GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP

Line Assembler - Telecom Products

QP Code: TEL/Q2502

Version: 4.0

NSQF Level: 4

Telecom Sector Skill Council || 3rd Floor, Plot No 126, Sector - 44
Gurgaon - 122003

Contents

Qualification Pack

TEL/Q2502: Line Assembler - Telecom Products

Brief Job Description

An individual in this job role is responsible for assembly of handsets and telecom equipment various stages of the production/ assembly line operations adhering to the stages/ process which are pre-defined. The outcome of the activity is fully/ partially assembled unit. The job includes assembly of electronic boards, components and related accessories using relevant tools as per work instructions and product specification drawings.

Personal Attributes

This job requires the individual to have technical appreciation of the processes, ability to understand technical details, logical thinking and clear approach to the defined processes with an eye for details. Individual needs to be focused, process oriented and should have ability to work with concentration during the shift hours.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. TEL/N2506: Preparing Workspace for Assembly Operations

2. TEL/N2507: Assembly Operations in Production Line

3. TEL/N2508: ESD Safe Procedures and Practices

4. TEL/N9101: Organize Work and Resources as per Health and Safety Standards

5. TEL/N9102: Interact Effectively with Team Members and Customers

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

Qualification Pack (QP) Parameters

Sector	Telecom
Sub-Sector	Handset
Occupation	Communication Electronics
Country	India
NSQF Level	4

Credits	19
Aligned to NCO/ISCO/ISIC Code	NCO-2015/3114.1402
Minimum Educational Qualification & Experience	11th grade pass OR Completed 1st year of 3-year diploma (after 10th) and pursuing regular diploma OR 10th grade pass and pursuing continuous schooling OR 10th grade pass with 2 Years of experience OR Previous relevant Qualification of NSQF Level (3 with minimum education as 5th Grade pass) with 2 Years of experience
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	17 Years
Last Reviewed On	NA
Next Review Date	24/02/2025
NSQC Approval Date	24/02/2022
Version	4.0
Reference code on NQR	2022/TEL/TSSC/07013
NQR Version	2

TEL/N2506: Preparing Workspace for Assembly Operations

Description

This OS unit describes the preparation of workplace for assembly operations.

Scope

The scope covers the following :

- Arrange components/parts and assembly bench
- Arrange tools and equipment required for assembly

Elements and Performance Criteria

Arrange components/parts and assembly bench

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

PC1. draw correct components from stores as per the work instructions

PC2. demonstrate understanding of the work instructions and familiarity with the assembly instructions

PC3. demonstrate arrangement of components as per the assembly instructions

PC4. verify specifications of all components as per the work instructions

Arrange tools and equipment required for assembly

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

PC5. identify and draw tools and equipment requirement as per the work instructions

PC6. ascertain compliance/correctness (calibration) wherever required

PC7. ascertain proper operation of all the tools/equipment

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. organizational policies, procedures and processes related to stores, issue and return of components

KU2. work practices and health and safety requirements

KU3. responsibility and escalation matrix

KU4. type of electronic parts/components

KU5. safe handling practices of electronic components

KU6. types of mechanical parts like screws, nuts, securing clips and their applicability

KU7. applicability of basic assembly tools and range of hand tools like screw drivers, electric screw drivers, spanners, forceps, forming players, cutters etc.

KU8. types of semi-automatic tools used for electronics components fitment/ forming/ preparation like thermal wire strippers, adjustable electronic board holders, led free soldering tools, precision screw driver set.

KU9. different types of consumables used for soldering and their conditions/usage /application in assembly operations including any specifications by the customer and customer supplied consumables. storage and handling before usage of these consumables like thawing, stirring, fifo etc

KU10. general Safety Health and Environment (SHE) aspects and importance of following safe product/components handling techniques during assembly and impact on environment, product, parts and property including safe movement/storage and/or lifting of materials/packages etc.

Generic Skills (GS)

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

GS1. read and interpret necessary documents

GS2. read and understand manuals, requirement documents, operational health and safety instructions, memos, reports etc.

