Model Curriculum

QP Name: Crane Operator – Port Terminals/CFS/ICD

(Electives – Rail Mounted Quay (RMQ) Crane/ Grab Ship Unloader (GSU) Crane/ Rubber Tyre Gantry (RTG) Crane)

QP Code: LSC/Q3702

QP Version: 1.0

NSQF Level: 4

Model Curriculum Version: 1.0

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Training Parameters

Sector	Logistics
Sub-Sector	Port Terminals, ICD and CFS
Occupation	Crane/Material Handling Equipment (MHE) operation
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/8343, 8344
Minimum Educational Qualification and Experience	12th grade Pass OR Completed 2nd year of the 3-year diploma after 10th OR 10th grade pass with 2 years of ITI OR 10th grade pass with 3 Years of experience in port operations OR Previous relevant Qualification of NSQF Level (3) with 3 Years of experience in port operations
Pre-Requisite License or Training	Light Motor Vehicle (LMV) license
Minimum Job Entry Age	18 years
Last Reviewed On	30/05/2024
Next Review Date	30/05/2027
NSQC Approval Date	30/05/2024
QP Version	1.0
Model Curriculum Creation Date	06/05/2024
Model Curriculum Valid Up to Date	30/05/2027
Model Curriculum Version	1.0
Minimum Duration of the Course	480
Maximum Duration of the Course	600

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 will be able to:

- Execute cargo handling operations using Material Handling Equipment (MHE), and associated equipment.
- Perform preventive and first line maintenance of MHE.
- Apply the necessary precautions while handling dangerous and hazardous goods.
- Inspect compliance to dangerous goods handling methods and guide teams.
- Operate Reach stacker as per SOP
- Comply with workplace integrity, ethical and regulatory practices.
- Manage workplace for safe and healthy work environment by following and ensuring compliance to regulatory and safety norms
- Operate various cranes such as Rail Mounted Quay Crane (RMQC), Grab Ship Unloader (GSU), Rubber Tyre Gantry Crane (RTG) to load/unload and move goods

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
Bridge Module	**20**	**10**			**30**
Module 1: Introduction to Crane Operator - Port Terminals/CFS/ICD	20	10			30
LSC/N3701 – Perform cargo handling at ports V2.0 NSQF Level 4	**20**	**30**	**10**		**60**
Module 2: Cargo handling operations	20	30	10		60
LSC/N3702 – Perform preventive and first-line maintenance of MHE at ports V2.0 NSQF Level 4	**20**	**30**	**10**		**60**
Module 3: First-line preventive maintenance of MHE	20	30	10		60
LSC/N3706 – Operate Reach Stacker V2.0 NSQF Level 4	**20**	**60**	**10**		**90**

Module 4: Reach stacker operations	20	60	10		90
LSC/N9904 – Maintain integrity and ethics in operation **V3.0** **NSQF Level 4**	**20**	**40**			**60**
Module 5: Guidelines on integrity and ethics	20	40			60
LSC/N9905 – Follow health, safety and security procedures **V2.0** **NSQF Level 4**	**20**	**40**			**60**
Module 6: Compliance to health, safety and security norms	20	40			60
Employability Skills DGT/VSQ/N0102	**30**	**30**			**60**
Total Duration	**150**	**240**	**30**		**420**

Elective Modules

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

Elective 1: Rail Mounted Quay (RMQ) Crane

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
LSC/N3703 – Operate Rail Mounted Quay (RMQ) crane **V2.0** **NSQF Level 4**	**30**	**30**			**60**
Module 8: Rail Mounted Quay Crane Operations	30	30			60
Total Duration	**30**	**30**			**60**

Elective 2: Grab Ship Unloader (GSU) crane

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
LSC/N3704 – Operate Grab Ship Unloader (GSU) crane V2.0 NSQF Level 4	**30**	**30**			**60**
Module 9: Grab ship unloader crane operations	30	30			60
Total Duration	**30**	**30**			**60**

