

## Qualification Pack



# Skid Steer Loader Operator

QP Code: IES/Q0126

Version: 3.0

NSQF Level: 4

Infrastructure Equipment Skill Council || Jubilee Building – 2nd Floor, No.45, Museum Road  
Bengaluru - 560025

## Qualification Pack

### Contents

IES/Q0126: Skid Steer Loader Operator .....	3
<i>Brief Job Description</i> .....	3
Applicable National Occupational Standards (NOS) .....	3
<i>Compulsory NOS</i> .....	3
<i>Qualification Pack (QP) Parameters</i> .....	3
IES/N0176: Carry out pre-operation checks on skid steer loader .....	5
IES/N0177: Operate a skid steer loader .....	11
IES/N0178: Carry out maintenance and troubleshooting of a skid steer loader .....	17
IES/N7601: Comply with worksite health and safety .....	23
DGT/VSQ/N0101: Employability Skills (30 Hours) .....	27
Assessment Guidelines and Weightage .....	32
<i>Assessment Guidelines</i> .....	32
<i>Assessment Weightage</i> .....	33
Acronyms .....	34
Glossary .....	35

## Qualification Pack

### IES/Q0126: Skid Steer Loader Operator

#### Brief Job Description

A skid steer loader operator drives and controls skid steer equipment. He uses the controls in the machine to dig, lift and dump construction materials above the base level of the machine. He is required to drive safely, regulate the speed and move the load from one place to another in compact places.

#### Personal Attributes

The job requires an individual to be physically agile, strong and have good eye sight. He should maintain constant alertness to the multiple concurrent activities at the construction site. He should have good hand, eye and leg coordination and should have flexibility to move the equipment on uneven surfaces.

#### Applicable National Occupational Standards (NOS)

##### Compulsory NOS:

1. [IES/N0176: Carry out pre-operation checks on skid steer loader](#)
2. [IES/N0177: Operate a skid steer loader](#)
3. [IES/N0178: Carry out maintenance and troubleshooting of a skid steer loader](#)
4. [IES/N7601: Comply with worksite health and safety](#)
5. [DGT/VSQ/N0101: Employability Skills \(30 Hours\)](#)

#### Qualification Pack (QP) Parameters

<b>Sector</b>	Infrastructure Equipment
<b>Sub-Sector</b>	Equipment Operations
<b>Occupation</b>	Operator
<b>Country</b>	India
<b>NSQF Level</b>	4
<b>Credits</b>	14
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/8342.2101

## Qualification Pack

<b>Minimum Educational Qualification &amp; Experience</b>	8th grade pass plus 2-year NTC plus 1 Year NAC OR 10th grade pass plus 1-year NTC/ NAC OR 10th grade pass with 2 Years of experience Relevant OR 10th grade pass and pursuing continuous schooling OR 11th grade pass
<b>Minimum Level of Education for Training in School</b>	8th Class
<b>Pre-Requisite License or Training</b>	Light Commercial Vehicle Driving License (LCV) is preferred
<b>Minimum Job Entry Age</b>	18 Years
<b>Last Reviewed On</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQC Approval Date</b>	17/11/2022
<b>Version</b>	3.0
<b>Reference code on NQR</b>	2022/IS/IESC/06785
<b>NQR Version</b>	3.0

## Qualification Pack

### IES/N0176: Carry out pre-operation checks on skid steer loader

#### Description

This unit provides Performance Criteria, Knowledge & Understanding and Skills & Ability for activities that need to be carried out to conduct pre-operational checks on skid steer loader and prepare for the shift.

#### Scope

The scope covers the following :

- Pre-operation checks
- Documentation and reporting

#### Elements and Performance Criteria

##### *Pre Operation Checks*

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

- PC1.** ensure that visual inspections of the body components for cracks are performed
- PC2.** check the inflation pressure of the tyres as per the prescribed norms/ the requirement of the ground
- PC3.** examine the machine for loose or missing nuts and bolts, loose guards, connectors and pivot pins
- PC4.** check conditions of parking brake, main horn, reverse horn and head light
- PC5.** ensure footplates, grab irons, hand holds and steps are clean and free from mud, dirt and oil to reduce skidding risks
- PC6.** inspect electrical and hydraulic lines, as well as hoses for damage and leaks
- PC7.** check that the engine transmission oil, radiator coolant and battery electrolyte levels are all at the proper levels
- PC8.** drain water and sediment from the fuel tank if required
- PC9.** check that all protection and safety devices such as controls locking lever, loading arm locking pin and operator post rotation locking pin are in the right position as per the equipment manual
- PC10.** visual inspection to check the different controls, gauges, warning lights and other safety devices
- PC11.** inspect bucket pins and keepers for damage and connections for leaks
- PC12.** inspect and if necessary adjust the seat height, tilt and distance from the pedals

