

Qualification Pack



Network Cloud Junior Architect

QP Code: TEL/Q6215

Version: 3.0

NSQF Level: 4

Telecom || 3rd Floor, Plot No 126, Sector - 44
Gurgaon - 122003 || email:QAteam@tsscindia.com



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TEL/Q6215: Network Cloud Junior Architect

Brief Job Description

A Network Cloud Junior Architect looks into preparing and executing cloud-based application testing in telecom networks, especially within Software-Defined WAN (SD-WAN) environments. Responsibilities include setting up and maintaining cloud infrastructure using platforms like AWS, Azure, and GCP, configuring testing tools and environments, and ensuring compliance with security and data protection standards. The individual monitors performance, identifies and fixes defects, manages IT and network assets, and maintains inventory using open-source tools. They also coordinate with DevOps teams, optimize resource usage, and ensure documentation and reporting for telecom-grade cloud systems.

Personal Attributes

The job requires the individual to have good communication and interpersonal skills with outcome focused and customer centric approach and an eye for detail.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [TEL/N6279: Prepare for Cloud-Based Software or Application Testing in Telecom Networks](#)
2. [TEL/N6612: Perform Cloud Testing and Resolve Bugs in Telecom Applications](#)
3. [TEL/N6613: Maintain Cloud Infrastructure Components](#)
4. [TEL/N6614: Manage IT Infrastructure and Assets](#)
5. [TEL/N9101: Organise Work and Resources as per Health and Safety Standards](#)
6. [TEL/N9102: Interact Effectively with Team Members and Customers](#)
7. [DGT/VSQ/N0101: Employability Skills \(30 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Telecom
Sub-Sector	Network Managed Services
Occupation	Network Operation and Maintenance
Country	India

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NSQF Level	4
Credits	16
Aligned to NCO/ISCO/ISIC Code	NCO-2015/1330.6215
Minimum Educational Qualification & Experience	12th grade Pass OR Completed 2nd year of the 3-year diploma after 10 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) 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-04-TL-00468- 2025-V2 -TSSC
NQR Version	2

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TEL/N6279: Prepare for Cloud-Based Software or Application Testing in Telecom Networks

Description

This OS prepares software for cloud testing, including understanding requirements, setting up environments, configuring tools, validating connectivity, and ensuring security compliance. It coordinates with development teams, selects platforms, and plans scenarios.

Scope

The scope covers the following :

- Requirement Understanding and Planning
- Environment Setup and Configuration
- Security and Compliance
- Testing Preparation and Documentation
- Coordination and Communication

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.** consult with developers and DevOps teams to clarify application architecture and deployment parameters relevant to cloud testing.
- PC4.** determine suitable cloud testing models (IaaS, PaaS, SaaS) based on application type and objectives.

Environment Setup and Configuration

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

- PC5.** select and provision appropriate cloud platforms (e.g., AWS, Azure, GCP) for test execution, ensuring they meet the test coverage and budget requirements.
- PC6.** configure the testing environment including OS, middleware, databases, and application dependencies based on defined specifications.
- PC7.** install and configure required test automation tools (e.g., Katalon Studio, Rest Assured, Telerik Test Studio) and integrate them with CI/CD pipelines.
- PC8.** validate network connectivity, data synchronization, and service availability between test environment and production-like systems.

Security and Compliance

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

- PC9.** implement access control policies, encryption, and data privacy configurations for test environments as per organizational and regulatory standards.

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PC10. ensure testing data complies with data protection guidelines and anonymize sensitive information before test execution.

Testing Preparation and Documentation

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

PC11. design cloud-specific test cases and scripts addressing functionality, load, stress, and scalability scenarios.

PC12. verify environment readiness by executing smoke or sanity tests and fixing issues identified during test dry runs.

PC13. document cloud test setup, tool configurations, scripts, and user access for traceability and knowledge sharing.

Coordination and Communication

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

PC14. coordinate with cross-functional teams to align test environment configurations and schedules with development milestones.

PC15. communicate environment readiness, constraints, and requirements clearly to project stakeholders and update them on progress.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. basic concepts of cloud computing including deployment and service models (IaaS, PaaS, SaaS).

KU2. common cloud platforms (AWS, Azure, GCP) and their configurations for test environments.

KU3. tools and techniques for functional, performance, and security testing in a cloud setup.

KU4. importance of environment replication, data privacy, and compliance in cloud-based testing.

KU5. typical challenges in cloud testing such as latency, cost management, and test data control.

KU6. version control and CI/CD tools used in integrating automated cloud tests.

KU7. principles of safe handling of sensitive data during testing and role-based access control.