Elective 3: Rubber Tyre Gantry (RTG) crane

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
LSC/N3705 – Operate Rubber Tyre Gantry (RTG) crane V2.0 NSQF Level 4	**30**	**30**			**60**
Module 10: Rubber tyre gantry crane operations	30	30			60
Total Duration	**30**	**30**			**60**

Module Details

Module 1: Introduction to Crane Operator – Port Terminals/CFS/ICD
Mapped to Bridge Module

Terminal Outcomes:

- Describe the basic structure and function of supply chain
- Detail the various functions of a Crane Operator – Port Terminals/CFS/ICD

Duration: *20:00*	Duration: *10:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Classify the components of supply chain and logistics sector - Detail the various sub-sectors and the opportunities in them - Detail the activities in CFS and ICD - Explain the job roles in CFS and ICD - Detail your job role as Crane Operator – Port Terminals/CFS/ICD and it's interface with other job roles - Discuss the various functions to be performed by a Crane Operator – Port Terminals/CFS/ICD	- Perform various activities in CFS and ICD - Identify job roles in CFS and ICD - Identify the various MHEs and equipment used in CFS/ICD - Perform the job role of a Crane Operator – Port Terminals/CFS/ICD
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computers with MS office, Scanners, system tools, printers	

Module 2: Cargo Handling Operations
Mapped to LSC/N3701, v2.0

Terminal Outcomes:

- Detail the steps involved in cargo handling operations

Duration: *20:00*	Duration: *30:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Detail the different types of cargo and the corresponding MHE to load/unload - Explain the coordination required for cargo movement - List the various checks to performed for ensuring smooth functioning of MHE for loading/unloading - Select the appropriate PPE to be used for cargo movement - Explain the process of MHE/ crane operation - Discuss safe cargo movement and placement techniques - Explain the appropriate procedure for preparing post-operative reports on cargo movement, maintenance requirements etc.	- Identify the appropriate MHE for different types of cargo - Decide the path for cargo movement as per SOP - Follow signalling standards - Inspect preparedness of MHE for loading/unloading - Use the appropriate PPE for cargo movement - Operate MHE/ crane as per SOP - Demonstrate MHE navigation techniques - Demonstrate safe cargo movement and placement techniques - Identify maintenance requirements of MHE - Prepare post -operative reports on cargo movement, maintenance requirements etc.
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computers with MS office, Ropes, VHF radio, flags, locks, master-links, winches, PPEs, MHEs, SOP, Safety charts, Maintenance equipment, Cargo handling equipment	

Module 3: First-line Preventive Maintenance of MHE
Mapped to LSC/N3702, V2.0

Terminal Outcomes:

- Detail the steps to be followed for first line preventive maintenance of MHE as per SOP

Duration: 20:00	Duration: 30:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe preventive maintenance checklist - Inspect various controls in MHE - Recognize irregularities and aberrances while using MHE - Demonstrate basic repairs and upkeep of MHE like oiling, changing fuse etc. - Describe repairs which require parts replacement or external technical support - Describe the appropriate procedure for preparing maintenance reports	- Prepare preventive maintenance checklist - Perform preventive maintenance inspection - Interpret irregularities and aberrances while using MHE - Perform basic repairs and upkeep of MHE like oiling, changing fuse etc. - Recognize repairs which require parts replacement or external support - Prepare maintenance reports
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computers with MS office, PPEs, MHEs, SOP, Safety charts, Maintenance equipment, tools and tackles	

Module 4: Reach Stacker Operations
Mapped to LSC/N3706, V2.0

Terminal Outcomes:

