

Qualification Pack



Supervisor (Plant & Machinery)

QP Code: IES/Q0201

Version: 3.0

NSQF Level: 5

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



Qualification Pack

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IES/Q0201: Supervisor (Plant & Machinery)

Brief Job Description

The Supervisor (Plant & Machinery) plans and schedules work related to equipment operations, allocates work to team members and guides till completion in line with safety, productivity and quality norms at the worksite. The Supervisor also maintains equipment operations related documentation, anchors interactions with stakeholders and assists the manager with P&M operations related matters to meet organizations objectives and customers requirements.

Personal Attributes

The Job requires the individual to have: attention to details, a sharp mind to spot and correct errors, the ability to work long hours, high level of concentration, analytical ability and team work. He should also be physically agile, strong, have good high sight and cognitive reasoning.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [IES/N0201: Plan and supervise equipment operations](#)
2. [IES/N0202: Manage equipment operations related stakeholders](#)
3. [IES/N0203: Comply with worksite safety and quality standards](#)
4. [IES/N7601: Comply with worksite health and safety](#)
5. [DGT/VSQ/N0102: Employability Skills \(60 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Infrastructure Equipment
Sub-Sector	Equipment Operations
Occupation	Managerial & Supervisory - Equipment Operations
Country	India
NSQF Level	5
Credits	18

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Aligned to NCO/ISCO/ISIC Code	NCO-3123.0100 Supervisor (Plant & Machinery)
Minimum Educational Qualification & Experience	<p>Completed 1st year of UG (UG Certificate) OR Completed 1st year of diploma (after 12th) OR 12th grade Pass with 2 Years of experience Relevant OR 12th grade pass with 1 year NTC/ NAC OR Completed 3 year diploma after 10th with 1 Year of experience Relevant OR Previous relevant Qualification of NSQF Level (IES/Q1101- Mechanic Engine - NSQF Level 4 with minimum education as 8th class pass) with 3 Years of experience Relevant</p>
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	20 Years
Last Reviewed On	NA
Next Review Date	17/11/2025
NSQC Approval Date	17/11/2022
Version	3.0
Reference code on NQR	2022/IS/IESC/06809
NQR Version	3.0

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IES/N0201: Plan and supervise equipment operations

Description

This unit provides Performance Criteria, Knowledge & Understanding and Skills & Abilities for carrying out planning and supervising equipment operations at the worksite

Scope

The scope covers the following :

- Planning and supervision of equipment operations

Elements and Performance Criteria

Planning and supervision of equipment operations

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

- PC1.** plan and schedule equipment operations in accordance with organization, Safety Health Environment, worksite guidelines and procedures
- PC2.** plan and match equipment and resources required as per the task
- PC3.** select the equipment according to the requirement of the project
- PC4.** allocate the schedule of operators and other P&M support personnel as per the project requirements
- PC5.** appropriately allocate work to subordinate team-mates as per their experience/ skill levels
- PC6.** train and elaborate them on the assigned jobs
- PC7.** communicate job expectations, based on task and site conditions, clearly to the team-mates
- PC8.** monitor and supervise operations on an ongoing basis to meet project requirements
- PC9.** carry out appraisals and training of the team-mates at regular intervals
- PC10.** adhere to organization and worksite level policies / procedures
- PC11.** adhere to relevant quality processes / standards during operations
- PC12.** complete role related documentation and reporting
- PC13.** resolve process level issues or queries based on interactions with other stakeholders and managers

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organization and worksite related guidelines/ procedures related to equipment operations
- KU2.** expectations and responsibilities of the job role
- KU3.** details of the various job roles and responsibilities
- KU4.** responsibilities and line of reporting within the work area
- KU5.** method of obtaining / giving feedback related to performance
- KU6.** Safety Health Environment policy of the company

