

Qualification Pack



Junior Excavator Operator

QP Code: IES/Q0104

Version: 2.0

NSQF Level: 3

Infrastructure Equipment Skill Council || Avik Royale - First Floor (Next of Vijaya Bank), No.6, 50 feet
Main Road, Avalahalli Extension, Girinagar
Bengaluru 560026

Qualification Pack

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IES/Q0104: Junior Excavator Operator

Brief Job Description

A junior excavator operator assists an excavator operator to drive and control the excavator operations the movement and angle of the arm and the equipment. He assists in determining the angle and speed of the movements of the arm and bucket along the vertical axis.

Personal Attributes

This job requires the individual to have good hand eye coordination as also comply with industry regulations. Willingness to work, strong work ethics, and courteous behavior with co workers are equally desirable. He should also be physically agile, strong, have good eye sight and not suffer from colour-blindness.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [IES/N0110: Assist in carrying out pre-checks of an excavator](#)
2. [IES/N0111: Assist in operating an excavator](#)
3. [IES/N0112: Assist in regular maintenance of an excavator](#)
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	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/ 8342.2001
Minimum Educational Qualification & Experience	8th Class (OR 10th class without experience) with 1 Year of experience

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Minimum Level of Education for Training in School	8th Class
Pre-Requisite License or Training	NA
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/05894
NQR Version	1.0

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IES/N0110: Assist in carrying out pre-checks of an excavator

Description

This unit provides Performance Criteria, Knowledge & Understanding and Skills & Ability for activities that need to be carried out to prepare the excavator for a shift.

Scope

The scope covers the following :

- This unit/task covers the following: Assist in conducting pre-operation checks

Elements and Performance Criteria

Assist in conducting pre operation checks

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

- PC1.** abide with the supervisor's time limitations
- PC2.** assist in visual inspection of the body components for cracks and bearing wear
- PC3.** assist in checking the sprocket for worn or cracked teeth
- PC4.** assist in inspecting the boom, bucket and the stick for dents and cracked welds
- PC5.** grease all the pins, bushings and pivots points
- PC6.** inspect all ground engaging tools to ensure stability
- PC7.** assist in checking that oil levels of engine and radiant coolant are as per manufacturer's indicators
- PC8.** assist in checking hydraulic oil levels
- PC9.** assist in checking for leaks in the hydraulic hose and ram
- PC10.** carry out inspections to verify that the horn and worklights are in proper working order
- PC11.** check battery electrolyte level and terminal tightness
- PC12.** visually inspect the different controls, gauges, warning lights, and confirm that all safety and maintenance stickers are present
- PC13.** as needed, double-check and place any essential work signs
- PC14.** clean the footplates and steps to maintain them clean and free of mud, dirt, and grease
- PC15.** assist with the inspection and cleaning of the circle turn gear if necessary
- PC16.** ensure that the air filter dust bowls are clean, and that the gasket and inner filter are in good condition
- PC17.** drain water and sediment from the fuel tank
- PC18.** top up coolant and oil in engine if necessary, as per manufacturer's indicators
- PC19.** check fan belt tension

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

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- KU1.** the organization's breakdown and maintenance procedures and guidelines
- KU2.** the company's performance criteria and processes
- KU3.** reporting structure in the company
- KU4.** escalation matrix for reporting unresolved problems
- KU5.** schedule for resolving the complaint/problem
- KU6.** work goal and review mechanism with supervisor for obtaining/giving feedback on performance process
- KU7.** location of tools
- KU8.** contact person in case of queries on procedure or products
- KU9.** location and process for storage and disposal of waste material
- KU10.** safety policy of the company
- KU11.** various excavators and their uses and functions
- KU12.** introduction to the engine and transmission, as well as their use and purpose
- KU13.** different types of hydraulic mechanisms
- KU14.** principles of friction
- KU15.** steering techniques and the proper technique to steer on a slope
- KU16.** the relevance of greasing and oiling excavator components that require routine lubrication
- KU17.** instrument panel / cabin controls, their location and operation
- KU18.** controls, levers and switches in order to operate the excavator properly
- KU19.** excavator components, such as the hoist, propel system, power train, hoist, boom & stick, and other attachments, must be in good operating order
- KU20.** optimal engine oil pressure, radiator coolant temperature
- KU21.** visual inspections are performed ahead of time to detect damage, flaws, cracks, or leaks

Generic Skills (GS)

