





Model Curriculum

QP Name: Land Transportation Associate

(Options – Transport Consolidation/ Customs Clearance)

QP Code: LSC/Q1001

QP Version: 2.0

NSQF Level: 3

Model Curriculum Version: 2.0

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Training Parameters

0
Logistics
Land Transportation
Transport Operations, Vehicle Operations, Customer Support/Relations
India
3
NCO-2015-4221/4323 and ISCO-08/4323
Completed Grade 10 OR Completed Grade 8 + 2 year relevant experience in transportation OR Completed 5th grade + 5 year relevant experience in transportation OR Completed Previous relevant Qualification of NSQF Level 2 (Loader/ Unloader) + 1 year relevant experience in transportation
NA
18
25-08-2022
25-08-2025
25-08-2022
2.0
04-07-2022
25-08-2025
2.0
390
510







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 consignment booking activities
- Schedule vehicle for consignment movement based on type of consignment and delivery priority
- Perform route planning and resource scheduling activities
- Process gate entry and gate exit of vehicles
- Schedule consignment pickup by deploying the right vehicle
- Track consignment movement to report status
- 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
- Execute cargo consolidation to optimise travel, time, and cost
- Assist in customs clearance of goods by performing field customs clearance activities

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 Land Transportation Associate	20	10			30
LSC/N1201 – Book and process consignments NOS Version 1.0 NSQF Level 3	20	30	10		60
Module 2: Consignment booking and processing	20	30	10		60
LSC/N1004- Route planning and vendor coordination NOS Version 1.0 NSQF Level 3	20	30	10		60
Module 3: Route planning and vendor coordination	20	30	10		60
LSC/N1001 – Undertake gate operations NOS Version 1.0 NSQF Level 3	20	30	10		60
Module 4: Date operations	20	30	10		60







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LSC/N1132— Arrange and track the movement of consignments NOS Version 1.0 NSQF Level 3	20	40			60
Module 5: Consignment pickup and tracking	20	40			60
LSC/N9904 – Maintain integrity and ethics in operations NOS Version 1.0 NSQF Level 3	10	20			30
Module 6: Guidelines on integrity and ethics	10	20			30
LSC/N9905 - Follow health safety and security procedures NOS Version 1.0 NSQF Level 3	10	20			30
Module 7: Compliance to health, safety and security norms	10	20			30
LSC/N9906 - Verify GST invoices NOS Version 1.0 NSQF Level 3	10	20			30
Module 8: Verify GST application	10	20			30
Employability Skills DGT/VSQ/N0101	15	15			30
Total Duration	145	215	30		390







Option Modules

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

Option 1: Transport Consolidation

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
LSC/N1135 – Perform transport consolidation NOS Version 1.0 NSQF Level 3	30	30			60
Module 9: Consignment consolidation for transportation	30	30			60
Total Duration	30	30			60

Option 2: Customs Clearance

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
LSC/N2341 – Perform customs clearance field activities NOS Version 1.0 NSQF Level 3	30	30			60
Module 10: Field activities in customs clearance	30	30			60
Total Duration	30	30			60







Module Details

Module 1: Introduction to Land Transportation Associate *Mapped to Bridge Module*

Terminal Outcomes:

- Describe the basic structure and function of supply chain
- Detail the various functions of a Land transportation Associate

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 Explain job roles in Land Transportation Detail your job role as Land Transportation Associate and its interface with other job roles Describe the various MHEs and equipment used in Land transportation Discuss the documentation requirements land transportation 	 Identify the various MHEs and equipment's used in transportation Perform various operations functions of a land transportation associate
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whitel Tools, Equipment and Other Requirements	ooard/Smart Board, Marker, Board eraser
TMS(Learning version)	







Module 2: Consignment booking and processing *Mapped to LSC/N1201, v1.0*

Terminal Outcomes:

• Detail the steps involved in consignment booking and processing as per SOP

Duration: 20:00	Duration: 30:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Explain the procedure involved in order booking Describe the method of calculating loading requirements to identify the type of truck required Demonstrate the method to calculate transportation cost that occur during transit List the important documents for land transportation such as GST permit, Lorry receipt etc. Explain the course of problem that may occur during transit Explain the tracking procedure of vehicle and goods Illustrate inbound documentation and agreement sheet 	 Perform order booking as per SOP Compute the loading requirements to identify the type of truck required Calculate the transportation cost that occur during transit Formulate documents such as GST permit, Lorry receipt etc. Perform tracking of vehicle and goods as per SOP Process inbound documentation and agreement sheet

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

Tools, Equipment and Other Requirements

TMS(Learning version), SOP, Stationery, markers, PPEs, ERP, computer, printers, GPS tracker etc.