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- KU7.** quality standards like ISO applicable to equipment operations
- KU8.** risk and impact of not following defined procedures/ work instructions
- KU9.** implications of delays in process to the company
- KU10.** communication network / channels followed by the organization
- KU11.** documentation and reporting protocol and formats
- KU12.** the various kinds of infrastructure equipment and their uses
- KU13.** methods of estimation of manpower requirement
- KU14.** the method to select the appropriate personnel for different types of projects
- KU15.** skill matrix/ other guidelines and method of classifying available personnel
- KU16.** the process of clear communication and job allocation
- KU17.** various training and up-skilling interventions
- KU18.** the procedure for monitoring employee performance
- KU19.** the process of appraisal and its importance
- KU20.** process of maintaining operations related documentation
- KU21.** different communication channels / network for issue/ query resolution
- KU22.** knowledge in choosing the right tools and lifting tackles

Generic Skills (GS)

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

- GS1.** record any deviations/ incidents as per prescribed norms
- 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.** make appropriate decisions pertaining to the concerned area of work with respect to intended work objective, span of authority, responsibility, laid down procedure and guidelines
- GS6.** work with supervisors/ team mates to carry out work related tasks
- GS7.** plan work according to the required schedule and location
- GS8.** ensure all customer needs are assessed and every effort is made to provide satisfactory service
- GS9.** ensure all routine customer requests are effectively allocated
- GS10.** refer problems outside area of responsibility to appropriate person
- GS11.** assess the resource requirement to accomplish the task with in schedule
- GS12.** 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>Planning and supervision of equipment operations</i>	10	35	-	-
PC1. plan and schedule equipment operations in accordance with organization, Safety Health Environment, worksite guidelines and procedures	1	3	-	-
PC2. plan and match equipment and resources required as per the task	-	3	-	-
PC3. select the equipment according to the requirement of the project	-	3	-	-
PC4. allocate the schedule of operators and other P&M support personnel as per the project requirements	1	3	-	-
PC5. appropriately allocate work to subordinate team-mates as per their experience/ skill levels	1	3	-	-
PC6. train and elaborate them on the assigned jobs	1	3	-	-
PC7. communicate job expectations, based on task and site conditions, clearly to the team-mates	1	3	-	-
PC8. monitor and supervise operations on an ongoing basis to meet project requirements	-	3	-	-
PC9. carry out appraisals and training of the team-mates at regular intervals	1	3	-	-
PC10. adhere to organization and worksite level policies / procedures	1	2	-	-
PC11. adhere to relevant quality processes / standards during operations	1	2	-	-
PC12. complete role related documentation and reporting	1	2	-	-
PC13. resolve process level issues or queries based on interactions with other stakeholders and managers	1	2	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
NOS Total	10	35	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	IES/N0201
NOS Name	Plan and supervise equipment operations
Sector	Infrastructure Equipment
Sub-Sector	Equipment Operations
Occupation	Managerial and Supervisory - Equipment Operations
NSQF Level	5
Credits	6
Version	3.0
Last Reviewed Date	NA
Next Review Date	17/11/2025
NSQC Clearance Date	17/11/2022

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IES/N0202: Manage equipment operations related stakeholders

Description

This unit provides Performance Criteria, Knowledge & Understanding and Skills & Abilities for interacting and coordinating with various stakeholders during equipment operations.

Scope

The scope covers the following :

- Interaction with stakeholders
- Assistance in sub-contractor management

Elements and Performance Criteria

Interaction with stakeholders

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

- PC1.** receive work instructions and feedback from reporting manager or other senior construction team personnel at the work site
- PC2.** carry out work related activities in compliance with instructions and worksite requirements
- PC3.** analyze and present operations data like MTBF, MTTR, productivity analysis, cost to company etc on a periodic basis
- PC4.** generate system based requests for spares and consumables
- PC5.** report to manager and other stakeholders periodically on equipment operations
- PC6.** appraise the details of the hired equipment and actual worked hours of the equipment
- PC7.** keep stakeholders informed about repairs and maintenance of tools and machinery as required
- PC8.** assist the P&M manager in finalizing process-flow and resource level improvements
- PC9.** assist the P&M manager in providing alternative economical but productive and safe alternatives from an operations perspective
- PC10.** communicate to manager about employee management, i.e., shortages or performance related
- PC11.** communicate any potential hazards or expected process disruptions
- PC12.** plan for re-work based on feedback provided by manager/ other stakeholders