- Detail the steps to be followed for effective Reach Stacker (RS) operations

Duration: *20:00*	Duration: *60:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- List all checks to be performed to ensure readiness of operation of reach Stacker - Detail the safety requirements to be undertaken while operating Reach Stacker - Detail the procedure for checking Reach Stacker for defects and malfunctioning - Discuss the appropriate procedure for preparing reports on cargo movement, maintenance requirements etc.	- Inspect Reach Stacker for readiness of operation - Choose the appropriate lifting equipment, bucket slings, ropes, eye bolts, shackles and other based on cargo - Calculate safe working load (SWL) and working load limit (WLL) based on cargo - Follow safety precautions while operating Reach Stacker - Operate Reach Stacker and it's component equipment for safe loading/unloading for cargo - Interpret the information on Reach Stacker control screen - Inspect Reach Stacker crane for defects and malfunctioning - Prepare reports on cargo movement, maintenance requirements etc.
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Reach stacker, Slings, ropes, shackles, eye bolts, Computers with MS office, VHF radio, flags, locks, master-links, winches, PPEs, MHEs, SOP, Safety charts, Maintenance equipment	

Module 5: Guidelines on integrity and ethics
Mapped to LSC/N9904, v3.0

Terminal Outcomes:

- Explain the concepts of integrity, ethics
- Detail the various regulatory requirements related to logistics industry

Duration: 20:00	Duration: 40:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe the concepts of integrity, ethics - Detail the various regulatory requirements related to logistics industry - Explain data and information security practices - Discuss the code of conduct and etiquettes - Document all integrity and ethics violations - Explain escalation matrix for reporting deviation	- Practice the principles of integrity and ethics - Follow the various regulatory requirements related to logistics industry - Perform data and information security practices - Identify corrupt practices - Comply with regulatory requirements - Practice code of conduct and etiquettes - Report deviation as per the escalation matrix
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computers with MS office, SOP, LLMS (learning version)	

Module 6: Compliance to health, safety and security norms
Mapped to LSC/N9905, v2.0

Terminal Outcomes:

- Describe health, safety, and security procedures in port terminals, CFS and ICD
- Demonstrate the inspection procedure to ensure appropriate and safe conditions of activity area and equipment
- Illustrate the standard protocol to be followed during emergency situations, accidents and breach of safety

Duration: *20:00*	**Duration**: *40:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Detail health, safety and security procedures in port terminals, CFS and ICD - Describe the 5S to be followed - Explain the inspection procedure to ensure appropriate and safe conditions of activity area and equipment - Detail unsafe working conditions - Describe the inspection procedure to check safe handling of hazardous goods - Discuss the standard protocol to be followed during emergency situations, accidents and breach of safety - Document health, safety and security violations - Explain the escalation matrix for reporting deviation	- Follow health, safety and security procedures in port terminals, CFS and ICD - Implement 5S at workplace - Inspect the activity area and equipment, for appropriate and safe conditions - Identify unsafe working conditions - Inspect adherence to standard operating procedures (SOP) while handling dangerous and hazardous goods - Implement standard protocol in case of emergency situations, accidents, and breach of safety - Prepare report on health, safety and security violations - Report deviation as per the escalation matrix
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computers with MS office, SOP, LLMS (learning version), PPE, MHE, Safety charts	

Module 7: Employability Skills
Mapped to DGT/VSQ/N0102, v1.0

Terminal Outcomes:

- Discuss the Employability Skills required for jobs in various industries
- Explain the constitutional values, including civic rights and duties, citizenship, responsibility towards society and personal values and ethics such as honesty, integrity, caring and respecting others that are required to become a responsible citizen
- Discuss how to identify opportunities for potential business, sources of funding and associated financial and legal risks with its mitigation plan

