Qualification Pack

Smart Devices Installation Operator

QP Code: TEL/Q6102

Version: 3.0

NSQF Level: 4

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Qualification Pack

TEL/Q6102: Smart Devices Installation Operator

Brief Job Description

The Smart Devices Installation Operator is responsible for the installation, configuration, and basic troubleshooting of smart devices in residential, commercial, or industrial settings. The role involves interpreting installation plans, following safety procedures, and ensuring connectivity and optimal functioning of smart systems. The operator works closely with clients and technical teams to ensure seamless deployment and customer satisfaction. All activities must comply with prescribed quality and operational standards.

Personal Attributes

The individual in this role should be attentive to detail, safety-conscious, and have a problem-solving attitude. They should demonstrate patience, adaptability, and a willingness to learn new technologies. The individual should also have good hand-eye coordination and the ability to work independently or as part of a team.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. TEL/N6615: Prepare for Installation of Smart Devices
2. TEL/N6616: Install Smart Platform as per Business Requirement
3. TEL/N6612: Perform Cloud Testing and Resolve Bugs in Telecom Applications
4. TEL/N9101: Organise Work and Resources as per Health and Safety Standards
5. TEL/N9102: Interact Effectively with Team Members and Customers
6. DGT/VSQ/N0101: Employability Skills (30 Hours)

Qualification Pack (QP) Parameters

Sector	Telecom
Sub-Sector	Network Managed Services
Occupation	Network (Active Components Installation)
Country	India

Qualification Pack

NSQF Level	4
Credits	14
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7421.6102
Minimum Educational Qualification & Experience	12th grade Pass OR Completed 3 year diploma after 10th OR Previous relevant Qualification of NSQF Level (3.5) with 1.5 years of experience relevant experience OR Previous relevant Qualification of NSQF Level (3.0) with 3 Years of experience relevant experience
Minimum Level of Education for Training in School	12th Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	30/06/2028
NSQC Approval Date	19/08/2025
Version	3.0
Reference code on NQR	QG-03-TL-00463-2025-V2-TSSC
NQR Version	2

Qualification Pack

TEL/N6615: Prepare for Installation of Smart Devices

Description

This OS covers the skills and knowledge required to analyse customer requirements, collect relevant data, and design appropriate smart device installation solutions for optimal functionality at the customer's premises.

Scope

The scope covers the following :

- Analyse customer requirements and environment
- Collect and review data for smart device installation
- Suggest solution options to the customer

Elements and Performance Criteria

Analyse customer requirements and environment

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

PC1. interpret customer-provided technical specifications, including device type, data throughput, power requirements, and connectivity standards.

PC2. identify and document smart device functionalities requested by the customer, such as predictive alerts, voice command responsiveness, or real-time monitoring.

PC3. conduct site feasibility assessments including structural compatibility, network availability (LAN/WAN/IoT protocols), and power sources.

PC4. verify location-specific environmental constraints such as interference sources, ambient temperature, and physical obstructions.

PC5. assess customer’s existing hardware ecosystem (e.g., routers, sensors, hubs) for compatibility with proposed smart devices.

PC6. report any site-level technical issues or constraints to the supervisor.

Collect and review data for smart device installation

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

PC7. collect operational datasets such as workflow patterns, device usage statistics, sensor inputs, and legacy system logs.

PC8. validate collected data against technical benchmarks to determine latency tolerance, bandwidth needs, and device capacity limits.

PC9. collect performance data and reports of existing devices (e.g., sensors, biometrics, etc.) if any, installed at the premises.

PC10. identify anomalies or inconsistencies in historical performance or failure logs that impact device integration.

PC11. record data formats, transmission protocols (e.g., MQTT, Zigbee, Bluetooth Mesh), and existing communication layers.

PC12. collate and structure data to support smart device configuration and parameter tuning.

Suggest solution options to the customer

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

PC13. analyse customer's business processes and automation requirements to recommend suitable smart device applications (e.g., facial recognition for access control, sensor-based automation).

PC14. map customer KPIs (e.g., energy savings, surveillance coverage, asset uptime) with smart device capabilities and integration endpoints.

PC15. explain standard smart device features and use-cases (e.g., motion detection, voice activation) to the customer.

PC16. suggest appropriate placement or usage scenarios for smart devices, based on customer environment and supervisor direction.

PC17. recommend devices that address common customer needs like remote monitoring, home automation, or energy management.

PC18. communicate predefined smart device use-case benefits (e.g., safety alerts, appliance control) to customers in simple terms.

PC19. respond to basic customer queries about smart device functionality using product manuals or FAQs.

PC20. assist customers in visualizing and explaining the recommended device layout using printed diagrams or app-based interfaces.

PC21. document final solution architecture with detailed block diagrams, device lists, and logical data workflows for customer validation.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. common types of smart devices used in telecom and smart environments (e.g., smart cameras, voice assistants, automation sensors).

KU2. functional architecture and technical capabilities of smart edge and IoT devices (e.g., smart cameras, smart sensors, voice assistants).

KU3. parameters for evaluating site readiness, such as signal strength (RSSI), data packet loss, and electrical safety compliance.

KU4. company formats and checklists used for pre-installation assessment.

KU5. basics of smart device integration in real-world applications such as smart home control, predictive maintenance, and security surveillance.

KU6. protocols and standards used in device-to-device and device-to-cloud communication (e.g., HTTP, CoAP, LoRaWAN, 5G NR).

