







Skid Steer Loader Operator

QP Code: IES/Q0126

Version: 2.0

NSQF Level: 4

Infrastructure Equipment Skill Council || Avik Royale - First Floor (Next of Vijaya Bank), No.6, 50 feet

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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. JES/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 guidelines

Qualification Pack (QP) Parameters

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







Minimum Educational Qualification & Experience	8th Class (OR • 10th Class Pass + ITI (1year after Class 10th) with 1 year of relevant experience • OR • 10th Class Pass + ITI (2years after Class 10th) • OR • 10th Class Pass and pursuing continuous regular schooling • OR • 3 Year Diploma (After 10th)12th Class Pass with 6 months of relevant experience • OR • Previous relevant Qualification of NSQF Level 3 with 2 years of relevant experience)
Minimum Level of Education for Training in School	8th Class
Pre-Requisite License or Training	Light Commercial Vehicle Driving License (LCV) is preferred
Minimum Job Entry Age	18 Years
Last Reviewed On	26/05/2022
Next Review Date	26/05/2025
NSQC Approval Date	26/05/2022
Version	2.0
Reference code on NQR	2022/IS/IESC/05910
NQR Version	1.0







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:

• This unit/task 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)

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
- **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







Assessment Criteria

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







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







National Occupational Standards (NOS) Parameters

NOS Code	IES/N0176
NOS Name	Carry out pre-operation checks on skid steer loader
Sector	Infrastructure Equipment
Sub-Sector	Equipment Operations
Occupation	Operator
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	26/05/2022
Next Review Date	26/05/2025
NSQC Clearance Date	26/05/2022







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:

- This unit/task 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
- **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
- **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







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Starting and driving the Skid steer loader	3	6	-	-
PC1. ensure the joystick controls are in neutral position before starting the skid steer loader	0.5	1	-	-
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	0.5	1	-	-
PC3. wear seat belt and adjust seat position as per ones comfort and safety	0.5	1	-	-
PC4. lower the safety/restraining bar	0.5	1	-	-
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	0.5	1	-	-
PC6. start the machine by unlocking the controls using toggle switch near the instrument panel	0.5	1	-	-
Loading and unloading	5.5	11	-	-
PC7. steer the loader by moving the left and right arm controls together	0.5	1	-	-
PC8. check that skid steer loader load, operating speed and direction of machine are within limits	0.5	1	-	-
PC9. lift and lower the bucket through foot control and pedals as per the loading/unloading requirement	0.5	1	-	-
PC10. operate all the attachments in a skid steer loader as per the requirement and the operational manual	0.5	1	-	-
PC11. drive forward to engage and collect load	0.5	1	-	-
PC12. 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	-	-







Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
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	0.5	1	-	-
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	0.5	1	-	-
PC15. drive to the spot, press the right pedal with toe to tilt the bucket down and dump the load	0.5	1	-	-
PC16. ensure completion of work within defined time	0.5	1	-	-
PC17. determine and maintain a safe distance from other vehicles	0.5	1	-	-
Shut down procedures	3.5	6	-	-
PC18. 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	-	-
PC19. set the parking brake and controls to relieve hydraulic pressure	0.5	1	-	-
PC20. ensure the engine is turned off as per the manufacturer's instructions	0.5	0.5	-	-
PC21. ensure the controls are locked and the ignition key is removed	0.5	1	-	-
PC22. unbuckle the safety belt, raise the safety bar and exit as per the manufacturer's instruction	0.5	1	-	-
PC23. ensure the tyres are in static position to avoid the vehicle moving forward or backward	0.5	1	-	-
PC24. report to the supervisor of any problems while operating the skid steer loader	0.5	0.5	-	-
NOS Total	12	23	-	-







National Occupational Standards (NOS) Parameters

NOS Code	IES/N0177
NOS Name	Operate a skid steer loader
Sector	Infrastructure Equipment
Sub-Sector	Equipment Operations
Occupation	Operator
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	26/05/2022
Next Review Date	26/05/2025
NSQC Clearance Date	26/05/2022







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:

- This unit/task 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:

- **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
- **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







Assessment Criteria

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







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







National Occupational Standards (NOS) Parameters

NOS Code	IES/N0178
NOS Name	Carry out maintenance and troubleshooting of a skid steer loader
Sector	Infrastructure Equipment
Sub-Sector	Equipment Operations
Occupation	Operator
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	26/05/2022
Next Review Date	26/05/2025
NSQC Clearance Date	26/05/2022







IES/N7601: Comply with worksite health and safety guidelines

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







- **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







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Worksite health and safety	5	10	-	-
PC1. Comply with safety, health, security and environment related regulations/guidelines at the work site	0.5	1	-	-
PC2. use personal protective equipment (ppe) and other safety gear as applicable to the equipment and the worksite	0.5	1	-	-
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	0.5	1	-	-
PC4. Carry out operations as per the manufacturer's and worksite related health and safety guidelines	0.5	1	-	-
PC5. Handle the transport, storage and disposal of hazardous materials and waste in compliance with worksite health, safety and environmental guidelines	1	1	-	-
PC6. operate various grades of fire extinguishers, as applicable	0.5	2	-	-
PC7. support in administering basic first aid and report to concerned team members, as required, in case of an accident	0.5	1	-	-
PC8. respond promptly and appropriately to an accident/ incident or emergency, within limits of your role and responsibility	0.5	1	-	-
PC9. record and report details related to operations, incidents or accidents, as applicable	0.5	1	-	-
NOS Total	5	10	-	-







National Occupational Standards (NOS) Parameters

NOS Code	IES/N7601
NOS Name	Comply with worksite health and safety guidelines
Sector	Infrastructure Equipment
Sub-Sector	Equipment Operations
Occupation	Operator
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	26/05/2022
Next Review Date	31/05/2025
NSQC Clearance Date	26/05/2022

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).







- 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	30
IES/N0177.Operate a skid steer loader	12	23	0	0	35	35
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 guidelines	5	10	0	0	15	15
Total	31	69	0	0	100	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'
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.