Assistance in sub-contractor management

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

- PC13.** provide correct and reliable feedback on equipment and personnel to the P&M manager
- PC14.** assist the P&M Manager to estimate the potential equipment/ manpower requirements from sub-contractors
- PC15.** assist in the evaluation of sub-contractors as per the equipment required
- PC16.** validate the submission of sub-contractor related documentation and work sheets as per company policy
- PC17.** supervise sub-contractor personnel in order to get optimum work performance

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- PC18.** support/inform vendor/contractor to get work permit to work inside plant/factory and update about the statutory requirements

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** expectations and responsibilities of the job roles (self and team)
- KU2.** details of the various job roles and responsibilities in various teams at the worksite
- KU3.** responsibilities and line of reporting within the work area
- KU4.** escalation matrix for reporting identified problems
- KU5.** the organizations rules, guidelines and standards
- KU6.** method of obtaining/ giving feedback related to performance
- KU7.** organizational policies and procedures
- KU8.** safety health environment policy, quality policy, house keeping and other worksite requirements
- KU9.** documentation and reporting requirements at the organization and worksite related to equipment operations
- KU10.** the various infrastructure equipment and their uses
- KU11.** equipment history sheet / professional engineering checklist
- KU12.** usage, capacity and functionality of various equipment
- KU13.** types and methods of computing operations data (mtbf, mttr, productivity analysis, cost to company)
- KU14.** different spares and consumables required for operations
- KU15.** inventory levels and reordering patterns for common spares and consumables
- KU16.** repair and maintenance schedule for tools and equipment
- KU17.** the method to evaluate and select sub-contractors
- KU18.** documentation and reporting formats/ protocols for sub-contractors
- KU19.** process and documentation related to evaluation of the performance of the subcontractor personnel

Generic Skills (GS)

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

- GS1.** record any deviations/ incidents as per prescribed norms
- 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.** think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s)
- GS6.** work with supervisors/ team mates to carry out work related tasks

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- GS7.** plan work according to the required schedule and location
- GS8.** ensure all customer needs are assessed and every effort is made to provide satisfactory service
- GS9.** ensure all customer requests are effectively allocated
- GS10.** develop, implement and evaluate solutions to problems
- GS11.** assess any expected process disruptions
- GS12.** 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>Interaction with stakeholders</i>	7	28	-	-
PC1. receive work instructions and feedback from reporting manager or other senior construction team personnel at the work site	1	2	-	-
PC2. carry out work related activities in compliance with instructions and worksite requirements	1	2	-	-
PC3. analyze and present operations data like MTBF, MTTR, productivity analysis, cost to company etc on a periodic basis	-	5	-	-
PC4. generate system based requests for spares and consumables	1	2	-	-
PC5. report to manager and other stakeholders periodically on equipment operations	-	2	-	-
PC6. appraise the details of the hired equipment and actual worked hours of the equipment	-	-	-	-
PC7. keep stakeholders informed about repairs and maintenance of tools and machinery as required	1	2	-	-
PC8. assist the P&M manager in finalizing process-flow and resource level improvements	1	2	-	-
PC9. assist the P&M manager in providing alternative economical but productive and safe alternatives from an operations perspective	1	2	-	-
PC10. communicate to manager about employee management, i.e., shortages or performance related	1	3	-	-
PC11. communicate any potential hazards or expected process disruptions	-	3	-	-
PC12. plan for re-work based on feedback provided by manager/ other stakeholders	-	3	-	-
<i>Assistance in sub-contractor management</i>	3	12	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. provide correct and reliable feedback on equipment and personnel to the P&M manager	1	2	-	-
PC14. assist the P&M Manager to estimate the potential equipment/ manpower requirements from sub-contractors	-	2	-	-
PC15. assist in the evaluation of sub-contractors as per the equipment required	-	2	-	-
PC16. validate the submission of sub-contractor related documentation and work sheets as per company policy	1	2	-	-
PC17. supervise sub-contractor personnel in order to get optimum work performance	-	2	-	-
PC18. support/inform vendor/contractor to get work permit to work inside plant/factory and update about the statutory requirements	1	2	-	-
NOS Total	10	40	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	IES/N0202
NOS Name	Manage equipment operations related stakeholders
Sector	Infrastructure Equipment
Sub-Sector	Equipment Operations
Occupation	Managerial and Supervisory - Equipment Operations
NSQF Level	5
Credits	5
Version	3.0
Last Reviewed Date	NA
Next Review Date	17/11/2025
NSQC Clearance Date	17/11/2022

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IES/N0203: Comply with worksite safety and quality standards

Description

This unit provides Performance Criteria, Knowledge & Understanding and Skills & Abilities for ensuring the performance of equipment operations as per quality and project management standards at the worksite.