KU7. methods for analyzing structured and unstructured data from customer environments (e.g., JSON logs, CSV exports, sensor metadata).

KU8. techniques for identifying optimization needs based on customer KPIs such as downtime reduction, automation efficiency, or user engagement.

KU9. importance of data security, encryption, and privacy compliance (e.g., data residency, consent, audit logs) during smart device solution design.

KU10. process for mapping user requirements to smart device capabilities using use-case modelling and device specification sheets.

KU11. application of basic networking concepts such as IP addressing, subnetting, and DHCP in device installation scenarios.

KU12. standard tools and diagnostic utilities used for signal testing, protocol sniffing, and network mapping.

KU13. techniques for creating basic solution design documents, block diagrams, and configuration manuals.

KU14. process for logging customer preferences, device compatibility, and installation feedback.

KU15. awareness of confidentiality and data privacy while handling customer environments.

Generic Skills (GS)

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

GS1. communicate clearly and professionally with customers, supervisor and team members.

GS2. apply basic numerical skills for measuring, comparing, and evaluating data.

GS3. interpret technical instructions and customer specifications.

GS4. organize tasks and manage time effectively to meet installation schedules.

GS5. work collaboratively with team members during site assessments.

GS6. maintain accuracy and attention to detail while documenting information.

GS7. adapt to changing customer requirements and evolving technologies.

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Analyse customer requirements and environment	**16**	**13**	**-**	**3**
PC1. interpret customer-provided technical specifications, including device type, data throughput, power requirements, and connectivity standards.	3	2	-	1
PC2. identify and document smart device functionalities requested by the customer, such as predictive alerts, voice command responsiveness, or real-time monitoring.	3	2	-	1
PC3. conduct site feasibility assessments including structural compatibility, network availability (LAN/WAN/IoT protocols), and power sources.	3	3	-	1
PC4. verify location-specific environmental constraints such as interference sources, ambient temperature, and physical obstructions.	3	2	-	-
PC5. assess customer's existing hardware ecosystem (e.g., routers, sensors, hubs) for compatibility with proposed smart devices.	2	2	-	-
PC6. report any site-level technical issues or constraints to the supervisor.	2	2	-	-
Collect and review data for smart device installation	**20**	**11**	**-**	**3**
PC7. collect operational datasets such as workflow patterns, device usage statistics, sensor inputs, and legacy system logs.	5	2	-	-
PC8. validate collected data against technical benchmarks to determine latency tolerance, bandwidth needs, and device capacity limits.	5	2	-	-
PC9. collect performance data and reports of existing devices (e.g., sensors, biometrics, etc.) if any, installed at the premises.	5	2	-	1
PC10. identify anomalies or inconsistencies in historical performance or failure logs that impact device integration.	2	2	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. record data formats, transmission protocols (e.g., MQTT, Zigbee, Bluetooth Mesh), and existing communication layers.	2	1	-	1
PC12. collate and structure data to support smart device configuration and parameter tuning.	1	2	-	1
Suggest solution options to the customer	**14**	**16**	**-**	**4**
PC13. analyse customer's business processes and automation requirements to recommend suitable smart device applications (e.g., facial recognition for access control, sensor-based automation).	2	1	-	1
PC14. map customer KPIs (e.g., energy savings, surveillance coverage, asset uptime) with smart device capabilities and integration endpoints.	2	1	-	1
PC15. explain standard smart device features and use-cases (e.g., motion detection, voice activation) to the customer.	3	1	-	-
PC16. suggest appropriate placement or usage scenarios for smart devices, based on customer environment and supervisor direction.	1	1	-	-
PC17. recommend devices that address common customer needs like remote monitoring, home automation, or energy management.	1	1	-	1
PC18. communicate predefined smart device use-case benefits (e.g., safety alerts, appliance control) to customers in simple terms.	1	2	-	1
PC19. respond to basic customer queries about smart device functionality using product manuals or FAQs.	1	2	-	-
PC20. assist customers in visualizing and explaining the recommended device layout using printed diagrams or app-based interfaces.	1	2	-	-
PC21. document final solution architecture with detailed block diagrams, device lists, and logical data workflows for customer validation.	2	5	-	-
NOS Total	**50**	**40**	**-**	**10**

National Occupational Standards (NOS) Parameters

NOS Code	TEL/N6615
NOS Name	Prepare for Installation of Smart Devices
Sector	Telecom
Sub-Sector	
Occupation	Data Handling – Network Managed Services
NSQF Level	4
Credits	3
Version	1.0
Last Reviewed Date	19/08/2025
Next Review Date	30/06/2028
NSQC Clearance Date	19/08/2025

TEL/N6616: Install Smart Platform as per Business Requirement

Description

This OS covers the skills and knowledge required to assist in planning and executing preventive and predictive maintenance, conducting diagnostics, troubleshooting faults, and optimizing the performance of smart devices integrated into customer environments.

Scope

The scope covers the following :

- Perform predictive and preventive maintenance
- Troubleshoot faults in smart devices and run system health checks
- Maintain documentation and log incident requests
- Implement smart interfaces and virtual assistants

Elements and Performance Criteria

Perform pre-installation checks and preparation

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

PC1. inspect and verify the hardware against the Bill of Materials (BoM), including smart sensors, controllers, adaptors, mounting kits, and user manuals.

