







Model Curriculum

QP Name: Warehouse Supervisor

(Electives – Bonded Warehouse/ Cold Chain Warehouse/ FMCG & E-Com Warehouse/ Automotive Warehouse/ Dry Bulk Cargo Warehouse)
(Options – Business Development/ Profit and Loss Management)

QP Code: LSC/Q0102

QP Version: 4.0

NSQF Level: 5

Model Curriculum Version: 4.0

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Training Parameters

Sector	Logistics
Sub-Sector	Warehousing
Occupation	Operations, VAS, Documentation and Reporting
Country	India
NSQF Level	5
Aligned to NCO/ISCO/ISIC Code	NCO-2015/ 1324.1201 and ISCO -08 - 4321
Minimum Educational Qualification and Experience	Completed 2nd year of UG Or Completed 2nd year of diploma (after 12th) Or Completed 3 year diploma after 10th + 3 year relevant experience in warehouse Or Previous relevant Qualification of NSQF Level 4 (Warehouse Executive) and with minimum education as 8th Grade pass + 3 year relevant experience
Pre-Requisite License or Training	NA
Minimum Job Entry Age	21
Last Reviewed On	28/02/2023
Next Review Date	28/02/2026
NSQC Approval Date	28/02/2023
QP Version	4.0
Model Curriculum Creation Date	07/10/2022
Model Curriculum Valid Up to Date	28/02/2026
Model Curriculum Version	4.0
Minimum Duration of the Course	600
Maximum Duration of the Course	960







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:

- Manage allocation of resources and streamlining operations in a warehouse for daily operations.
- Oversee receiving inventory and dispatch activities
- Supervising packaging and quality check operations in warehouse.
- Comply to workplace integrity, ethical and regulatory practices.
- Manage workplace for safe and healthy work environment by following compliance to regulatory and safety norms.
- Inspect invoices for correct application of GST.

Options:

- Manage operations in a bonded warehouse
- Engage into handling operations in a cold chain warehouse and supervise cold storage material handling.
- Supervise FMCG goods handling and FMCG warehouse operations.
- Manage handling of Automotive goods in Warehouse.
- Supervise dry bulk cargo warehouse operations
- Generate new business and maintain relationships with all stakeholders
- Manage Profit and Loss accounts and cost accounting, review.

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	30	60			90
Module 1: Introduction to Warehouse Supervisor	30	60			90
LSC/N0127- Decision science-based resource allocation and streamline operations at a warehouse V1.0	20	60	10		90







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Module 2: Science-based resource allocation and streamlining of operations	20	60	10		90
LSC/N0128- Supervise receiving, inventory and dispatch activities V1.0	20	60	10		90
Module 3: Supervision of receiving, inventory and dispatch	20	60	10		90
LSC/N0201- Supervise VAS/ Packaging V1.0 5	20	60	10		90
Module 4: Supervision of VAS/ Packaging	20	60	10		90
LSC/N9908- Maintain integrity and ethics in operations V1.0	10	20			30
Module 5: Guidelines on integrity and ethics	10	20			30
LSC/N9909- Follow health, safety and security procedures V1.0 5	20	40			60
Module 6: Compliance to health, safety and security norms	20	40			60
LSC/N9906 Verify GST invoices V1.0 5	10	20			30
Module 7: Verify GST application	10	20			30
Employability Skills DGT/VSQ/N0102	30	30			60
Total Duration	160	350	30		540







Elective Modules

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

Elective 1: Bonded Warehouse

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
LSC/N0121 Supervise bonded warehouse operations NOS Version 1.0 NSQF Level 5	30	30			60
Module 9: Supervision of bonded warehouse operations	30	30			60
Total Duration	30	30			60

Elective 2: Cold Chain warehouse

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
LSC/N0122 Supervise cold storage warehouse operations NOS Version 1.0 NSQF Level 5	30	30			60
Module 10: Supervision of cold storage warehouse operations	30	30			60
Total Duration	30	30			60







Elective 3: FMCG Warehouse

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
LSC/N0123- Supervise FMCG & E-Com warehouse operations NOS Version 1.0 NSQF Level 5	30	30			60
Module 11: Supervision of FMCG & E-Com warehouse operations	30	30			60
Total Duration	30	30			60