##### *Documentation and reporting*

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

- PC13.** if a fault is found that is outside of the scope of the position, notify the supervisor immediately
- PC14.** keep inspection/maintenance logbook to keep track of all actions

#### Knowledge and Understanding (KU)

## Qualification Pack

The individual on the job needs to know and understand:

- KU1.** the organization operations, maintenance and safety related guidelines
- KU2.** the company's operating standards and processes, as well as the timeline for resolving the complaint/problem
- KU3.** reporting structure of the company
- KU4.** location of specialized tools and the equipment
- KU5.** location and process for storage and disposal of waste material
- KU6.** overview of types of skid steer loaders and the general applications of that equipment
- KU7.** technical characteristics, features and performance of various types of Skid Steer Loaders
- KU8.** identify the components of a skid steer loaders and how they work
- KU9.** attachments for skid steer loaders and their uses
- KU10.** engine and subsystem fundamentals; fuel, lubrication, and cooling systems
- KU11.** basics of transmission, auto-electrical functioning and repairs
- KU12.** different types of hydraulic mechanisms and principles of friction
- KU13.** steering mechanisms and correct way of steering on slopes
- KU14.** the fundamentals of electrical systems, including the control panel
- KU15.** controls, levers and switches in order to operate the aerial work platform
- KU16.** procedure for topping up the machine's fuel, lubricating oil and coolant
- KU17.** optimal working parameters- engine oil pressure, hydraulic oil pressure and temperature
- KU18.** different types of machine guards for equipment

## Generic Skills (GS)

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

- GS1.** record information/observations on activities/incidents in accordance with the established rules
- GS2.** read and understand basic signs, symbols, graphs, charts, and decals on equipment and at the job site
- GS3.**
  - read and understand the applicable relevant aspects of the equipment operation &
  - maintenance manuals
- GS4.** when communicating with coworkers and supervisors, utilize the right technical terms/phrases
- GS5.** explain/instruct other team members in a straightforward and simple way
- GS6.** pay close attention to and understand the questions/comments offered by other team members
- GS7.** decide when to escalate and seek assistance if the problem is beyond the scope
- GS8.** prioritize and schedule maintenance activity on equipment to support operational needs
- GS9.** design and organize the work schedule in collaboration with the rest of the team and the supervisor
- GS10.**
  - execute the tasks efficiently within the time frame allotted and prescribed quality norms;
  - with minimal supervision



## Qualification Pack

- GS11.** deliver first-class service to ensure client satisfaction
- GS12.** evaluate the possible solutions and initiate appropriate remedial measures and actions
- GS13.**
  - apply common sense and reasoning skills to identify the cause of delays and difficulties in execution
- GS14.**
  - apply knowledge and judgement acquired through experience and awareness to execute tasks efficiently

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Pre Operation Checks</i>	<b>6</b>	<b>20</b>	-	-
<b>PC1.</b> ensure that visual inspections of the body components for cracks are performed	0.5	1	-	-
<b>PC2.</b> check the inflation pressure of the tyres as per the prescribed norms/ the requirement of the ground	0.5	1	-	-
<b>PC3.</b> examine the machine for loose or missing nuts and bolts, loose guards, connectors and pivot pins	0.5	1	-	-
<b>PC4.</b> check conditions of parking brake, main horn, reverse horn and head light	0.5	1	-	-
<b>PC5.</b> ensure footplates, grab irons, hand holds and steps are clean and free from mud, dirt and oil to reduce skidding risks	0.5	2	-	-
<b>PC6.</b> inspect electrical and hydraulic lines, as well as hoses for damage and leaks	0.5	2	-	-
<b>PC7.</b> check that the engine transmission oil, radiator coolant and battery electrolyte levels are all at the proper levels	0.5	2	-	-
<b>PC8.</b> drain water and sediment from the fuel tank if required	0.5	2	-	-
<b>PC9.</b> check that all protection and safety devices such as controls locking lever, loading arm locking pin and operator post rotation locking pin are in the right position as per the equipment manual	0.5	2	-	-
<b>PC10.</b> visual inspection to check the different controls, gauges, warning lights and other safety devices	0.5	2	-	-
<b>PC11.</b> inspect bucket pins and keepers for damage and connections for leaks	0.5	2	-	-
<b>PC12.</b> inspect and if necessary adjust the seat height, tilt and distance from the pedals	0.5	2	-	-



### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Documentation and reporting</i>	<b>1</b>	<b>3</b>	-	-
<b>PC13.</b> if a fault is found that is outside of the scope of the position, notify the supervisor immediately	0.5	2	-	-
<b>PC14.</b> keep inspection/maintenance logbook to keep track of all actions	0.5	1	-	-
<b>NOS Total</b>	<b>7</b>	<b>23</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	IES/N0176
<b>NOS Name</b>	Carry out pre-operation checks on skid steer loader
<b>Sector</b>	Infrastructure Equipment
<b>Sub-Sector</b>	Equipment Operations
<b>Occupation</b>	Operator
<b>NSQF Level</b>	4
<b>Credits</b>	4
<b>Version</b>	3.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQF Clearance Date</b>	17/11/2022

## Qualification Pack

### IES/N0177: Operate a skid steer loader

#### Description

This unit provides Performance Criteria, Knowledge & Understanding and Skills & Ability for activities that are required for starting and drive the skid steer loader

#### Scope

The scope covers the following :

- Starting and driving the skid steer
- Loading and unloading
- Shut down procedures

#### Elements and Performance Criteria

##### *Starting and driving the Skid steer loader*

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

- PC1.** ensure the joystick controls are in neutral position before starting the skid steer loader
- PC2.** enter the cabin of the skid steer loader only with the engine turned off, lift arms down, attachments on the ground and stairs and grip bars in place
- PC3.** wear seat belt and adjust seat position as per ones comfort and safety
- PC4.** lower the safety/restraining bar
- PC5.** start the engine with the starting key and test all controls, including steering, forward and backward, raising and lowering lift arms and all other functions
- PC6.** start the machine by unlocking the controls using toggle switch near the instrument panel

##### *Loading and unloading*

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

- PC7.** steer the loader by moving the left and right arm controls together
- PC8.** check that skid steer loader load, operating speed and direction of machine are within limits
- PC9.** lift and lower the bucket through foot control and pedals as per the loading/unloading requirement
- PC10.** operate all the attachments in a skid steer loader as per the requirement and the operational manual
- PC11.** drive forward to engage and collect load
- PC12.** stop the machine just before you touch the material pile and drop the bucket to the ground with the front edge level
- PC13.** drive forward, pushing the bucket into the load until the tyre spin, then press the left pedal down with heel while still attempting to drive forward
- PC14.** push the right pedal with your heel to tilt the bucket back for driving, then back up and elevate the bucket to a safe carrying height
- PC15.** drive to the spot, press the right pedal with toe to tilt the bucket down and dump the load
- PC16.** ensure completion of work within defined time

## Qualification Pack

**PC17.** determine and maintain a safe distance from other vehicles

### *Shut down procedures*

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

**PC18.** when parked, make sure the skid steer loader is in a stationary position with the arms drawn and the controls turned off

**PC19.** set the parking brake and controls to relieve hydraulic pressure

**PC20.** ensure the engine is turned off as per the manufacturer's instructions

**PC21.** ensure the controls are locked and the ignition key is removed

**PC22.** unbuckle the safety belt, raise the safety bar and exit as per the manufacturer's instruction

**PC23.** ensure the tyres are in static position to avoid the vehicle moving forward or backward

**PC24.** report to the supervisor of any problems while operating the skid steer loader

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

**KU1.** the organization operations, maintenance and safety related guidelines

**KU2.** the company's operating standards and processes, as well as the timeline for resolving the complaint/problem

**KU3.** reporting structure of the company

**KU4.** location of specialized tools and the equipment

**KU5.** location and procedure for waste storage and disposal

**KU6.** contact person/area in case of emergency

**KU7.** technical characteristics, features, and performance of many types of boom and scissors lifts

**KU8.** load chart reading and balancing of weight

**KU9.** requirements for radius and setup

**KU10.** factors that affect equipment stability, such as ground and supporting conditions

**KU11.** controls, levers and switches in order to operate the skid steer loader

**KU12.** actual and prospective risks include overhead utilities and guide wires, as well as other equipment, employees and automobile traffic