PC2. validate device model, firmware version, and compatibility with customer infrastructure and integration requirements.

Install smart devices as per business model requirements

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

PC3. identify mounting zones based on coverage needs, field-of-view angles, lighting conditions, and device range requirements (e.g., motion sensors, smart cameras).

PC4. recognize the components used in smart devices such as embedded processors, microcontrollers, and wireless communication modules.

PC5. identify microprocessor boards (e.g., Raspberry Pi, Arduino, ESP32) used at the site and validate their suitability for deployment.

PC6. assess the appropriate placement of environmental or occupancy sensors to meet business objectives like energy optimization or automated lighting.

PC7. use hand and power tools such as rotary drill, stud finder, and fish tape to mount devices on walls, ceilings, or partitions.

PC8. route and connect communication cables (e.g., Cat6, coaxial) into appropriate ports ensuring secure termination and minimal signal interference.

PC9. establish and verify power supply using adaptors or PoE switches, and test voltage output and grounding with a multimeter.

PC10. perform firmware updates via local interface or cloud console and verify checksums to ensure secure installation.

PC11. initiate device provisioning through mobile apps or web portals, configuring parameters like MAC address, IP settings, and firmware sync.

PC12. connect devices to cloud platforms (e.g., AWS IoT, Azure IoT, or proprietary systems) using valid SSID and credentials.

PC13. run diagnostics to verify smart features such as gesture recognition, environmental sensing, or command execution.

PC14. test responsiveness of actuators and sensors using loopback commands, ping tests, and API calls.

PC15. align visual devices like IP cameras or smart displays ensuring coverage for surveillance or facial/gesture control use cases.

PC16. check wireless signal strength using tools (e.g., NetSpot, WiFi Analyzer) and ensure optimal connectivity with minimal loss.

PC17. install add-ons like weatherproof covers, filters, or enclosures based on the deployment environment.

PC18. verify performance of smart modules like temperature, humidity, accelerometer, gyroscope, and ensure data accuracy.

PC19. conduct field tests for real-time functionality like motion-triggered alerts, voice control, or remote switching operations.

Perform routing and document smart device installation

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

PC20. lay structured cabling for power and data as per standards, ensuring segregation, safe routing, secure fastening, proper labeling, and inspection for damage, grounding issues, or missing surge protection.

PC21. capture geotagged photos of installed devices, annotate them on digital layouts, and conduct a final walkthrough with the customer and supervisor to verify installation quality and compliance with the design plan.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. principles of smart predictive maintenance including statistical anomaly detection, trend analysis, and supervised learning for fault prediction.

KU2. types of data collected by sensors (e.g., temperature, vibration, acoustic, motion) and how this data is processed by edge smart devices.

KU3. embedded hardware platforms commonly used in smart platform installations (e.g., Raspberry Pi 4, Jetson Nano, STM32 controllers) and their diagnostic ports.

KU4. basic communication protocols such as MQTT, CoAP, LoRa, and Zigbee and their role in real-time device monitoring and diagnostics.

KU5. importance and methods of real-time data validation using device log analyzers, buffer overflow detection, and data integrity checks.

KU6. calibration techniques for smart sensors (e.g., gyroscopes, humidity sensors, proximity detectors) and the significance of threshold tuning.

KU7. common smart dashboard features such as fault prediction graphs, CPU/GPU load metrics, battery state of health (SOH), and device usage maps.

KU8. typical failure modes in smart platforms, such as thermal throttling, memory leaks, inference model stalling, and cloud sync failures.

KU9. diagnostic software and command-line tools (e.g., dmesg, i2cdetect, journalctl, syslog) used for fault tracing.

KU10. use of CMMS tools and ticketing platforms to log incidents, schedule maintenance, and track asset health over time.

KU11. standard escalation protocols and severity classification for maintenance issues in smart devices.

KU12. structured cabling standards (e.g., TIA-568, IS/IEC 60364-5-52), cable types, segregation practices, labeling methods, and safety considerations for routing near interference sources or power lines.

KU13. tools and digital platforms used for documenting installations, including geotagging, layout annotation apps, and procedures for conducting walkthroughs and validating installation against design specifications.

Generic Skills (GS)

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

GS1. communicate clearly with customers to explain device function, status of installation, and basic operations.

GS2. interpret structured instructions and layout diagrams provided by supervisors or manuals.

GS3. solve basic installation issues like device non-responsiveness or cable misrouting using standard procedures.

GS4. use basic arithmetic and measurements for determining distances, mounting angles, or cable lengths.

GS5. manage time effectively to complete installation within the allocated visit schedule.

GS6. adapt to minor contextual changes such as different wall surfaces or alternate device locations.

GS7. maintain a positive, helpful attitude during customer interaction and feedback handling.