Scope

The scope covers the following :

- Worksite SHE and quality standards

Elements and Performance Criteria

Worksite SHE and quality standards

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

- PC1.** comply with all organizational guidelines, SHE policy and quality standards during equipment operations
- PC2.** supervise the enforcement of all HSE related guidelines in equipment operations
- PC3.** plan procurement and provide safety gear and other equipment required to personnel for safe and productive operations
- PC4.** carry out fire/ other disaster recovery drills on work site along with the HSE team
- PC5.** inspect fire extinguishers and other machine equipment for validity and plan procurement/ renewal for necessary equipment
- PC6.** carry out periodic walk-throughs to ensure that the worksite and workshop areas are clean and free from hazards as per the safety, health and environmental policy/ guidelines
- PC7.** supervise the handling and disposal of waste based on environmental guidelines at the work place
- PC8.** participate, as required, in the investigation of near misses, accidents and incidents at the work site with the she and project management teams
- PC9.** assist in gathering data and complete documentation related to accidents/ incidents and share with concerned personnel
- PC10.** assist with checking the project management plan to ensure operations are as per the quality and productivity specifications outlined
- PC11.** carry out routine random checks and inspections to keep a check on the quality of work carried out
- PC12.** inspect damage to equipment and suggest rectification as per the work protocol and quality standards
- PC13.** give feedback to team and stakeholders on the quality and productivity at the worksite on the continuous basis
- PC14.** carry out role related documentation and reporting

Knowledge and Understanding (KU)

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The individual on the job needs to know and understand:

- KU1.** organizational policies and procedures, safety policy and quality standards documents
- KU2.** details of the various job roles and responsibilities within the worksite
- KU3.** responsibilities and line of reporting within the work area
- KU4.** escalation matrix for reporting identified problems
- KU5.** contact details of the procurement team and process for procurement of equipment, spares and consumables
- KU6.** schedule and process for fire/ other disaster recovery drills
- KU7.** inspection and certification plan for equipment
- KU8.** rectification process and approval for damaged equipment
- KU9.** implications of delays in procurement process to the company
- KU10.** risk and impact of not following defined procedures/ work instructions
- KU11.** accident investigative procedure and documentation
- KU12.** production plan for the worksite and site productivity levels
- KU13.** documentation formats and process for SHE and quality
- KU14.** different SHE related processes to be carried out during operations
- KU15.** methods to enforce SHE policy guidelines in operations
- KU16.** safety risks and hazards at worksite and means to mitigate these
- KU17.** types and methods of disaster recovery drills
- KU18.** various techniques to carry out quality checks on operations
- KU19.** methods of disposal of hazardous waste, as per SHE policy
- KU20.** types of equipment damage and the effects on quality

Generic Skills (GS)

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

- GS1.** record any deviations/ incidents as per prescribed norms
- 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.** make appropriate decisions pertaining to the concerned area of work with respect to intended work objective, span of authority, responsibility, laid down procedure and guidelines
- GS6.** work with supervisors/ team mates to carry out work related tasks
- GS7.** plan work according to the required schedule and location
- GS8.** plan for regular maintenance on a daily basis before machine operations
- GS9.** ensure all customer needs are assessed and every effort is made to provide satisfactory service
- GS10.** ensure all customer requests are effectively allocated