Duration: *30:00*	Duration: *30:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Discuss the Employability Skills required for jobs in various industries - List different learning and employability related GOI and private portals and their usage - Explain the constitutional values, including civic rights and duties, citizenship, responsibility towards society and personal values and ethics such as honesty, integrity, caring and respecting others that are required to become a responsible citizen - Discuss importance of relevant 21st century skills. - Describe the benefits of continuous learning. - Explain the importance of active listening for effective communication - Discuss the significance of working collaboratively with others in a team - Discuss the significance of escalating sexual harassment issues as per POSH act. - List the common components of salary and compute income, expenditure, taxes, investments etc. - Discuss the legal rights, laws, and aids - Describe the role of digital technology in today's life - Discuss the significance of displaying responsible online behaviour while browsing, using various social media platforms, e-mails, etc., safely and securely	- Practice different environmentally sustainable practices. - Exhibit 21st century skills like Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. in personal or professional life. - Demonstrate to use basic English sentences for everyday conversation in different contexts, in person and over the telephone - Read and interpret text written in basic English - Write a short note/paragraph / letter/e - mail using basic English - Create a career development plan with well-defined short- and long-term goals - Communicate effectively using verbal and nonverbal communication etiquette. - Demonstrate how to behave, communicate, and conduct oneself appropriately with all genders and PwD - Outline the importance of selecting the right financial institution, product, and service - Demonstrate how to carry out offline and online financial transactions, safely and securely - Operate digital devices and use the associated applications and features, safely and securely

● Explain the types of entrepreneurship and enterprises	● Create sample word documents, excel sheets and presentations using basic features
● Discuss how to identify opportunities for potential business, sources of funding and associated financial and legal risks with its mitigation plan	● Utilize virtual collaboration tools to work effectively
● Describe the 4Ps of Marketing-Product, Price, Place and Promotion and apply them as per requirement	● Devise a sample business plan, for the selected business opportunity
	● Create a professional Curriculum Vitae (CV)
● Detail the significance of analyzing different types and needs of customers	● Use various offline and online job search sources such as employment exchanges, recruitment agencies, and job portals respectively
● Explain the significance of identifying customer needs and responding to them in a professional manner.	● Perform a mock interview
● Discuss the significance of maintaining hygiene and dressing appropriately	
● Explain the significance of maintaining hygiene and confidence during an interview	
● List the steps for searching and registering for apprenticeship opportunities	

Classroom Aids
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser, UPS, LCD Projector, Computer Tables & chairs
Tools, Equipment and Other Requirements
Computer (PC) with latest configurations – and Internet connection with standard operating system and standard word processor and worksheet software (Licensed) (all software should either be latest version or one/two version below), Scanner cum Printer

Module 8: Rail Mounted Quay Crane Operations
Mapped to LSC/N3703, v2.0

Terminal Outcomes:

- Detail the steps to be followed for effective Rail Mounted Quay Crane operations

Duration: 30:00	Duration: 30:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- List all the checks to be performed for readiness of operation of the RMQ crane - Select the appropriate lifting equipment, slings, ropes, eye bolts, shackles spreaders and others - Compute Safe Working Load (SWL) and Working Load Limit (WLL) based on cargo - Detail the safety requirements to be undertaken while operating RMQ crane - Operate RMQ crane and its component equipment for safe loading/unloading of cargo - Understand the information on RMQ control screen - Detail the procedure for checking RMQ crane for defects and malfunctioning - Discuss the appropriate procedure for preparing reports on cargo movement, maintenance requirements etc.	- Perform appropriate checks for readiness of operation of the RMQ crane - Choose the appropriate lifting equipment's, slings, ropes, eyebolts, shackles, spreaders and others - Calculate Safe Working Load (SWL) and Working Load Limit (WLL) based on cargo - Follow the safety precautions while operating RMQC - Operate RMQ crane and its component equipment for safe loading/unloading of cargo - Interpret the information on RMQ control screen - Inspect RMQ crane for defects and malfunctioning - Prepare reports on cargo movement, maintenance requirements etc.
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
RMQ Crane, Slings, ropes, shackles, eye bolts, Computers with MS office, VHF radio, flags, locks, master-links, winches, PPEs, MHEs, SOP, Safety charts, Maintenance equipment	