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Perform pre-installation checks and preparation	**5**	**6**	**-**	**1**
PC1. inspect and verify the hardware against the Bill of Materials (BoM), including smart sensors, controllers, adaptors, mounting kits, and user manuals.	2	3	-	-
PC2. validate device model, firmware version, and compatibility with customer infrastructure and integration requirements.	3	3	-	1
Install smart devices as per business model requirements	**23**	**49**	**-**	**8**
PC3. identify mounting zones based on coverage needs, field-of-view angles, lighting conditions, and device range requirements (e.g., motion sensors, smart cameras).	2	2	-	1
PC4. recognize the components used in smart devices such as embedded processors, microcontrollers, and wireless communication modules.	2	2	-	1
PC5. identify microprocessor boards (e.g., Raspberry Pi, Arduino, ESP32) used at the site and validate their suitability for deployment.	2	3	-	-
PC6. assess the appropriate placement of environmental or occupancy sensors to meet business objectives like energy optimization or automated lighting.	1	3	-	1
PC7. use hand and power tools such as rotary drill, stud finder, and fish tape to mount devices on walls, ceilings, or partitions.	-	3	-	-
PC8. route and connect communication cables (e.g., Cat6, coaxial) into appropriate ports ensuring secure termination and minimal signal interference.	-	3	-	1
PC9. establish and verify power supply using adaptors or PoE switches, and test voltage output and grounding with a multimeter.	-	3	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. perform firmware updates via local interface or cloud console and verify checksums to ensure secure installation.	1	3	-	1
PC11. initiate device provisioning through mobile apps or web portals, configuring parameters like MAC address, IP settings, and firmware sync.	2	3	-	-
PC12. connect devices to cloud platforms (e.g., AWS IoT, Azure IoT, or proprietary systems) using valid SSID and credentials.	2	3	-	-
PC13. run diagnostics to verify smart features such as gesture recognition, environmental sensing, or command execution.	2	3	-	-
PC14. test responsiveness of actuators and sensors using loopback commands, ping tests, and API calls.	1	3	-	1
PC15. align visual devices like IP cameras or smart displays ensuring coverage for surveillance or facial/gesture control use cases.	2	3	-	-
PC16. check wireless signal strength using tools (e.g., NetSpot, WiFi Analyzer) and ensure optimal connectivity with minimal loss.	1	3	-	1
PC17. install add-ons like weatherproof covers, filters, or enclosures based on the deployment environment.	2	3	-	-
PC18. verify performance of smart modules like temperature, humidity, accelerometer, gyroscope, and ensure data accuracy.	1	3	-	-
PC19. conduct field tests for real-time functionality like motion-triggered alerts, voice control, or remote switching operations.	2	3	-	1
Perform routing and document smart device installation	**2**	**5**	**-**	**1**
PC20. lay structured cabling for power and data as per standards, ensuring segregation, safe routing, secure fastening, proper labeling, and inspection for damage, grounding issues, or missing surge protection.	-	3	-	1

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC21. capture geotagged photos of installed devices, annotate them on digital layouts, and conduct a final walkthrough with the customer and supervisor to verify installation quality and compliance with the design plan.	2	2	-	-
NOS Total	**30**	**60**	**-**	**10**

National Occupational Standards (NOS) Parameters

NOS Code	TEL/N6616
NOS Name	Install Smart Platform as per Business Requirement
Sector	Telecom
Sub-Sector	
Occupation	Network (Active Components Installation)
NSQF Level	4
Credits	4
Version	1.0
Last Reviewed Date	19/08/2025
Next Review Date	30/06/2028
NSQC Clearance Date	19/08/2025

TEL/N6612: Perform Cloud Testing and Resolve Bugs in Telecom Applications

Description

The OS involves cloud-based testing of applications, identifying defects, and fixing them. The individual must collaborate with developers and IT teams to prioritize, address, and resolve defects efficiently while maintaining quality standards.

Scope

The scope covers the following :

- Requirement Understanding and Planning
- Cloud environment setup and configuration
- Security and compliance
- Cloud testing execution and bug identification
- Bug fixing and defect resolution
- Post-testing validation and reporting

Elements and Performance Criteria

Requirement understanding and planning

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

PC1. interpret telecom software or application testing requirements and select appropriate cloud platforms and test environments in coordination with development and operations teams.

PC2. configure cloud-native testing tools and validate connectivity with virtualized infrastructure and telecom-grade services such as OSS/BSS and SD-WAN platforms.

PC3. define the suitable testing approach and methodology based on the cloud service model (IaaS, PaaS, SaaS).

PC4. work with development and DevOps teams to clarify system architecture and identify potential cloud deployment challenges.

Cloud environment setup and configuration

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

PC5. provision and configure the cloud platforms (e.g., AWS, Azure, Google Cloud) necessary for testing, ensuring resource availability and test coverage.

PC6. configure essential system components (e.g., OS, middleware, databases, application dependencies) based on defined specifications.

PC7. set up and integrate test automation tools such as Selenium, JMeter, and Postman into the CI/CD pipelines.

PC8. validate network connectivity and synchronization of data between the cloud testing environment and production-like systems.

Security and compliance

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

PC9. implement security measures such as access control, data encryption, and compliance with data privacy regulations in the cloud testing environment.

PC10. ensure that testing data is anonymized and complies with organizational and legal standards regarding data protection.

Cloud testing execution and bug identification

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

PC11. design test cases that address critical functional, performance, scalability, and security scenarios tailored to cloud environments.

PC12. execute smoke tests or sanity checks to validate environment readiness before comprehensive testing.

PC13. execute automated and manual test cases in the cloud environment to validate performance and functionality of telecom applications like VoLTE and 5G network functions.

PC14. identify, log, and coordinate resolution of bugs or issues, ensuring seamless integration of continuous testing in telecom DevOps workflows.

Bug fixing and defect resolution

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

PC15. work with developers and DevOps teams to resolve identified defects and bugs quickly while ensuring code integrity.

PC16. verify fixes by conducting re-testing to confirm defect resolution without introducing new issues.

