



Model Curriculum

QP Name: ICT Network Infrastructure

QP Code: TEL/Qxxxx

QP Version: 1.0

NSQF Level: 4.5

Model Curriculum Version: 1.0

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Training Parameters

Sector	Telecom
Sub-Sector	Passive Infrastructure
Occupation	Network (Passive) Installation
Country	India
NSQF Level	4.5
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7422.0800
Minimum Educational Qualification and Experience	NA
Pre-Requisite License or Training	NA
Entry Age	16 to 25 Years
Last Reviewed On	NA
Next Review Date	
NSQC Approval Date	
QP Version	1.0
Model Curriculum Creation Date	
Model Curriculum Valid Up to Date	
Model Curriculum Version	1.0
Minimum Duration of the Course	510 hours
Maximum Duration of the Course	510 hours

Program Overview

This section summarizes the end objectives of the program along with its duration.

Training Outcomes

At the end of the program, the learner should have acquired the listed knowledge and skills to:

- Trainees will design and install network infrastructure, ensuring reliable connectivity.
- Trainees will select and install appropriate cables for different network systems.
- Trainees will integrate IoT/IIoT devices, leveraging AI, Big Data, and Cloud services.
- Trainees will perform maintenance, testing, and commissioning to ensure network reliability.
- Trainees will ensure strong network performance to prevent costly disruptions.

Compulsory Modules

The table lists the modules, their duration and mode of delivery.

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
TEL/N4209: Work organization and management NOS Version-1.0 NSQF Level- 4.5	10:00	20:00	00:00	-	30:00
Module 1: Work organization and management	10:00	20:00	00:00	-	30:00
TEL/N4210: Communication and interpersonal skills NOS Version-1.0 NSQF Level- 4.5	10:00	20:00	00:00	-	30:00
Module 2: Communication and interpersonal skills	10:00	20:00	00:00	-	30:00
TEL/N4211: Planning, Implementation, Management NOS Version-1.0 NSQF Level- 4.5	10:00	20:00	30:00	-	60:00
Module 3: Planning, Implementation, Management	10:00	20:00	30:00	-	60:00

TEL/N4212: Cabling and Installation NOS Version-1.0 NSQF Level- 4.5	10:00	20:00	60:00	-	90:00
Module 4: Cabling and Installation	10:00	20:00	60:00	-	90:00
TEL/N4213: Installation of optical fibre cabling system NOS Version-1.0 NSQF Level- 4.5	10:00	20:00	60:00	-	90:00
Module 5: Installation of optical fibre cabling system	10:00	20:00	60:00	-	90:00
TEL/N4214: Installation of copper cabling system NOS Version-1.0 NSQF Level-4.5	10:00	20:00	30:00	-	60:00
Module 6: Installation of copper cabling system	10:00	20:00	30:00	-	60:00
TEL/N4215: Wireless connectivity for IoT and IIOT applications NOS Version-1.0 NSQF Level-4.5	10:00	20:00	30:00	-	60:00
Module 7: Wireless connectivity for IoT and IIOT applications	10:00	20:00	30:00	-	60:00
TEL/N4216: Troubleshooting and ongoing maintenance NOS Version-1.0 NSQF Level-4.5	20:00	10:00	30:00	-	60:00
Module 8: Troubleshooting and ongoing maintenance	20:00	10:00	30:00	-	60:00
TEL/N4217: Measurement NOS Version No. 1 NSQF Level- 4.5	30:00	00:00	00:00	-	30:00
Module 9: Measurement	30:00	00:00	00:00	-	30:00
Total Duration	120:00	150:00	240:00	-	510:00

Module Details

Module 1: Work organization and management

Mapped to NOS: TEL/N4209, v1.0

Terminal Outcomes:

- develop a habit of ensuring safety in every aspect of their work, including the use of appropriate PPE and equipment safety protocols.