GS3. read and comprehend/understand material specifications

GS4. communicate with colleagues, peers and supervisor

GS5. liaise and coordinate with third party vendors/other stakeholders

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Arrange components/parts and assembly bench	**19**	**26**	**-**	**8**
PC1. draw correct components from stores as per the work instructions	4	5	-	2
PC2. demonstrate understanding of the work instructions and familiarity with the assembly instructions	5	7	-	2
PC3. demonstrate arrangement of components as per the assembly instructions	5	7	-	2
PC4. verify specifications of all components as per the work instructions	5	7	-	2
Arrange tools and equipment required for assembly	**11**	**29**	**-**	**7**
PC5. identify and draw tools and equipment requirement as per the work instructions	4	10	-	3
PC6. ascertain compliance/correctness (calibration) wherever required	4	10	-	2
PC7. ascertain proper operation of all the tools/equipment	3	9	-	2
NOS Total	**30**	**55**	**-**	**15**

National Occupational Standards (NOS) Parameters

NOS Code	TEL/N2506
NOS Name	Preparing Workspace for Assembly Operations
Sector	Telecom
Sub-Sector	Handset
Occupation	Communication Electronics
NSQF Level	4
Credits	5
Version	3.0
Last Reviewed Date	NA
Next Review Date	24/02/2025
NSQC Clearance Date	24/02/2022

TEL/N2507: Assembly Operations in Production Line

Description

This OS unit is about undertaking assembly operations in a handset production line.

Scope

The scope covers the following :

- Assembly operations of telecom devices/products
- Post assembly activities

Elements and Performance Criteria

Assembly operations of telecom devices/products

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

PC1. ascertain availability of all parts/components, vis-a-vis the specifications and assembly guidelines

PC2. ascertain availability of all tools and equipment to carry out work

PC3. ascertain work safety compliance before commencing work

PC4. sequence the parts and subassemblies in correct order

PC5. demonstrate ability to read technical diagrams and specifications

PC6. demonstrate basic skills of component handling, component fitment, use of basic assembly tools and mechanical fitments (special purpose screws etc.)

PC7. demonstrate assembly of the parts/componens using proper process, procedures, sequence and using right tools

PC8. demonstrate basic quality check procedures

Post assembly activities

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

PC9. cross check intermediate and end of work compliance

PC10. secure the workplace by clearing any loose/leftover consumables, spare components etc.

PC11. account for all components used and match with the inventory issues.

PC12. follow store compliances in terms of return of inventory (components, parts etc.) at the end of work

PC13. document work done and account for all components as per company policy

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. quality standards, and compliances

KU2. relevant health and safety requirements

KU3. role and responsibilities as per the job profile and engagement terms

KU4. reporting structure, inter-dependent functions, lines and procedures in the work area including all HR processes/HR manual/company policies

KU5. discipline and office etiquettein the work area and during the break hours as well outside to maintain the culture/image of the company.

KU6. guidelines with respect to contractual labour engaged by the organisation

KU7. escalation matrix and procedures for reporting work and employment related issue

KU8. handling of different kinds of electronic parts/components & connectors

KU9. importance of polarity of components

KU10. different types of mechanical parts like screws, nuts, identification of types and importance of use for assembly.

KU11. basic assembly tools and range of hand tools like screwdrivers, electric screw drivers, spanners, forceps, forming players, cutters etc.

KU12. types of hand tools and semi automatic tools used for electronics components, tweezers, forming tools, pliers, cutters, wire strippers, de-soldering pump etc.

KU13. PCBs (bare board) baking, storage and handling of critical parts during assembly and consumables handling like flux, paste etc.

KU14. quality standards and risks of not following the standards

KU15. basic soldering techniques, type of soldering defects, their effect on performance and re-work process

KU16. basic units of measurement used in Volatage, current, resistance and power measurements, frequency, RF, wrt telecommunication equipment

KU17. diagrams, drawings, assembly drawings, specifications and schedules pertaining to electronics line assembly/production

KU18. electronic circuits and functions (transmitters, receivers, switches, power supplies, amplifiers, multiplexers, couplers, registers, memory and all RF circuits in telecom equipment)

KU19. different types of connectors/cables/wires, cable forms polarities and pin Identification and understanding of basic specifications of these

KU20. the legend printing on PCBs and equipment including the version number and other visual symbols

KU21. safe disposal of hazardous and non-hazardous waste materials in places designated separately and clear the trash bins in time to avoid overflow causing unsafe conditions

Generic Skills (GS)

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

GS1. read and interpret necessary documents

GS2. read and understand manuals, requirement documents, operational health and safety instructions, memos, reports etc.

