









# Warehouse Data Analyst

QP Code: LSC/Q0503

Version: 1.0

NSQF Level: 6

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# LSC/Q0503: Warehouse Data Analyst

### **Brief Job Description**

The individual is responsible for working on the warehouse monitoring, reporting, data analysis and bringing business insights into the processes ensuring the warehouse operations improve on a continuous basis.

### **Personal Attributes**

The individual must have analytical skills to maneuver with data. The person shall be able to track and monitor key performance indicators which are important to deliver project successfully. The individual shall work closely with various stakeholders from different departments to co-ordinate and deliver the required results.

### **Applicable National Occupational Standards (NOS)**

### **Compulsory NOS:**

- 1. LSC/N0509: Data Collection and Analysis for Warehouse
- 2. LSC/N0510: Performance Monitoring and Tracking Key KPIs
- 3. LSC/N0511: Technical Tool Analysis
- 4. LSC/N0512: Reporting, Visualization and BI
- 5. LSC/N0513: Data Modelling and Forecasting
- 6. LSC/N0514: Data Integrity and Quality Control
- 7. LSC/N9911: Follow health, safety, security procedures and maintain integrity, ethics at workplace
- 8. DGT/VSQ/N0103: Employability Skills (90 Hours)

### **Qualification Pack (QP) Parameters**

Sector	Logistics
Sub-Sector	Warehousing (Storage & Packaging)
Occupation	Technology
Country	India









NSQF Level	6
Credits	21
Aligned to NCO/ISCO/ISIC Code	NCO-2015/2511
Minimum Educational Qualification & Experience	MBA (Operations Management) OR B.E./B.Tech with 1 Year of experience in warehouse operations OR Completed 3 year UG degree with 5 Years of experience in warehouse operations OR Pursuing PG diploma after 3 year UG degree (Pursuing 2nd year PG diploma in Logistics after 3 year UG degree)
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	23 Years
Last Reviewed On	NA
Next Review Date	30/11/2026
NSQC Approval Date	30/11/2023
Version	1.0
Reference code on NQR	QG-06-TW-01357-2023-V1-LSC
NQR Version	1.0







# LSC/N0509: Data Collection and Analysis for Warehouse

## Description

This unit is about collecting, cleaning, organizing, and analysing large volumes of data from various sources.

### Scope

The scope covers the following :

- Data collection within the warehouse and integrating from outside interfaces
- Sanity of data and basic validations
- Organizing and analysing the data

### **Elements and Performance Criteria**

### Data collection within the warehouse and integrating from outside interfaces

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

- **PC1.** Collect information on different warehouse buildings.
- PC2. Obtain information on mezzanine floor in the warehouse buildings.
- **PC3.** Obtain information on aisles and bays.
- PC4. Obtain information on different kinds of locations.
- **PC5.** Collect purchase order and invoice data integrating from upstream.
- PC6. Collect various order like store order, DC to DC transfer orders.
- PC7. Obtain information on storage zones, picking zones and inventory.
- **PC8.** Obtain information on returns area to manage reverse logistics.

### Sanity of data and basic validations

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

**PC9.** Process the data in system tools to validate the count of records against the physical count.

**PC10.** Process the data in system tools to check for duplicate records.

#### Organizing and analysing the data

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

- PC11. Organize the data collected from different sources in separate files/folders.
- PC12. Analyse the data to validate if the count of several data matches with physical data.
- **PC13.** Prepare flow charts to represent data and analyse any missing entity.

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** different regions of the warehouse
- KU2. demography of the local workforce









- KU3. advanced computer knowledge
- KU4. data analysis
- **KU5.** flow chart preparation

### **Generic Skills (GS)**

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

- GS1. existing warehouse design document
- GS2. warehouse layout guidelines
- GS3. tags and labels
- GS4. document on data and find the missing entity
- GS5. warehouse process flows
- **GS6.** communicate with co-workers and supervisors
- GS7. collect information from supervisors, associates, and peers
- GS8. conduct advanced checks and verify the accuracy of the data provided
- GS9. identify errors in data and identify correction and document the changes
- GS10. draw inferences and conclusions based on trend analysis
- **GS11.** maintain punctuality
- GS12. plan for timely collection of data from warehouse users
- **GS13.** be a team player and achieve joint goals
- **GS14.** adhere to customer timelines
- GS15. address urgency of customers
- GS16. speak politely with customer and take feedback constructively
- GS17. identify common trends as per analysis and implement the same in new layouts
- GS18. implement possible solutions for the common issues in daily operations based on information
- GS19. identify the processes and layouts to mitigate possible future failures
- GS20. analyse trends to identify defaults for corrective action as needed
- GS21. observe the warehouse layouts, interfaces and find best possible way to collect data
- GS22. cross check the data and possibly find the optimum inventory levels







# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Data collection within the warehouse and integrating from outside interfaces	18	37	-	5
<b>PC1.</b> Collect information on different warehouse buildings.	2	5	-	1
<b>PC2.</b> Obtain information on mezzanine floor in the warehouse buildings.	2	5	-	-
PC3. Obtain information on aisles and bays.	3	5	-	-
<b>PC4.</b> Obtain information on different kinds of locations.	3	5	-	1
<b>PC5.</b> Collect purchase order and invoice data integrating from upstream.	2	4	-	-
<b>PC6.</b> Collect various order like store order, DC to DC transfer orders.	2	4	-	1
<b>PC7.</b> Obtain information on storage zones, picking zones and inventory.	2	4	-	1
<b>PC8.</b> Obtain information on returns area to manage reverse logistics.	2	5	-	1
Sanity of data and basic validations	6	11	-	2
<b>PC9.</b> Process the data in system tools to validate the count of records against the physical count.	3	6	-	1
<b>PC10.</b> Process the data in system tools to check for duplicate records.	3	5	-	1
Organizing and analysing the data	6	12	-	3
<b>PC11.</b> Organize the data collected from different sources in separate files/folders.	2	4	-	1
<b>PC12.</b> Analyse the data to validate if the count of several data matches with physical data.	2	4	-	1
<b>PC13.</b> Prepare flow charts to represent data and analyse any missing entity.	2	4	-	1









Assessment Criteria for Outcomes	Theory	Practical	Project	Viva
	Marks	Marks	Marks	Marks
NOS Total	30	60	-	10









# National Occupational Standards (NOS) Parameters

NOS Code	LSC/N0509
NOS Name	Data Collection and Analysis for Warehouse
Sector	Logistics
Sub-Sector	Warehousing (Storage & Packaging)
Occupation	Technology
NSQF Level	6
Credits	3
Version	1.0
Last Reviewed Date	30/11/2023
Next Review Date	30/11/2026
NSQC Clearance Date	30/11/2023







# LSC/N0510: Performance Monitoring and Tracking Key KPIs

### Description

This unit is about tracking and monitoring key performance indicators (KPIs) related to warehouse operations, such as inventory levels, order fulfilment, cycle times, and accuracy rates.