Module 9: Grab Ship Unloader Quay Crane Operations
Mapped to LSC/N3704, v2.0

Terminal Outcomes:

- Detail the steps to be followed for effective Grab Ship Unloader Quay Crane operations

Duration: 30:00	Duration: 30:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- List all checks to be performed to ensure readiness of operation of GSU crane - Select the appropriate lifting equipment, bucket slings, ropes, eye bolts, shackles, and others based on cargo - Compute Safe Working Load (SWL) and Working Load Limit (WLL) based on cargo - Detail the safety requirements to be undertaken while operating GSU crane - Operate GSU crane and its component equipment for safe loading/unloading of cargo - Detail the procedure for checking RMQ crane for defects and malfunctioning - Discuss the appropriate procedure for preparing reports on cargo movement, maintenance requirements etc.	- Inspect GSU crane for readiness of operation - Choose the appropriate lifting equipment, bucket slings, ropes, eye bolts, shackles and other based on cargo - Calculate safe working load (SWL) and working load limit (WLL) based on cargo - Follow safety precautions while operating GSU crane - Operate GSU crane and it's component equipment for safe loading/unloading for cargo - Interpret the information on GSU control screen - Inspect GSU crane for defects and malfunctioning - Prepare reports on cargo movement, maintenance requirements etc.
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
GSU Crane, Slings, ropes, shackles, eye bolts, Computers with MS office, VHF radio, flags, locks, master-links, winches, PPEs, MHEs, SOP, Safety charts, Maintenance equipment	

Module 10: Rubber Tyre Gantry Quay Crane Operations
Mapped to LSC/N3705, V2.0

Terminal Outcomes:

- Detail the steps to be followed for effective Rubber Tyre Gantry Quay operations

Duration: 30:00	Duration: 30:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- List all checks to be performed to ensure readiness of operation of RTG crane - Select the appropriate lifting equipment, bucket slings, ropes, eye bolts, shackles, and others based on cargo - Compute Safe Working Load (SWL) and Working Load Limit (WLL) based on cargo - Detail the safety requirements to be undertaken while operating RTG crane - Operate RTG crane and its component equipment for safe loading/unloading of cargo - Construe the information on RTG control screen - Detail the procedure for checking RTG crane for defects and malfunctioning - Discuss the appropriate procedure for preparing reports on cargo movement, maintenance requirements etc.	- Inspect RTG crane for readiness of operation - Choose the appropriate lifting equipment, bucket slings, ropes, eye bolts, shackles and other based on cargo - Calculate safe working load (SWL) and working load limit (WLL) based on cargo - Follow safety precautions while operating RTG crane - Operate RTG crane and it's component equipment for safe loading/unloading for cargo - Interpret the information on RTG control screen - Inspect RTG crane for defects and malfunctioning - Prepare reports on cargo movement, maintenance requirements etc.

Classroom Aids
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser

Tools, Equipment and Other Requirements
RTG Crane, Slings, ropes, shackles, eye bolts, Computers with MS office, VHF radio, flags, locks, master-links, winches, PPEs, MHEs, SOP, Safety charts, Maintenance equipment

Annexure

Trainer Requirements

Trainer Prerequisites					
Minimum Educational Qualification	**Specialization**	**Relevant Industry Experience**		**Training Experience**		**Remarks**
		Years	*Specialization*	*Years*	*Specialization*	
Any degree	Port terminals/ CFS/ICD	2	Port terminals/ CFS/ICD			

Trainer Certification	
Domain Certification	**Platform Certification**
Certified for Job Role: "Crane Operator – Port Terminals/CFS/ICD" mapped to QP: "LSC/Q3702, v1.0". Minimum accepted score is 80%	Recommended that the Trainer is certified for the Job Role: "Trainer (VET and Skills)", mapped to the Qualification Pack: "MEP/Q2601, V2.0" with minimum score of 80%