GS3. read and comprehend/understand material specifications

GS4. communicate with colleagues, peers and supervisor

GS5. liaise and coordinate with third party vendors/other stakeholders

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Assembly operations of telecom devices/products	**18**	**48**	**-**	**11**
PC1. ascertain availability of all parts/components, vis-a-vis the specifications and assembly guidelines	2	5	-	2
PC2. ascertain availability of all tools and equipment to carry out work	2	5	-	1
PC3. ascertain work safety compliance before commencing work	1	5	-	1
PC4. sequence the parts and subassemblies in correct order	2	5	-	1
PC5. demonstrate ability to read technical diagrams and specifications	2	7	-	1
PC6. demonstrate basic skills of component handling, component fitment, use of basic assembly tools and mechanical fitments (special purpose screws etc.)	3	8	-	2
PC7. demonstrate assembly of the parts/componens using proper process, procedures, sequence and using right tools	4	8	-	2
PC8. demonstrate basic quality check procedures	2	5	-	1
Post assembly activities	**7**	**12**	**-**	**4**
PC9. cross check intermediate and end of work compliance	1	3	-	1
PC10. secure the workplace by clearing any loose/leftover consumables, spare components etc.	2	3	-	1
PC11. account for all components used and match with the inventory issues.	2	2	-	1
PC12. follow store compliances in terms of return of inventory (components, parts etc.) at the end of work	1	2	-	1

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. document work done and account for all components as per company policy	1	2	-	-
NOS Total	**25**	**60**	**-**	**15**

National Occupational Standards (NOS) Parameters

NOS Code	TEL/N2507
NOS Name	Assembly Operations in Production Line
Sector	Telecom
Sub-Sector	Handset
Occupation	Communication Electronics
NSQF Level	4
Credits	4
Version	3.0
Last Reviewed Date	NA
Next Review Date	24/02/2025
NSQC Clearance Date	24/02/2022

TEL/N2508: ESD Safe Procedures and Practices

Description

This OS unit covers ESD safety procedures during the assembly operations and safe handling ESD sensitive components, sub-assemblies and product. It covers understanding of responsibilities towards safe Electro Static Devices (ESD) practices to prevent ESD related failures.

Scope

The scope covers the following :

- Compliance to ESD processes and procedures

Elements and Performance Criteria

Compliance to ESD processes and procedures

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

PC1. demonstrate safe work practices as per the ESD process and protocol
PC2. demonstrate grounding of all components in work area
PC3. demonstrate use of ESD tools/equipment (static voltage checker, wrist straps, shoe grounders, air ionizers)
PC4. demonstrate safe cleaning and clearing practices for removal of non-essential items and equipment carrying electrostatic generating potential
PC5. demonstrate the process of packing/unpacking of electronic components in compliance to ESD processes
PC6. demonstrate safe handling of all semi-finished products after assembly operations (use of ESD free trays, conveyor lines)

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. importance and compliance of ESD policies and procedures
KU2. documents that refer to ESD safety in workplace
KU3. implications of not following the ESD protocols and its effect on the end product
KU4. basics of ESD and its effects on electronic components/performance
KU5. classification of ESD materials
KU6. how to identify ESD sensitive parts, packages, areas and understanding of precautionary labels/ instructions for use/packing/ unpacking etc.
KU7. sources of generation of Electrostatic energy
KU8. use/importance of all types of PPEs for ESD safe work, storage, packaging/handling materials like trays, bags etc.
KU9. levels of Electrostatic voltage generation during normal working environment on the shop floor like walking on various floors while soldering, cleaning etc.