Duration: 10:00	Duration: 20:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
• Explain the importance of complying with health and safety standards, rules, and regulations in the workplace. • Describe relevant codes and standards that need to be adhered to within the industry. • Explain the need for using personal protective equipment (PPE) to mitigate Electrostatic Discharge (ESD) risks. • Identify different types of PPE and their appropriate usage. • Define the importance of work area planning and its effect on maximizing efficiency. • Analyze how regular scheduling and re-scheduling impact workplace productivity. • Explain the importance of industry certification and 'license to practice' in various countries. • Formulate strategies for continuing professional development (CPD) and staying up-to-date with certifications. • Explore new methods and systems to improve work processes. • Critique the benefits of embracing innovation and adopting new systems in work environments. • Demonstrate effective research methods for continuous learning and knowledge growth in the field.	• Demonstrate the correct selection, use, and removal of PPE in various scenarios. • Practice cleaning, maintaining, and safely storing tools and equipment after use. • Demonstrate safe practices while using ladders to access high work areas. • Arrange and tidy a workstation to improve workflow efficiency during a practical session. • Develop a practical schedule based on a set of tasks, and re-schedule as priorities shift in a real-time scenario.
Classroom Aids:	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
Digital planner or scheduling software, Organizational bins, trays, labels, cleaning supplies, Ladder, safety harness, Hand tools, cleaning materials, storage boxes, Gloves, safety glasses, hard hats, ESD protective gear.	

Module 2: Communication and interpersonal skills

Mapped to NOS: TEL/N4210, v1.0

Terminal Outcomes:

- Develop proficiency in project planning, including the preparation of construction plans, quotations, and conflict resolution within team environments.

Duration: 10:00	Duration: 20:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
• Understand and apply active listening techniques to interpret and analyze complex situations. • Demonstrate the ability to communicate effectively through verbal and written means, adapting to various professional contexts. • Recognize the elements that contribute to effective teamwork and describe methods to foster team collaboration. • Identify strategies for sharing knowledge and fostering a supportive learning culture within a professional team. • Analyze conflict resolution techniques and apply them in managing tensions and disputes to restore team confidence. • Explain the process of liaising with other professionals and suppliers to create tailored packages for clients. • Evaluate different components of construction plans and develop quotations for planned work. • Assess the sustainability aspects of cabling systems and explain the long-term environmental impacts.	• Prepare a construction plan and cost quotation based on provided case study data. • Simulate a scenario where cabling work must be completed with minimal disruption, assessing the impact on the environment. • Collaborate in small groups to create a project plan that integrates inputs from professionals across different areas. • Role-play conflict resolution scenarios in small teams to apply conflict management techniques. • Lead a short training session to share expertise on a relevant topic, ensuring peer understanding. • Participate in group activities to practice and reflect on effective team collaboration techniques. • Write and present a clear, concise report or email on a simulated project status. • Conduct interviews or role-play exercises to demonstrate questioning techniques that lead to deeper understanding in real-life scenarios.
Classroom Aids:	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
Computers with planning and project management software (e.g., AutoCAD, Excel, Trello), Cabling equipment (for practical cabling scenarios), Collaboration and presentation tools (PowerPoint, Whiteboard, Feedback forms), Role-playing materials (scripts, scenarios).	

Module 3: Planning, Implementation, Management

Mapped to NOS: TEL/N4211, v1.0

Terminal Outcomes:

- Demonstrate the ability to independently plan and execute a site survey and installation process while adhering to quality and safety standards.

Duration: 10:00	Duration: 20:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
• Recall the principles and criteria for best practices in site surveys. • Define key technical terms related to cabling media and manufacturers' instructions. • Explain how to plan and specify installations according to best practice criteria. • Discuss the importance of sustainability plans in system design and operations. • Apply knowledge to interpret and analyze complex technical drawings and specifications. • Use manufacturers' instructions to make appropriate selections for tools, systems, and cabling media. • Assess work sites to identify risks and minimize hazards. • Analyze building layouts to plan cable locations effectively, minimizing damage and ensuring aesthetic design. • Evaluate installations to ensure they meet the required quality specifications. • Evaluate sustainability in system life cycles and suggest improvements. • Design a comprehensive site safety plan and sustainability strategy for installation tasks. • Develop inventory control and labelling schemes to optimize the installation process.	• Demonstrate how to perform a site survey using site maps and basic surveying tools. • Use sample plans and technical drawings to select appropriate tools and cabling media for installation tasks. • Perform risk assessments on mock work sites to identify hazards and suggest preventive measures. • Analyze sample buildings and plan cable routes to minimize damage and ensure safety. • Conduct an inventory check of tools and equipment for a given task and develop a labelling scheme. • Evaluate the quality of installations based on set specifications in mock scenarios. • Review sustainability aspects in system life cycles through case studies.
Classroom Aids:	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
Site survey tools (e.g., measuring tape, levels, distance measuring devices), Technical drawing software or printed plans, Cabling media samples, Sample technical specifications and manuals, Label-making tools for inventory control, Safety equipment (e.g., helmets, gloves) for risk assessment simulations	