KU8. documentation standards, logs, and reporting practices for test readiness.

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.

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Requirement Understanding and Planning</i>	10	15	-	2
PC1. interpret telecom software or application testing requirements and select appropriate cloud platforms and test environments in coordination with development and operations teams.	3	4	-	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.	2	4	-	1
PC3. consult with developers and DevOps teams to clarify application architecture and deployment parameters relevant to cloud testing.	3	3	-	-
PC4. determine suitable cloud testing models (IaaS, PaaS, SaaS) based on application type and objectives.	2	4	-	-
<i>Environment Setup and Configuration</i>	9	17	-	4
PC5. select and provision appropriate cloud platforms (e.g., AWS, Azure, GCP) for test execution, ensuring they meet the test coverage and budget requirements.	2	4	-	1
PC6. configure the testing environment including OS, middleware, databases, and application dependencies based on defined specifications.	3	5	-	1
PC7. install and configure required test automation tools (e.g., Katalon Studio, Rest Assured, Telerik Test Studio) and integrate them with CI/CD pipelines.	2	5	-	1
PC8. validate network connectivity, data synchronization, and service availability between test environment and production-like systems.	2	3	-	1
<i>Security and Compliance</i>	4	8	-	2

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC9. implement access control policies, encryption, and data privacy configurations for test environments as per organizational and regulatory standards.	2	4	-	1
PC10. ensure testing data complies with data protection guidelines and anonymize sensitive information before test execution.	2	4	-	1
<i>Testing Preparation and Documentation</i>	5	13	-	1
PC11. design cloud-specific test cases and scripts addressing functionality, load, stress, and scalability scenarios.	2	5	-	-
PC12. verify environment readiness by executing smoke or sanity tests and fixing issues identified during test dry runs.	2	4	-	1
PC13. document cloud test setup, tool configurations, scripts, and user access for traceability and knowledge sharing.	1	4	-	-
<i>Coordination and Communication</i>	2	7	-	1
PC14. coordinate with cross-functional teams to align test environment configurations and schedules with development milestones.	1	4	-	-
PC15. communicate environment readiness, constraints, and requirements clearly to project stakeholders and update them on progress.	1	3	-	1
NOS Total	30	60	-	10

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National Occupational Standards (NOS) Parameters

NOS Code	TEL/N6279
NOS Name	Prepare for Cloud-Based Software or Application Testing in Telecom Networks
Sector	Telecom
Sub-Sector	
Occupation	Network Operation and Maintenance
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

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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:

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- 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.



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- 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.

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Requirement understanding and planning</i>	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	-	-
<i>Cloud environment setup and configuration</i>	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	-	-
<i>Security and compliance</i>	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	-	-

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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
<i>Cloud testing execution and bug identification</i>	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	-	-
<i>Bug fixing and defect resolution</i>	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	-	-
<i>Post-testing validation and reporting</i>	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	-	-

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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

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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
NSQF Clearance Date	19/08/2025

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TEL/N6613: Maintain Cloud Infrastructure Components

Description

The OS involves maintaining cloud infrastructure components for optimal performance, security, and scalability, ensuring efficient resource monitoring, addressing issues, and ensuring compliance with security standards.

Scope

The scope covers the following :

- Cloud Infrastructure Setup and Configuration
- Monitoring Cloud Infrastructure
- Optimizing Cloud Resources
- Ensuring Security and Compliance in Cloud Infrastructure
- Documentation and Reporting

Elements and Performance Criteria

Cloud infrastructure setup and configuration

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

- PC1.** select and provision cloud resources (virtual machines, storage, databases) using free cloud services available in India (e.g., AWS Free Tier, Google Cloud Free Tier, Azure Free Account).
- PC2.** configure network components such as VPCs, subnets, and firewalls using free cloud tools and resources.
- PC3.** set up cloud databases (e.g., MySQL, PostgreSQL) and storage services (e.g., AWS S3, Google Cloud Storage) for optimal application performance.
- PC4.** ensure the installation and configuration of necessary tools such as Kubernetes for container orchestration using free open-source tools.

Monitoring cloud infrastructure

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

- PC5.** implement cloud monitoring using free services like Prometheus (for metrics collection) and Grafana (for visualization).
- PC6.** monitor and maintain cloud-based virtual machines, containers, and orchestration systems supporting telecom workloads, ensuring high availability and performance.
- PC7.** perform routine updates, patches, and resource optimization to sustain services such as OSS/BSS, virtualized core network elements, and telco-grade applications.