**KU13.** safety controls and equipment such as automated limit switches, overload limit devices and fire extinguishers

**KU14.** safety measures to be followed at time of emergencies to avoid damage

**KU15.** staff positions on-site, such as supervisor and others

## Generic Skills (GS)

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

**GS1.** record information/observations on activities/incidents in accordance with the established rules

**GS2.** read and understand basic signs, symbols, graphs, charts and decals on equipment and at the job site

## Qualification Pack

- GS3.** read and understand the applicable relevant aspects of the equipment operation & maintenance manuals
- GS4.** when communicating with coworkers and supervisors, utilize the right technical terms/phrases
- GS5.** explain/instruct other team members in a straightforward and simple way
- GS6.** pay close attention to and understand the questions/comments offered by other team members
- GS7.** decide when to escalate and seek assistance if the problem is beyond scope
- GS8.** prioritize and schedule maintenance activity on equipment to support operational needs
- GS9.** design and organize the work schedule in collaboration with the rest of the team and the supervisor
- GS10.** execute the tasks efficiently within the time frame allotted and prescribed quality norms with minimal supervision
- GS11.** deliver first-class service to ensure client satisfaction
- GS12.** evaluate the possible solutions and initiate appropriate remedial measures and actions
- GS13.** apply common sense and reasoning skills to identify the cause of delays and difficulties in execution
- GS14.** apply knowledge and judgement acquired through experience and awareness to execute the tasks efficiently

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Starting and driving the Skid steer loader</i>	<b>3</b>	<b>6</b>	-	-
<b>PC1.</b> ensure the joystick controls are in neutral position before starting the skid steer loader	0.5	1	-	-
<b>PC2.</b> enter the cabin of the skid steer loader only with the engine turned off, lift arms down, attachments on the ground and stairs and grip bars in place	0.5	1	-	-
<b>PC3.</b> wear seat belt and adjust seat position as per ones comfort and safety	0.5	1	-	-
<b>PC4.</b> lower the safety/restraining bar	0.5	1	-	-
<b>PC5.</b> start the engine with the starting key and test all controls, including steering, forward and backward, raising and lowering lift arms and all other functions	0.5	1	-	-
<b>PC6.</b> start the machine by unlocking the controls using toggle switch near the instrument panel	0.5	1	-	-
<i>Loading and unloading</i>	<b>5.5</b>	<b>11</b>	-	-
<b>PC7.</b> steer the loader by moving the left and right arm controls together	0.5	1	-	-
<b>PC8.</b> check that skid steer loader load, operating speed and direction of machine are within limits	0.5	1	-	-
<b>PC9.</b> lift and lower the bucket through foot control and pedals as per the loading/unloading requirement	0.5	1	-	-
<b>PC10.</b> operate all the attachments in a skid steer loader as per the requirement and the operational manual	0.5	1	-	-
<b>PC11.</b> drive forward to engage and collect load	0.5	1	-	-
<b>PC12.</b> stop the machine just before you touch the material pile and drop the bucket to the ground with the front edge level	0.5	1	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> drive forward, pushing the bucket into the load until the tyre spin, then press the left pedal down with heel while still attempting to drive forward	0.5	1	-	-
<b>PC14.</b> push the right pedal with your heel to tilt the bucket back for driving, then back up and elevate the bucket to a safe carrying height	0.5	1	-	-
<b>PC15.</b> drive to the spot, press the right pedal with toe to tilt the bucket down and dump the load	0.5	1	-	-
<b>PC16.</b> ensure completion of work within defined time	0.5	1	-	-
<b>PC17.</b> determine and maintain a safe distance from other vehicles	0.5	1	-	-
<i>Shut down procedures</i>	<b>3.5</b>	<b>6</b>	-	-
<b>PC18.</b> when parked, make sure the skid steer loader is in a stationary position with the arms drawn and the controls turned off	0.5	1	-	-
<b>PC19.</b> set the parking brake and controls to relieve hydraulic pressure	0.5	1	-	-
<b>PC20.</b> ensure the engine is turned off as per the manufacturer's instructions	0.5	0.5	-	-
<b>PC21.</b> ensure the controls are locked and the ignition key is removed	0.5	1	-	-
<b>PC22.</b> unbuckle the safety belt, raise the safety bar and exit as per the manufacturer's instruction	0.5	1	-	-
<b>PC23.</b> ensure the tyres are in static position to avoid the vehicle moving forward or backward	0.5	1	-	-
<b>PC24.</b> report to the supervisor of any problems while operating the skid steer loader	0.5	0.5	-	-
<b>NOS Total</b>	<b>12</b>	<b>23</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	IES/N0177
<b>NOS Name</b>	Operate a skid steer loader
<b>Sector</b>	Infrastructure Equipment
<b>Sub-Sector</b>	Equipment Operations
<b>Occupation</b>	Operator
<b>NSQF Level</b>	4
<b>Credits</b>	4
<b>Version</b>	3.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQC Clearance Date</b>	17/11/2022



## Qualification Pack

# IES/N0178: Carry out maintenance and troubleshooting of a skid steer loader

## Description

This unit provides Performance Criteria, Knowledge & Understanding and Skills & Ability for activities that are required for performing routine maintenance and troubleshooting on the skid steer loader