### Scope

The scope covers the following :

- Establishing the KPI
- Warehouse inventory level monitoring
- Warehouse receiving operations monitoring
- Warehouse order fulfilment monitoring
- Warehouse cycle count monitoring
- Warehouse reverse logistics monitoring

### **Elements and Performance Criteria**

#### Establishing the KPI

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

- **PC1.** Collaborate with stakeholders, including warehouse managers, operations teams, and senior leadership, to define and establish relevant KPIs for warehouse performance.
- **PC2.** Monitor KPIs regularly, track performance against targets, and identify areas of improvement or concern.

#### Warehouse Inventory level Monitoring

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

- **PC3.** Calculate the optimum inventory level at each zones and areas.
- **PC4.** Prepare the inventory levels at different warehouse zones and areas.
- **PC5.** Maintain record of inventory levels in non pickable area.

#### Warehouse Receiving Operations Monitoring

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

- **PC6.** Calculate the time required to receive a full truck load of inventory.
- **PC7.** Measure sample size of the receiving operations and provide a benchmark.
- **PC8.** Measure the time taken to move the inventory from receiving docks to staging area and finally to storage locations.

#### Warehouse Order Fulfilment Monitoring

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

- **PC9.** Measure the time required to pick 1 pallet/case/each.
- **PC10.** Measure the total turnaround time to do the picking 1 pallet/case/each.
- **PC11.** Prepare the amount of urgent replenishment which were triggered due to inventory not available at pick locations.
- **PC12.** Prepare the list of orders which cannot be shipped due to inventory unavailability.







### Warehouse Cycle Count Monitoring

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

- PC13. Monitor the cycle count process and track inventory mismatch.
- PC14. Work with stakeholders to build reports on the variance and track the reason.
- **PC15.** Conduct in-depth root cause analysis to understand the factors influencing variance.

#### Warehouse Reverse Logistics Monitoring

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

- **PC16.** Gather data related to reverse logistics activities, including returned products, reasons for returns, return locations, transportation details, and any associated costs.
- **PC17.** Analyse historical return data to identify trends and patterns in return volumes, reasons for returns, and any seasonality in return rates.
- **PC18.** Evaluate the costs associated with reverse logistics, including transportation, processing, restocking, and refurbishment costs.

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. different regions of the warehouse
- KU2. demography of the local workforce
- KU3. advanced computer knowledge
- KU4. data analysis
- **KU5.** flow chart preparation

### **Generic Skills (GS)**

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

- GS1. existing warehouse design document
- **GS2.** warehouse layout guidelines
- GS3. tags and labels
- **GS4.** document on data and find the missing entity
- **GS5.** warehouse process flows
- GS6. communicate with co-workers and supervisors
- **GS7.** collect information from supervisors, associates, and peers
- **GS8.** conduct advanced checks and verify the accuracy of the data provided
- **GS9.** identify errors in data and identify correction and document the changes
- GS10. draw inferences and conclusions based on trend analysis
- **GS11.** maintain punctuality
- GS12. plan for timely collection of data from warehouse users
- **GS13.** be a team player and achieve joint goals
- GS14. adhere to customer timelines







- **GS15.** address urgency of customers
- **GS16.** speak politely with customer and take feedback constructively
- GS17. identify common trends as per analysis and implement the same in new layouts
- **GS18.** implement possible solutions for the common issues in daily operations based on information
- **GS19.** identify the processes and layouts to mitigate possible future failures
- **GS20.** analyse trends to identify defaults for corrective action as needed
- GS21. observe the warehouse layouts, interfaces and find best possible way to collect data
- **GS22.** cross check the data and possibly find the optimum inventory levels







# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Establishing the KPI	2	7	-	1
<b>PC1.</b> Collaborate with stakeholders, including warehouse managers, operations teams, and senior leadership, to define and establish relevant KPIs for warehouse performance.	1	3	-	-
<b>PC2.</b> Monitor KPIs regularly, track performance against targets, and identify areas of improvement or concern.	1	4	-	1
Warehouse Inventory level Monitoring	4	9	-	2
<b>PC3.</b> Calculate the optimum inventory level at each zones and areas.	1	3	-	-
<b>PC4.</b> Prepare the inventory levels at different warehouse zones and areas.	1	3	-	1
<b>PC5.</b> Maintain record of inventory levels in non pickable area.	2	3	-	1
Warehouse Receiving Operations Monitoring	6	9	-	2
<b>PC6.</b> Calculate the time required to receive a full truck load of inventory.	2	3	-	1
<b>PC7.</b> Measure sample size of the receiving operations and provide a benchmark.	2	3	-	1
<b>PC8.</b> Measure the time taken to move the inventory from receiving docks to staging area and finally to storage locations.	2	3	_	_
Warehouse Order Fulfilment Monitoring	8	13	-	1
<b>PC9.</b> Measure the time required to pick 1 pallet/case/each.	2	3	-	-
<b>PC10.</b> Measure the total turnaround time to do the picking 1 pallet/case/each.	2	3	-	-
<b>PC11.</b> Prepare the amount of urgent replenishment which were triggered due to inventory not available at pick locations.	2	4	_	1









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> Prepare the list of orders which cannot be shipped due to inventory unavailability.	2	3	-	-
Warehouse Cycle Count Monitoring	6	11	-	2
<b>PC13.</b> Monitor the cycle count process and track inventory mismatch.	2	4	-	1
<b>PC14.</b> Work with stakeholders to build reports on the variance and track the reason.	2	3	-	-
<b>PC15.</b> Conduct in-depth root cause analysis to understand the factors influencing variance.	2	4	-	1
Warehouse Reverse Logistics Monitoring	4	11	-	2
<b>PC16.</b> Gather data related to reverse logistics activities, including returned products, reasons for returns, return locations, transportation details, and any associated costs.	2	3	-	1
<b>PC17.</b> Analyse historical return data to identify trends and patterns in return volumes, reasons for returns, and any seasonality in return rates.	1	4	-	1
<b>PC18.</b> Evaluate the costs associated with reverse logistics, including transportation, processing, restocking, and refurbishment costs.	1	4	-	-
NOS Total	30	60	-	10









# National Occupational Standards (NOS) Parameters

NOS Code	LSC/N0510
NOS Name	Performance Monitoring and Tracking Key KPIs
Sector	Logistics
Sub-Sector	Warehousing (Storage & Packaging)
Occupation	Technology
NSQF Level	6
Credits	3
Version	1.0
Last Reviewed Date	30/11/2023
Next Review Date	30/11/2026
NSQC Clearance Date	30/11/2023







# LSC/N0511: Technical Tool Analysis

### Description

This unit is about conducting technical tool analysis which involves evaluating and selecting appropriate tools and technologies to manage and analyse data within the warehouse environment efficiently and effectively.