Optimizing cloud resources

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

- PC8.** implement cost management strategies by monitoring and optimizing the utilization of cloud resources using AWS Cost Explorer (Free Tier) or Google Cloud Pricing Calculator.
- PC9.** perform regular resource optimization by analyzing underutilized resources and scaling cloud services up or down as necessary to ensure cost-efficiency.

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PC10. use Terraform (open-source) to automate infrastructure provisioning, scaling, and maintenance tasks to improve efficiency and reduce manual intervention.

Ensuring security and compliance in cloud infrastructure

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

PC11. implement basic security controls, such as encryption, firewall configurations, and access management using AWS IAM or Google Cloud IAM.

PC12. ensure compliance with data protection standards by implementing data encryption and anonymization in cloud storage using free tools.

PC13. use free vulnerability scanning tools, such as OpenVAS (open-source) or Nessus Essentials (free version), to identify security issues within the infrastructure.

Documentation and reporting

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

PC14. document infrastructure components, configurations, and changes made to the cloud environment for traceability and auditing purposes.

PC15. prepare and present reports on cloud resource usage, performance metrics, and optimization efforts to stakeholders using free tools like Google Docs or Markdown.

PC16. create troubleshooting logs and incident response documentation to ensure quick recovery in case of cloud infrastructure failures.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. cloud infrastructure components such as virtual machines, storage, networking, and databases.

KU2. free cloud services and their limitations in India (e.g., AWS Free Tier, Azure Free Account, Google Cloud Free Tier).

KU3. monitoring tools like Prometheus and Grafana, along with cloud-native monitoring solutions like AWS CloudWatch and Google Cloud Operations Suite.

KU4. security measures, including access control, data encryption, and firewall configurations, within cloud environments.

KU5. cost management tools and strategies to optimize the usage of cloud resources efficiently.

KU6. open-source tools such as Terraform for infrastructure as code (IaC) and automating cloud resource provisioning and management.

KU7. cloud data storage options and strategies for securing sensitive data within cloud services.

KU8. vulnerability scanning tools like OpenVAS and Nessus Essentials to assess and mitigate security risks in cloud environments.

KU9. best practices for documentation and incident reporting in cloud environments to ensure clarity and accountability.

Generic Skills (GS)

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

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



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- 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.

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Cloud infrastructure setup and configuration</i>	7	14	-	3
PC1. select and provision cloud resources (virtual machines, storage, databases) using free cloud services available in India (e.g., AWS Free Tier, Google Cloud Free Tier, Azure Free Account).	2	3	-	1
PC2. configure network components such as VPCs, subnets, and firewalls using free cloud tools and resources.	1	4	-	-
PC3. set up cloud databases (e.g., MySQL, PostgreSQL) and storage services (e.g., AWS S3, Google Cloud Storage) for optimal application performance.	2	4	-	1
PC4. ensure the installation and configuration of necessary tools such as Kubernetes for container orchestration using free open-source tools.	2	3	-	1
<i>Monitoring cloud infrastructure</i>	6	12	-	1
PC5. implement cloud monitoring using free services like Prometheus (for metrics collection) and Grafana (for visualization).	2	4	-	-
PC6. monitor and maintain cloud-based virtual machines, containers, and orchestration systems supporting telecom workloads, ensuring high availability and performance.	2	4	-	-
PC7. perform routine updates, patches, and resource optimization to sustain services such as OSS/BSS, virtualized core network elements, and telco-grade applications.	2	4	-	1
<i>Optimizing cloud resources</i>	5	12	-	2
PC8. implement cost management strategies by monitoring and optimizing the utilization of cloud resources using AWS Cost Explorer (Free Tier) or Google Cloud Pricing Calculator.	2	4	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC9. perform regular resource optimization by analyzing underutilized resources and scaling cloud services up or down as necessary to ensure cost-efficiency.	2	4	-	1
PC10. use Terraform (open-source) to automate infrastructure provisioning, scaling, and maintenance tasks to improve efficiency and reduce manual intervention.	1	4	-	1
<i>Ensuring security and compliance in cloud infrastructure</i>	6	12	-	2
PC11. implement basic security controls, such as encryption, firewall configurations, and access management using AWS IAM or Google Cloud IAM.	2	4	-	1
PC12. ensure compliance with data protection standards by implementing data encryption and anonymization in cloud storage using free tools.	2	4	-	-
PC13. use free vulnerability scanning tools, such as OpenVAS (open-source) or Nessus Essentials (free version), to identify security issues within the infrastructure.	2	4	-	1
<i>Documentation and reporting</i>	6	10	-	2
PC14. document infrastructure components, configurations, and changes made to the cloud environment for traceability and auditing purposes.	2	3	-	1
PC15. prepare and present reports on cloud resource usage, performance metrics, and optimization efforts to stakeholders using free tools like Google Docs or Markdown.	2	3	-	-
PC16. create troubleshooting logs and incident response documentation to ensure quick recovery in case of cloud infrastructure failures.	2	4	-	1
NOS Total	30	60	-	10