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- GS11.** identify immediate or temporary solutions to resolve issues
- GS12.** evaluate the criticality of any damage to the plant and machinery and take appropriate action
- GS13.** 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>Worksite SHE and quality standards</i>	10	30	-	-
PC1. comply with all organizational guidelines, SHE policy and quality standards during equipment operations	-	3	-	-
PC2. supervise the enforcement of all HSE related guidelines in equipment operations	-	2	-	-
PC3. plan procurement and provide safety gear and other equipment required to personnel for safe and productive operations	1	2	-	-
PC4. carry out fire/ other disaster recovery drills on work site along with the HSE team	-	3	-	-
PC5. inspect fire extinguishers and other machine equipment for validity and plan procurement/ renewal for necessary equipment	-	3	-	-
PC6. carry out periodic walk-throughs to ensure that the worksite and workshop areas are clean and free from hazards as per the safety, health and environmental policy/ guidelines	1	2	-	-
PC7. supervise the handling and disposal of waste based on environmental guidelines at the work place	-	3	-	-
PC8. participate, as required, in the investigation of near misses, accidents and incidents at the work site with the she and project management teams	1	2	-	-
PC9. assist in gathering data and complete documentation related to accidents/ incidents and share with concerned personnel	1	2	-	-
PC10. assist with checking the project management plan to ensure operations are as per the quality and productivity specifications outlined	-	2	-	-
PC11. carry out routine random checks and inspections to keep a check on the quality of work carried out	1	2	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. inspect damage to equipment and suggest rectification as per the work protocol and quality standards	1	2	-	-
PC13. give feedback to team and stakeholders on the quality and productivity at the worksite on the continuous basis	2	1	-	-
PC14. carry out role related documentation and reporting	2	1	-	-
NOS Total	10	30	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	IES/N0203
NOS Name	Comply with worksite safety and quality standards
Sector	Infrastructure Equipment
Sub-Sector	Equipment Operations
Occupation	Managerial and Supervisory - Equipment Operations
NSQF Level	5
Credits	4
Version	3.0
Last Reviewed Date	NA
Next Review Date	17/11/2025
NSQF Clearance Date	17/11/2022

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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

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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
Sector	Infrastructure Equipment
Sub-Sector	Equipment Operations
Occupation	Operator
NSQF Level	4
Credits	1
Version	3.0
Last Reviewed Date	NA
Next Review Date	17/11/2025
NSQC Clearance Date	17/11/2022

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DGT/VSQ/N0102: Employability Skills (60 Hours)

Description

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

Scope

The scope covers the following :

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

Elements and Performance Criteria

Introduction to Employability Skills

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

- PC1.** identify employability skills required for jobs in various industries
- PC2.** identify and explore learning and employability portals

Constitutional values - Citizenship

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

- PC3.** recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.
- PC4.** follow environmentally sustainable practices

Becoming a Professional in the 21st Century

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

- PC5.** recognize the significance of 21st Century Skills for employment
- PC6.** practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life

Basic English Skills

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

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- PC7.** use basic English for everyday conversation in different contexts, in person and over the telephone
- PC8.** read and understand routine information, notes, instructions, mails, letters etc. written in English
- PC9.** write short messages, notes, letters, e-mails etc. in English

Career Development & Goal Setting

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

- PC10.** understand the difference between job and career
- PC11.** prepare a career development plan with short- and long-term goals, based on aptitude

Communication Skills

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

- PC12.** follow verbal and non-verbal communication etiquette and active listening techniques in various settings
- PC13.** work collaboratively with others in a team

Diversity & Inclusion

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

- PC14.** communicate and behave appropriately with all genders and PwD
- PC15.** escalate any issues related to sexual harassment at workplace according to POSH Act

Financial and Legal Literacy

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

- PC16.** select financial institutions, products and services as per requirement
- PC17.** carry out offline and online financial transactions, safely and securely
- PC18.** identify common components of salary and compute income, expenses, taxes, investments etc
- PC19.** identify relevant rights and laws and use legal aids to fight against legal exploitation

Essential Digital Skills

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

- PC20.** operate digital devices and carry out basic internet operations securely and safely
- PC21.** use e- mail and social media platforms and virtual collaboration tools to work effectively
- PC22.** use basic features of word processor, spreadsheets, and presentations

Entrepreneurship

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

- PC23.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- PC24.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- PC25.** identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity

Customer Service

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

- PC26.** identify different types of customers
- PC27.** identify and respond to customer requests and needs in a professional manner.