### Scope

The scope covers the following :

• Technical tool selection and uses

### **Elements and Performance Criteria**

#### Technical tool selection and uses

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

- **PC1.** Conduct research to identify relevant data analytics, data warehousing, and data management tools available in the market.
- **PC2.** Evaluate tools features, capabilities, and suitability for the warehouse's requirements.
- **PC3.** Assess the strengths and weaknesses of different tools and technologies after considering technical factors such as scalability, performance, ease of use, integration capabilities, and compatibility with existing systems.
- **PC4.** Prepare a report with SWOT analysis of each of the shortlisted tools. Present the report to stakeholders and conduct meeting to finalize the tool after considering the organization's budget, long-term data requirements, and the skillset of the data team.
- **PC5.** Evaluate ETL tools that facilitate data extraction, transformation, and loading processes to ensure that data is prepared and made available for analysis.
- **PC6.** Evaluate statistical analysis software that can be used to perform advanced analytics and predictive modelling on warehouse data.
- **PC7.** Investigate business intelligence tools that enable ad-hoc querying, reporting, and data exploration for better decision-making.
- **PC8.** Ensure that the selected tools comply with data security and governance requirements, especially when dealing with sensitive or confidential data.
- **PC9.** Evaluate how well the chosen tools can integrate with the organization's existing IT infrastructure and data management systems.
- **PC10.** Conduct testing and proof of concept projects to validate the effectiveness and compatibility of the selected tools in the warehouse environment.
- **PC11.** Coordinate training sessions for the data team to ensure they can effectively use the chosen tools for their data analysis tasks.
- PC12. Ensure effective transition of tools to the vendor and responsible stakeholders.

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

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- KU1. organizational procedure
- **KU2.** different regions of the warehouse
- **KU3.** demography of the local workforce
- KU4. advanced computer knowledge
- KU5. data analysis
- KU6. flow chart preparation

### **Generic Skills (GS)**

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

- GS1. existing warehouse design document
- GS2. warehouse layout guidelines
- GS3. tags and labels
- GS4. document on data and find the missing entity
- GS5. warehouse process flows
- GS6. communicate with co-workers and supervisors
- GS7. collect information from supervisors, associates, and peers
- GS8. conduct advanced checks and verify the accuracy of the data provided
- GS9. identify errors in data and identify correction and document the changes
- GS10. draw inferences and conclusions based on trend analysis
- **GS11.** maintain punctuality
- GS12. plan for timely collection of data from warehouse users
- GS13. be a team player and achieve joint goals
- GS14. adhere to customer timelines
- GS15. address urgency of customers
- GS16. speak politely with customer and take feedback constructively
- GS17. identify common trends as per analysis and implement the same in new layouts
- GS18. implement possible solutions for the common issues in daily operations based on information
- **GS19.** identify the processes and layouts to mitigate possible future failures
- GS20. analyse trends to identify defaults for corrective action as needed
- GS21. observe the warehouse layouts, interfaces and find best possible way to collect data
- GS22. cross check the data and possibly find the optimum inventory levels







# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Technical tool selection and uses	30	60	-	10
<b>PC1.</b> Conduct research to identify relevant data analytics, data warehousing, and data management tools available in the market.	3	5	-	1
<b>PC2.</b> Evaluate tools features, capabilities, and suitability for the warehouse's requirements.	2	5	-	1
<b>PC3.</b> Assess the strengths and weaknesses of different tools and technologies after considering technical factors such as scalability, performance, ease of use, integration capabilities, and compatibility with existing systems.	3	5	-	-
<b>PC4.</b> Prepare a report with SWOT analysis of each of the shortlisted tools. Present the report to stakeholders and conduct meeting to finalize the tool after considering the organization's budget, long-term data requirements, and the skillset of the data team.	3	5	-	1
<b>PC5.</b> Evaluate ETL tools that facilitate data extraction, transformation, and loading processes to ensure that data is prepared and made available for analysis.	2	5	-	1
<b>PC6.</b> Evaluate statistical analysis software that can be used to perform advanced analytics and predictive modelling on warehouse data.	3	5	-	1
<b>PC7.</b> Investigate business intelligence tools that enable ad-hoc querying, reporting, and data exploration for better decision-making.	3	5	-	-
<b>PC8.</b> Ensure that the selected tools comply with data security and governance requirements, especially when dealing with sensitive or confidential data.	2	5	-	1
<b>PC9.</b> Evaluate how well the chosen tools can integrate with the organization's existing IT infrastructure and data management systems.	2	5	-	1









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> Conduct testing and proof of concept projects to validate the effectiveness and compatibility of the selected tools in the warehouse environment.	3	5	-	1
<b>PC11.</b> Coordinate training sessions for the data team to ensure they can effectively use the chosen tools for their data analysis tasks.	2	5	-	1
<b>PC12.</b> Ensure effective transition of tools to the vendor and responsible stakeholders.	2	5	-	1
NOS Total	30	60	-	10









# National Occupational Standards (NOS) Parameters

NOS Code	LSC/N0511
NOS Name	Technical Tool Analysis
Sector	Logistics
Sub-Sector	Warehousing (Storage & Packaging)
Occupation	Technology
NSQF Level	6
Credits	2
Version	1.0
Last Reviewed Date	30/11/2023
Next Review Date	30/11/2026
NSQC Clearance Date	30/11/2023







# LSC/N0512: Reporting, Visualization and BI

# Description

This unit is about reports, dashboards, and visual representations of data to present insights and trends to stakeholders, management, and cross-functional teams.

## Scope

The scope covers the following :

• Designing and developing reports, dashboard and visual representations

### **Elements and Performance Criteria**

#### Designing and developing reports, dashboard and visual representations

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

- **PC1.** Collect the requirement about reports from business users after discussing the different processes.
- PC2. Perform as-is analysis of the existing reports.
- **PC3.** Perform fit-gap analysis on how to enhance existing reports (if any) to fulfil the business needs.
- PC4. Prepare Business Requirement Document (BRD) for new reports.
- PC5. Prepare a design document for each of new reports.
- **PC6.** Prepare design document which shall consist of report layout, dashboard requirement, visual representations, data requirements.
- **PC7.** Provide guidance to developer to prepare technical design document. Finalize the data set required to present the data in reports.
- **PC8.** Perform unit test of reports, dashboards.
- **PC9.** Work with business users to perform user acceptance test for reports.
- **PC10.** Deploy the reports for business end users.

