

Qualification Pack



Junior Mechanic (Engine)

QP Code: IES/Q1102

Version: 3.0

NSQF Level: 3

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

Qualification Pack

Contents

IES/Q1102: Junior Mechanic (Engine)	3
<i>Brief Job Description</i>	3
Applicable National Occupational Standards (NOS)	3
<i>Compulsory NOS</i>	3
<i>Qualification Pack (QP) Parameters</i>	3
IES/N1102: Assist in repair and maintenance of equipment's engine and power train systems	5
IES/N7801: Maintain the work area, tools and machine to support the operations	11
IES/N7602: Comply with Workshop Health and Safety Guidelines	16
DGT/VSQ/N0101: Employability Skills (30 Hours)	22
Assessment Guidelines and Weightage	27
<i>Assessment Guidelines</i>	27
<i>Assessment Weightage</i>	28
Acronyms	29
Glossary	30

Qualification Pack

IES/Q1102: Junior Mechanic (Engine)

Brief Job Description

The primary role of a Junior Mechanic (engine) is to provide assistance to Mechanic (engine) in breakdown repair & preventive maintenance in issues related to engines of the equipment.

Personal Attributes

This job requires the individual to work independently as well as in teams. He should have analytical skills, problem solving attitude, high concentration levels. Junior Mechanic Engine should have good hand-eye coordination, good eye-sight, no colour-blindness and should be able to complete precise and detailed work.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [IES/N1102: Assist in repair and maintenance of equipment's engine and power train systems](#)
2. [IES/N7801: Maintain the work area, tools and machine to support the operations](#)
3. [IES/N7602: Comply with Workshop Health and Safety Guidelines](#)
4. [DGT/VSQ/N0101: Employability Skills \(30 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Infrastructure Equipment
Sub-Sector	Equipment Service and spares
Occupation	Equipment Maintenance
Country	India
NSQF Level	3
Credits	10
Aligned to NCO/ISCO/ISIC Code	NCO-2015/ 7233.0701

Qualification Pack

Minimum Educational Qualification & Experience	<p>Ability to read and write with 5 Years of experience Relevant</p> <p>OR</p> <p>5th grade pass with 4 Years of experience Relevant</p> <p>OR</p> <p>8th grade pass with 1 Year of experience Relevant</p> <p>OR</p> <p>8th grade pass with 1 year NTC plus 1 year NAC</p> <p>OR</p> <p>8th grade pass and pursuing continuous schooling in regular school with vocational subject</p>
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 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/06806
NQR Version	3.0

Qualification Pack

IES/N1102: Assist in repair and maintenance of equipment's engine and power train systems

Description

This unit provides Performance Criteria, Knowledge & Understanding and Skills & Ability for activities that need to be carried out for assisting mechanic (Engine) in testing, diagnosing, repairing and maintaining engines.

Scope

The scope covers the following :

- Breakdown Repair Assistance
- Maintenance Work Assistance

Elements and Performance Criteria

Breakdown Repair Assistance

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

- PC1.** inspect the work area and ensure it is safe and clean with adequate lighting and ventilation and as per the safety regulations, to enable repairs to be carried out efficiently
- PC2.** ensure availability and serviceability of standard tools and equipment including supporting workshop facilities ; consumables needed for engine and power train repair work
- PC3.** assist in inspecting the machine sequentially for visible damages /deficiencies and leaks in the engine and and power train systems; report as necessary
- PC4.** check all levels of fuel, coolant and oils in engine, hydraulic and transmission systems; top up if necessary
- PC5.** assist in starting the machine as per procedure and checking the defect/fault reported in the engine and and power train systems
- PC6.** select and position all tools and equipment needed to remove the defective parts as identified during the fault diagnosis
- PC7.** remove , as instructed , defective parts of the engine and power train system without damaging surrounding components and assemblies
- PC8.** disassemble the parts, laying it out sequentially, as per procedure to facilitate re-assembly later
- PC9.** assist in inspecting the removed/disassembled parts and identifying those that can be reused/repaired/ replaced as applicable
- PC10.** assist in preparing the list of parts for procurement including consumables, preliminary work order and time schedule
- PC11.** clean all the disassembled parts using the appropriate tools and consumables as per manufacturers guidelines
- PC12.** replace or repair the affected parts, test functionality on bench as applicable and refit / reassemble the same as per the manufacturers guidelines

