- Work in a disciplined and ethical manner
- Uphold social diversity at the workplace

Elements and Performance Criteria

Communicate effectively at the workplace

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

PC1. exchange information and instruction with colleagues, and seek clarifications and feedback as necessary

PC2. assist colleagues where required

PC3. follow business communication etiquette in all interactions and communicative formats (online, digital, and in-person)

PC4. document and share all relevant information with stakeholders in agreed formats and as per agreed timelines

Work effectively

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

PC5. identify and obtain clarity regarding organisational, team and own goals and targets

PC6. prioritise and plan work in order to achieve goals and targets

PC7. monitor own and team performance as per agreed plan

PC8. complete duties accurately, systematically and within required timeframes

PC9. express emotions appropriately at the workplace and manage own response to heightened emotions

PC10. maintain orderliness and cleanliness in the work area

Maintain and enhance professional competence

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

PC11. identify own strengths and weaknesses in relation to goals and targets

PC12. adapt self, service, or product to meet success criteria

PC13. seek and select opportunities for continuous professional development

PC14. formulate a professional development plan to enhance capabilities

PC15. build or contribute to the organizational knowledge base of cases, clients, issues, solutions, and innovations

PC16. examine developments and trends in field of work and their potential impact on work

PC17. take feedback from peers, supervisors and clients to improve own performance and practices

Work in a disciplined and ethical manner

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

PC18. perform tasks as per workplace standards, organisational policies and legislative requirements

PC19. display appropriate professional appearance at the workplace and adhere to the organisational dress code

PC20. 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.

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

PC22. protect the rights of the client and organisation when delivering services

PC23. ensure services are delivered equally to all clients regardless of personal and cultural beliefs

PC24. operate within an agreed ethical code of practice and report unethical conduct to the appropriate authorities

PC25. follow organisational guidelines and legal requirements on disclosure and confidentiality

Uphold social diversity at the workplace

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

PC26. recognize and evaluate biased practices against underrepresented groups like women and persons with disabilities, in workplace systems and processes

PC27. identify and report discrimination and harassment based on gender, disability, or cultural difference at the workplace

PC28. use inclusive or neutral language and gestures in all interactions

PC29. respect the personal and professional space of others

PC30. access grievance redressal mechanisms as per legislations

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. organisation's policies on dress code, workplace timings, workplace behaviour, performance management, incentives, delivery standards, information security, etc.

KU2. organizational hierarchy and escalation matrix

KU3. importance of the individual's role in the workflow

KU4. organisational norms on health, safety and sustainability

KU5. work area inspection procedures and practices

KU6. professional etiquette and grooming

KU7. communication etiquette across communicative mediums (online, digital, and in-person) including strategies/methods for sharing information, documentation, and providing and receiving feedback

KU8. importance of self-evaluations and developing a continuous learning and professional development plan

KU9. developments and trends impacting professional practice

KU10. importance of taking and using feedback from colleagues and clients to identify and introduce improvements in work performance

KU11. professional ethics and workplace norms on reporting and/or penalizing unethical behaviour and practices.

KU12. guidelines and legal requirements on disclosure, confidentiality, and conflicts of interest

KU13. strategies for collaboration with colleagues and clients.

KU14. professional responses and strategies against inappropriate language or behaviour toward self and others

KU15. Implicit bias (based on gender, disability, class, caste, colour, race, culture, religion, etc.) and its consequences in the workplace

KU16. organizational guidelines, prevalent legislations and accessibility norms and processes to support PwDs at the workplace

KU17. strategies for time, effort and resource allocation towards the goals.