PC17. perform regression testing to ensure that the application remains stable after bug fixes.

Post-testing validation and reporting

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

PC18. validate that cloud-based applications meet performance benchmarks and function correctly after the defect fixes are applied.

PC19. prepare detailed test reports including testing outcomes, bug fixes, and lessons learned, ensuring that results are communicated clearly to stakeholders.

PC20. provide feedback and recommendations for improving the cloud application's architecture and testing processes.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. cloud platforms and services (AWS, Azure, GCP) and their role in testing and deployment.

KU2. cloud testing models (IaaS, PaaS, SaaS) and their application in different environments.

KU3. cloud application architecture and deployment patterns (e.g., microservices, containerization).

KU4. security practices for cloud environments, including data encryption, access controls, and compliance with regulations such as GDPR.

KU5. automation tools (Katalon Studio, Rest Assured, Telerik Test Studio) and their integration into CI/CD pipelines for continuous testing.

KU6. cloud-specific testing strategies (functional, load, stress, scalability) and tools used to execute these tests.

KU7. best practices in bug tracking and defect management, including using tools like Bugsee, MantisBT, or Trac.

KU8. techniques for regression testing and ensuring that fixes do not affect the overall system stability.

KU9. cloud application monitoring and diagnostic tools to detect and resolve issues during and after testing.

Generic Skills (GS)

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

GS1. read and write to follow work instructions and maintain records.

GS2. communicate effectively with team members and supervisors.

GS3. stay updated on gemstone processing techniques and industry trends.

GS4. manage time efficiently to meet production deadlines.

GS5. identify and solve problems related to gemstone defects and processing.

GS6. apply critical thinking to improve processing methods and quality.

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Requirement understanding and planning	**5**	**11**	**-**	**2**
PC1. interpret telecom software or application testing requirements and select appropriate cloud platforms and test environments in coordination with development and operations teams.	1	3	-	1
PC2. configure cloud-native testing tools and validate connectivity with virtualized infrastructure and telecom-grade services such as OSS/BSS and SD-WAN platforms.	1	3	-	1
PC3. define the suitable testing approach and methodology based on the cloud service model (IaaS, PaaS, SaaS).	1	3	-	-
PC4. work with development and DevOps teams to clarify system architecture and identify potential cloud deployment challenges.	2	2	-	-
Cloud environment setup and configuration	**7**	**15**	**-**	**2**
PC5. provision and configure the cloud platforms (e.g., AWS, Azure, Google Cloud) necessary for testing, ensuring resource availability and test coverage.	2	4	-	-
PC6. configure essential system components (e.g., OS, middleware, databases, application dependencies) based on defined specifications.	2	4	-	1
PC7. set up and integrate test automation tools such as Selenium, JMeter, and Postman into the CI/CD pipelines.	2	4	-	1
PC8. validate network connectivity and synchronization of data between the cloud testing environment and production-like systems.	1	3	-	-
Security and compliance	**3**	**5**	**-**	**1**
PC9. implement security measures such as access control, data encryption, and compliance with data privacy regulations in the cloud testing environment.	2	3	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. ensure that testing data is anonymized and complies with organizational and legal standards regarding data protection.	1	2	-	1
Cloud testing execution and bug identification	**5**	**11**	**-**	**2**
PC11. design test cases that address critical functional, performance, scalability, and security scenarios tailored to cloud environments.	1	3	-	-
PC12. execute smoke tests or sanity checks to validate environment readiness before comprehensive testing.	1	3	-	1
PC13. execute automated and manual test cases in the cloud environment to validate performance and functionality of telecom applications like VoLTE and 5G network functions.	1	3	-	1
PC14. identify, log, and coordinate resolution of bugs or issues, ensuring seamless integration of continuous testing in telecom DevOps workflows.	2	2	-	-
Bug fixing and defect resolution	**4**	**9**	**-**	**1**
PC15. work with developers and DevOps teams to resolve identified defects and bugs quickly while ensuring code integrity.	1	2	-	1
PC16. verify fixes by conducting re-testing to confirm defect resolution without introducing new issues.	1	3	-	-
PC17. perform regression testing to ensure that the application remains stable after bug fixes.	2	4	-	-
Post-testing validation and reporting	**6**	**9**	**-**	**2**
PC18. validate that cloud-based applications meet performance benchmarks and function correctly after the defect fixes are applied.	2	3	-	1
PC19. prepare detailed test reports including testing outcomes, bug fixes, and lessons learned, ensuring that results are communicated clearly to stakeholders.	2	4	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC20. provide feedback and recommendations for improving the cloud application's architecture and testing processes.	2	2	-	1
NOS Total	**30**	**60**	**-**	**10**

National Occupational Standards (NOS) Parameters

NOS Code	TEL/N6612
NOS Name	Perform Cloud Testing and Resolve Bugs in Telecom Applications
Sector	Telecom
Sub-Sector	
Occupation	Data Handling – Network Managed Services
NSQF Level	4
Credits	4
Version	1.0
Last Reviewed Date	19/08/2025
Next Review Date	30/06/2028
NSQC Clearance Date	19/08/2025

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

Description

This OS covers the skills and knowledge required to organise work and resources efficiently while maintaining health, safety, hygiene, and environmental standards in the workplace.