Qualification Pack

- PC13.** assist in starting the machine as per procedure and testing to confirm the defect/fault has been rectified
- PC14.** assist in starting the machine as per procedure and testing for leakages, unusual noises and general performance to corroborate with operators feedback on the equipment
- PC15.** ascertain the availability of necessary parts and consumables and assist in preparing tentative maintenance plan including approximate costing and time schedule
- PC16.** assist in carrying out all maintenance/service tasks as applicable on the equipments engine and and power train systems as per manufacturers specifications and procedures, ensuring only genuine and approved parts and consumables are used.
- PC17.** assist in starting the machine, post repairs and service, and conducting trial runs to check the performance of engine and and power train systems
- PC18.** store the tools and equipment, post usage, at the designated places and ensure they are not left behind in the repair bay
- PC19.** dispose the defective parts, consumables and waste as per the organizational policies & environmental regulations
- PC20.** assist in completing and submitting the requisite reports and documents as per the organizational policies and procedures

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organizations policies, guidelines and procedures related to breakdown repairs & maintenance services including reporting structure and escalation matrix
- KU2.** the organizations policies, guidelines and procedures related to workshop safety, personal health, security and environment including contact details during emergency
- KU3.** the facilities in the workshop to include location of standard and special tools, diagnostic and test equipment; and their serviceability
- KU4.** the identification and application, correct and safe usage of various hand and power tools; special tools and equipment
- KU5.** the methodology to check all the tools and equipment to be used are tested / calibrated, serviceable and in safe condition
- KU6.** the general functioning of an engine and its various subsystems like fuel - air, lubrication, cooling and transmission/ power train; hydraulic and electrical systems
- KU7.** the broad techniques used to identify faults such as sensory information - sight, sound, smell, touch; aural, visual and functional tests and checks
- KU8.** the procedure to remove components from the engine and power train systems; without damaging it as well as the surrounding ones as per the manufacturers guidelines
- KU9.** the technique to lay the removed components out in a logical sequence to aid re-assembly and check them for wear and tear
- KU10.** the procedure for cleaning the dis assembled parts and components as per manufacturers guidelines
- KU11.** the procedure for carrying out repairs and service of the affected components as per the manufacturers guidelines

Qualification Pack

- KU12.** the procedure for checking the correct specs of the replacement parts like seals, gaskets, O rings, filters, belts and consumables such as grease and lubricants before usage/fitment
- KU13.** the procedure for reassembly of components, their fitment on to the equipment and assisting in their serviceability trials/tests
- KU14.** the procedure for carrying out all the tasks as specified in the maintenance/service schedule of the equipment for the engine, related subsystems; and power train
- KU15.** the procedure for disposal of replaced parts/components and waste material as per organisational policy and environmental regulations
- KU16.** the general overview of various reports and documents that are to be completed and submitted post breakdown repairs and servicing, as per organizational policies and procedures
- KU17.** the review mechanism for obtaining / giving feedback from/to the supervisor / customer on the standard and quality of work executed

Generic Skills (GS)

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

- GS1.** read and interpret signs, symbols, diagrams and decals both on the equipment and in the work-shop
- GS2.** read the maintenance manual for understanding the basic specs of the systems and service procedures to be undertaken
- GS3.** record basic details of all repairs and servicing carried out as recommended by the manufacturer, on the prescribed format
- GS4.** use correct terms/phrases while interacting with co-workers, supervisor and customers
- GS5.** interact regularly with team members to enable tasks to be carried out efficiently and within the time schedule
- GS6.** interact confidently with customers to understand the problems and to seek clarifications as necessary
- GS7.** plan, prioritize and sequence operations to ensure completion within the laid down time schedule
- GS8.** evaluate progress of work regularly to assess delays and initiate remedial measures including timely escalation if beyond one's scope or ability
- GS9.** ensure quality service is delivered as committed to achieve high levels of customer satisfaction
- GS10.** follow up with supervisors / superiors on any unfavorable feedback received from customer