KU18. basic concepts of work productivity including waste reduction, efficient material usage and optimization of time

Generic Skills (GS)

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

GS1. complete documentation and forms such as work orders, invoices maintenance records activity logs, attendance sheets as per organizational format in English and/or local language

GS2. write basic accident or incident report accurately in an appropriate format

GS3. read warnings, instructions and other text material on product labels, components, etc. and relevant signages, warnings, labels or descriptions on equipment, etc. while carrying out work activities

GS4. convey and share technical information clearly using appropriate language

GS5. clarify task-related information

GS6. liaise with authorities and supervisors as per organizational protocol

GS7. listen, speak, and write in an inclusive, respectful manner in line with organizational protocol

GS8. seek clarification from immediate supervisor or responsible authority or exercise most appropriate solutions to safety breaches at work

GS9. report to the supervisor and when to deal with a colleague depending on the type of concern

GS10. deliver product to next work process on time

GS11. improve work process and report potential areas of delays and disruptions

GS12. communicate problems appropriately to others

GS13. identify symptoms of the fault to the cause of the problem and resolve, otherwise seek assistance and support from other sources to solve the problem

GS14. anticipate and avoid hazards that may occur during repairs because of tools, materials used or repair processes

GS15. complete tasks efficiently and accurately within stipulated time

GS16. appreciate and respect social diversity in all professional settings

GS17. develop awareness and accountability for perspectives on gender, disabilities, and socio-cultural issues leading to discrimination, bias, or harassment at the workplace

GS18. maintain positive and effective relationships with colleagues and customers

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Communicate effectively at the workplace	**5**	**13**	**-**	**-**
PC1. exchange information and instruction with colleagues, and seek clarifications and feedback as necessary	1	3	-	-
PC2. assist colleagues where required	1	3	-	-
PC3. follow business communication etiquette in all interactions and communicative formats (online, digital, and in-person)	1	4	-	-
PC4. document and share all relevant information with stakeholders in agreed formats and as per agreed timelines	2	3	-	-
Work effectively	**6**	**13**	**-**	**-**
PC5. identify and obtain clarity regarding organisational, team and own goals and targets	1	2	-	-
PC6. prioritise and plan work in order to achieve goals and targets	1	2	-	-
PC7. monitor own and team performance as per agreed plan	1	2	-	-
PC8. complete duties accurately, systematically and within required timeframes	1	2	-	-
PC9. express emotions appropriately at the workplace and manage own response to heightened emotions	1	2	-	-
PC10. maintain orderliness and cleanliness in the work area	1	3	-	-
Maintain and enhance professional competence	**8**	**7**	**-**	**-**
PC11. identify own strengths and weaknesses in relation to goals and targets	1	1	-	-
PC12. adapt self, service, or product to meet success criteria	1	1	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. seek and select opportunities for continuous professional development	1	1	-	-
PC14. formulate a professional development plan to enhance capabilities	2	1	-	-
PC15. build or contribute to the organizational knowledge base of cases, clients, issues, solutions, and innovations	1	1	-	-
PC16. examine developments and trends in field of work and their potential impact on work	1	1	-	-
PC17. take feedback from peers, supervisors and clients to improve own performance and practices	1	1	-	-
Work in a disciplined and ethical manner	**11**	**16**	**-**	**-**
PC18. perform tasks as per workplace standards, organisational policies and legislative requirements	2	2	-	-
PC19. display appropriate professional appearance at the workplace and adhere to the organisational dress code	1	2	-	-
PC20. 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	-	-
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	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC25. follow organisational guidelines and legal requirements on disclosure and confidentiality	1	2	-	-
Uphold social diversity at the workplace	**10**	**11**	**-**	**-**
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	-	-
NOS Total	**40**	**60**	**-**	**-**

National Occupational Standards (NOS) Parameters

NOS Code	ELE/N9905
NOS Name	Work effectively at the workplace
Sector	Electronics
Sub-Sector	Generic
Occupation	Generic - Organizational Behaviour
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	24/02/2022
Next Review Date	30/12/2026
NSQC Clearance Date	30/12/2021

ELE/N1002: Apply health and safety practices at the workplace

Description

This OS unit is about knowledge and practices relating to health, safety and security that candidates need to use in the workplace.

Scope

The scope covers the following :

- Deal with workplace hazards
- Apply fire safety practices
- Follow emergencies, rescue and first-aid procedures
- Effective waste management/recycling practices

Elements and Performance Criteria

Deal with workplace hazards

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

PC1. identify job-site hazards and possible causes of accident in the workplace

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.