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National Occupational Standards (NOS) Parameters

NOS Code	TEL/N6613
NOS Name	Maintain Cloud Infrastructure Components
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

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TEL/N6614: Manage IT Infrastructure and Assets

Description

Manage Telecom IT Infrastructure and Network Assets

Scope

The scope covers the following :

- IT Asset Inventory Management
- Hardware and Software Installation and Configuration
- Infrastructure Monitoring and Maintenance
- Asset Security and Compliance
- Asset Lifecycle and Documentation

Elements and Performance Criteria

IT Asset Inventory Management

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

- PC1.** identify and categorize IT assets including hardware, software, licenses, and network components.
- PC2.** maintain inventory of telecom cloud and IT assets including hardware, virtualized infrastructure, licenses, and network services used in cloud-hosted environments.
- PC3.** assign and track asset allocation to employees or departments with appropriate access and usage records.
- PC4.** regularly audit and reconcile asset inventory records with actual asset conditions and update discrepancies.

Hardware and Software Installation and Configuration

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

- PC5.** install and configure computing devices including desktops, laptops, and network peripherals as per organizational needs.
- PC6.** deploy and configure software applications using organization-approved licensing models.
- PC7.** implement operating system setup, network configurations, and security patches using free tools such as PDQ Deploy Free, Clonezilla, or WSUS (for Windows updates).
- PC8.** perform hardware diagnostics and resolve issues related to devices like printers, routers, and projectors.

Infrastructure Monitoring and Maintenance

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

- PC9.** support field-level deployments and configuration updates for telecom cloud components, ensuring compliance with security and operational protocols.
- PC10.** apply preventive maintenance schedules to IT assets to reduce downtime and extend asset lifespan.
- PC11.** coordinate firmware and driver updates for hardware components to maintain compatibility and security.

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PC12. troubleshoot basic connectivity, OS, and hardware-related issues and escalate unresolved problems per SOPs.

Asset Security and Compliance

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

PC13. implement user access controls, endpoint protection, and device encryption using free tools like BitLocker, ClamAV, or Windows Defender.

PC14. maintain logs of asset access and ensure compliance with internal IT policies and data protection guidelines.

PC15. enforce software license compliance and ensure no unauthorized applications are installed.

PC16. isolate and report incidents related to asset theft, loss, or misuse.

Asset Lifecycle and Documentation

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

PC17. maintain records for asset procurement, assignment, return, repair, and disposal.

PC18. evaluate and recommend asset upgrades, replacements, or decommissioning based on usage and lifecycle stages.

PC19. generate reports on IT asset status, utilization, and performance for audits and management reviews.

PC20. ensure proper disposal of retired assets following environmental and e-waste regulations.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. types and components of IT infrastructure: hardware, software, network devices, and peripheral equipment.

KU2. open-source and free tools for IT asset management, configuration, and monitoring (e.g., Snipe-IT, Nagios, Zabbix).

KU3. procedures for secure installation, configuration, and updates of IT systems.

KU4. standards and best practices for inventory tracking, license management, and IT governance.

KU5. security protocols for asset protection, including antivirus, firewall, encryption, and access control.

KU6. incident reporting processes and response protocols for theft, data loss, or policy violations.

KU7. maintenance schedules and asset lifecycle management strategies.

KU8. legal and environmental regulations regarding IT asset disposal and data protection.

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.



Qualification Pack

- GS5.** identify and solve problems related to gemstone defects and processing.
- GS6.** apply critical thinking to improve processing methods and quality.