Qualification Pack

PC28. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

PC29. create a professional Curriculum vitae (Résumé)

PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively

PC31. apply to identified job openings using offline /online methods as per requirement

PC32. answer questions politely, with clarity and confidence, during recruitment and selection

PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. need for employability skills and different learning and employability related portals

KU2. various constitutional and personal values

KU3. different environmentally sustainable practices and their importance

KU4. Twenty first (21st) century skills and their importance

KU5. how to use English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up

KU6. importance of career development and setting long- and short-term goals

KU7. about effective communication

KU8. POSH Act

KU9. Gender sensitivity and inclusivity

KU10. different types of financial institutes, products, and services

KU11. how to compute income and expenditure

KU12. importance of maintaining safety and security in offline and online financial transactions

KU13. different legal rights and laws

KU14. different types of digital devices and the procedure to operate them safely and securely

KU15. how to create and operate an e- mail account and use applications such as word processors, spreadsheets etc.

KU16. how to identify business opportunities

KU17. types and needs of customers

KU18. how to apply for a job and prepare for an interview

KU19. apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

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

GS1. read and write different types of documents/instructions/correspondence

GS2. communicate effectively using appropriate language in formal and informal settings

Qualification Pack

- GS3.** behave politely and appropriately with all
- GS4.** how to work in a virtual mode
- GS5.** perform calculations efficiently
- GS6.** solve problems effectively
- GS7.** pay attention to details
- GS8.** manage time efficiently
- GS9.** maintain hygiene and sanitization to avoid infection

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	1	1	-	-
PC1. identify employability skills required for jobs in various industries	-	-	-	-
PC2. identify and explore learning and employability portals	-	-	-	-
<i>Constitutional values - Citizenship</i>	1	1	-	-
PC3. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
PC4. follow environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	2	4	-	-
PC5. recognize the significance of 21st Century Skills for employment	-	-	-	-
PC6. practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
<i>Basic English Skills</i>	2	3	-	-
PC7. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
PC8. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
PC9. write short messages, notes, letters, e-mails etc. in English	-	-	-	-
<i>Career Development & Goal Setting</i>	1	2	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. understand the difference between job and career	-	-	-	-
PC11. prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
<i>Communication Skills</i>	2	2	-	-
PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
PC13. work collaboratively with others in a team	-	-	-	-
<i>Diversity & Inclusion</i>	1	2	-	-
PC14. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
<i>Financial and Legal Literacy</i>	2	3	-	-
PC16. select financial institutions, products and services as per requirement	-	-	-	-
PC17. carry out offline and online financial transactions, safely and securely	-	-	-	-
PC18. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
<i>Essential Digital Skills</i>	3	4	-	-
PC20. operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
PC22. use basic features of word processor, spreadsheets, and presentations	-	-	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Entrepreneurship</i>	2	3	-	-
PC23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
PC24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
PC25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
<i>Customer Service</i>	1	2	-	-
PC26. identify different types of customers	-	-	-	-
PC27. identify and respond to customer requests and needs in a professional manner.	-	-	-	-
PC28. follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship & Jobs</i>	2	3	-	-
PC29. create a professional Curriculum vitae (Résumé)	-	-	-	-
PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
PC31. apply to identified job openings using offline /online methods as per requirement	-	-	-	-
PC32. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
NOS Total	20	30	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0102
NOS Name	Employability Skills (60 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	4
Credits	2
Version	1.0
Last Reviewed Date	NA
Next Review Date	03/05/2026
NSQC Clearance Date	03/05/2023

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each 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.

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/N0201.Plan and supervise equipment operations	10	35	-	-	45	30
IES/N0202.Manage equipment operations related stakeholders	10	40	-	-	50	20
IES/N0203.Comply with worksite safety and quality standards	10	30	-	-	40	20
IES/N7601.Comply with worksite health and safety	5	10	-	-	15	15
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	0	0	50	15
Total	55	145	0	0	200	100



Qualification Pack

Acronyms

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

Qualification Pack

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.