PC3. 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

PC4. follow standard safety procedures while handling tool/ ,equipment, hazardous substances and while working in hazardous environments

PC5. dispose electronic waste (such as toxins; metals such as lead, cadmium, barium; flame retardant plastics, welding slag etc.) as per industry approved techniques

PC6. avoid damage of components due to negligence in electrostatic discharge (ESD) procedures

PC7. 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)

PC8. maintain appropriate posture while handling heavy objects

PC9. apply good housekeeping practices at all times

Apply fire safety practices

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

PC10. take preventive measures to prevent fire hazards

PC11. • 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 panels, etc. (These categories of fires become Class A, B, and D fires when the electrical equipment that initiated the fire is no l

PC12. exhibit rescue and first-aid techniques in case of fire or electrocution

Follow emergencies, rescue and first-aid procedures

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

PC13. administer appropriate first aid to victims in case of bleeding, burns, choking, electric shock, poisoning etc.

PC14. administer first aid to victims in case of a heart attack or cardiac arrest due to electric shock,

PC15. 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

PC16. use correct method to move injured people and others during an emergency

Effective waste management/recycling practices

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

PC17. identify recyclable and non-recyclable, and hazardous waste generated

PC18. segregate waste into different categories

PC19. ensure disposal of non-recyclable waste appropriately

PC20. deposit non-recyclable and reusable material at identified location

PC21. follow processes specified for disposal of hazardous waste

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. importance of working in clean and safe work environment following safety practices and procedures

KU2. health and safety roles and responsibilities of relevant personnel within and outside the organisation

KU3. key internal and external sources of health and safety information

KU4. basic knowledge of electronic devices and related health risks

KU5. meaning of hazards and risks

KU6. various types of health and safety hazards commonly present in the work environment such as physical hazards, electrical hazards, chemical hazards, fire hazards, equipment related hazards, health hazards, etc.

KU7. methods of accident prevention

KU8. importance of using protective clothing/equipment while working

KU9. general principles for identifying and controlling health and safety risks

KU10. main hazards and preventive as well as control measures while working with different types of equipment

KU11. importance of carrying out electrical and non-electrical isolation to prevent hazards from loss of machine/system/process control

KU12. main hazards and preventive as well as control measures when working with electrical systems or using electrical equipment

KU13. forms and classifications of hazardous substances

KU14. safe working practices while working at various hazardous sites

KU15. prevention and control measures to reduce risks from exposure to hazardous substances

KU16. health effects associated with exposure to noise and vibration and the appropriate control measures

KU17. precautionary activities to prevent the fire accident

KU18. various causes of fire such as heating of metal, spontaneous ignition, sparking, electrical eating, loose fires (smoking, welding, etc.) chemical fires etc.

KU19. techniques of using the different fire extinguishers

KU20. different methods and material to extinguish fires

KU21. different materials used for extinguishing fire such as sand, water, foam, CO2, dry powder

KU22. rescue techniques used during a fire hazard

KU23. various types of safety signs and their meaning

KU24. basic first aid treatment relevant to the common work place injuries e.g. shock, electrical shock, bleeding, breaks to bones, minor burns, resuscitation, poisoning, eye injuries

KU25. contents of written accident report

KU26. potential injuries and ill health associated with incorrect handing of tools and equipment

KU27. safe lifting and carrying practices

KU28. potential impact to a person who is moved incorrectly

KU29. personal safety, health and dignity issues relating to the movement of a person by others

KU30. ESD measures and 5S

KU31. efficient utilization and management of material and water

KU32. ways to recognize common electrical problems and practices of conserving electricity

KU33. usage of different colours of dustbins, categorization of waste into dry, wet, recyclable, nonrecyclable and items of single-use plastics

KU34. organization's procedure for minimizing waste

KU35. waste management and methods of waste disposal

KU36. common sources of pollution and ways to minimize it

KU37. names, contact information and location of people responsible for health and safety in the workplace

KU38. location of documents and equipment for health and safety compliance/practices in the workplace

KU39. safety notices, signs and instructions at workplace

Generic Skills (GS)