Module 4: Cabling and Installation

Mapped to NOS: TEL/N4212, v1.0

Terminal Outcomes:

- Demonstrate an understanding of post-installation procedures, including cleaning, labeling, and cable removal, ensuring that the site is functional and organized.

Duration: 10:00	Duration: 20:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
● Identify the cabling and installation requirements for generic cabling systems in different customer premises (offices, industries, homes, data centres, etc.) to ensure functionality and compliance with relevant standards. ● Explain the importance of pathway systems (cable trays, conduit, fibre channels) and the appropriate use in different environments (industrial, commercial, residential). ● Describe the key spaces (TR, ER, TE) and their function in establishing an effective structured cabling system. ● Select and justify the appropriate procedures for cable installation, based on system needs and environment constraints, ensuring minimal disruption. ● Summarize procedures for maintaining sustainability during the installation process, including reducing waste and resource management. ● Identify best practices in maintaining equipment and completing administration tasks related to cabling systems.	● Demonstrate how to pull cables within pathway systems, ensuring proper handling and minimal damage to cables and surroundings. ● Install rack cabinets, patch panels, and network equipment, ensuring compliance with design and functionality standards. ● Label all installed cables and equipment according to standards, ensuring clarity for future maintenance. ● Remove abandoned cables from installations, ensuring compliance with environmental standards. ● Perform cleaning and tidying of installation sites post-installation, ensuring compliance with client expectations.
Classroom Aids:	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
Cleaning materials, waste disposal tools, Cable cutters, wire strippers, safety gloves, Label printer, cable markers, Screwdrivers, cable testers, network analyzers, racks, patch panels, Cable pulling rods, fish tapes, wire pullers.	

Module 5: Installation of optical fibre cabling system

Mapped to NOS: TEL/N4213, v1.0

Terminal Outcomes:

- Install and maintain copper and fibre optic cabling systems, ensuring the application of industry standards.

Duration: 10:00	Duration: 20:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
• Describe the components of copper cabling systems, including Optical closure, Optical panel, Splice box, TO, and different types of cables (fibre, ribbon fibre, etc.). • Explain the methods used for splicing optical fibre cables, such as Fusion splicing, Mechanical splicing, and Optical connectors (including installable optical connectors). • Identify the appropriate tools and techniques for managing and maintaining optical fibre cable systems. • Select and justify the correct equipment for optical fibre cable installation based on the application (FTTH, PON, Access network, etc.). • Summarize the processes involved in installing optical fibre cabling systems and their application in telecommunications (FTTH, PON, Access network).	• Demonstrate the installation of components related to copper cabling systems such as Optical closure, Optical panel, and Splice box in a real-world setting. • Perform fusion splicing of optical fibre cables using appropriate splicing equipment. • Manage the optical fibre cabling system, including inspection and basic maintenance, within a classroom lab setup. • Assemble and terminate optical fibre connectors (both fusion and mechanical) and test the signal strength or quality using measurement devices. • Install optical fibre cabling systems and demonstrate their application in FTTH (Fibre to the Home) networks in a practical training environment.
Classroom Aids:	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
FTTH installation kit, Optical fibre cables, Splitters, PON (Passive Optical Network) equipment, Fusion splicer, Mechanical splicer, Optical connectors, Optical cable tester, OTDR (Optical Time-Domain Reflectometer), Visual fault locator, Optical fibre tester, Optical closure kits, Optical panels, Splice boxes, TO, Fibre cables, Fusion splicer, Optical fibres, Mechanical splitters, Optical connectors.	