Scope

The scope covers the following :

- Maintain an organised, productive, and digitally compliant workspace
- Adhere to health, safety, and environmental guidelines
- Conserve energy and manage resources efficiently
- Implement safe and sustainable waste disposal practices

Elements and Performance Criteria

Maintain an organised, productive, and digitally compliant workspace

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

PC1. maintain a clean, clutter-free, and ergonomically safe workspace aligned with 5S principles

PC2. follow designated workflow as per the organisational Standard Operating Procedures (SOPs)

PC3. digitally log work completed, including time stamps, material usage, and issues faced

PC4. track and update digital task checklists, inventories, or handovers through mobile/desktop apps

PC5. identify delays, workflow inefficiencies, or material constraints and escalate appropriately.

Adhere to health, safety, and environmental guidelines

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

PC6. comply with organisational health, safety, and environment (HSE) policies at all times

PC7. use personal protective equipment (PPE) such as ESD wrist straps, gloves, masks, and safety footwear

PC8. report any breaches in safety protocols, near misses, or unsafe practices immediately to supervisor/concerned authorities

PC9. detect hazards, including spillage, loose wiring, excessive noise, or EMI sources and respond as per SOP

PC10. follow lockout/tagout procedures when working around electrical or moving parts

PC11. adhere to safe lifting techniques, workstation posture norms, and equipment handling procedures

PC12. handle tools and heavy components using trolleys or assistive equipment when needed

PC13. identify early signs of physical or mental fatigue and report for preventive action

PC14. inform supervisor of symptoms related to communicable diseases or unsafe coworker behaviour.

Conserve energy and manage resources efficiently

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

PC15. minimise wastage of consumables, components, and materials by adhering to industry best practices

PC16. use electricity, lighting, and climate-control systems responsibly

PC17. power off equipment, tools, and terminals when not in use

PC18. ensure routine maintenance, cleaning, and calibration of machines/tools to improve performance

PC19. report leakages, overheating, or malfunctions immediately for rectification

PC20. use digital tools to monitor and reduce environmental footprint, where applicable.

Implement safe and sustainable waste disposal practices

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

PC21. segregate and dispose of hazardous, recyclable, and general waste as per guidelines

PC22. deposit e-waste or used batteries at designated collection points following e-waste protocols

PC23. follow ESD-safe disposal procedures for sensitive electronic components

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. organisational procedures for workplace management, task allocation, and quality assurance

KU2. applicable health, safety, and environmental policies as per national/international standards (e.g., ISO 45001, ISO 14001)

KU3. importance and application of the 5S methodology (Sort, Set in Order, Shine, Standardise, Sustain)

KU4. methods for digital documentation of work records, task sheets, and material movement logs

KU5. common workplace hazards (e.g., ESD, fire, electrical faults, trip hazards) and mitigation procedures

KU6. types and correct usage of PPE (e.g., gloves, goggles, ESD wrist straps, masks, safety shoes)

KU7. safe practices for lifting, bending, standing, and workstation ergonomics

KU8. first aid procedures for minor cuts, electric shocks, or workplace injuries

KU9. importance of maintaining hygiene and cleanliness in workstations, tools, and devices

KU10. indicators of equipment or machinery malfunction and escalation protocols

KU11. energy-saving practices applicable to lights, equipment, and HVAC systems

KU12. sustainable practices in material usage, including waste minimisation and recycling

KU13. types of waste: recyclable, non-recyclable, hazardous (e.g., batteries, solvents, e-waste)

KU14. correct procedures for the disposal of different types of waste in accordance with government and industry regulations (e.g., E-Waste Management Rules)

KU15. usage of digital tools (e.g., mobile apps, web portals, task boards) for productivity tracking

Generic Skills (GS)

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

GS1. read and interpret organisational procedures, safety protocols, labels, and warning signage

GS2. write clear and accurate reports/logs in paper or digital format regarding tasks performed, incidents, or issues

GS3. communicate effectively with peers and supervisors regarding workload, delays, hazards, or support required

GS4. listen attentively and follow safety instructions, tool handling techniques, or ergonomic guidelines

GS5. plan daily tasks by prioritising safety and quality over speed

GS6. identify and resolve minor operational problems independently, escalating only where necessary

GS7. work as part of a team to maintain cleanliness, safety, and quality standards in a shared workspace.

GS8. apply critical thinking to identify risks and recommend proactive safety measures.

GS9. foster a positive and responsible safety culture in the workplace.

GS10. stay updated on evolving safety standards and regulations.