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	**Specialization**	**Relevant Industry Experience**		**Training/Assessment Experience**		**Remarks**
		Years	*Specialization*	*Years*	*Specialization*	
Any degree	Port terminals/ CFS/ICD	2	Port terminals/ CFS/ICD			

Assessor Certification	
Domain Certification	**Platform Certification**
Certified for Job Role: "Crane Operator – Port Terminals/CFS/ICD" mapped to QP: "LSC/Q3702, v1.0". Minimum accepted score is 80%	Recommended that the Assessor is certified for the Job Role: "Assessor (VET and Skills)", mapped to the Qualification Pack: "MEP/Q2701, V2.0" with minimum score of 80%

Assessment Strategy

The emphasis is on 'learning-by-doing' and practical demonstration of skills and knowledge based on the performance criteria. Accordingly, assessment criteria for each job role is set and made available in qualification pack.

The assessment papers for both theory and practical would be developed by Subject Matter Experts (SME) hired by Logistics Sector Skill Council or with the LSC accredited Assessment Agency as per the assessment criteria mentioned in the Qualification Pack. The assessments papers would also be checked for the various outcome-based parameters such as quality, time taken, precision, tools & equipment requirement etc.

Each NOS in the Qualification Pack (QP) is assigned a relative weightage for assessment based on the criticality of the NOS. Therein each Element/Performance Criteria in the NOS is assigned marks on relative importance, criticality of function and training infrastructure.

The following tools would be used for final assessment:

1. **Practical Assessment:** This comprises of a creation of mock environment in the skill lab which is equipped with all equipment required for the qualification pack.

   Candidate's soft skills, communication, aptitude, safety consciousness, quality consciousness etc. is ascertained by observation and marked in observation checklist. The outcome is measured against the specified dimensions and standards to gauge the level of their skill achievements.

2. **Viva/Structured Interview:** This tool is used to assess the conceptual understanding and the behavioral aspects with regard to the job role and the specific task at hand. It also includes questions on safety, quality, environment, and equipment etc.

3. **On-Job Training:** OJT would be evaluated based on standard log book capturing departments worked on, key observations of learner, feedback and remarks of supervisor or mentor.

4. **Written Test:** Question paper consisting of 100 MCQs (Hard:40, Medium:30 and Easy: 30) with questions from each element of each NOS. The written assessment paper is comprised of following types of questions:

   i. True / False Statements
   ii. Multiple Choice Questions
   iii. Matching Type Questions.
   iv. Fill in the blanks
   v. Scenario based Questions
   vi. Identification Questions

QA Regarding Assessors:

Assessors are selected as per the "eligibility criteria" laid down by LSC for assessing each job role. The assessors selected by Assessment Agencies are scrutinized and made to undergo training and introduction to LSC Assessment Framework, competency based assessments, assessors guide etc. LSC conducts "Training of Assessors" program from time to time for each job role and sensitize assessors regarding assessment process and strategy which is outlined on following mandatory parameters:

1) Guidance regarding NSQF
2) Qualification Pack Structure
3) Guidance for the assessor to conduct theory, practical and viva assessments
4) Guidance for trainees to be given by assessor before the start of the assessments.
5) Guidance on assessments process, practical brief with steps of operations practical observation checklist and mark sheet
6) Viva guidance for uniformity and consistency across the batch.
7) Mock assessments
8) Sample question paper and practical demonstration

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	Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).
OJT (M)	On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on site
OJT (R)	On-the-job training (Recommended); trainees are recommended the specified hours of training on site
Procedural Knowledge	Procedural knowledge addresses how to do something, or how to perform a task. It is the ability to work, or produce a tangible work output by applying cognitive, affective or psychomotor skills.
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do **upon the completion of the training**.
Terminal Outcome	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
QP	Qualification Pack
NSQF	National Skills Qualification Framework
NSQC	National Skills Qualification Committee
NOS	National Occupational Standards