Module 6: Installation of copper cabling system

Mapped to NOS: TEL/N4214, v1.0

Terminal Outcomes:

- Demonstrate in performing various types of cable terminations, ensuring reliable network performance.

Duration: 10:00	Duration: 20:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
• Explain the characteristics and applications of copper cabling systems, including U/UTP, S/FTP, F/UTP, and coaxial cables. • Identify the various components of a copper cabling system, such as 19-inch racks, panels, TOs (Telecommunication Outlets), and network equipment. • Distinguish between different types of copper cables and explain their appropriate use in different scenarios. • Describe the procedures for conducting IDC (Insulation Displacement Connector) terminations and the role of multi-pair, four-pair, and single-pair terminations. • Summarize the best practices for managing and maintaining copper cabling systems to ensure longevity and efficiency. • Justify the selection of tools and equipment used for copper cable installation and maintenance.	• Demonstrate the installation of copper cabling components, including the setup of 19-inch racks, panels, and network equipment. • Perform IDC terminations using appropriate tools on multi-pair, four-pair, and single-pair copper cables. • Terminate different types of copper cables (U/UTP, S/FTP, F/UTP) following standard practices. • Inspect and maintain installed copper cabling systems for faults and repair as necessary. • Prepare copper cables and related equipment for installation by cutting, stripping, and labeling them as per industry standards.
Classroom Aids:	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
Punch-down tool (for IDC terminations), Cable crimper, Wire cutters and strippers, Coaxial cable tool kit, 19-inch rack, patch panels, TOs (Telecommunication Outlets), Multi-meter and cable tester, Labeling equipment, Coaxial, U/UTP, S/FTP, and F/UTP cables	

Module 7: Wireless connectivity for IoT and IIOT applications

Mapped to NOS: TEL/N4215, v1.0

Terminal Outcomes:

- Demonstrate proficiency in wireless system installation and configuration

Duration: 10:00	Duration: 20:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
- Describe the components and principles of wireless networking. - Explain the key concepts of wireless security protocols and their importance in network configuration. - Evaluate the different types of connectivity options available for smart homes/factories. - Discuss the interoperability of smart devices within a home/factory ecosystem. - Identify factors affecting wireless network performance and coverage. - Analyze data from network surveys to determine optimal configurations. - Discuss the functionality and application of various smart technologies in home and industrial settings. - Explain the integration of smart applications with existing systems. - Analyze the types of security systems available and their applicability in different scenarios. - Explain the importance of cybersecurity measures in protecting smart devices. - Define IoT/IIoT and their roles in modern environments. - Discuss the challenges and ethical considerations associated with IoT deployment.	- Successfully set up a wireless network using real hardware and software tools. - Demonstrate the ability to troubleshoot common wireless connectivity issues. - Conduct a hands-on installation of smart devices in a classroom or laboratory setting. - Configure a smart hub to manage multiple devices. - Execute a real wireless site survey using tools to measure signal strength and coverage. - Document findings and recommend improvements based on survey results. - Install and configure smart applications on devices in a controlled environment. - Connect and control smart devices using the configured applications. - Install and configure a security camera system and demonstrate its functionalities. - Conduct a hands-on setup of alarm systems and discuss their integration with smart devices. - Set up IoT devices and demonstrate their functionality in a live environment. - Connect IoT devices to a cloud service for data management and analytics.
Classroom Aids:	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
Tools, Equipment and Other Requirements	
Wireless routers, laptops, network testing tools (e.g., Wireshark), Smart hub, IoT devices (smart bulbs, sensors), configuration software, Signal strength meters, survey software (e.g., Ekahau), Smartphones/tablets, smart devices (e.g., thermostats, cameras), Security cameras, alarm systems, monitoring software, IoT devices (sensors, actuators), cloud platforms (e.g., AWS IoT, Azure IoT)	

Module 8: Troubleshooting and ongoing maintenance

Mapped to NOS: TEL/N4216, v1.0

Terminal Outcomes:

- Demonstrate Proficiency in Fault Diagnosis and Repair

Duration: 10:00	Duration: 20:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
• Explain the common system faults and their symptoms. • Discuss the methodologies for locating and diagnosing faults in cabling systems. • Describe the procedures for rectifying faults in cabling systems. • Summarize the best practices for cable repair and replacement. • Illustrate the differences between optical fiber and copper cabling. • Analyze the situations where each type of cabling is most effective. • Assess various methods for troubleshooting Wi-Fi networks and their effectiveness. • Explain the importance of thorough documentation and record-keeping in troubleshooting processes. • Explain how system updates can address emerging business needs and improve efficiency. • Discuss effective strategies for providing guidance to users regarding system features and limitations.	• Perform fault diagnosis on real-world cabling systems using diagnostic tools. • Rectify identified faults in cabling systems under supervision. • Execute the replacement of optical fiber and copper cabling in a classroom setup. • Demonstrate proper installation techniques for different types of cabling. • Perform hands-on troubleshooting of Wi-Fi networks, identifying common issues and implementing solutions. • Document troubleshooting steps and outcomes using log sheets. • Complete fault-finding log sheets accurately and clearly for various scenarios. • Develop user guidance documentation based on system features and limitations.
Classroom Aids:	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
Tools, Equipment and Other Requirements	
Cable testers, Multimeters, Diagnostic software, Cable crimping tools, Fiber optic splicing tools, Safety equipment (gloves, goggles), Wi-Fi analyzers, Network configuration tools, Log sheet templates, Word processing software, Templates for documentation, Recording devices for feedback	

Module 9: Measurement

Mapped to NOS: TEL/N4217, v1.0

Terminal Outcomes:

- Demonstrate Proficiency in Network Testing and Certification

Duration: 20:00	Duration: 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
• Explain the criteria for selecting appropriate test equipment for various networking tasks. • Describe the functions and specifications of different types of test equipment. • Summarize the components and standards of cabling systems. • Identify common issues related to cabling systems and their impact on network performance. • Differentiate between optical loss test set (OTLS) and optical time-domain reflectometer (OTDR) in terms of application and results interpretation. • Analyze the factors affecting optical fiber performance based on test results. • Critique the various types of cable/LAN testers and their effectiveness in certifying copper cables. • Assess the importance of proper cable certification in ensuring network reliability. • Discuss the standards for fiber optical connector end-faces and their impact on overall system performance. • Evaluate techniques for inspecting and certifying connector quality. • Describe the principles behind 802.11 wireless network performance optimization. • Identify common factors that affect wireless network performance.	• Demonstrate the selection and usage of appropriate test equipment for specific networking tasks. • Operate test equipment to gather performance data for cabling systems. • Perform hands-on inspections of cabling systems to identify potential issues and ensure compliance with standards. • Document the findings of cabling inspections and propose corrective actions. • Conduct certification tests on optical fiber cables using OTLS and OTDR, recording and analyzing the results. • Perform a comparative analysis of test results against industry standards. • Execute cable certification procedures using a cable/LAN tester, ensuring accurate readings. • Interpret and report on the certification outcomes, including troubleshooting any detected issues. • Use specialized tools to inspect and verify the quality of fiber optical connector end-faces, ensuring adherence to standards. • Document inspection results and recommend maintenance or replacement as necessary. • Implement optimization techniques for 802.11 wireless networks in a controlled environment, assessing the performance improvements. • Measure and report on network performance before and after optimization to demonstrate effectiveness.
Classroom Aids:	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
Tools, Equipment and Other Requirements	
Optical Loss Test Set (OTLS), Optical Time Domain Reflectometer (OTDR), Cable/LAN Tester, Fiber Inspection Microscope, Wireless Network Analyzer, Network Management Software	