KU10. impact of working on/handling on ESD sensitive products/components in a non-ESD safe area

KU11. ESD - paths while working on assemblies, sub-assemblies and component parts

KU12. grounding paths and various methods/accessories used for grounding in the work area like for e.g.- Tables, mats, flooring, wrist straps

KU13. imporatance of proper usage of ESD safe materials and importance of checking these ESD safe PPEs and follow ESD processes and co-operate with ESD audits

KU14. basics of conducting ESD audits on various facility like work tables, flooring, straps, aprons, static/anti-static packaging etc.

KU15. relevance of safe handling, storage/ stacking of parts, assembly/ sub-assemblies to avoid/prevent ESD failures

Generic Skills (GS)

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

GS1. read and interpret necessary documents

GS2. read and understand manuals, requirement documents, operational health and safety instructions, memos, reports etc.

GS3. read and comprehend/understand material specifications

GS4. communicate with colleagues, peers and supervisor

GS5. liaise and coordinate with third party vendors/other stakeholders

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Compliance to ESD processes and procedures	**30**	**55**	**-**	**15**
PC1. demonstrate safe work practices as per the ESD process and protocol	4	10	-	2
PC2. demonstrate grounding of all components in work area	4	10	-	2
PC3. demonstrate use of ESD tools/equipment (static voltage checker, wrist straps, shoe grounders, air ionizers)	6	7	-	3
PC4. demonstrate safe cleaning and clearing practices for removal of non-essential items and equipment carrying electrostatic generating potential	6	10	-	4
PC5. demonstrate the process of packing/unpacking of electronic components in compliance to ESD processes	6	9	-	2
PC6. demonstrate safe handling of all semi-finished products after assembly operations (use of ESD free trays, conveyor lines)	4	9	-	2
NOS Total	**30**	**55**	**-**	**15**

National Occupational Standards (NOS) Parameters

NOS Code	TEL/N2508
NOS Name	ESD Safe Procedures and Practices
Sector	Telecom
Sub-Sector	Handset
Occupation	Communication Electronics
NSQF Level	4
Credits	4
Version	3.0
Last Reviewed Date	NA
Next Review Date	24/02/2025
NSQC Clearance Date	24/02/2022

TEL/N9101: Organize Work and Resources as per Health and Safety Standards

Description

This OS unit is about planning work and following sustainable as well as healthy practices for safety and optimal use of resources.

Scope

The scope covers the following :

- Perform work as per quality standards
- Maintain safe, healthy and secure working environment
- Conserve material/energy/electricity
- Use effective waste management/recycling practices

Elements and Performance Criteria

Perform work as per quality standards

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

PC1. keep workspace clean and tidy

PC2. perform individual role and responsibilities as per the job role while taking accountability for the work

PC3. record/document tasks completed as per the requirements within specific timelines

PC4. implement schedules to ensure timely completion of tasks

PC5. identify the cause of a problem related to own work and validate it

PC6. analyse problems accurately and communicate different possible solutions to the problem

Maintain safe, healthy and secure working environment

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

PC7. comply with organisation's current health, safety, security policies and procedures

PC8. check for water spills in and around the work space and escalate these to the appropriate authority

PC9. report any identified breaches in health, safety, and security policies and procedures to the designated person

PC10. use safety materials such as goggles, gloves, ear plugs, caps, ESD pins, covers, shoes, etc.

PC11. avoid damage of components due to negligence in ESD procedures or any other loss due to safety negligence

PC12. identify hazards such as illness, accidents, fires or any other natural calamity safely, as per organisation's emergency procedures, within the limits of individual's authority

PC13. participate regularly in fire drills or other safety related workshops organised by the company

PC14. report any hazard outside the individual's authority to the relevant person in line with organisational procedures and warn others who may be affected

PC15. maintain appropriate posture while sitting/standing for long hours

PC16. handle heavy and hazardous materials with care, while maintaining appropriate posture

PC17. sanitize workstation and equipment regularly

PC18. clean hands with soap, alcohol-based sanitizer regularly

PC19. avoid contact with anyone suffering from communicable diseases and take necessary precautions

PC20. take safety precautions while travelling e.g. maintain 1m distance from others, sanitize hands regularly, wear masks, etc.