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

GS1. interpret general health and safety guidelines labels, charts, signages

GS2. read operation manuals

GS3. write health and safety compliance report

GS4. write an accident/incident report in local language or English

GS5. provide an emergency or safety incident brief to seniors or relevant authorities in a calm, clear and to-the-point manner

GS6. communicate general health and safety guidelines to colleagues/co-workers

GS7. communicate appropriately with co-workers in order to clarify instructions and other issues

GS8. act in case of any potential hazards observed in the work place

GS9. plan and organize their own work schedule, work area, tools, equipment in compliance with organizational policies for health, safety and security

GS10. take adequate measures to ensure the safety of clients and visitors at the workplace

GS11. identify immediate or temporary solutions to resolve delays

GS12. evaluate the work area for health and safety risks or hazards

GS13. use cause and effect relations to anticipate potential issues, problems and their solution in the work area related to safety

GS14. recognise emergency and potential emergency situations

GS15. protect self and others from a health and safety risk or hazard

GS16. communicate and collaborate to incorporate sustainable practices (greening) in workplace processes

GS17. record data on waste disposal at workplace

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Deal with workplace hazards	**20**	**31**	**-**	**-**
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	-	-
PC3. 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	-	-
PC4. follow standard safety procedures while handling tool/ ,equipment, hazardous substances and while working in hazardous environments	3	4	-	-
PC5. 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	-	-
PC6. avoid damage of components due to negligence in electrostatic discharge (ESD) procedures	2	3	-	-
PC7. 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	-	-
PC8. maintain appropriate posture while handling heavy objects	1	3	-	-
PC9. apply good housekeeping practices at all times	2	3	-	-
Apply fire safety practices	**4**	**9**	**-**	**-**
PC10. take preventive measures to prevent fire hazards	2	3	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. • 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 panels, etc. (These categories of fires become Class A, B, and D fires when the electrical equipment that initiated the fire is no l	1	3	-	-
PC12. exhibit rescue and first-aid techniques in case of fire or electrocution	1	3	-	-
Follow emergencies, rescue and first-aid procedures	**6**	**13**	**-**	**-**
PC13. administer appropriate first aid to victims in case of bleeding, burns, choking, electric shock, poisoning etc.	1	3	-	-
PC14. administer first aid to victims in case of a heart attack or cardiac arrest due to electric shock,	1	2	-	-
PC15. 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	-	-
PC16. use correct method to move injured people and others during an emergency	2	4	-	-
Effective waste management/recycling practices	**5**	**12**	**-**	**-**
PC17. identify recyclable and non-recyclable, and hazardous waste generated	1	3	-	-
PC18. segregate waste into different categories	1	2	-	-
PC19. ensure disposal of non-recyclable waste appropriately	1	2	-	-
PC20. deposit non-recyclable and reusable material at identified location	1	3	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC21. follow processes specified for disposal of hazardous waste	1	2	-	-
NOS Total	**35**	**65**	**-**	**-**

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	ELE/N1002
NOS Name	Apply health and safety practices at the workplace
Sector	Electronics
Sub-Sector	Generic
Occupation	Generic - Health Safety
NSQF Level	4
Credits	TBD
Version	3.0
Last Reviewed Date	24/02/2022
Next Review Date	24/02/2025
NSQC Clearance Date	24/02/2022

DGT/VSQ/N0102: Employability Skills (60 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
- Career Development & Goal Setting
- 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. identify employability skills required for jobs in various industries

PC2. identify and explore learning and employability portals

Constitutional values – Citizenship

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

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

Becoming a Professional in the 21st Century

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

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

Basic English Skills

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

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

Career Development & Goal Setting

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

PC10. understand the difference between job and career

PC11. prepare a career development plan with short- and long-term goals, based on aptitude

Communication Skills

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

PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings

PC13. work collaboratively with others in a team

Diversity & Inclusion

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

PC14. communicate and behave appropriately with all genders and PwD

PC15. escalate any issues related to sexual harassment at workplace according to POSH Act

Financial and Legal Literacy

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

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

Essential Digital Skills

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

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

Entrepreneurship

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

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

Customer Service

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

PC26. identify different types of customers

PC27. identify and respond to customer requests and needs in a professional manner.