## Scope

The scope covers the following :

- Preventive maintenance
- Basic diagnostics and troubleshooting
- Documentation and Reporting

## Elements and Performance Criteria

### *Preventive maintenance*

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

- PC1.** determine the right service schedule by tracking machine operating hours
- PC2.** check if all plates are attached into the vehicle
- PC3.** keep the footplates and steps clear of mud, grime, snow, dirt and oil and regularly clean air filter dust bowls
- PC4.** check and maintain the tyre rims, air pressure, wheel nuts and treads in accordance with the manufacturer's recommendations
- PC5.** replenish lubricants and fluids as needed or as directed by the manufacturer
- PC6.** grease all greasing pins and pivot points everyday
- PC7.** check battery levels and condition of the terminals and carry out minor adjustments if required
- PC8.** ensure all the tools are kept in the designated place after usage

### *Basic diagnostics and troubleshooting*

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

- PC9.** ensure the main is turned off from panel completely before carrying out maintenance work on the equipment
- PC10.** before doing any maintenance work, make sure the bucket arm is lowered
- PC11.** make certain that no engine maintenance is conducted while the engine is running or remains hot
- PC12.** ensure that appropriate tools are used while troubleshooting
- PC13.** diagnose the problem and identify appropriate repair procedures
- PC14.** report defects precisely to the supervisor if beyond scope of role
- PC15.** dispose waste as per the guidelines of the site/ organisation

### *Documentation and Reporting*

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

## Qualification Pack

**PC16.** complete all documents in accordance with the required standards on time

**PC17.** determine and maintain a safe distance from other vehicles

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organization operations, maintenance and safety related guidelines
- KU2.** the company's operating standards and processes, as well as the timeline for resolving the complaint/problem
- KU3.** reporting structure of the company
- KU4.** location of specialized tools and the equipment
- KU5.** location and procedure for waste storage and disposal
- KU6.** maintenance schedule of the equipment
- KU7.** engine and subsystem fundamentals; fuel, lubrication and cooling systems
- KU8.** basics of transmission, auto-electrical functioning and repairs
- KU9.** different types of hydraulic mechanisms, and principles of friction
- KU10.** the fundamentals of electrical systems, including the control panel
- KU11.** controls, levers and switches in order to operate the skid steer loader platform
- KU12.** common defects and general causes of breakdown
- KU13.** procedures for spill kits and battery recharging

### Generic Skills (GS)

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

- GS1.** record information/observations on activities/incidents in accordance with the established rules
- GS2.** read and understand basic signs, symbols, graphs, charts, and decals on equipment and at the job site
- GS3.** read and understand the applicable relevant aspects of the equipment operation & maintenance manuals
- GS4.** when communicating with coworkers and supervisors, utilize the right technical terms/phrases
- GS5.** explain/instruct other team members in a straightforward and simple way
- GS6.** pay close attention to and understand the questions/comments offered by other team members
- GS7.** decide when to escalate and seek assistance if the problem is beyond scope
- GS8.** prioritize and schedule maintenance activity on equipment to support operational needs
- GS9.** design and organize the work schedule in collaboration with the rest of the team and the supervisor
- GS10.** execute the tasks efficiently within the time frame allotted and prescribed quality norms; with minimal supervision



## Qualification Pack

- GS11.** deliver first-class service to ensure client satisfaction
- GS12.** evaluate the possible solutions and initiate appropriate remedial measures and actions
- GS13.** apply common sense and reasoning skills to identify the cause of delays and difficulties in execution
- GS14.** apply knowledge and judgement acquired through experience and awareness to execute tasks efficiently