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Breakdown Repair Assistance</i>	15	50	-	-
PC1. inspect the work area and ensure it is safe and clean with adequate lighting and ventilation and as per the safety regulations, to enable repairs to be carried out efficiently	1	2	-	-
PC2. ensure availability and serviceability of standard tools and equipment including supporting workshop facilities ; consumables needed for engine and power train repair work	1	3	-	-
PC3. assist in inspecting the machine sequentially for visible damages /deficiencies and leaks in the engine and and power train systems; report as necessary	1	2	-	-
PC4. check all levels of fuel, coolant and oils in engine, hydraulic and transmission systems; top up if necessary	1	3	-	-
PC5. assist in starting the machine as per procedure and checking the defect/fault reported in the engine and and power train systems	1	2	-	-
PC6. select and position all tools and equipment needed to remove the defective parts as identified during the fault diagnosis	1	3	-	-
PC7. remove , as instructed , defective parts of the engine and power train system without damaging surrounding components and assemblies	1	4	-	-
PC8. disassemble the parts, laying it out sequentially, as per procedure to facilitate re-assembly later	-	4	-	-
PC9. assist in inspecting the removed/disassembled parts and identifying those that can be reused/repaired/ replaced as applicable	-	2	-	-
PC10. assist in preparing the list of parts for procurement including consumables, preliminary work order and time schedule	1	2	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. clean all the disassembled parts using the appropriate tools and consumables as per manufacturers guidelines	1	3	-	-
PC12. replace or repair the affected parts, test functionality on bench as applicable and refit / reassemble the same as per the manufacturers guidelines	-	3	-	-
PC13. assist in starting the machine as per procedure and testing to confirm the defect/fault has been rectified	-	2	-	-
PC14. assist in starting the machine as per procedure and testing for leakages, unusual noises and general performance to corroborate with operators feedback on the equipment	1	2	-	-
PC15. ascertain the availability of necessary parts and consumables and assist in preparing tentative maintenance plan including approximate costing and time schedule	1	2	-	-
PC16. assist in carrying out all maintenance/service tasks as applicable on the equipments engine and and power train systems as per manufacturers specifications and procedures, ensuring only genuine and approved parts and consumables are used.	1	4	-	-
PC17. assist in starting the machine, post repairs and service, and conducting trial runs to check the performance of engine and and power train systems	1	2	-	-
PC18. store the tools and equipment, post usage, at the designated places and ensure they are not left behind in the repair bay	-	2	-	-
PC19. dispose the defective parts, consumables and waste as per the organizational policies & environmental regulations	1	2	-	-
PC20. assist in completing and submitting the requisite reports and documents as per the organizational policies and procedures	1	1	-	-
NOS Total	15	50	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	IES/N1102
NOS Name	Assist in repair and maintenance of equipment's engine and power train systems
Sector	Infrastructure Equipment
Sub-Sector	Equipment Service and spares
Occupation	Equipment Maintenance
NSQF Level	3
Credits	4
Version	3.0
Last Reviewed Date	NA
Next Review Date	17/11/2025
NSQC Clearance Date	17/11/2022

Qualification Pack

IES/N7801: Maintain the work area, tools and machine to support the operations

Description

This unit provides Performance Criteria, Knowledge & Understanding and Skills & Ability for activities that are needed to Maintain the work area, tools and machine to support the operations.

Scope

The scope covers the following :

- Work area / tools / machinery maintenance at work

Elements and Performance Criteria

Work area / tools / machinery maintenance at work

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

- PC1.** inspect the work area and ensure it is safe from hazards and clean with adequate lighting and ventilation as applicable, to enable repairs to be carried out efficiently
- PC2.** comply with all latest work area safety, security and environmental regulations and guidelines
- PC3.** maintain tools and equipment as per organizational guidelines and manufacturers instructions
- PC4.** select tools and equipment as appropriate to the various tasks and utilize them correctly as per the manufacturers /workshop service manual
- PC5.** lift or haul as necessary, various tools and equipment safely from stowage area to repair bay as per the laid down procedures
- PC6.** store the tools and equipment, post usage, at the designated places and ensure they are not left behind in the repair bay
- PC7.** ensure the condition of tools and equipment including machine guards is serviceable, report immediately if unserviceable or unsafe for use
- PC8.** ensure adequate stocks of various types of cleaning agents and materials, as needed, are available at all times
- PC9.** keep the work area free from clutter and spillage on a regular basis to maintain basic hygiene and cleanliness at all times
- PC10.** report the need for maintenance and / or cleaning outside your area of responsibility
- PC11.** handle the storage and disposal of waste including hazardous materials as per the safety, health and environmental regulations

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

Qualification Pack

- KU1.** organizations standard operating procedures and guidelines for work area maintenance and upkeep
- KU2.** organizations reporting structure and contact details of personnel for queries/escalating unresolved problems
- KU3.** various types of safety signs and warnings in the work area facility including on tools and equipment and their meaning
- KU4.** types of common hazards and risks at the work area including fire, mechanical and electrical related
- KU5.** procedure for safe lockdown / shutdown of machinery in case of an emergency in the work area
- KU6.** location of workshop stores for tools and equipment; procedure for issue and return of specialist tools
- KU7.** procedure for operation and maintenance of various tools and equipment as per manufacturers guidelines
- KU8.** procedure for correct handling and transporting of tools and equipment from stowage area to repair bay and back
- KU9.** selection and correct usage of various types of cleaning agents and related tools and equipment
- KU10.** guidelines for storage and disposal of waste including hazardous materials