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. organizational procedure
- KU2. different regions of the warehouse
- KU3. demography of the local workforce
- KU4. advanced computer knowledge
- KU5. data analysis
- **KU6.** flow chart preparation

### **Generic Skills (GS)**

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

- **GS1.** existing warehouse design document
- GS2. warehouse layout guidelines
- GS3. tags and labels
- **GS4.** document on data and find the missing entity
- GS5. warehouse process flows
- **GS6.** communicate with co-workers and supervisors
- **GS7.** collect information from supervisors, associates, and peers
- **GS8.** conduct advanced checks and verify the accuracy of the data provided
- GS9. identify errors in data and identify correction and document the changes
- GS10. draw inferences and conclusions based on trend analysis
- **GS11.** maintain punctuality
- GS12. plan for timely collection of data from warehouse users
- GS13. be a team player and achieve joint goals
- **GS14.** adhere to customer timelines
- GS15. address urgency of customers
- GS16. speak politely with customer and take feedback constructively
- GS17. identify common trends as per analysis and implement the same in new layouts
- GS18. implement possible solutions for the common issues in daily operations based on information
- GS19. identify the processes and layouts to mitigate possible future failures
- GS20. analyse trends to identify defaults for corrective action as needed
- GS21. observe the warehouse layouts, interfaces and find best possible way to collect data
- GS22. cross check the data and possibly find the optimum inventory levels







# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Designing and developing reports, dashboard and visual representations	30	60	-	10
<b>PC1.</b> Collect the requirement about reports from business users after discussing the different processes.	3	6	-	1
<b>PC2.</b> Perform as-is analysis of the existing reports.	3	6	-	1
<b>PC3.</b> Perform fit-gap analysis on how to enhance existing reports (if any) to fulfil the business needs.	3	6	-	1
<b>PC4.</b> Prepare Business Requirement Document (BRD) for new reports.	3	6	-	1
<b>PC5.</b> Prepare a design document for each of new reports.	3	6	-	1
<b>PC6.</b> Prepare design document which shall consist of report layout, dashboard requirement, visual representations, data requirements.	3	6	-	1
<b>PC7.</b> Provide guidance to developer to prepare technical design document. Finalize the data set required to present the data in reports.	3	6	-	1
PC8. Perform unit test of reports, dashboards.	3	6	-	1
<b>PC9.</b> Work with business users to perform user acceptance test for reports.	3	6	-	1
<b>PC10.</b> Deploy the reports for business end users.	3	6	-	1
NOS Total	30	60	-	10









# National Occupational Standards (NOS) Parameters

NOS Code	LSC/N0512
NOS Name	Reporting, Visualization and BI
Sector	Logistics
Sub-Sector	Warehousing (Storage & Packaging)
Occupation	Technology
NSQF Level	6
Credits	3
Version	1.0
Last Reviewed Date	30/11/2023
Next Review Date	30/11/2026
NSQC Clearance Date	30/11/2023







# LSC/N0513: Data Modelling and Forecasting

## Description

This unit is about predictive modelling to forecast inventory needs, identify demand patterns and optimize warehouse layout

## Scope

The scope covers the following :

- Forecast inventory needs
- Identify demand patterns

### **Elements and Performance Criteria**

#### Forecast inventory needs

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

- **PC1.** Gather historical sales data, customer orders, and any other relevant data sources from the warehouse management system, or enterprise resource planning (ERP) system.
- **PC2.** Clean the data to remove any inconsistencies, errors, or missing values. Preprocess the data to make it suitable for analysis, such as aggregating it into relevant time periods (e.g., daily, weekly, monthly).
- **PC3.** Analyse past demand patterns to identify any seasonal trends, cyclic patterns, or significant events that might have affected sales to form the basis of forecasting model.
- **PC4.** Select appropriate forecasting methods based on the demand analysis and the characteristics of your data. Common methods include time series forecasting techniques like moving averages, exponential smoothing.
- **PC5.** Use the selected forecasting method(s) to generate future demand forecasts for each product or product category in the warehouse. These forecasts will serve as estimates of the inventory needs in the upcoming periods.
- **PC6.** Work closely with the sales and marketing teams to gather insights into upcoming promotions, new product launches, or any other factors that could impact future demand. Incorporate these insights into forecasting model.
- **PC7.** Analyse the lead time for each product to understand the time it takes to replenish stock once an order is placed. Incorporate this lead time information into inventory forecast calculations.

#### Identify demand patterns

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

- **PC8.** Gather relevant data from various sources such as warehouse management systems, sales records, customer orders, and other related databases.
- **PC9.** Gather historical sales data, SKU-level information, inventory levels, seasonal factors, and any other relevant data.
- **PC10.** Cleanse and preprocess the collected data to ensure accuracy and consistency.
- **PC11.** Cleanse and identify missing values, removing outliers, standardizing units, and transforming data into a suitable format for analysis.







- **PC12.** Identify seasonal demand patterns and trends to understand how demand varies throughout the year.
- **PC13.** Analyse inventory levels and turnover rates to optimize stock levels and reduce carrying costs while ensuring product availability to meet demand.
- **PC14.** Continuously monitor demand patterns and forecast accuracy to assess the effectiveness of the implemented strategies and models.
- **PC15.** Collaborate with other teams, such as supply chain management, sales, marketing, and finance, to align demand forecasts with business strategies and plans.
- **PC16.** Conduct ad-hoc analyses based on specific questions or requests from management or other stakeholders.

# Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** organizational procedure
- KU2. different regions of the warehouse
- KU3. demography of the local workforce
- KU4. advanced computer knowledge
- KU5. data analysis
- KU6. flow chart preparation

### **Generic Skills (GS)**

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

- GS1. existing warehouse design document
- **GS2.** warehouse layout guidelines
- GS3. tags and labels
- **GS4.** document on data and find the missing entity
- **GS5.** warehouse process flows
- **GS6.** communicate with co-workers and supervisors
- GS7. collect information from supervisors, associates, and peers
- **GS8.** conduct advanced checks and verify the accuracy of the data provided
- **GS9.** identify errors in data and identify correction and document the changes
- GS10. draw inferences and conclusions based on trend analysis
- **GS11.** maintain punctuality
- GS12. plan for timely collection of data from warehouse users
- **GS13.** be a team player and achieve joint goals
- **GS14.** adhere to customer timelines
- GS15. address urgency of customers
- GS16. speak politely with customer and take feedback constructively
- **GS17.** identify common trends as per analysis and implement the same in new layouts







- **GS18.** implement possible solutions for the common issues in daily operations based on information
- **GS19.** identify the processes and layouts to mitigate possible future failures
- **GS20.** analyse trends to identify defaults for corrective action as needed
- **GS21.** observe the warehouse layouts, interfaces and find best possible way to collect data
- **GS22.** cross check the data and possibly find the optimum inventory levels







# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Forecast inventory needs	14	26	-	4
<b>PC1.</b> Gather historical sales data, customer orders, and any other relevant data sources from the warehouse management system, or enterprise resource planning (ERP) system.	2	4	-	1
<b>PC2.</b> Clean the data to remove any inconsistencies, errors, or missing values. Preprocess the data to make it suitable for analysis, such as aggregating it into relevant time periods (e.g., daily, weekly, monthly).	2	4	-	1
<b>PC3.</b> Analyse past demand patterns to identify any seasonal trends, cyclic patterns, or significant events that might have affected sales to form the basis of forecasting model.	2	4	-	-
<b>PC4.</b> Select appropriate forecasting methods based on the demand analysis and the characteristics of your data. Common methods include time series forecasting techniques like moving averages, exponential smoothing.	2	3	-	-
<b>PC5.</b> Use the selected forecasting method(s) to generate future demand forecasts for each product or product category in the warehouse. These forecasts will serve as estimates of the inventory needs in the upcoming periods.	2	3	-	1
<b>PC6.</b> Work closely with the sales and marketing teams to gather insights into upcoming promotions, new product launches, or any other factors that could impact future demand. Incorporate these insights into forecasting model.	2	4	-	-
<b>PC7.</b> Analyse the lead time for each product to understand the time it takes to replenish stock once an order is placed. Incorporate this lead time information into inventory forecast calculations.	2	4	-	1
Identify demand patterns	16	34	-	6









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC8.</b> Gather relevant data from various sources such as warehouse management systems, sales records, customer orders, and other related databases.	2	3	-	1
<b>PC9.</b> Gather historical sales data, SKU-level information, inventory levels, seasonal factors, and any other relevant data.	2	4	-	1
<b>PC10.</b> Cleanse and preprocess the collected data to ensure accuracy and consistency.	2	3	-	-
<b>PC11.</b> Cleanse and identify missing values, removing outliers, standardizing units, and transforming data into a suitable format for analysis.	2	4	-	1
<b>PC12.</b> Identify seasonal demand patterns and trends to understand how demand varies throughout the year.	2	4	-	1
<b>PC13.</b> Analyse inventory levels and turnover rates to optimize stock levels and reduce carrying costs while ensuring product availability to meet demand.	2	4	-	1
<b>PC14.</b> Continuously monitor demand patterns and forecast accuracy to assess the effectiveness of the implemented strategies and models.	2	4	-	-
<b>PC15.</b> Collaborate with other teams, such as supply chain management, sales, marketing, and finance, to align demand forecasts with business strategies and plans.	1	4	-	-
<b>PC16.</b> Conduct ad-hoc analyses based on specific questions or requests from management or other stakeholders.	1	4	-	1
NOS Total	30	60	-	10









# National Occupational Standards (NOS) Parameters

NOS Code	LSC/N0513
NOS Name	Data Modelling and Forecasting
Sector	Logistics
Sub-Sector	Warehousing (Storage & Packaging)
Occupation	Technology
NSQF Level	6
Credits	3
Version	1.0
Last Reviewed Date	30/11/2023
Next Review Date	30/11/2026
NSQC Clearance Date	30/11/2023







# LSC/N0514: Data Integrity and Quality Control

## Description

This unit is about ensuring data integrity and quality control in a warehouse setting maintaining the accuracy, consistency, and reliability of the data stored in the warehouse.

### Scope

The scope covers the following :

- Maintaining data integrity
- Maintaining data quality control

### **Elements and Performance Criteria**

#### Maintaining data integrity

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

- PC1. Implement data validation rules to check the integrity of incoming data.
- **PC2.** Implement validation checks for data types, ranges, and constraints to ensure that only valid and correctly formatted data is entered into the warehouse.
- PC3. Standardize and transform data to ensure uniformity across different sources.
- **PC4.** Converting data into a common format, consistent units of measurement, and handling data from various systems or file types.
- **PC5.** Maintain comprehensive documentation about data sources, data definitions, and any transformations applied.
- **PC6.** Establishing data governance after collaborating with several teams including IT teams and other stakeholders ensuring defined responsibilities and accountability.
- **PC7.** Ensure data security and compliance with relevant data protection regulations. Implement measures to protect sensitive data and restrict access to authorized personnel only.
- **PC8.** Optimize data storage and retrieval processes to enhance the overall performance of the warehouse, ensuring that queries and reports run efficiently.
- **PC9.** Conduct periodic data audits to assess the overall data quality and identify areas for improvement.

### Maintaining data quality control

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

- **PC10.** Profile the data in the warehouse to understand its structure, content, and quality.
- PC11. Assessing data types, distributions, and identifying any potential data quality issues.
- **PC12.** Regularly clean and preprocess the data to handle missing values including deduplication, and error correction.
- **PC13.** Generate data quality reports and dashboards to communicate data quality metrics and issues to stakeholders and management.
- **PC14.** Provide training and support to data users to promote data quality awareness and best practices for data entry and maintenance.









# Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. organizational procedure
- KU2. different regions of the warehouse
- KU3. demography of the local workforce
- **KU4.** advanced computer knowledge
- KU5. data analysis
- KU6. flow chart preparation

### **Generic Skills (GS)**

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

- GS1. existing warehouse design document
- GS2. warehouse layout guidelines
- GS3. tags and labels
- **GS4.** document on data and find the missing entity
- GS5. warehouse process flows
- **GS6.** communicate with co-workers and supervisors
- GS7. collect information from supervisors, associates, and peers
- **GS8.** conduct advanced checks and verify the accuracy of the data provided
- GS9. identify errors in data and identify correction and document the changes
- GS10. draw inferences and conclusions based on trend analysis
- **GS11.** maintain punctuality
- GS12. plan for timely collection of data from warehouse users
- GS13. be a team player and achieve joint goals
- **GS14.** adhere to customer timelines
- GS15. address urgency of customers
- **GS16.** speak politely with customer and take feedback constructively
- GS17. identify common trends as per analysis and implement the same in new layouts
- GS18. implement possible solutions for the common issues in daily operations based on information
- GS19. identify the processes and layouts to mitigate possible future failures
- GS20. analyse trends to identify defaults for corrective action as needed
- GS21. observe the warehouse layouts, interfaces and find best possible way to collect data
- GS22. cross check the data and possibly find the optimum inventory levels







# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Maintaining data integrity	19	38	-	7
<b>PC1.</b> Implement data validation rules to check the integrity of incoming data.	2	4	-	1
<b>PC2.</b> Implement validation checks for data types, ranges, and constraints to ensure that only valid and correctly formatted data is entered into the warehouse.	2	5	-	-
<b>PC3.</b> Standardize and transform data to ensure uniformity across different sources.	2	4	-	1
<b>PC4.</b> Converting data into a common format, consistent units of measurement, and handling data from various systems or file types.	2	5	-	1
<b>PC5.</b> Maintain comprehensive documentation about data sources, data definitions, and any transformations applied.	3	4	-	1
<b>PC6.</b> Establishing data governance after collaborating with several teams including IT teams and other stakeholders ensuring defined responsibilities and accountability.	2	4	-	1
<b>PC7.</b> Ensure data security and compliance with relevant data protection regulations. Implement measures to protect sensitive data and restrict access to authorized personnel only.	2	4	-	1
<b>PC8.</b> Optimize data storage and retrieval processes to enhance the overall performance of the warehouse, ensuring that queries and reports run efficiently.	2	4	-	1
<b>PC9.</b> Conduct periodic data audits to assess the overall data quality and identify areas for improvement.	2	4	-	-
Maintaining data quality control	11	22	-	3
<b>PC10.</b> Profile the data in the warehouse to understand its structure, content, and quality.	2	4	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC11.</b> Assessing data types, distributions, and identifying any potential data quality issues.	3	5	-	1
<b>PC12.</b> Regularly clean and preprocess the data to handle missing values including deduplication, and error correction.	2	4	-	1
<b>PC13.</b> Generate data quality reports and dashboards to communicate data quality metrics and issues to stakeholders and management.	2	5	-	-
<b>PC14.</b> Provide training and support to data users to promote data quality awareness and best practices for data entry and maintenance.	2	4	-	1
NOS Total	30	60	-	10







# National Occupational Standards (NOS) Parameters

NOS Code	LSC/N0514
NOS Name	Data Integrity and Quality Control
Sector	Logistics
Sub-Sector	Warehousing (Storage & Packaging)
Occupation	Technology
NSQF Level	6
Credits	2
Version	1.0
Last Reviewed Date	30/11/2023
Next Review Date	30/11/2026
NSQC Clearance Date	30/11/2023







# LSC/N9911: Follow health, safety, security procedures and maintain integrity, ethics at workplace

### Description

This unit deals in detail with application of health, safety, security procedures at workplace and maintaining integrity, ensuring data security, professional and ethical practice.

### Scope

The scope covers the following :

- Follow health, safety and security measures during all activities
- Maintain a healthy and hygienic workplace
- Handle emergency situations
- Maintain integrity and ensure data security
- Professional and ethical practice
- Ensure regulatory compliance

## **Elements and Performance Criteria**

### Follow health, safety and security measures during all activities

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

- **PC1.** Comply with safety regulations and procedures to avoid fire hazards, biohazards, etc.
- **PC2.** Wear all safety equipment including protective gear, helmets etc., in relevant bay areas.
- PC3. Follow organisation procedures concerning documentation.
- **PC4.** Recognise unsafe workplace conditions and safety practices and report them to concerned authorities.

### Maintain a healthy and hygienic workplace

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

- **PC5.** Ensure that the work area and supplies are organised and cleaned regularly.
- **PC6.** Comply with data safety regulations of the organisation and follow clear worktable area policy.
- **PC7.** Maintain personal hygiene and wash hands regularly using soap and water or alcohol-based sanitizer.
- **PC8.** Undertake periodical preventive health check-ups.
- **PC9.** Participate in fire drills and follow 5S at workplace.

### Handle emergency situations

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

- **PC10.** Act immediately during emergencies and move to safety.
- **PC11.** Provide first aid to affected victims e.g., in case of bleeding, burns, choking, electric shock, poisoning etc.
- **PC12.** In case of fire, follow fire safety practices taught during fire drills.
- PC13. Follow procedures to rescue victims of fire without endangering self.









#### Maintain integrity and ensure data security

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

- **PC14.** Refrain from indulging in corrupt practices.
- **PC15.** Protect customers' information and ensure acquired information is not used for personal advantage.
- PC16. Protect data and information related to business or commercial decisions.

#### Professional and ethical practice

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

- **PC17.** Sensitize the workforce towards ethical behaviour in the workplace and performing jobs with integrity.
- **PC18.** Conduct regular reviews, check reports for unethical behaviour and corrupt practices and promptly report all violations of the code of ethics.
- PC19. Consult senior management when in an ethical dilemma.

#### Ensure regulatory compliance

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

- **PC20.** Check that documentation concerning operations is up to date and in accordance with the regulations.
- **PC21.** Coordinate with regulatory authorities and assist in inspections and clearances.
- **PC22.** Report any issues with regulatory compliance.

# Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** Company's policies on the use of language, Human Resources policies, code of ethics and business
- KU2. Company's whistle-blower policy and rules related to sexual harassment
- **KU3.** Company's reporting structure and documentation policy
- KU4. Principles of code of ethics and business ethics
- **KU5.** Different regulations and acts that are applicable for the sub-sector and logistics sector as a whole
- **KU6.** The documentary compliance required for different type of products for Health Safety and Environment (HSE) practices
- KU7. Relevant Occupational Health and Safety (OHS) regulations
- KU8. Enterprise /site emergency procedures and techniques
- **KU9.** Procedures for recording, reporting and maintenance of workplace safety and hygiene
- **KU10.** Health and safety hazards commonly present in the work environment and related precautions
- KU11. Possible causes of risk, hazard or accident in the workplace
- KU12. Where to find all the general health and safety equipment in the workplace
- KU13. Various dangers associated with the use of electrical equipment
- KU14. Preventative and remedial actions to be taken in the case of exposure to toxic materials
- **KU15.** Importance of using protective clothing/equipment while working









- **KU16.** Various causes of fire and precautionary activities to prevent the fire accident
- **KU17.** Different methods of extinguishing fire and techniques of using the different fire extinguishers
- KU18. Rescue techniques applied during a fire hazard and safe lifting and carrying practices
- KU19. Various types of safety signs and their meaning
- **KU20.** Appropriate basic first aid treatment relevant to the condition e.g., shock, electrical shock, bleeding, breaks to bones, minor burns, resuscitation, poisoning, eye injuries

# **Generic Skills (GS)**

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

- **GS1.** Read policy documents, work-related documents, various acts and regulations
- **GS2.** Write instructions, communications to internal staff, emails and letters, and reports
- **GS3.** Interact with internal and external stakeholders
- GS4. Communicate with peers and subordinates
- **GS5.** Take appropriate action in a vulnerable situation
- **GS6.** Identify breaches and take necessary actions
- **GS7.** Identify the documentary requirement for a specific product or regulation and take necessary action
- **GS8.** Plan and organise steps/ actions as per the company's guidelines, if any violation of the code of ethics is noticed in the company
- GS9. Plan and organise training sessions and sensitisation sessions for workforce
- GS10. Plan review meetings to monitor compliance with ethics and regulations
- GS11. Prevent company and customer information leakage
- GS12. Provide proper advice or guidance to colleagues to deal with sensitive issues
- GS13. Suggest solutions to managers and workers when in an ethical dilemma
- GS14. Identify conflict of interests and take necessary actions
- **GS15.** Review reports to identify common trends of defaults
- **GS16.** Conduct a review to analyse the reasons for the default
- GS17. Check that all regulatory compliances are adhered to
- **GS18.** Check that any unethical behaviour gets captured before damage or negative impact happens
- GS19. Write Health and safety compliance report
- **GS20.** Interpret general health and safety guidelines
- GS21. Communicate general health and safety guidelines to co-workers
- GS22. Decide on the corrective action to be taken in case of any potential hazards







# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Follow health, safety and security measures during all activities	6	10	-	2
<b>PC1.</b> Comply with safety regulations and procedures to avoid fire hazards, biohazards, etc.	1	2	-	-
<b>PC2.</b> Wear all safety equipment including protective gear, helmets etc., in relevant bay areas.	2	3	-	1
<b>PC3.</b> Follow organisation procedures concerning documentation.	1	2	-	-
<b>PC4.</b> Recognise unsafe workplace conditions and safety practices and report them to concerned authorities.	2	3	-	1
Maintain a healthy and hygienic workplace	5	14	-	3
<b>PC5.</b> Ensure that the work area and supplies are organised and cleaned regularly.	1	3	-	1
<b>PC6.</b> Comply with data safety regulations of the organisation and follow clear worktable area policy.	1	3	-	-
<b>PC7.</b> Maintain personal hygiene and wash hands regularly using soap and water or alcohol-based sanitizer.	1	2	-	1
<b>PC8.</b> Undertake periodical preventive health check-ups.	1	3	-	1
<b>PC9.</b> Participate in fire drills and follow 5S at workplace.	1	3	-	-
Handle emergency situations	6	9	-	2
<b>PC10.</b> Act immediately during emergencies and move to safety.	2	2	-	1
<b>PC11.</b> Provide first aid to affected victims e.g., in case of bleeding, burns, choking, electric shock, poisoning etc.	1	2	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> In case of fire, follow fire safety practices taught during fire drills.	2	3	-	-
<b>PC13.</b> Follow procedures to rescue victims of fire without endangering self.	1	2	-	1
Maintain integrity and ensure data security	4	8	-	-
PC14. Refrain from indulging in corrupt practices.	2	3	-	-
<b>PC15.</b> Protect customers' information and ensure acquired information is not used for personal advantage.	1	2	-	-
<b>PC16.</b> Protect data and information related to business or commercial decisions.	1	3	-	-
Professional and ethical practice	4	8	-	1
<b>PC17.</b> Sensitize the workforce towards ethical behaviour in the workplace and performing jobs with integrity.	1	2	-	-
<b>PC18.</b> Conduct regular reviews, check reports for unethical behaviour and corrupt practices and promptly report all violations of the code of ethics.	2	4	-	1
<b>PC19.</b> Consult senior management when in an ethical dilemma.	1	2	-	-
Ensure regulatory compliance	5	11	-	2
<b>PC20.</b> Check that documentation concerning operations is up to date and in accordance with the regulations.	1	3	-	-
<b>PC21.</b> Coordinate with regulatory authorities and assist in inspections and clearances.	2	4	_	1
<b>PC22.</b> Report any issues with regulatory compliance.	2	4	-	1
NOS Total	30	60	-	10







# National Occupational Standards (NOS) Parameters

NOS Code	LSC/N9911
NOS Name	Follow health, safety, security procedures and maintain integrity, ethics at workplace
Sector	Logistics
Sub-Sector	Generic
Occupation	Generic
NSQF Level	6
Credits	1
Version	1.0
Last Reviewed Date	30/11/2023
Next Review Date	30/11/2026
NSQC Clearance Date	30/11/2023







# DGT/VSQ/N0103: Employability Skills (90 Hours)

# Description

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

## Scope

The scope covers the following :

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

#### **Elements and Performance Criteria**

#### Introduction to Employability Skills

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

- **PC1.** understand the significance of employability skills in meeting the current job market requirement and future of work
- PC2. identify and explore learning and employability relevant portals
- **PC3.** research about the different industries, job market trends, latest skills required and the available opportunities

#### Constitutional values - Citizenship

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

- **PC4.** recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.
- **PC5.** follow environmentally sustainable practices

#### Becoming a Professional in the 21st Century

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

PC6. recognize the significance of 21st Century Skills for employment







- **PC7.** practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life
- **PC8.** adopt a continuous learning mindset for personal and professional development

#### Basic English Skills

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

- **PC9.** use basic English for everyday conversation in different contexts, in person and over the telephone
- **PC10.** read and understand routine information, notes, instructions, mails, letters etc. written in English
- PC11. write short messages, notes, letters, e-mails etc. in English

#### Career Development & Goal Setting

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

- PC12. identify career goals based on the skills, interests, knowledge, and personal attributes
- PC13. prepare a career development plan with short- and long-term goals

#### Communication Skills

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

- **PC14.** follow verbal and non-verbal communication etiquette while communicating in professional and public settings
- PC15. use active listening techniques for effective communication
- **PC16.** communicate in writing using appropriate style and format based on formal or informal requirements
- **PC17.** work collaboratively with others in a team

#### Diversity & Inclusion

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

- PC18. communicate and behave appropriately with all genders and PwD
- PC19. escalate any issues related to sexual harassment at workplace according to POSH Act

#### Financial and Legal Literacy

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

- **PC20.** identify and select reliable institutions for various financial products and services such as bank account, debit and credit cards, loans, insurance etc.
- **PC21.** carry out offline and online financial transactions, safely and securely, using various methods and check the entries in the passbook
- **PC22.** identify common components of salary and compute income, expenses, taxes, investments etc

# **PC23.** identify relevant rights and laws and use legal aids to fight against legal exploitation *Essential Digital Skills*

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

- PC24. operate digital devices and use their features and applications securely and safely
- **PC25.** carry out basic internet operations by connecting to the internet safely and securely, using the mobile data or other available networks through Bluetooth, Wi-Fi, etc.
- PC26. display responsible online behaviour while using various social media platforms









- **PC27.** create a personal email account, send and process received messages as per requirement
- **PC28.** carry out basic procedures in documents, spreadsheets and presentations using respective and appropriate applications
- PC29. utilize virtual collaboration tools to work effectively

#### Entrepreneurship

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

- **PC30.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- **PC31.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- **PC32.** identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity

#### **Customer Service**

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

- PC33. identify different types of customers and ways to communicate with them
- PC34. identify and respond to customer requests and needs in a professional manner
- PC35. use appropriate tools to collect customer feedback
- PC36. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

- **PC37.** create a professional Curriculum vitae (Résumé)
- **PC38.** search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively
- PC39. apply to identified job openings using offline /online methods as per requirement
- PC40. answer questions politely, with clarity and confidence, during recruitment and selection
- PC41. identify apprenticeship opportunities and register for it as per guidelines and requirements

# Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. need for employability skills and different learning and employability related portals
- KU2. various constitutional and personal values
- KU3. different environmentally sustainable practices and their importance
- KU4. Twenty first (21st) century skills and their importance
- **KU5.** how to use English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up
- KU6. importance of career development and setting long- and short-term goals
- **KU7.** about effective communication
- KU8. POSH Act
- **KU9.** Gender sensitivity and inclusivity
- **KU10.** different types of financial institutes, products, and services









- KU11. components of salary and how to compute income and expenditure
- KU12. importance of maintaining safety and security in offline and online financial transactions
- **KU13.** different legal rights and laws
- KU14. different types of digital devices and the procedure to operate them safely and securely
- KU15. how to create and operate an e- mail account
- **KU16.** use applications such as word processors, spreadsheets etc.
- KU17. how to identify business opportunities
- KU18. types and needs of customers
- KU19. how to apply for a job and prepare for an interview
- **KU20.** apprenticeship scheme and the process of registering on apprenticeship portal

# **Generic Skills (GS)**

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

- **GS1.** read and write different types of documents/instructions/correspondence in English and other languages
- GS2. communicate effectively using appropriate language in formal and informal settings
- **GS3.** behave politely and appropriately with all to maintain effective work relationship
- GS4. how to work in a virtual mode, using various technological platforms
- GS5. perform calculations efficiently
- GS6. solve problems effectively
- **GS7.** pay attention to details
- GS8. manage time efficiently
- **GS9.** maintain hygiene and sanitization to avoid infection







# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	1	1	-	-
<b>PC1.</b> understand the significance of employability skills in meeting the current job market requirement and future of work	-	-	-	_
<b>PC2.</b> identify and explore learning and employability relevant portals	-	-	-	-
<b>PC3.</b> research about the different industries, job market trends, latest skills required and the available opportunities	-	-	-	-
Constitutional values – Citizenship	1	1	-	-
<b>PC4.</b> recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
PC5. follow environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	1	3	-	-
<b>PC6.</b> recognize the significance of 21st Century Skills for employment	-	-	-	_
<b>PC7.</b> practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	_
<b>PC8.</b> adopt a continuous learning mindset for personal and professional development	-	-	-	_
Basic English Skills	3	4	-	-
<b>PC9.</b> use basic English for everyday conversation in different contexts, in person and over the telephone	_	-	_	_









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
<b>PC11.</b> write short messages, notes, letters, e-mails etc. in English	-	-	-	-
Career Development & Goal Setting	1	2	-	-
<b>PC12.</b> identify career goals based on the skills, interests, knowledge, and personal attributes	-	-	-	-
<b>PC13.</b> prepare a career development plan with short- and long-term goals	-	-	-	-
Communication Skills	2	2	-	-
<b>PC14.</b> follow verbal and non-verbal communication etiquette while communicating in professional and public settings	-	-	-	-
<b>PC15.</b> use active listening techniques for effective communication	-	-	-	-
<b>PC16.</b> communicate in writing using appropriate style and format based on formal or informal requirements	-	-	-	-
PC17. work collaboratively with others in a team	-	-	-	-
Diversity & Inclusion	1	1	-	-
<b>PC18.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
<b>PC19.</b> escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
Financial and Legal Literacy	2	3	-	-
<b>PC20.</b> identify and select reliable institutions for various financial products and services such as bank account, debit and credit cards, loans, insurance etc.	-	-	-	-
<b>PC21.</b> carry out offline and online financial transactions, safely and securely, using various methods and check the entries in the passbook	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC22.</b> identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
<b>PC23.</b> identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
Essential Digital Skills	3	5	-	-
<b>PC24.</b> operate digital devices and use their features and applications securely and safely	-	-	-	-
<b>PC25.</b> carry out basic internet operations by connecting to the internet safely and securely, using the mobile data or other available networks through Bluetooth, Wi-Fi, etc.	-	-	-	-
<b>PC26.</b> display responsible online behaviour while using various social media platforms	-	-	-	-
<b>PC27.</b> create a personal email account, send and process received messages as per requirement	-	-	-	-
<b>PC28.</b> carry out basic procedures in documents, spreadsheets and presentations using respective and appropriate applications	-	-	-	-
<b>PC29.</b> utilize virtual collaboration tools to work effectively	-	-	-	-
Entrepreneurship	2	3	-	-
<b>PC30.</b> identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
<b>PC31.</b> develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
<b>PC32.</b> identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
Customer Service	1	2	-	-
<b>PC33.</b> identify different types of customers and ways to communicate with them	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC34.</b> identify and respond to customer requests and needs in a professional manner	-	-	_	-
<b>PC35.</b> use appropriate tools to collect customer feedback	-	-	-	-
<b>PC36.</b> follow appropriate hygiene and grooming standards	-	-	-	-
Getting ready for apprenticeship & Jobs	2	3	-	-
<b>PC37.</b> create a professional Curriculum vitae (Résumé)	-	-	-	-
<b>PC38.</b> search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
<b>PC39.</b> apply to identified job openings using offline /online methods as per requirement	-	-	-	-
<b>PC40.</b> answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
<b>PC41.</b> identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
NOS Total	20	30	-	-









# National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0103
NOS Name	Employability Skills (90 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	5
Credits	3
Version	1.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023

# Assessment Guidelines and Assessment Weightage

#### **Assessment Guidelines**

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC

2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC

3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below)

4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criterion

5. To pass the Qualification Pack, every trainee should score a minimum of 70% for NSQF level 4 & above job roles and 50% for NSQF level 1 to 3 job roles

6. In case of unsuccessful completion, the trainee may seek re-assessment on the Qualification Pack

Minimum Aggregate Passing % at QP Level : 70









(**Please note**: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

#### Minimum Passing % at NOS Level: 70

(**Please note**: A Trainee must score the minimum percentage for each NOS separately as well as on the QP as a whole.)

## **Assessment Weightage**

#### Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
LSC/N0509.Data Collection and Analysis for Warehouse	30	60	-	10	100	20
LSC/N0510.Performance Monitoring and Tracking Key KPIs	30	60	-	10	100	20
LSC/N0511.Technical Tool Analysis	30	60	-	10	100	10
LSC/N0512.Reporting, Visualization and BI	30	60	-	10	100	10
LSC/N0513.Data Modelling and Forecasting	30	60	-	10	100	10
LSC/N0514.Data Integrity and Quality Control	30	60	-	10	100	10
LSC/N9911.Follow health, safety, security procedures and maintain integrity, ethics at workplace	30	60	-	10	100	10
DGT/VSQ/N0103.Employability Skills (90 Hours)	20	30	-	-	50	10
Total	230	450	-	70	750	100







# Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training







# Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N' $% \left( {{\left( {{{\left( {{{{\left( {{{{\left( {{{{\left( {{{{\left( {{{{}}}}}} \right)}}}}\right.}$
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.









Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.