Elective 4: Automotive warehouse

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
LSC/N0124 Supervise automotive warehouse operations NOS Version 1.0 NSQF Level 5	30	30			60
Module 12: Supervision of automotive warehouse operations	30	30			60
Total Duration	30	30			60

Elective 5: Dry Bulk Cargo warehouse

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
LSC/N0125 Supervise bulk cargo warehouse operations NOS Version 1.0 NSQF Level 5	30	30			60
Module 13: Supervision of bulk cargo warehouse operations	30	30			60
Total Duration	30	30			60







Optional Modules

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

Option 1: Business Development

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
LSC/N9701 Business development and stakeholder relations V1.0	30	30			60
Module 14: Business development and stakeholder relations	30	30			60
Total Duration	30	30			60

Option 2: Profit Management

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
LSC/N9603 Profit and loss account management and cost accounting V1.0	30	30			60
Module 15: Profit and loss account management and cost accounting	30	30			60
Total Duration	30	30			60







Module Details

Module 1: Introduction to Warehouse Supervisor Mapped to Bridge Module

Terminal Outcomes:

- Describe the basic structure and function of supply chain
- Detail the various functions of a Warehouse Supervisor

Duration: 30:00	Duration: 60:00		
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes		
 Discuss about supply chain, logistics sector and the modals involved. Detail the various sub-sectors and the opportunities in them Explain different types of Inventories and its importance Discuss the various operations in warehouse and their importance in the effective logistics Detail your job role as warehouse supervisor and its interface with other job roles Define the inbound and outbound activities Explain various activities in warehousing 	 Identify various activities in warehousing Perform your job role as warehouse supervisor Perform various operations in warehouse Demonstrate the inbound and outbound activities 		

Classroom Aids

Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser **Tools, Equipment and Other Requirements**

Teaching board, computer, projector, LLMS & WMS (learning version), video player or TV, MHE







Module 2: Science-based resource allocation and streamlining of operations

Mapped to LSC/N0127, v1.0

Terminal Outcomes:

Duration: 20:00

- Describe allocation and review process for resources.
- Explain escalation procedure with manager and internal stakeholders to resolve queries.

Duration: 60:00

Duration: 20:00	Duration : 60:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Detail the planning activities involved for daily/ weekly operations using decision tool. Describe allocation and review process for resources. Detail exigency plan preparation Explain escalation procedure with manager and internal stakeholders to resolve queries Describe relationship to be maintained with other departments, contractors, transporters, freight operators, clients, customs, and regulatory bodies Detail the examination process to be followed in warehouse operations. Explain damaged goods handling procedure. Describe planning and preventive maintenance. 	 Operate decision tool for generating and approving work plan. Use task manager for task allocation. Prepare budget and allocate the requisite MHE for tasks at hand Review and monitor the work of the assistants, executives and contractual workforce, and check for accuracy of documentation and task performance Devise exigency and contingency plan for optimal resource allocation. Escalate issues regarding MHE operations, transporter delays, accidents, damages, etc. to manager Plan corrective and preventive actions based on accident and damage reports Perform inspection for segregation, damage and disposal. Update tracker of stored inventory Review escalated issues and identify root cause for providing corrective action Escalate the issues to manager when external or additional help is required Coordinate with other departments, contractors, transporters, freight operators, clients, shipping companies, customs, regulatory bodies and others to resolve escalations if required Prepare claims reports for damaged goods and coordinate with insurance agency and client for processing

Classroom Aids

Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser Tools, Equipment and Other Requirements

Stationery, Radio Frequency Identification (RFID) scanner, bar code scanner, plastic bags, markers, Personal Protective Equipment (PPEs), LLMS & WMS (learning version), Enterprise Resource Planning (ERP), computer, printers, Global Positioning System (GPS) tracker, Material Handling Equipment (MHEs), etc.







Module 3: Supervision of receiving, inventory and dispatch

Mapped LSC/N0128, V1.0

Terminal Outcomes:

- Detail loading and unloading process.
- Define damaged goods handling process.
- Explain binning, put away and various operations involved in it.