Module 10: On-the-Job Training

Mapped to ICT Network Infrastructure

Mandatory Duration: 240:00

Recommended Duration: 00:00

Module Name: On-the-Job Training

Location: On Site

- Demonstrate compliance with health and safety standards and regulations in real work scenarios.
- Correctly select and utilize personal protective equipment, including ESD protection, in daily tasks.
- Perform hands-on inspections of cabling systems, identifying potential issues and ensuring compliance with safety standards.
- Execute certification tests for optical fiber and copper cables using appropriate testing equipment, documenting results accurately.
- Identify, locate, and rectify faults in cabling systems, demonstrating troubleshooting skills in real-time scenarios.
- Install and configure various cabling systems (copper and optical fiber), ensuring proper procedures are followed.
- Perform site surveys to assess installation requirements, ensuring compliance with best practices.
- Complete accurate labeling of systems and components for user information and guidance.
- Manage equipment maintenance schedules and complete necessary records and documentation in an organized manner.
- Engage with clients to provide expert advice on systems, features, and limitations, ensuring their needs are met.

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
Bachelor's degree	Information Technology, Telecommunications, Electrical Engineering	10	Eligible for ToT program	0	NA	Eligible for ToT program

Trainer Certification	
Domain Certification	Platform Certification
Job Role "ICT Network Infrastructure", "TEL/Q4204, v1.0", Minimum accepted score is 80%	Trainer is certified for the job role " Trainer (VET & SKILLS) "; mapped to Qualification Pack: - "MEP/Q2601, v2.0" with minimum 80% of score.

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	Specialization	Years	Specialization	
Bachelor's degree	IT/Telecommunications/EE	10				
Assessor Certification						
Domain Certification			Platform Certification			
Job Role "ICT Network Infrastructure", "TEL/Q4204, v1.0", Minimum accepted score is 80%.			Assessor is certified for the job role "Assessor (VET & SKILLS)"; mapped to Qualification Pack: - "MEP/Q2701, v2.0" with minimum 80% of score.			

Assessment Strategy

1. Assessment System Overview:

- Batches assigned to the assessment agencies for conducting the assessment on SDSM/SIP or email.
- Assessment agencies send the assessment confirmation to VTP/TC looping SSC.
- The assessment agency deploys the ToA certified Assessor for executing the assessment.
- SSC monitors the assessment process & records.

2. Testing Environment:

- Confirm that the centre is available at the same address as mentioned on SDMS or SIP.
- Check the duration of the training.
- Check the Assessment Start and End time to be as 10 a.m. and 5 p.m.
- If the batch size is more than 30, then there should be 2 Assessors.
- Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.
- Check the mode of assessment—Online (TAB/Computer) or Offline (OMR/PP).
- Confirm the number of TABs on the ground are correct to execute the Assessment smoothly.
- Check the availability of the Lab Equipment for the particular Job Role.

3. Assessment Quality Assurance levels / Framework:

- Question papers created by the Subject Matter Experts (SME).
- Question papers created by the SME verified by the other subject Matter Experts.
- Questions are mapped with NOS and PC.
- Question papers are prepared considering that level 1 to 3 are for the unskilled & semi- skilled individuals, and level 4 and above are for the skilled, supervisor & higher management.
- An assessor must be ToA certified & the trainer must be ToT Certified.
- The assessment agency must follow the assessment guidelines to conduct the assessment.

4. Types of evidence or evidence-gathering protocol:

- Time-stamped & geotagged reporting of the assessor from assessment location.
- Center photographs with signboards and scheme-specific branding.
- Biometric or manual attendance sheet (stamped by TP) of the trainees during the training period.
- Time-stamped & geotagged assessment (Theory + Viva + Practical) photographs & videos.

5. Method of verification or validation:

- A surprise visit to the assessment location.
- A random audit of the batch.
- Random audit of any candidate.

6. Method for assessment documentation, archiving, and access:

- Hard copies of the documents are stored.
- Soft copies of the documents & photographs of the assessment are uploaded / accessed from Cloud Storage.
- Soft copies of the documents & photographs of the assessment are stored in the Hard Drives.

References

Glossary

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

Acronyms and Abbreviations

Term	Description
NOS	National Occupational Standard (s)
NSQF	National Skills Qualifications Framework
OJT	On-the-job Training
QP	Qualifications Pack
PwD	People with Disability
PPE	Personal Protective Equipment