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>IT Asset Inventory Management</i>	6	12	-	3
PC1. identify and categorize IT assets including hardware, software, licenses, and network components.	1	3	-	1
PC2. maintain inventory of telecom cloud and IT assets including hardware, virtualized infrastructure, licenses, and network services used in cloud-hosted environments.	1	3	-	-
PC3. assign and track asset allocation to employees or departments with appropriate access and usage records.	2	3	-	1
PC4. regularly audit and reconcile asset inventory records with actual asset conditions and update discrepancies.	2	3	-	1
<i>Hardware and Software Installation and Configuration</i>	5	12	-	2
PC5. install and configure computing devices including desktops, laptops, and network peripherals as per organizational needs.	1	3	-	1
PC6. deploy and configure software applications using organization-approved licensing models.	2	3	-	-
PC7. implement operating system setup, network configurations, and security patches using free tools such as PDQ Deploy Free, Clonezilla, or WSUS (for Windows updates).	1	3	-	-
PC8. perform hardware diagnostics and resolve issues related to devices like printers, routers, and projectors.	1	3	-	1
<i>Infrastructure Monitoring and Maintenance</i>	7	12	-	2
PC9. support field-level deployments and configuration updates for telecom cloud components, ensuring compliance with security and operational protocols.	2	3	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. apply preventive maintenance schedules to IT assets to reduce downtime and extend asset lifespan.	2	3	-	1
PC11. coordinate firmware and driver updates for hardware components to maintain compatibility and security.	1	3	-	1
PC12. troubleshoot basic connectivity, OS, and hardware-related issues and escalate unresolved problems per SOPs.	2	3	-	-
<i>Asset Security and Compliance</i>	6	12	-	2
PC13. implement user access controls, endpoint protection, and device encryption using free tools like BitLocker, ClamAV, or Windows Defender.	1	3	-	1
PC14. maintain logs of asset access and ensure compliance with internal IT policies and data protection guidelines.	2	3	-	1
PC15. enforce software license compliance and ensure no unauthorized applications are installed.	1	3	-	-
PC16. isolate and report incidents related to asset theft, loss, or misuse.	2	3	-	-
<i>Asset Lifecycle and Documentation</i>	6	12	-	1
PC17. maintain records for asset procurement, assignment, return, repair, and disposal.	2	3	-	-
PC18. evaluate and recommend asset upgrades, replacements, or decommissioning based on usage and lifecycle stages.	2	3	-	-
PC19. generate reports on IT asset status, utilization, and performance for audits and management reviews.	1	3	-	1
PC20. ensure proper disposal of retired assets following environmental and e-waste regulations.	1	3	-	-
NOS Total	30	60	-	10

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	TEL/N6614
NOS Name	Manage IT Infrastructure and Assets
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

Qualification Pack

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

Qualification Pack

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:

Qualification Pack

- 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.

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain an organised, productive, and digitally compliant workspace</i>	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
<i>Adhere to health, safety, and environmental guidelines</i>	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	-	-

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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	-	-
<i>Conserve energy and manage resources efficiently</i>	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	-	-
<i>Implement safe and sustainable waste disposal practices</i>	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

Qualification Pack

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

Qualification Pack

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

Qualification Pack

- 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

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Interact effectively with supervisors and stakeholders</i>	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
<i>Collaborate effectively with team members and customers</i>	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

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Promote inclusivity, respect, and accessibility in the workplace</i>	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

Qualification Pack

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

Qualification Pack

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

Description

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

Scope

The scope covers the following :

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

Elements and Performance Criteria

Introduction to Employability Skills

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

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

Constitutional values - Citizenship

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

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

Becoming a Professional in the 21st Century

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

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

Basic English Skills

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

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

Communication Skills

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

PC5. follow good manners while communicating with others

PC6. work with others in a team

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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

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

Generic Skills (GS)

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

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

Qualification Pack

Assessment Criteria

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

Qualification Pack

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	-	-	-	-
<i>Essential Digital Skills</i>	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	-	-	-	-
<i>Entrepreneurship</i>	3	5	-	-
PC14. identify and assess opportunities for potential business	-	-	-	-
PC15. identify sources for arranging money and associated financial and legal challenges	-	-	-	-
<i>Customer Service</i>	2	2	-	-
PC16. identify different types of customers	-	-	-	-
PC17. identify customer needs and address them appropriately	-	-	-	-
PC18. follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship & Jobs</i>	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	-	-

Qualification Pack

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.

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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/N6279.Prepare for Cloud-Based Software or Application Testing in Telecom Networks	30	60	0	10	100	15
TEL/N6612.Perform Cloud Testing and Resolve Bugs in Telecom Applications	30	60	0	10	100	15
TEL/N6613.Maintain Cloud Infrastructure Components	30	60	0	10	100	15
TEL/N6614.Manage IT Infrastructure and Assets	30	60	0	10	100	15
TEL/N9101.Organise Work and Resources as per Health and Safety Standards	30	60	0	10	100	15
TEL/N9102.Interact Effectively with Team Members and Customers	40	50	0	10	100	15
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	10
Total	210	380	0	60	650	100

Qualification Pack

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

Qualification Pack

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.

Qualification Pack

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.

Qualification Pack

National Occupational Standard	NOS are occupational standards that apply uniquely in the Indian context.
Qualification 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	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.