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Maintain an organised, productive, and digitally compliant workspace	**6**	**13**	**-**	**2**
PC1. maintain a clean, clutter-free, and ergonomically safe workspace aligned with 5S principles	1	2	-	-
PC2. follow designated workflow as per the organisational Standard Operating Procedures (SOPs)	2	3	-	-
PC3. digitally log work completed, including time stamps, material usage, and issues faced	1	3	-	1
PC4. track and update digital task checklists, inventories, or handovers through mobile/desktop apps	1	3	-	-
PC5. identify delays, workflow inefficiencies, or material constraints and escalate appropriately.	1	2	-	-1
Adhere to health, safety, and environmental guidelines	**13**	**24**	**-**	**5**
PC6. comply with organisational health, safety, and environment (HSE) policies at all times	1	3	-	1
PC7. use personal protective equipment (PPE) such as ESD wrist straps, gloves, masks, and safety footwear	1	3	-	-
PC8. report any breaches in safety protocols, near misses, or unsafe practices immediately to supervisor/concerned authorities	2	2	-	1
PC9. detect hazards, including spillage, loose wiring, excessive noise, or EMI sources and respond as per SOP	1	3	-	1
PC10. follow lockout/tagout procedures when working around electrical or moving parts	2	3	-	-
PC11. adhere to safe lifting techniques, workstation posture norms, and equipment handling procedures	2	3	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. handle tools and heavy components using trolleys or assistive equipment when needed	1	3	-	1
PC13. identify early signs of physical or mental fatigue and report for preventive action	2	2	-	1
PC14. inform supervisor of symptoms related to communicable diseases or unsafe coworker behaviour.	1	2	-	-
Conserve energy and manage resources efficiently	**7**	**14**	**-**	**2**
PC15. minimise wastage of consumables, components, and materials by adhering to industry best practices	1	3	-	-
PC16. use electricity, lighting, and climate-control systems responsibly	1	3	-	-
PC17. power off equipment, tools, and terminals when not in use	1	2	-	-
PC18. ensure routine maintenance, cleaning, and calibration of machines/tools to improve performance	1	2	-	1
PC19. report leakages, overheating, or malfunctions immediately for rectification	2	2	-	1
PC20. use digital tools to monitor and reduce environmental footprint, where applicable.	1	2	-	-
Implement safe and sustainable waste disposal practices	**4**	**9**	**-**	**1**
PC21. segregate and dispose of hazardous, recyclable, and general waste as per guidelines	2	3	-	-
PC22. deposit e-waste or used batteries at designated collection points following e-waste protocols	1	3	-	-
PC23. follow ESD-safe disposal procedures for sensitive electronic components	1	3	-	1
NOS Total	**30**	**60**	**-**	**10**

National Occupational Standards (NOS) Parameters

NOS Code	TEL/N9101
NOS Name	Organise Work and Resources as per Health and Safety Standards
Sector	Telecom
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	1
Version	3.0
Last Reviewed Date	19/08/2025
Next Review Date	30/06/2028
NSQC Clearance Date	19/08/2025

TEL/N9102: Interact Effectively with Team Members and Customers

Description

This OS pertains to techniques to interact effectively with supervisors, team members, customers and promote inclusivity in the workplace.

Scope

The scope covers the following :

- Interact effectively with supervisors and stakeholders
- Collaborate effectively with team members and customers
- Promote inclusivity, respect, and accessibility in the workplace

Elements and Performance Criteria

Interact effectively with supervisors and stakeholders

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

PC1. receive and clarify work instructions, technical requirements, and priorities from supervisors or clients using appropriate communication tools (e.g., messaging apps, emails, virtual meetings)

PC2. inform supervisors or relevant stakeholders in a timely manner about any issues, risks, or deviations from planned tasks

PC3. contribute to team decisions by providing relevant data, suggestions, and professional feedback during team discussions

PC4. act promptly on constructive feedback and incorporate learnings to improve future work outcomes

Collaborate effectively with team members and customers

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

PC5. follow organisational norms and digital etiquette when working in hybrid or remote teams

PC6. communicate respectfully and effectively using face-to-face, phone, email, or collaboration platforms (e.g., MS Teams, Zoom)

PC7. seek clarification and respond to queries from customers and team members accurately and promptly

PC8. identify and de-escalate conflicts tactfully to maintain a productive and harmonious work environment

PC9. demonstrate emotional intelligence in team settings by recognising and responding to others' perspectives and emotional states

PC10. align personal efforts with team and organisational goals to ensure shared success.

Promote inclusivity, respect, and accessibility in the workplace

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

PC11. foster an inclusive workplace culture that respects gender, cultural, and socio-economic diversity

PC12. demonstrate respectful language and conduct toward colleagues and customers of all genders and backgrounds

PC13. support team members with disabilities by helping remove work-related barriers or by assisting them as needed

PC14. practice appropriate verbal and non-verbal communication while engaging with persons with disabilities (PwDs)

PC15. promote equal opportunity and participation for all in meetings, decision-making, and teamwork.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. organisational structure, hierarchy, and roles of team members, supervisors, and stakeholders

KU2. professional etiquette and expected behaviour in face-to-face, virtual, and telephonic interactions

KU3. importance of clear communication and active listening to ensure mutual understanding

KU4. common digital communication tools (e.g., email, chat apps, video conferencing platforms) used in workplace interactions

KU5. feedback mechanisms within the organisation and how to respond constructively to criticism

KU6. cultural sensitivities, unconscious biases, and the importance of inclusion and diversity in the workplace

KU7. principles of emotional intelligence and how they help in team coordination and customer service

KU8. challenges faced by Persons with Disabilities (PwDs) and inclusive practices for working with them

KU9. legal and organisational frameworks supporting equality, diversity, and anti-discrimination

KU10. methods for conflict prevention and resolution, including mediation and escalation

KU11. role of respect, trust, and open communication in team effectiveness and customer satisfaction

Generic Skills (GS)

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

GS1. read and interpret work instructions, emails, and policy documents related to workplace behaviour and communication.

GS2. write clear, concise emails, reports, or messages to team members, supervisors, or customers

GS3. communicate clearly and confidently in person, over the phone, and using digital communication platforms

GS4. adapt communication style based on the needs of the audience (e.g., customer, peer, supervisor, PwD)

GS5. listen attentively to gather information, understand perspectives, and clarify doubts.