PC21. report hygiene and sanitation issues to appropriate authority

PC22. follow recommended personal hygiene and sanitation practices, for example, washing/sanitizing hands, covering face with a bent elbow while coughing/sneezing, using PPE, etc.

Conserve material/energy/electricity

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

PC23. optimize usage of material including water in various tasks/activities/processes

PC24. use resources such as water, electricity and others responsibly

PC25. carry out routine cleaning of tools, machine and equipment

PC26. optimize use of electricity/energy in various tasks/activities/processes

PC27. perform periodic checks of the functioning of the equipment/machine and rectify wherever required

PC28. report malfunctioning and lapses in maintenance of equipment

PC29. use electrical equipment and appliances properly

Use effective waste management/recycling practices

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

PC30. identify recyclable, non-recyclable and hazardous waste

PC31. deposit recyclable and reusable material at identified location

PC32. dispose non-recyclable and hazardous waste as per recommended processes

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. strategies pertinent to their field (such as internet searches, asking peers and managers, enrolling for courses and certifications, etc.) that can be used to pursue an advancement in their skills

KU2. key performance indicators for the new tasks

KU3. feedback processes and formats

KU4. timelines and goals as well as their relevance to work allocated

KU5. importance of quality and timely delivery of the product/service

KU6. escalation matrix and its importance, especially in case of emergencies

KU7. ways of time and cost management

KU8. rules/regulation for maintaining health and safety at workplace

KU9. meaning of hazard, different types of health and safety hazards found in the workplace, risks and threats based on the nature of work

KU10. relevant signage, warnings, labels or descriptions on equipment, etc. while carrying out work activities

KU11. procedures to report breaches in health, safety and security

KU12. organisation's procedures for different emergency situations and the importance of following the same

KU13. different methods of cleaning, disinfection, sterilization, and sanitization

KU14. significance of personal hygiene practice including hand hygiene

KU15. path of disease transmission

KU16. correct method of donning and doffing of PPE

KU17. ways of managing resources and material efficiently

KU18. common electrical problems and common practices of conserving electricity

KU19. categorization of waste into dry, wet, recyclable, non-recyclable and items of single-use plastics and use of different colours of dustbins

KU20. organisation's procedures for minimizing waste

KU21. waste management and methods of waste disposal

KU22. common sources of pollution and ways to minimize it

Generic Skills (GS)

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

GS1. improve and modify work practices

GS2. complete tasks efficiently and accurately within stipulated time

GS3. develop skills and mastery of the technologies prevalent in the industry

GS4. write in at least one language and complete written work with attention to detail

GS5. utilize time and manage workload efficiently

GS6. read and comprehend instructions and documents

GS7. accept feedback in a constructive way

GS8. seek clarifications from superior about the job requirement

GS9. read and comprehend statutory documents relevant to safety and hygiene

GS10. refer all anomalies to the concerned persons

GS11. analyze situations and make appropriate decisions

GS12. decide the most suitable course of action for completing the task within resources