Module 3: Route planning and vendor coordination *Mapped to LSC/N1004, V1.0*

Terminal Outcomes:

- Detail the steps to be followed for route planning activities
- Discuss the steps to be followed for effective vendor coordination

Duration : 20:00	Duration : <i>30:00</i>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Detail the steps to be followed for the route planning procedure Explain the method to set up daily truck route and trip assignment Set up daily truck route and trip assignment Explain the route plan, schedule and necessary requirements to all stakeholders concerned 	 Identify point of origin, destination, type of good, pick-up time and date for a transit Perform the route planning procedure Identify alternate routes for times of emergency Set up daily truck route and trip assignment Organize necessary driver and helper for trip Arrange for consignment pickup and delivery

Classroom Aids

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

Tools, Equipment and Other Requirements

TMS(Learning version), SOP, computer, ERP, worksheets, Route optimization software, MS Excel and Access, Atlas Map, etc.







Module 4: Gate operations Mapped to LSC/N1001, V1.0

Terminal Outcomes:

• Detail the steps to be followed for effective gate operation activities

Duration: 20:00	Duration : <i>30:00</i>				
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes				
 Detail the steps to prepare vehicle wise/bay wise daily schedule for loading and unloading based on daily dispatch/ receipt plan Discuss the compliance and regulatory requirements Detail the precautions to be followed for hazardous goods transportation Describe the customs verification process Discuss the compliance to customs and legal clearance for all containers before approving exit pass 	 Prepare vehicle wise/ bay wise daily schedule for loading and unloading based on daily dispatch/ receipt plan Record plan details in ERP/TMS (Learning version) to communicate details to all stakeholders Inspect vehicle details and driver details for compliance to regulatory and consignment requirements Apply necessary precautions for hazardous goods transportation Demonstrate the customs verification process Verify compliance to customs and legal clearance for all containers before approving exit pass Communicate entry pass and exit pass through ERP/TMS(Learning version) 				
Classroom Aids					
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser					
Tools, Equipment and Other Requirements					
TMS(Learning version), SOP, ERP/ TMS(Learning version), computer, stationery, projector, etc.					







Module 5: Consignment pickup and tracking Mapped to LSC/N1132, V1.0

Terminal Outcomes:

Detail the steps to be followed for consignment pickup and tracking as per SOP

Duration: 20:00	Duration : 40:00		
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes		
 Detail the procedure to schedule consignment pickup by coordinating with transport companies and customers Explain the steps to be followed in case of exigencies List the mandatory documentation for perishable goods handling Detail the steps to be followed for tracking Discuss the process of recording information in ERP 	 Schedule consignment pickup by coordinating with transport companies and customers Plan alternate vehicle in coordination with Executive in-case of exigencies Inspect the vehicle for availability of all mandatory documentation for perishable goods handling Communicate to customer in case of any change in vehicle, pickup plan and schedule of operations Inspect compliance to schedule by coordinating with vehicle driver Record location of consignment in ERP periodically to track movement and compliance to schedule Appraise Executive, and Customer in case of documentation problems, accidents, GPS failure and any other case of exigencies 		

Classroom Aids

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

Tools, Equipment and Other Requirements

TMS(Learning version), Microsoft office, Global Positioning System (GPS) tracking and Enterprise Resource Planning (ERP)/ Transport Management System (TMS) (Learning version)software, computer, projector, stationery, work sheets etc.







Module 6: Guidelines on integrity and ethics Mapped to LSC/N9904, v1.0

Terminal Outcomes:

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

Duration: 10:00	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

TM(Learning version)S, LLMS(Learning version), SOP, Teaching board, computer, projector, video player, stationery, worksheets and TV







Module 7: Compliance to health, safety and security norms Mapped to LSC/N9905, v1.0

Terminal Outcomes:

- Describe health, safety, and security procedures
- 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: 10:00	Duration: 20:00		
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes		
 Detail health, safety and security procedures. 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. 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**

TMS(Learning version), LLMS(Learning version), PPEs, MHEs like Forklift, Reach stacker, pallet truck, etc., barcode scanner, packaging devices, packing material, markers and stationery, etc.







Module 8: Verify GST application Mapped to LSC/N9906, v1.0

Terminal Outcomes:

Demonstrate the process of verifying GST invoices as per SOP

Duration : <i>10:00</i>	Duration: 20:00		
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes		
 Differentiate location of service recipient and place of supply of services in GST application Determine classification of the transaction to apply the right CGST, IGST, and SGST Detail 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. Compute the applicable GST based on documentation Discuss the procedure for inspecting invoice for availability of mandatory information relating to GST application Classroom Aids	 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 		

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

Tools, Equipment and Other Requirements

TMS(Learning version), MS office, ERP, stationery, worksheets, computer, projector, GST guidelines etc.