PC28. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

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

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. need for employability skills and different learning and employability related portals

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 English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up

KU6. importance of career development and setting long- and short-term goals

KU7. about effective communication

KU8. POSH Act

KU9. Gender sensitivity and inclusivity

KU10. different types of financial institutes, products, and services

KU11. how to compute income and expenditure

KU12. importance of maintaining safety and security in offline and online financial transactions

KU13. different legal rights and laws

KU14. different types of digital devices and the procedure to operate them safely and securely

KU15. how to create and operate an e- mail account and use applications such as word processors, spreadsheets etc.

KU16. how to identify business opportunities

KU17. types and needs of customers

KU18. how to apply for a job and prepare for an interview

KU19. apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

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

GS1. read and write different types of documents/instructions/correspondence

GS2. communicate effectively using appropriate language in formal and informal settings

GS3. behave politely and appropriately with all

GS4. how to work in a virtual mode

GS5. perform calculations efficiently

GS6. solve problems effectively

GS7. pay attention to details

GS8. manage time efficiently

GS9. maintain hygiene and sanitization to avoid infection

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	1	1	-	-
PC1. identify employability skills required for jobs in various industries	-	-	-	-
PC2. identify and explore learning and employability portals	-	-	-	-
Constitutional values – Citizenship	1	1	-	-
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	-	-	-	-
Becoming a Professional in the 21st Century	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	-	-	-	-
Basic English Skills	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	-	-	-	-
Career Development & Goal Setting	1	2	-	-

Qualification Pack

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. understand the difference between job and career	-	-	-	-
PC11. prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
Communication Skills	**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	-	-	-	-
Diversity & Inclusion	**1**	**2**	**-**	**-**
PC14. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
Financial and Legal Literacy	**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	-	-	-	-
Essential Digital Skills	**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	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Entrepreneurship	**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	-	-	-	-
Customer Service	**1**	**2**	**-**	**-**
PC26. identify different types of customers	-	-	-	-
PC27. identify and respond to customer requests and needs in a professional manner.	-	-	-	-
PC28. follow appropriate hygiene and grooming standards	-	-	-	-
Getting ready for apprenticeship & Jobs	**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	-	-	-	-
NOS Total	**20**	**30**	**-**	**-**

National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0102
NOS Name	Employability Skills (60 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	4
Credits	2
Version	1.0
Last Reviewed Date	30/04/2025
Next Review Date	30/04/2028
NSQC Clearance Date	30/04/2025

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.

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/N4601.Engaging with the customers	40	50	-	10	100	20
ELE/N4612.Installing, configuring and setting up the networking and storage system	40	50	-	10	100	25
ELE/N4613.Troubleshooting and fix equipment	40	50	-	10	100	25
ELE/N9905.Work effectively at the workplace	40	60	-	-	100	10
ELE/N1002.Apply health and safety practices at the workplace	35	65	-	-	100	10
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	0	0	50	10
Total	**215**	**305**	**0**	**0**	**550**	**100**

Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
QP	Qualification Pack
NSQF	National Skills Qualification Framework
NSQC	National Skills Qualification Committee
CPU	Central Processing Unit
PCB	Printed Circuit Board
TAT	Turn Around Time
SOP	Standard Operating Procedure

Glossary

Sector	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.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	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.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	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.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	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.
Scope	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.

Knowledge and Understanding (KU)	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.
Organisational Context	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.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	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.
Electives	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.
Options	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.
Declarative Knowledge	Declarative knowledge refers to facts, concepts and principles that need to be known and/or understood in order to accomplish a task or to solve a problem.
Key Learning Outcome	Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).
OJT (M)	On-the-job training (Mandatory) trainees are mandated to complete specified hours of training on site
OJT (R)	On-the-job training (Recommended) trainees are recommended the specified hours of training on site
Procedural Knowledge	Procedural knowledge addresses how to do something, or how to perform a task. It is the ability to work, or produce a tangible work output by applying cognitive, affective or psychomotor skills.
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training.