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

- GS1.** keep a note of any deviations or occurrences that do not conform to the established criteria
- GS2.** read and comprehend basic english to read manuals of operations
- GS3.** read instructions, guidelines/procedures/rules related to the worksite and equipment operations
- GS4.** give clear instructions to co-workers, subordinates and other personnel
- GS5.** when talking with your operator, utilize the right technical words
- GS6.** decide when to conduct maintenance checks
- GS7.** work with supervisors/ team mates to carry out work related tasks
- GS8.** plan work according to the required schedule and location
- GS9.** plan for cleaning and lubricating the excavator every day
- GS10.** examine, evaluate, and apply knowledge acquired from observation, experience, logic, or communication in order to act efficiently
- GS11.** problems that you are unable to address should be reported to the proper authority



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- GS12.** identify sources of support that can be availed for problem solving for various kinds of problems
- GS13.** evaluate the complexity of the tasks to determine for any assistance required from superior

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Assist in conducting pre operation checks</i>	7	23	-	-
PC1. abide with the supervisor's time limitations	-	1	-	-
PC2. assist in visual inspection of the body components for cracks and bearing wear	1	1	-	-
PC3. assist in checking the sprocket for worn or cracked teeth	-	2	-	-
PC4. assist in inspecting the boom, bucket and the stick for dents and cracked welds	1	1	-	-
PC5. grease all the pins, bushings and pivots points	-	2	-	-
PC6. inspect all ground engaging tools to ensure stability	-	1	-	-
PC7. assist in checking that oil levels of engine and radiant coolant are as per manufacturer's indicators	-	1	-	-
PC8. assist in checking hydraulic oil levels	-	1	-	-
PC9. assist in checking for leaks in the hydraulic hose and ram	1	1	-	-
PC10. carry out inspections to verify that the horn and worklights are in proper working order	1	1	-	-
PC11. check battery electrolyte level and terminal tightness	1	1	-	-
PC12. visually inspect the different controls, gauges, warning lights, and confirm that all safety and maintenance stickers are present	1	1	-	-
PC13. as needed, double-check and place any essential work signs	-	1	-	-
PC14. clean the footplates and steps to maintain them clean and free of mud, dirt, and grease	-	1	-	-
PC15. assist with the inspection and cleaning of the circle turn gear if necessary	-	1	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC16. ensure that the air filter dust bowls are clean, and that the gasket and inner filter are in good condition	1	1	-	-
PC17. drain water and sediment from the fuel tank	-	2	-	-
PC18. top up coolant and oil in engine if necessary, as per manufacturer's indicators	-	2	-	-
PC19. check fan belt tension	-	1	-	-
NOS Total	7	23	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	IES/N0110
NOS Name	Assist in carrying out pre-checks of an excavator
Sector	Infrastructure Equipment
Sub-Sector	Equipment Operations
Occupation	Operator
NSQF Level	3
Credits	TBD
Version	2.0
Last Reviewed Date	26/05/2022
Next Review Date	26/05/2025
NSQC Clearance Date	26/05/2022

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IES/N0111: Assist in operating an excavator

Description

This unit provides Performance Criteria, Knowledge & Understanding and Skills & Ability for activities that are required for assisting in operating an excavator.

Scope

The scope covers the following :

- Assist in performing loading and hauling of the load. Assist in dumping of the load

Elements and Performance Criteria

Assist in performing loading and hauling of the load

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

- PC1.** assist in examining the jobsite for loose soil, concealed deep ditches, or marshy spots where the excavator might become trapped
- PC2.** assist in identifying and choosing the proper attachment to be required for the task at hand on the job site
- PC3.** report any issues/problems encountered while operating the excavator to the supervisor
- PC4.** assist in taking precaution for hazards such as trenches, potholes and cables
- PC5.** abide with the supervisor's time limitations
- PC6.** make sure that no other operators travel on or near the excavator
- PC7.** maintain a safe distance from other plants and vehicles
- PC8.** ensure that excavator is always parked on firm, level ground and drive controls disengaged
- PC9.** assist the operator to look out for people working and hazards such as trenches, potholes and cables

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organization's breakdown and maintenance procedures and guidelines
- KU2.** the company's performance criteria and processes
- KU3.** reporting structure in the company
- KU4.** escalation matrix for reporting unresolved problems
- KU5.** schedule for resolving the complaint / problem
- KU6.** work goal and review mechanism with supervisor for obtaining/giving feedback on performance process
- KU7.** location of tools
- KU8.** contact person in case of queries on procedure or products
- KU9.** location and process for storage and disposal of waste material