GS6. prioritise tasks and allocate time effectively in coordination with team members

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Interact effectively with supervisors and stakeholders	**11**	**13**	**-**	**2**
PC1. receive and clarify work instructions, technical requirements, and priorities from supervisors or clients using appropriate communication tools (e.g., messaging apps, emails, virtual meetings)	3	3	-	-
PC2. inform supervisors or relevant stakeholders in a timely manner about any issues, risks, or deviations from planned tasks	2	3	-	-
PC3. contribute to team decisions by providing relevant data, suggestions, and professional feedback during team discussions	3	4	-	1
PC4. act promptly on constructive feedback and incorporate learnings to improve future work outcomes	3	3	-	1
Collaborate effectively with team members and customers	**16**	**21**	**-**	**4**
PC5. follow organisational norms and digital etiquette when working in hybrid or remote teams	3	4	-	1
PC6. communicate respectfully and effectively using face-to-face, phone, email, or collaboration platforms (e.g., MS Teams, Zoom)	3	3	-	1
PC7. seek clarification and respond to queries from customers and team members accurately and promptly	3	3	-	1
PC8. identify and de-escalate conflicts tactfully to maintain a productive and harmonious work environment	2	4	-	-
PC9. demonstrate emotional intelligence in team settings by recognising and responding to others' perspectives and emotional states	2	3	-	-
PC10. align personal efforts with team and organisational goals to ensure shared success.	3	4	-	1

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Promote inclusivity, respect, and accessibility in the workplace	**13**	**16**	**-**	**4**
PC11. foster an inclusive workplace culture that respects gender, cultural, and socio-economic diversity	3	3	-	1
PC12. demonstrate respectful language and conduct toward colleagues and customers of all genders and backgrounds	2	3	-	-
PC13. support team members with disabilities by helping remove work-related barriers or by assisting them as needed	3	4	-	1
PC14. practice appropriate verbal and non-verbal communication while engaging with persons with disabilities (PwDs)	2	3	-	1
PC15. promote equal opportunity and participation for all in meetings, decision-making, and teamwork.	3	3	-	1
NOS Total	**40**	**50**	**-**	**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	3.0
Last Reviewed Date	19/08/2025
Next Review Date	30/06/2028
NSQC Clearance Date	19/08/2025

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

Description

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

Scope

The scope covers the following :

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

Elements and Performance Criteria

Introduction to Employability Skills

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

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

Constitutional values – Citizenship

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

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

Becoming a Professional in the 21st Century

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

PC3. explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.

Basic English Skills

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

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

Communication Skills

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

PC5. follow good manners while communicating with others

PC6. work with others in a team

Diversity & Inclusion

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

PC7. communicate and behave appropriately with all genders and PwD

PC8. report any issues related to sexual harassment

Financial and Legal Literacy

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

PC9. use various financial products and services safely and securely

PC10. calculate income, expenses, savings etc.

PC11. approach the concerned authorities for any exploitation as per legal rights and laws

Essential Digital Skills

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

PC12. operate digital devices and use its features and applications securely and safely

PC13. use internet and social media platforms securely and safely

Entrepreneurship

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

PC14. identify and assess opportunities for potential business

PC15. identify sources for arranging money and associated financial and legal challenges

Customer Service

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

PC16. identify different types of customers

PC17. identify customer needs and address them appropriately

PC18. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

PC19. create a basic biodata

PC20. search for suitable jobs and apply

PC21. identify and register apprenticeship opportunities as per requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. need for employability skills

KU2. various constitutional and personal values

KU3. different environmentally sustainable practices and their importance

KU4. Twenty first (21st) century skills and their importance

KU5. how to use basic spoken English language

KU6. Do and dont of effective communication

KU7. inclusivity and its importance

KU8. different types of disabilities and appropriate communication and behaviour towards PwD

KU9. different types of financial products and services

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

Generic Skills (GS)

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

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

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	**1**	**1**	**-**	**-**
PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
Constitutional values – Citizenship	**1**	**1**	**-**	**-**
PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	**1**	**3**	**-**	**-**
PC3. explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
Basic English Skills	**2**	**3**	**-**	**-**
PC4. speak with others using some basic English phrases or sentences	-	-	-	-
Communication Skills	**1**	**1**	**-**	**-**
PC5. follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team	-	-	-	-
Diversity & Inclusion	**1**	**1**	**-**	**-**
PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
Financial and Legal Literacy	**3**	**4**	**-**	**-**
PC9. use various financial products and services safely and securely	-	-	-	-

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

National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0101
NOS Name	Employability Skills (30 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	2
Credits	1
Version	1.0
Last Reviewed Date	07/10/2025
Next Review Date	07/10/2028
NSQC Clearance Date	07/10/2025

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
TEL/N6615.Prepare for Installation of Smart Devices	50	40	0	10	100	18
TEL/N6616.Install Smart Platform as per Business Requirement	30	60	0	10	100	18
TEL/N6612.Perform Cloud Testing and Resolve Bugs in Telecom Applications	30	60	0	10	100	18
TEL/N9101.Organise Work and Resources as per Health and Safety Standards	30	60	0	10	100	18
TEL/N9102.Interact Effectively with Team Members and Customers	40	50	0	10	100	18
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	10
Total	**200**	**300**	**-**	**50**	**550**	**100**

Acronyms

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

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.
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.

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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	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	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 specialisation in a job role. There may be multiple electives within a QP for each specialised 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.