Duration: 20:00	Duration: 60:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Describe docking, parking bay and staging area allocation process. Explain loading and unloading process. Detail the documents to be checked during loading and unloading Describe handling exceptions during loading and unloading Explain binning and put away activities. Describe ruck/urgent order picking Explain stowage plan and stacking procedure Detail inventory management in warehouse by using ERP. Explain how to prepare daily/weekly/monthly reports on receipt and dispatch performance, pending activities, worker productivity and others as per SOP Detail the inspection steps to be followed from loading till dispatch. Describe preparing deviation report with reasons for non-dispatch, product damage, inventory discrepancies etc Classroom Aids	 Plan daily allocation of parking bay, staging area, docking area and timings. Inspect manual loading/unloading of goods and record spillages, breakages etc Record damage to goods while handling them using MHE Monitor 'shape of the day' based on work load of different tasks and redeploy resources as per demand Perform visual inspection of inbound and outbound goods Check the mandatory documents on receipt of stock and before unloading and ensure right quantity is received as per the documents Inspect safe movement of goods to putaway area and disposal of damaged goods Allocate pick request to pickers per picking strategy from storage area Illustrate inventory reconciliation procedure Prepare daily/weekly/monthly reports on receipt and dispatch performance, pending activities, worker productivity and others as per SOP

Classroom Aids

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

Tools, Equipment and Other Requirements

Stationery, Radio Frequency Identification (RFID) scanner, bar code scanner, plastic bags, markers, Personal Protective Equipment (PPEs), Enterprise Resource Planning (ERP), computer, printers, Global Positioning System (GPS) tracker, LLMS & WMS (learning version), Material Handling Equipment (MHEs), etc.







Module 4: Supervision of VAS/packaging process

Mapped to LSC/N0201, v1.0

Terminal Outcomes:

- Describe packing process as per customer requirement.
- Detail the SOP to be followed for packaging.

Duration : 20:00	Duration : 60:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Describe different types of packaging material and packaging techniques Detail the SOP to be followed for packaging. Explain the compliance process for packaging and labelling as per the customs requirement of different countries Describe packaging process inspection procedure Detail safe handling of goods and adherence process Explain the process for optimal utilisation of NPM and man hours, without any damage to the products. Detail various steps to be followed during packaging. 	 Coordinate with client for VAS/packaging and labelling requirement Monitor the availability of Non-Production Material (NPM) and packaging equipment as per the packaging requirement Supervise whether items are packed as per instructions, labelled with bar codes and product tags and sealed as per Standard Operating Procedures (SOP) Examine whether the packaging and labelling are done as per the customs requirement of different countries Conduct random check for authenticity of the product by verifying manufacturing address, the logo of the product, shape, size and specification of the product Demonstrate binning, crating and palletisation Report goods damaged during packaging Inspect whether that the packed goods are moved to staging/storage/dispatch area and their corresponding documentation are updated in ERP Report utilisation of non-production material, worker productivity and other parameters.

Classroom Aids

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

Tools, Equipment and Other Requirements

Stationery, ERP, SOP, plastic bags, markers, LLMS & WMS (learning version), Personal Protective Equipment (PPEs), Management Information System (MIS), computer, printers.







Module 5: Guidelines on integrity and ethics *Mapped to LSC/N9908, v1.0*

Terminal Outcomes:

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

Duration : <i>10:00</i>	Duration : 20:00
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 about the corrupt practices Describe regulatory requirements, code of conduct and etiquettes Detail the procedure for documenting all integrity and ethics violations Explain escalation matrix for reporting deviation 	 Practice the principles of integrity and ethics Illustrate various regulatory requirements related to logistics industry Perform data and information security practices Identify corrupt practices and methods to curb the same. Comply to regulatory requirements of the organization. Practice code of conduct and etiquettes Document all integrity and ethics 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

SOP, Teaching board, computer, projector, LLMS & WMS (learning version), video player, stationery, worksheets and TV







Module 6: Compliance to health, safety and security norms *Mapped to LSC/N9909*, v1.0

Terminal Outcomes:

- Describe health, safety, and security procedures in warehouse
- 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 warehouse. Describe the 5S to be followed in industry. Explain the inspection procedure to ensure appropriate and safe conditions of activity area and equipment Discuss what are 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 	 Demonstrate the health, safety and security procedures to be followed in warehouse 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

PPEs, MHEs like Forklift, Reach stacker, LLMS & WMS (learning version), pallet truck, barcode scanner, packaging devices, packing material, markers and stationery, etc







Module 7: Verify GST Application *Mapped to LSC/N9906, v1.0*

Terminal Outcomes:

• Demonstrate the process of verifying GST invoices as per SOP

Duration : 10:00	Duration: 20:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Detail the components available in GST application Describe classification process of the transaction to apply the right CGST, IGST, and SGST Explain the rules and regulation in applying and reversing GST Discuss the details required for applying GST, such as GSTIN, PAN, email id, HSC code, SAC code, UIN number etc. Describe GST computation based on documentation Explain the procedure for inspecting invoice for availability of mandatory information relating to GST application 	 Differentiate location of service recipient and place of supply of services in GST application Demonstrate classification of the transaction to apply the right CGST, IGST, and SGST Apply the right CGST, IGST and SGST as per transaction type Apply and reverse GST by following the appropriate rules and regulations Calculate the correct GST based on documentation Inspect invoice for availability of mandatory information relating to GST application
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Laptop, MS office, ERP, stationery, worksheets, computer, projector, GST guidelines etc	







Module 8: Employability Skills

Mapped to DGT/VSQ/N0101, 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* **Practical – Key Learning Outcomes** Theory – Key Learning Outcomes Discuss the Employability Skills required for Practice different environmentally jobs in various industries sustainable practices. List different learning and employability Exhibit 21st century skills like Selfrelated GOI and private portals and their Awareness, Behaviour Skills, time management, critical and adaptive thinking, usage Explain the constitutional values, including problem-solving, creative thinking, social civic rights and duties, citizenship, and cultural awareness, emotional responsibility towards society and personal awareness, learning to learn etc. in personal or professional life. values and ethics such as honesty, integrity, caring and respecting others that are Demonstrate to use basic English sentences required to become a responsible citizen for everyday conversation in different contexts, in person and over the telephone Discuss importance of relevant 21st century Read and interpret text written in basic skills. Describe the benefits of continuous **English** Write a short note/paragraph / letter/e -Explain the importance of active listening mail using basic English for effective communication Create a career development plan with well-defined short- and long-term goals Discuss the significance of working collaboratively with others in a team Communicate effectively using verbal and nonverbal communication etiquette. Discuss the significance of escalating sexual harassment issues as per POSH act. Demonstrate how to behave, communicate, and conduct oneself List the common components of salary and compute income, expenditure, taxes, appropriately with all genders and PwD Outline the importance of selecting the investments etc. right financial institution, product, and Discuss the legal rights, laws, and aids service Describe the role of digital technology in Demonstrate how to carry out offline and today's life Discuss the significance of displaying online financial transactions, safely and responsible online behaviour while securely Operate digital devices and use the browsing, using various social media associated applications and features, safely platforms, e-mails, etc., safely and securely and securely Explain the types of entrepreneurship and Create sample word documents, excel enterprises sheets and presentations using basic Discuss how to identify opportunities for potential business, sources of funding and features







- associated financial and legal risks with its mitigation plan
- Describe the 4Ps of Marketing-Product,
 Price, Place and Promotion and apply them as per requirement
- Detail the significance of analysing different types and needs of customers
- Explain the significance of identifying customer needs and responding to them in a professional manner.
- Discuss the significance of maintaining hygiene and dressing appropriately
- Explain the significance of maintaining hygiene and confidence during an interview

- Utilize virtual collaboration tools to work effectively
- Devise a sample business plan, for the selected business opportunity
- Create a professional Curriculum Vitae (CV)
- Use various offline and online job search sources such as employment exchanges, recruitment agencies, and job portals respectively
- Perform a mock 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 9: Supervisory operations at bonded warehouse

Mapped to LSC/N0121, v1.0

Terminal Outcomes:

- Describe bonded warehouse demarcation procedure for different types of goods and clients
- Explain the process for restricting worker access within the bonded warehouse

Duration: 30:00	Duration : 30:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Describe bonded warehouse demarcation procedure for different types of goods and clients Explain the process for restricting worker access within the bonded warehouse Detail the documentation process for customs clearance of different types of goods, country of receipt and type of product Describe the relationship to be maintained with various stakeholders. Detail the dispute resolution process in export/import documentation. Explain the client grievance redressal mechanism Describe the claims process for damaged goods 	 Coordinate with clients about the inward and outward goods Inspect operations within bonded areas and comply to timelines. Prepare checklist of various documents required for clearance of different products. Demonstrate coordination with customs, brokers, transporters, clients, IATA agents, insurance agents etc for timely inspection and delivery of goods Develop the dispute resolution process according to discrepancies in export/import documentation Devise client grievance redressal mechanism for addressing various issues. Illustrate the steps involved in processing the claims for damaged goods Develop robust preventive and corrective action.