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Preventive maintenance</i>	<b>3</b>	<b>7</b>	-	-
<b>PC1.</b> determine the right service schedule by tracking machine operating hours	0.5	1	-	-
<b>PC2.</b> check if all plates are attached into the vehicle	0.5	1	-	-
<b>PC3.</b> keep the footplates and steps clear of mud, grime, snow, dirt and oil and regularly clean air filter dust bowls	-	1	-	-
<b>PC4.</b> check and maintain the tyre rims, air pressure, wheel nuts and treads in accordance with the manufacturer's recommendations	0.5	1	-	-
<b>PC5.</b> replenish lubricants and fluids as needed or as directed by the manufacturer	0.5	1	-	-
<b>PC6.</b> grease all greasing pins and pivot points everyday	-	1	-	-
<b>PC7.</b> check battery levels and condition of the terminals and carry out minor adjustments if required	0.5	0.5	-	-
<b>PC8.</b> ensure all the tools are kept in the designated place after usage	0.5	0.5	-	-
<i>Basic diagnostics and troubleshooting</i>	<b>3</b>	<b>5</b>	-	-
<b>PC9.</b> ensure the main is turned off from panel completely before carrying out maintenance work on the equipment	0.5	0.5	-	-
<b>PC10.</b> before doing any maintenance work, make sure the bucket arm is lowered	0.5	0.5	-	-
<b>PC11.</b> make certain that no engine maintenance is conducted while the engine is running or remains hot	0.5	0.5	-	-
<b>PC12.</b> ensure that appropriate tools are used while troubleshooting	-	1	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> diagnose the problem and identify appropriate repair procedures	0.5	1	-	-
<b>PC14.</b> report defects precisely to the supervisor if beyond scope of role	0.5	0.5	-	-
<b>PC15.</b> dispose waste as per the guidelines of the site/ organisation	0.5	1	-	-
<i>Documentation and Reporting</i>	<b>1</b>	<b>1</b>	-	-
<b>PC16.</b> complete all documents in accordance with the required standards on time	0.5	0.5	-	-
<b>PC17.</b> determine and maintain a safe distance from other vehicles	0.5	0.5	-	-
<b>NOS Total</b>	<b>7</b>	<b>13</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	IES/N0178
<b>NOS Name</b>	Carry out maintenance and troubleshooting of a skid steer loader
<b>Sector</b>	Infrastructure Equipment
<b>Sub-Sector</b>	Equipment Operations
<b>Occupation</b>	Operator
<b>NSQF Level</b>	4
<b>Credits</b>	4
<b>Version</b>	3.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQF Clearance Date</b>	17/11/2022

## Qualification Pack

### IES/N7601: Comply with worksite health and safety

#### Description

This unit is about adhering to health and safety requirements at the worksite during equipment operations.

#### Scope

The scope covers the following :

- Worksite health and safety

#### Elements and Performance Criteria

##### *Worksite health and safety*

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

- PC1.** Comply with safety, health, security and environment related regulations/guidelines at the work site
- PC2.** use personal protective equipment (ppe) and other safety gear as applicable to the equipment and the worksite
- PC3.** Follow safety measures during operations to ensure that the health and safety of self or others (including members of the public) is not at risk
- PC4.** Carry out operations as per the manufacturer's and worksite related health and safety guidelines
- PC5.** Handle the transport, storage and disposal of hazardous materials and waste in compliance with worksite health, safety and environmental guidelines
- PC6.** operate various grades of fire extinguishers, as applicable
- PC7.** support in administering basic first aid and report to concerned team members, as required, in case of an accident
- PC8.** respond promptly and appropriately to an accident/ incident or emergency, within limits of your role and responsibility
- PC9.** record and report details related to operations, incidents or accidents, as applicable

#### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** health, safety, environmental (HSE) and security related policies/guidelines of the organization and the worksite and its importance
- KU2.** personnel responsible for health, safety and environment (HSE) related matters and their contact details
- KU3.** location of worksite storage, she team and safe assembly points
- KU4.** reporting and documentation procedures for HSE and security matters
- KU5.** manufacturers guidelines related to health and safety requirements

## Qualification Pack

- KU6.** common types of health, safety, environment and security risks related to the worksite and operations
- KU7.** types, use and importance of personal protective equipment (PPE) and other safety gear
- KU8.** safe working practices to avoid common hazards and risks
- KU9.** guidelines for transport, storage and disposal of hazardous materials and waste
- KU10.** types of common hazards and risks at the worksite including fire, electrical, gas emergencies, accidents, incidents, structure collapse, machine breakdown
- KU11.** knowledge of safe lockdown/stop of machinery use in case of emergencies and incidents/accidents
- KU12.** types of fire extinguishers and their use
- KU13.** common injuries and appropriate basic first aid treatment e.g. electrical shock, bleeding, wounds, fractures, minor burns, eye injuries

## Generic Skills (GS)

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

- GS1.** document and report any health and safety related incidents/accidents
- GS2.** read and comprehend basic English to read manuals of operations
- GS3.** read all organizational and equipment related health and safety manuals and documents
- GS4.** read instructions, guidelines / procedures /rules related to the worksite and equipment operations
- GS5.** Give clear instructions to co-workers, subordinates and other personnel
- GS6.** Use correct technical terms while interacting with supervisor
- GS7.** Make an appropriate timely decision in responding to emergencies/accidents in line with organizational/worksite guidelines
- GS8.** Use correct PPE and other safety gear while at the worksite
- GS9.** Work with supervisors/ team mates to carry out work related tasks
- GS10.** Plan work according to the required schedule and location
- GS11.** Build and maintain positive and effective relationships with colleagues and customers
- GS12.** Seek appropriate assistance from other sources to resolve problems
- GS13.** Assess the intensity of the fire accident and operate fire extinguishers
- GS14.** Analyse, evaluate and apply the information gathered from observation, experience, reasoning, or communication to act efficiently



## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Worksite health and safety</i>	<b>5</b>	<b>10</b>	-	-
<b>PC1.</b> Comply with safety, health, security and environment related regulations/guidelines at the work site	0.5	1	-	-
<b>PC2.</b> use personal protective equipment (ppe) and other safety gear as applicable to the equipment and the worksite	0.5	1	-	-
<b>PC3.</b> Follow safety measures during operations to ensure that the health and safety of self or others (including members of the public) is not at risk	0.5	1	-	-
<b>PC4.</b> Carry out operations as per the manufacturer's and worksite related health and safety guidelines	0.5	1	-	-
<b>PC5.</b> Handle the transport, storage and disposal of hazardous materials and waste in compliance with worksite health, safety and environmental guidelines	1	1	-	-
<b>PC6.</b> operate various grades of fire extinguishers, as applicable	0.5	2	-	-
<b>PC7.</b> support in administering basic first aid and report to concerned team members, as required, in case of an accident	0.5	1	-	-
<b>PC8.</b> respond promptly and appropriately to an accident/ incident or emergency, within limits of your role and responsibility	0.5	1	-	-
<b>PC9.</b> record and report details related to operations, incidents or accidents, as applicable	0.5	1	-	-
<b>NOS Total</b>	<b>5</b>	<b>10</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	IES/N7601
<b>NOS Name</b>	Comply with worksite health and safety
<b>Sector</b>	Infrastructure Equipment
<b>Sub-Sector</b>	Equipment Operations
<b>Occupation</b>	Operator
<b>NSQF Level</b>	4
<b>Credits</b>	1
<b>Version</b>	3.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	17/11/2025
<b>NSQF Clearance Date</b>	17/11/2022

## Qualification Pack

### DGT/VSQ/N0101: Employability Skills (30 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
- 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 job requirements

##### *Constitutional values - Citizenship*

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

**PC2.** identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices

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

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

**PC3.** explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.

##### *Basic English Skills*

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

**PC4.** speak with others using some basic English phrases or sentences

##### *Communication Skills*

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

**PC5.** follow good manners while communicating with others

**PC6.** work with others in a team

## Qualification Pack

### *Diversity & Inclusion*

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

**PC7.** communicate and behave appropriately with all genders and PwD

**PC8.** report any issues related to sexual harassment

### *Financial and Legal Literacy*

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

**PC9.** use various financial products and services safely and securely

**PC10.** calculate income, expenses, savings etc.

**PC11.** approach the concerned authorities for any exploitation as per legal rights and laws

### *Essential Digital Skills*

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

**PC12.** operate digital devices and use its features and applications securely and safely

**PC13.** use internet and social media platforms securely and safely

### *Entrepreneurship*

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

**PC14.** identify and assess opportunities for potential business

**PC15.** identify sources for arranging money and associated financial and legal challenges

### *Customer Service*

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

**PC16.** identify different types of customers

**PC17.** identify customer needs and address them appropriately

**PC18.** follow appropriate hygiene and grooming standards

### *Getting ready for apprenticeship & Jobs*

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

**PC19.** create a basic biodata

**PC20.** search for suitable jobs and apply

**PC21.** identify and register apprenticeship opportunities as per requirement

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

**KU1.** need for employability skills

**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 basic spoken English language

**KU6.** Do and dont of effective communication

**KU7.** inclusivity and its importance

**KU8.** different types of disabilities and appropriate communication and behaviour towards PwD

**KU9.** different types of financial products and services

## Qualification Pack

- KU10.** how to compute income and expenses
- KU11.** importance of maintaining safety and security in financial transactions
- KU12.** different legal rights and laws
- KU13.** how to operate digital devices and applications safely and securely
- KU14.** ways to identify business opportunities
- KU15.** types of customers and their needs
- KU16.** how to apply for a job and prepare for an interview
- KU17.** apprenticeship scheme and the process of registering on apprenticeship portal

## Generic Skills (GS)

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

- GS1.** communicate effectively using appropriate language
- GS2.** behave politely and appropriately with all
- GS3.** perform basic calculations
- GS4.** solve problems effectively
- GS5.** be careful and attentive at work
- GS6.** use time effectively
- GS7.** maintain hygiene and sanitisation to avoid infection

## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	<b>1</b>	<b>1</b>	-	-
<b>PC1.</b> understand the significance of employability skills in meeting the job requirements	-	-	-	-
<i>Constitutional values - Citizenship</i>	<b>1</b>	<b>1</b>	-	-
<b>PC2.</b> identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	<b>1</b>	<b>3</b>	-	-
<b>PC3.</b> explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
<i>Basic English Skills</i>	<b>2</b>	<b>3</b>	-	-
<b>PC4.</b> speak with others using some basic English phrases or sentences	-	-	-	-
<i>Communication Skills</i>	<b>1</b>	<b>1</b>	-	-
<b>PC5.</b> follow good manners while communicating with others	-	-	-	-
<b>PC6.</b> work with others in a team	-	-	-	-
<i>Diversity &amp; Inclusion</i>	<b>1</b>	<b>1</b>	-	-
<b>PC7.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
<b>PC8.</b> report any issues related to sexual harassment	-	-	-	-
<i>Financial and Legal Literacy</i>	<b>3</b>	<b>4</b>	-	-
<b>PC9.</b> use various financial products and services safely and securely	-	-	-	-

### Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> calculate income, expenses, savings etc.	-	-	-	-
<b>PC11.</b> approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
<i>Essential Digital Skills</i>	<b>4</b>	<b>6</b>	-	-
<b>PC12.</b> operate digital devices and use its features and applications securely and safely	-	-	-	-
<b>PC13.</b> use internet and social media platforms securely and safely	-	-	-	-
<i>Entrepreneurship</i>	<b>3</b>	<b>5</b>	-	-
<b>PC14.</b> identify and assess opportunities for potential business	-	-	-	-
<b>PC15.</b> identify sources for arranging money and associated financial and legal challenges	-	-	-	-
<i>Customer Service</i>	<b>2</b>	<b>2</b>	-	-
<b>PC16.</b> identify different types of customers	-	-	-	-
<b>PC17.</b> identify customer needs and address them appropriately	-	-	-	-
<b>PC18.</b> follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship &amp; Jobs</i>	<b>1</b>	<b>3</b>	-	-
<b>PC19.</b> create a basic biodata	-	-	-	-
<b>PC20.</b> search for suitable jobs and apply	-	-	-	-
<b>PC21.</b> identify and register apprenticeship opportunities as per requirement	-	-	-	-
<b>NOS Total</b>	<b>20</b>	<b>30</b>	-	-

## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	DGT/VSQ/N0101
<b>NOS Name</b>	Employability Skills (30 Hours)
<b>Sector</b>	Cross Sectoral
<b>Sub-Sector</b>	Professional Skills
<b>Occupation</b>	Employability
<b>NSQF Level</b>	2
<b>Credits</b>	1
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	27/05/2024
<b>NSQC Clearance Date</b>	27/05/2021

## 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) (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).



### Qualification Pack

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

5. In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.

6. In case of unsuccessful completion, the trainee may seek reassessment 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.)

### Assessment Weightage

#### Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
IES/N0176.Carry out pre-operation checks on skid steer loader	7	23	0	0	30	20
IES/N0177.Operate a skid steer loader	12	23	0	0	35	30
IES/N0178.Carry out maintenance and troubleshooting of a skid steer loader	7	13	0	0	20	20
IES/N7601.Comply with worksite health and safety	5	10	-	-	15	15
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	15
<b>Total</b>	<b>51</b>	<b>99</b>	<b>0</b>	<b>0</b>	<b>150</b>	<b>100</b>



## Qualification Pack

### Acronyms

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

## Qualification Pack

### Glossary

<b>Sector</b>	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.
<b>Sub-sector</b>	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
<b>Occupation</b>	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
<b>Job role</b>	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
<b>Occupational Standards (OS)</b>	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.
<b>Performance Criteria (PC)</b>	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
<b>National Occupational Standards (NOS)</b>	NOS are occupational standards which apply uniquely in the Indian context.
<b>Qualifications Pack (QP)</b>	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.
<b>Unit Code</b>	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
<b>Unit Title</b>	Unit title gives a clear overall statement about what the incumbent should be able to do.
<b>Description</b>	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.
<b>Scope</b>	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.

## Qualification Pack

<b>Knowledge and Understanding (KU)</b>	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.
<b>Organisational Context</b>	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.
<b>Technical Knowledge</b>	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
<b>Core Skills/ Generic Skills (GS)</b>	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.
<b>Electives</b>	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.
<b>Options</b>	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.