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Perform work as per quality standards	**4**	**9**	**-**	**2**
PC1. keep workspace clean and tidy	-	1	-	-
PC2. perform individual role and responsibilities as per the job role while taking accountability for the work	1	1	-	1
PC3. record/document tasks completed as per the requirements within specific timelines	-	1	-	1
PC4. implement schedules to ensure timely completion of tasks	-	2	-	-
PC5. identify the cause of a problem related to own work and validate it	2	2	-	-
PC6. analyse problems accurately and communicate different possible solutions to the problem	1	2	-	-
Maintain safe, healthy and secure working environment	**16**	**27**	**-**	**4**
PC7. comply with organisation's current health, safety, security policies and procedures	1	1	-	-
PC8. check for water spills in and around the work space and escalate these to the appropriate authority	1	2	-	1
PC9. report any identified breaches in health, safety, and security policies and procedures to the designated person	1	2	-	1
PC10. use safety materials such as goggles, gloves, ear plugs, caps, ESD pins, covers, shoes, etc.	1	2	-	1
PC11. avoid damage of components due to negligence in ESD procedures or any other loss due to safety negligence	2	3	-	1
PC12. identify hazards such as illness, accidents, fires or any other natural calamity safely, as per organisation's emergency procedures, within the limits of individual's authority	2	1	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. participate regularly in fire drills or other safety related workshops organised by the company	1	3	-	-
PC14. report any hazard outside the individual's authority to the relevant person in line with organisational procedures and warn others who may be affected	1	3	-	-
PC15. maintain appropriate posture while sitting/standing for long hours	1	1	-	-
PC16. handle heavy and hazardous materials with care, while maintaining appropriate posture	1	1	-	-
PC17. sanitize workstation and equipment regularly	1	2	-	-
PC18. clean hands with soap, alcohol-based sanitizer regularly	-	1	-	-
PC19. avoid contact with anyone suffering from communicable diseases and take necessary precautions	-	1	-	-
PC20. take safety precautions while travelling e.g. maintain 1m distance from others, sanitize hands regularly, wear masks, etc.	1	2	-	-
PC21. report hygiene and sanitation issues to appropriate authority	1	1	-	-
PC22. follow recommended personal hygiene and sanitation practices, for example, washing/sanitizing hands, covering face with a bent elbow while coughing/sneezing, using PPE, etc.	1	1	-	-
Conserve material/energy/electricity	**7**	**16**	**-**	**3**
PC23. optimize usage of material including water in various tasks/activities/processes	1	2	-	-
PC24. use resources such as water, electricity and others responsibly	1	2	-	1
PC25. carry out routine cleaning of tools, machine and equipment	1	2	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC26. optimize use of electricity/energy in various tasks/activities/processes	1	3	-	1
PC27. perform periodic checks of the functioning of the equipment/machine and rectify wherever required	1	3	-	1
PC28. report malfunctioning and lapses in maintenance of equipment	1	2	-	-
PC29. use electrical equipment and appliances properly	1	2	-	-
Use effective waste management/recycling practices	**3**	**8**	**-**	**1**
PC30. identify recyclable, non-recyclable and hazardous waste	1	2	-	1
PC31. deposit recyclable and reusable material at identified location	1	3	-	-
PC32. dispose non-recyclable and hazardous waste as per recommended processes	1	3	-	-
NOS Total	**30**	**60**	**-**	**10**

National Occupational Standards (NOS) Parameters

NOS Code	TEL/N9101
NOS Name	Organize Work and Resources as per Health and Safety Standards
Sector	Telecom
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	1
Version	2.0
Last Reviewed Date	NA
Next Review Date	24/02/2025
NSQC Clearance Date	24/02/2022

TEL/N9102: Interact Effectively with Team Members and Customers

Description

This OS unit is about interacting with superiors and colleagues as well as customers and other stakeholders in own or other work groups within as well as outside the organisation.

Scope

The scope covers the following :

- Interact effectively with superiors
- Interact effectively with colleagues and customers
- Respect differences of gender and ability

Elements and Performance Criteria

Interact effectively with superiors

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

PC1. receive work requirements from superiors and customers and interpret them correctly

PC2. inform the supervisor and/or concerned person about any unforeseen disruptions or delays

PC3. participate in decision making by providing facts and figures, giving/accepting constructive suggestions

PC4. rectify errors as per feedback and ensure the errors are not repeated

Interact effectively with colleagues and customers

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

PC5. comply with organisation's policies and procedures for working with team members

PC6. communicate professionally using appropriate mode of communication such as face-to-face, telephonic and written

PC7. respond to queries and seek/provide clarifications if required

PC8. co-ordinate with team to integrate work as per requirements

PC9. resolve conflicts within the team/with customers to achieve smooth workflow

PC10. recognize emotions accurately in self and others to build good relationships

PC11. prioritize team and organization goals above personal goals

Respect differences of gender and ability

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

PC12. maintain a conducive environment for all the genders at the workplace

PC13. encourage appropriate behavior and conduct with people across gender

PC14. assist team members with disability in overcoming any challenges faced in work

PC15. practice appropriate verbal and non-verbal communication while interacting with People with Disability (PwD)