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- KU10.** safety policy of the company
- KU11.** various excavators and their uses and functions
- KU12.** appropriate usage of various attachments such as excavation bucket, extreme excavation bucket, skeleton bucket, ditch cleaning bucket, tiltable ditch cleaning bucket, trapezoidal bucket, quick couplers, pin grabber plus quick coupler, hammers, rock breaker, contractors grapples, demolition and sorting grapples, orange peel grapples direct fit, breakers, teeth and adapters etc.
- KU13.** differentiate between several attachment types
- KU14.** introduction to the engine and transmission, as well as their use and purpose
- KU15.** different types of hydraulic mechanisms
- KU16.** principles of friction
- KU17.** steering mechanisms and correct way of steering on slopes
- KU18.** significance of greasing and oiling, parts of excavator that need routine lubrication
- KU19.** instrument panel / cabin controls, their location and operation
- KU20.** controls, levers and switches in order to operate the excavator properly
- KU21.** excavator components, such as the boom, stick, bucket and other attachments must be in good operating order
- KU22.** optimal engine oil pressure, radiator coolant temperature
- KU23.** visual inspections are performed ahead of time to detect damage, flaws, cracks, or leaks
- KU24.** the location and procedure of using the emergency stop button
- KU25.** the risks of excavating in the vicinity of misfired shots
- KU26.** all safety signs and other emergency signals
- KU27.** correct maintenance procedures for excavator
- KU28.** response to emergencies e.g. correct way to use fire extinguisher

Generic Skills (GS)

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

- GS1.** record of any deviations or occurrences that do not conform to the specified standards
- GS2.** read and comprehend basic english to read manuals of operations
- GS3.** understand stakes and signs on the road and on the job site
- GS4.** read instructions, guidelines / procedures / rules related to the worksite and equipment operations
- GS5.** communicate efficiently with operators to explain instructions and other concerns
- GS6.** when talking with your supervisor, utilize the right technical words
- GS7.** examine the excavator for any damage or defective components and take appropriate measures
- GS8.** carry out job duties in accordance with the operator's / supervisor's directions and deadlines
- GS9.** plan work according to the required schedule and location
- GS10.** examine, evaluate, and apply knowledge acquired from observation, experience, logic, or communication in order to act efficiently

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- GS11.** report problems that you cannot resolve to appropriate authority
- GS12.** Identify sources of support that may be used to solve challenges of various types
- GS13.** evaluate the complexity of the tasks to determine if he/she needs any assistance from the senior

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Assist in performing loading and hauling of the load</i>	5	15	-	-
PC1. assist in examining the jobsite for loose soil, concealed deep ditches, or marshy spots where the excavator might become trapped	1	1	-	-
PC2. assist in identifying and choosing the proper attachment to be required for the task at hand on the job site	2	2	-	-
PC3. report any issues/problems encountered while operating the excavator to the supervisor	-	2	-	-
PC4. assist in taking precaution for hazards such as trenches, potholes and cables	-	2	-	-
PC5. abide with the supervisor's time limitations	-	2	-	-
PC6. make sure that no other operators travel on or near the excavator	1	1	-	-
PC7. maintain a safe distance from other plants and vehicles	-	2	-	-
PC8. ensure that excavator is always parked on firm, level ground and drive controls disengaged	-	2	-	-
PC9. assist the operator to look out for people working and hazards such as trenches, potholes and cables	1	1	-	-
NOS Total	5	15	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	IES/N0111
NOS Name	Assist in operating an excavator
Sector	Infrastructure Equipment
Sub-Sector	Equipment Operations
Occupation	Operator
NSQF Level	3
Credits	TBD
Version	2.0
Last Reviewed Date	26/05/2022
Next Review Date	26/05/2025
NSQC Clearance Date	26/05/2022

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IES/N0112: Assist in regular maintenance of an excavator

Description

This unit provides Performance Criteria, Knowledge & Understanding and Skills & Ability for activities that are required for assisting in performing routine maintenance and troubleshooting on the excavator.

Scope

The scope covers the following :

- This unit/task covers the following: Assist in routine maintenance Assist in basic diagnostics and troubleshooting Documentation and Reporting

Elements and Performance Criteria

Assist in routine maintenance

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

- PC1.** assist in monitoring machine working hours allows you to determine the best service plan
- PC2.** at regular intervals, clean the air filter dust bowls
- PC3.** at regular intervals, clean the footplates, pedals, and stairs of mud, grime, ice, and snow
- PC4.** at regular interval, drain the water and debris from the fuel tank
- PC5.** replenish coolants, lubricants and fluids everyday
- PC6.** grease all greasing pins and pivot points everyday
- PC7.** check battery levels and terminal condition, and make small changes as needed
- PC8.** if a fault is found that is outside the scope of his duty, notify the supervisor immediately
- PC9.** before performing any repair, be certain that the machine is on firm and level ground
- PC10.** assist in timely completion of daily/ weekly maintenance sheets as provided by the company