Module 9: Employability Skills *Mapped to DGT/VSQ/N0101, v1.0*

Terminal Outcomes:

- Appraise the significance of employability skills in meeting the job requirements
- Identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices.
- Illustrate English and communication skills, customer service, entrepreneurship, and getting ready for jobs and apprenticeship.

Duration: 15:00	Duration: 15:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Detail the importance of Employability Skills in meeting the job requirements Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen. Describe positive attitude, self - motivation, problem solving, time management skills and continuous learning mindset in different situations. Discuss the significance of reporting sexual harassment issues in time Appraise the significance of using financial products and services safely and securely. Explain the importance of managing expenses, income, and savings. Detail the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws Discuss the significance of using internet for browsing, accessing social media platforms, safely and securely Categorize the need for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges Discuss the significance of maintaining hygiene and dressing appropriately Discuss how to search and register for apprenticeship opportunities Classroom Aids 	 Analyze 21st century skills. Practice appropriate basic English sentences/phrases while speaking Demonstrate how to communicate in a well -mannered way with others. Illustrate working with others in a team Demonstrate how to conduct oneself appropriately with all genders and PwD Operate digital devices and use the associated applications and features, safely and securely Differentiate between types of customers Create a biodata Experiment with various sources to search and apply for jobs Identify customer needs and address them Compose the significance of dressing up neatly and maintaining hygiene for an interview

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, LLMS(Learning version)







Module 10: Consignment consolidation for transportation Mapped to LSC/N1135, v1.0

Terminal Outcomes:

Demonstrate the steps for consignment consolidation as per SOP

Duration: 30:00	Duration : <i>30:00</i>				
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes				
 Explain components of truck schedule and dispatch schedule Describe the method of preparing consolidation plan based on nature of goods, volume of goods, FTL/LTL and other related parameters Explain the way to design effective loading plan Describe the process of lashing and cushioning of goods in the truck Demonstrate the way to record dispatch and delay details in ERP 	 Prepare consolidation plan based on nature of goods, volume of goods, FTL/LTL requirements, destination, delivery priority, route taken, truck dimensions and other related parameters Design loading plan to arrange goods in the demarcated space based on weight bearing capacity of bin/pallet/crate and delivery order Inspect compliance of loaded goods to the loading plan Arrange for replacement of damaged goods during handling Arrange for quarantine of damaged goods Record dispatch and delay details in ERP 				

Classroom Aids

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

Tools, Equipment and Other Requirements

TMS(Learning version), Microsoft office and Enterprise Resource Planning (ERP), Computer, worksheet, stationery, SOP etc.







Module 11: Field activities in customs clearance Mapped to LSC/N2341, v1.0

Terminal Outcomes:

Detail the appropriate steps to be followed for effective field activities in customs clearance

Duration: 30:00	Duration: 30:00			
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes			
 Discuss the documentation requirement for customs clearance Describe the dispute resolution process in customs clearance Describe different packaging requirements as per customer/country/ product requirements Detail customs inspection and container/cargo sealing process List the various documents to be submitted to shipper, customs agent, and EXIM office for filing and processing 	 Prepare documents required for customs clearance Resolve disputes in customs clearance as per company policy Inspect accuracy of packaging as per customer/ country/ product requirements Perform customs inspection and container/cargo sealing Plan for cargo handling and movement Report daily shipment activities, photographs of seals, container number, cargo stuffing and other relevant details relating to customs clearance Submit records to shipper, customs agent, and EXIM office for filing and processing 			

Classroom Aids

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

Tools, Equipment and Other Requirements

TMS(Learning version), SOP, MIS, ERP, worksheets, stationery, computer, projector etc.





Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational	Specialization	Relevant Industry Experience		Training Experience		Remarks
Qualification		Years	Specialization	Years	Specialization	
12 th Pass		2	Land Transportation	1	Land Transportation	

Trainer Certification				
Domain Certification	Platform Certification			
Certified for Job Role: "Land Transportation Associate" mapped to QP: "LSC/Q1001, v2.0". 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	NA	1	Land Transportation	1	Land Transportation	

Assessor Certification					
Domain Certification	Platform Certification				
Certified for Job Role: "Land Transportation Associate" mapped to QP: "LSC/Q1001, v2.0". 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
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
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