PC16. ensure equal participation of the people across genders in discussions

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. organisation's hierarchy and escalation matrix

KU3. importance of establishing good working relationships with colleagues and superiors

KU4. importance of helping colleagues with problems, in order to meet quality and time standards as a team

KU5. different means and methods of communication

KU6. different types of information that colleagues might need and the importance of providing this information in an appropriate manner

KU7. organisation's policies and procedures for working with colleagues and superiors

KU8. importance of understanding consequences of gender biased behaviour

KU9. gender based concepts, issues and legislation

KU10. organisation standards and guidelines to be followed for PwD and knowledge about laws, acts and provisions defined for PwD by the statutory bodies and the right way to use them including various medical conditions associated with PwD

KU11. health and safety requirements at workplace for PwD

KU12. process of recruiting people for a particular job profile w.r.t PwD and gender

KU13. various government/private schemes and benefits available for PwD and information about various institutes working for PwD to enable in providing livelihood opportunities for PwD

Generic Skills (GS)

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

GS1. read and comprehend forms, documents and records

GS2. read and write in English and/or local language

GS3. complete work with attention to detail

GS4. listen effectively and orally communicate information

GS5. work as per customer requirements

GS6. communicate with empathy across genders and PwD

GS7. improve and modify work practices

GS8. maintain positive and effective relationships with colleagues and customers

GS9. evaluate the possible solution(s) to the problem

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Interact effectively with superiors	**7**	**15**	**-**	**2**
PC1. receive work requirements from superiors and customers and interpret them correctly	1	2	-	-
PC2. inform the supervisor and/or concerned person about any unforeseen disruptions or delays	2	4	-	1
PC3. participate in decision making by providing facts and figures, giving/accepting constructive suggestions	2	5	-	1
PC4. rectify errors as per feedback and ensure the errors are not repeated	2	4	-	-
Interact effectively with colleagues and customers	**7**	**26**	**-**	**4**
PC5. comply with organisation's policies and procedures for working with team members	1	2	-	-
PC6. communicate professionally using appropriate mode of communication such as face-to-face, telephonic and written	2	4	-	1
PC7. respond to queries and seek/provide clarifications if required	2	4	-	1
PC8. co-ordinate with team to integrate work as per requirements	-	3	-	-
PC9. resolve conflicts within the team/with customers to achieve smooth workflow	1	5	-	1
PC10. recognize emotions accurately in self and others to build good relationships	1	4	-	-
PC11. prioritize team and organization goals above personal goals	-	4	-	1
Respect differences of gender and ability	**11**	**24**	**-**	**4**
PC12. maintain a conducive environment for all the genders at the workplace	2	5	-	1

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. encourage appropriate behavior and conduct with people across gender	2	5	-	1
PC14. assist team members with disability in overcoming any challenges faced in work	3	4	-	1
PC15. practice appropriate verbal and non-verbal communication while interacting with People with Disability (PwD)	2	4	-	1
PC16. ensure equal participation of the people across genders in discussions	2	6	-	-
NOS Total	**25**	**65**	**-**	**10**

National Occupational Standards (NOS) Parameters

NOS Code	TEL/N9102
NOS Name	Interact Effectively with Team Members and Customers
Sector	Telecom
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	1
Version	2.0
Last Reviewed Date	NA
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**	**-**	**-**

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	NA
Next Review Date	28/04/2025
NSQC Clearance Date	28/04/2022

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
TEL/N2506.Preparing Workspace for Assembly Operations	30	55	-	15	100	17
TEL/N2507.Assembly Operations in Production Line	25	60	-	15	100	17
TEL/N2508.ESD Safe Procedures and Practices	30	55	-	15	100	17
TEL/N9101.Organize Work and Resources as per Health and Safety Standards	30	60	-	10	100	17
TEL/N9102.Interact Effectively with Team Members and Customers	25	65	-	10	100	17
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	-	-	50	15
Total	**160**	**325**	**-**	**65**	**550**	**100**

Acronyms

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

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.

![Telecom Sector Skill Council]

सत्यमेव जयते
GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP
Qualification Pack

![NSDC National Skill Development Corporation]
Transforming the skill landscape

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.