Maintenance Work assistance

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

- PC11.** while doing maintenance, be sure that appropriate props / support devices are utilized and that the bucket is not lifted
- PC12.** make sure that no engine repair is conducted while the engine is running or remains hot
- PC13.** when a situation is beyond his capabilities, he should analyze it and report it to appropriately skilled and competent individuals
- PC14.** handle and dispose waste based on environmental guidelines at the work place
- PC15.** adhere to the reporting procedures established by the employer

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organization's breakdown and repair processes and guidelines
- KU2.** the company's performance criteria and processes

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- KU3.** reporting structure in the company
- KU4.** escalation matrix for reporting unresolved problems
- KU5.** schedule for resolving the complaint/problem
- KU6.** work goal and review mechanism with supervisor for obtaining/giving feedback on performance process
- KU7.** location of tools
- KU8.** contact person in case of queries on procedure or products
- KU9.** location and process for storage and disposal of waste material
- KU10.** safety policy of the company

Generic Skills (GS)

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

- GS1.** keep a record of any deviations or occurrences that do not conform to the specified standards
- GS2.** read and comprehend basic english to read manuals of operations
- GS3.** read instructions, guidelines / procedures / rules related to the worksite and equipment operations
- GS4.** give clear instructions to co-workers, subordinates and other personnel
- GS5.** when talking with your operator or other personnel, utilize the right technical words
- GS6.** decide when to conduct maintenance checks
- GS7.** evaluate the decision and conduct basic trouble shooting
- GS8.** follow the instructions of Operator / supervisors / team mates to carryout work related tasks
- GS9.** plan work according to the required schedule and location
- GS10.** plan for regular maintenance on a daily basis before machine operations
- GS11.** deliver first-class service to ensure client satisfaction
- GS12.** identify immediate or temporary solutions to resolve mechanical issues
- GS13.** investigate possible methods to enhance operational efficiency
- GS14.** evaluate the complexity of the tasks to determine if he/she needs any assistance from the senior
- GS15.** check for damages and diagnose common problems in the excavator and take relevant action
- GS16.** examine, evaluate, and apply knowledge acquired from observation, experience, logic, or communication in order to act efficiently

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Assist in routine maintenance</i>	6	14	-	-
PC1. assist in monitoring machine working hours allows you to determine the best service plan	1	1	-	-
PC2. at regular intervals, clean the air filter dust bowls	1	1	-	-
PC3. at regular intervals, clean the footplates, pedals, and stairs of mud, grime, ice, and snow	-	2	-	-
PC4. at regular interval, drain the water and debris from the fuel tank	-	2	-	-
PC5. replenish coolants, lubricants and fluids everyday	1	1	-	-
PC6. grease all greasing pins and pivot points everyday	-	2	-	-
PC7. check battery levels and terminal condition, and make small changes as needed	-	2	-	-
PC8. if a fault is found that is outside the scope of his duty, notify the supervisor immediately	1	1	-	-
PC9. before performing any repair, be certain that the machine is on firm and level ground	-	2	-	-
PC10. assist in timely completion of daily/ weekly maintenance sheets as provided by the company	2	-	-	-
<i>Maintenance Work assistance</i>	3	7	-	-
PC11. while doing maintenance, be sure that appropriate props / support devices are utilized and that the bucket is not lifted	-	2	-	-
PC12. make sure that no engine repair is conducted while the engine is running or remains hot	-	2	-	-
PC13. when a situation is beyond his capabilities, he should analyze it and report it to appropriately skilled and competent individuals	2	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. handle and dispose waste based on environmental guidelines at the work place	-	2	-	-
PC15. adhere to the reporting procedures established by the employer	1	1	-	-
NOS Total	9	21	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	IES/N0112
NOS Name	Assist in regular maintenance of an excavator
Sector	Infrastructure Equipment
Sub-Sector	Equipment Operations
Occupation	Operator
NSQF Level	3
Credits	TBD
Version	2.0
Last Reviewed Date	26/05/2022
Next Review Date	26/05/2025
NSQC Clearance Date	26/05/2022

Qualification Pack

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

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- 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

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Worksite health and safety</i>	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	-	-

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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 Element/ 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 Element/ PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
6. To pass the Qualification Pack assessment, every trainee should score the Recommended Pass % aggregate for the QP.
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

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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/N0110.Assist in carrying out pre-checks of an excavator	7	23	0	0	30	30
IES/N0111.Assist in operating an excavator	5	15	0	0	20	25
IES/N0112.Assist in regular maintenance of an excavator	9	21	0	0	30	30
IES/N7601.Comply with worksite health and safety guidelines	5	10	0	0	15	15
Total	26	69	0	0	95	100

Acronyms

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

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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.

Qualification Pack

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.