Classroom Aids

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

Tools, Equipment and Other Requirements

ERP, MS Office, stationery, demarcation equipment, LLMS & WMS (learning version), SOP, computer, projector, worksheets, etc







Module 10: Supervisory operations at cold chain warehouse

Mapped to LSC/N0122, v1.0

Terminal Outcomes:

- Describe cold chain warehouse temperature management requirements for different types of products
- Detail segregation, sorting, and grading process.

Duration: 30:00	Duration: 30:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Describe cold chain warehouse temperature management requirements for different types of products Detail segregation, sorting, and grading process. Explain HACCP and HAZMAT regulations for different types of goods Describe inspection of microbiological reports and non-conformities Describe the quarantine and other process to be undertaken in-case of microbiological non-conformities Explain the quarantine and safe disposal procedure for damaged, spilled and contaminated goods 	 Devise temperature control plan according to product type and quantity. Demonstrate segregation, sorting, and grading operations in a cold chain warehouse Inspect if any non-conformities and goods according to microbiological reports. Quarantine goods in-case of microbiological non-conformities. Discuss the documentation requirements for cold chain warehouse operations Prepare reports on cold chain warehouse operational metrics relating to employee operations, work completion status, temperature maintenance, resource utilized, down time etc.

Classroom Aids

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

Tools, Equipment and Other Requirements

ERP, MS Office, cold storage facility, temperature control systems, HACCP and HAZMAT guidelines, stationery, demarcation equipment, LLMS & WMS (learning version), SOP, computer, projector, worksheets, etc.







Module 11: Supervisory operations at FMCG & E-Com warehouse

Mapped to LSC/N0123, v1.0

Terminal Outcomes:

- Detail picklist generation process
- Describe goods, packaging and documentation inspection procedure
- Detail different types of inventories counting and reconciliation process available.

Duration: 30:00	Duration: 30:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Detail picklist generation process Describe the different types of order picking such as, single order picking, batch picking, zone picking, pick and pass, multi batch picking, order consolidation, wave picking etc. Explain inventory storage area management for different types of goods and quantity variations Explain goods sorting and appropriate storage method for different types of products Describe goods, packaging and documentation inspection procedure Detail different types of inventories counting and reconciliation process available. 	 Prepare picklist according to SOP Demonstrate different types of order picking. Allocate storage area according to different types of goods and quantity variations. Sort goods and store according to type. Inspect goods, packaging and documentation. Perform different types of inventories counting and reconciliation. Develop robust preventive and corrective action plans Prepare reports on FMCG warehouse operational metrics relating to employee operations, work completion status, resource utilized, down time etc

Classroom Aids

Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser **Tools, Equipment and Other Requirements**

ERP, MS Office, stationery, demarcation equipment, LLMS & WMS (learning version), different types of storage racks, SOP, computer, projector, worksheets, etc.







Module 12: Supervisory operations at automotive warehouse

Mapped to LSC/ N0124, v1.0

Terminal Outcomes:

- Explain relationship between OEM/ client departments in managing automotive warehouse
- Define Kanban process and its uses.
- Describe serial number tracking process for automotive goods

Duration : <i>30:00</i>	Duration : <i>30:00</i>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Explain relationship between OEM/client departments in managing automotive warehouse Define Kanban process and its uses. Describe serial number tracking process for automotive goods Detail different types of packaging and palletisation process available. Describe the documentation requirements for goods handling and customs clearance Explain the different types of inventory cycle counting process for automotive goods 	 Coordinate with OEM/3PL/4PL for storage and dispatch of goods Demonstrate Kanban process of material storage and inventory management List the various automotive certifications Demonstrate packaging with different types and palletisation process Prepare documents for goods handling and customs clearance Perform inventory cycle counting process for automotive goods with different types. Discuss the process improvement tools such as 5S, JIT, FMEA, kaizen, pokayoke etc. Prepare reports on automotive warehouse operational metrics relating to employee operations, work completion status, resource utilized, down time, SLA achievement etc.

Classroom Aids

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

Tools, Equipment and Other Requirements

ERP, MS Office, stationery, demarcation equipment, LLMS & WMS (learning version), different types of storage racks, pallets, tools for palletisation, SOP, computer, projector, worksheets, etc.







Module 13: Supervisory operations at dry bulk cargo warehouse

Mapped to LSC/ N0125, v1.0

Terminal Outcomes:

- Detail the usage of various MHE and conveyors in dry bulk warehouse
- Explain weight and volume measurement methods

Duration: 30:00	Duration: 30:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Describe the space and volume computation methods for different types of goods in dry bulk warehouse Detail the usage of various MHE and conveyors in dry bulk warehouse Explain weight and volume measurement methods Describe pest control methods to be undertaken for different types of goods Discuss the appropriate PPEs to be used while handling dry bulk cargo Detail the spillage recording process and control mechanisms to be put in place Explain various inventory accounting methods used in dry bulk warehouse 	 Compute and allocate space and using different methods. Operate MHE and conveyors in dry bulk warehouse Measure weight and volume with various available methods. Perform pest control for different types of goods. Demonstrate appropriate PPEs usage. Record spillage and operate the control mechanisms. Perform inventory accounting in dry bulk warehouse Develop robust corrective and preventive action plans Prepare reports on dry bulk warehouse operational metrics relating to employee operations, work completion status, resource utilized, down time, spillages etc.

Classroom Aids

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

Tools, Equipment and Other Requirements

ERP, MS Office, stationery, LLMS & WMS (learning version), demarcation equipment, MHE and conveyor controls, SOP, computer, projector, worksheets, etc.







Module 14: Business development and stakeholder relations Mapped to LSC/N9701, V1.0

Terminal Outcomes:

• Detail the steps to be followed for business development

Duration : <i>30:00</i>	Duration: 30:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 List target population to approach for business development Assess prospective clients Discuss client requirements Plan customised or bundled solutions based on sales pitch Demonstrate effective oral and written business communication Detail the procedure for preparing costing sheets for service delivery Demonstrate usage of ERP for updating client data Assess when to upsell and cross-sell services to existing clients Describe the nuances in building rapport with clients, customs, government agencies, insurance for healthy relationship Discuss the process of writing service level agreements 	 Identify target population to approach for business development Assess prospective clients Identify client requirements Offer customised or bundled solutions based on sales pitch Demonstrate effective oral and written business communication Prepare costing sheets for service delivery Use ERP for updating client data Estimate when to upsell and cross-sell services to existing clients Establish rapport with clients, customs, government agencies, insurance for healthy relationship Prepare service level agreements Schedule resources as per operational requirement

Classroom Aids

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

Tools, Equipment and Other Requirements

Computers, MIS, ERP, business lead software, LLMS & WMS (learning version), teaching board, computer, projector, video player and TV







Module 15: Profit and loss account management and cost accounting

Mapped to LSC/N9603, V1.0

Terminal Outcomes:

• Demonstrate the process of profit and loss account management and cost accounting

Duration: 30:00	Duration: 30:00		
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes		
 Describe P&L analysis process Explain budgeting and monitoring process Explain methods to analyse variance between budget and actual expenditure Detail the procedure for making budget amendments Describe the risk management procedures Define Activity Based Costing (ABC) Explain the process to rationalize cost by undertaking improvement activities 	 Evaluate profit & loss and prepare analysis. Prepare budget according to p&l. Analyse variance between budget and actual expenditure, to provide output. Compare budget with actual physical output Prepare budget amendments according to expenses. Devise a risk management plan Calculate Activity Based Costing (ABC) for budget preparation. Perform audit to identify reasons for deviation from costing Devise improvement activities to rationalize cost. 		
Classroom Aids			
Charts, Models, Video presentation, Flip Chart, \	Whiteboard/Smart Board, Marker, Board eraser		

Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board erase Tools, Equipment and Other Requirements

Computers, MIS, ERP, LLMS & WMS (learning version), performance review software







Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational	Specialization	Relevant Industry Experience		Training Experience		Remarks
Qualification		Years	Specialization	Years	Specialization	
12 th Pass		4	Warehousing	1	Warehousing	

Trainer Certification				
Domain Certification	Platform Certification			
Certified for Job Role: "Warehouse Supervisor" mapped to QP: "LSC/Q0102, v4.0". 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	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
Qualification		Years	Specialization	Years	Specialization	
12 th Pass		2	Warehousing	1	Warehousing	

Assessor Certification				
Domain Certification	Platform Certification			
Certified for Job Role: "Warehouse Supervisor" mapped to QP: "LSC/Q0102, v4.0". 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