Generic Skills (GS)

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

- GS1.** read and interpret signs, symbols, diagrams and decals both on the equipment and in the work area
- GS2.** read and understand instructions and guidelines related to operation and maintenance of tools and equipment
- GS3.** interact with mechanic and supervisor to understand the tasks and seek clarification if required
- GS4.** use correct terms / phrases while interacting with team members and supervisor
- GS5.** organize own work area to include tools and equipment; time plan to minimize any risks related to health and safety
- GS6.** monitor progress of work regularly to assess delays and initiate remedial measures including timely escalation if beyond one's scope or ability
- GS7.** give clear and concise information and advisories as applicable to team members to enable tasks to be completed safely and in time
- GS8.** build and maintain congenial and positive relationships with all team members and other stake holders
- GS9.** follow up with supervisors/superiors on any unfavorable feedback related to operations and maintenance issues
- GS10.** provide quality and timely service of the highest order to ensure customer satisfaction

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Work area / tools / machinery maintenance at work</i>	5	10	-	-
PC1. inspect the work area and ensure it is safe from hazards and clean with adequate lighting and ventilation as applicable, to enable repairs to be carried out efficiently	-	1	-	-
PC2. comply with all latest work area safety, security and environmental regulations and guidelines	1	1	-	-
PC3. maintain tools and equipment as per organizational guidelines and manufacturers instructions	-	1	-	-
PC4. select tools and equipment as appropriate to the various tasks and utilize them correctly as per the manufacturers /workshop service manual	1	1	-	-
PC5. lift or haul as necessary, various tools and equipment safely from stowage area to repair bay as per the laid down procedures	-	1	-	-
PC6. store the tools and equipment, post usage, at the designated places and ensure they are not left behind in the repair bay	-	1	-	-
PC7. ensure the condition of tools and equipment including machine guards is serviceable, report immediately if unserviceable or unsafe for use	-	1	-	-
PC8. ensure adequate stocks of various types of cleaning agents and materials, as needed, are available at all times	1	1	-	-
PC9. keep the work area free from clutter and spillage on a regular basis to maintain basic hygiene and cleanliness at all times	-	1	-	-
PC10. report the need for maintenance and / or cleaning outside your area of responsibility	1	-	-	-
PC11. handle the storage and disposal of waste including hazardous materials as per the safety, health and environmental regulations	1	1	-	-



Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
NOS Total	5	10	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	IES/N7801
NOS Name	Maintain the work area, tools and machine to support the operations
Sector	Infrastructure Equipment
Sub-Sector	Equipment Service and spares
Occupation	Equipment Maintenance
NSQF Level	3
Credits	3
Version	3.0
Last Reviewed Date	NA
Next Review Date	17/11/2025
NSQC Clearance Date	17/11/2022

Qualification Pack

IES/N7602: Comply with Workshop Health and Safety Guidelines

Description

This unit is about adhering to health and safety requirements at the service workshop during equipment maintenance.

Scope

The scope covers the following :

- Service workshop health and safety

Elements and Performance Criteria

Service workshop health and safety

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

- PC1.** comply with all latest/current workshop safety, personal health, security and environmental related regulations and guidelines
- PC2.** inspect the work area and ensure it is safe from hazards, clean and with adequate lighting and ventilation as applicable, to enable repairs to be carried out efficiently
- PC3.** use appropriate personal protective clothing and equipment for various tasks and work conditions as per regulations
- PC4.** lift or haul as necessary, various tools and equipment safely from stowage area to repair bay as per the laid down procedures
- PC5.** carry out all repairs and maintenance tasks safely and correctly as per the manufacturers workshop procedures and guidelines
- PC6.** store the tools and equipment, post usage, at the designated places and ensure they are not left behind in the repair bay
- PC7.** keep the work area free from clutter and spillage on a regular basis to maintain basic hygiene and cleanliness at all times
- PC8.** handle the storage and disposal of waste including hazardous materials as per the safety, health and environmental regulations
- PC9.** operate various types and grades of fire extinguishers, as per the laid down procedures
- PC10.** support in administering basic first aid at the spot and report to supervisor, as required, in case of an accident needing evacuation
- PC11.** respond promptly and appropriately to any accident / incident or emergency, within the limits of ones roles and responsibilities
- PC12.** report and record, as applicable, details related to operations, incidents or accidents, in a factually correct manner

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

Qualification Pack

- KU1.** organisations latest/current workshop safety, personal health, security and environmental related policies, regulations and guidelines
- KU2.** organisations reporting structure and contact details of personnel responsible for health, safety and environmental related matters
- KU3.** location of workshop stores for tools and equipment, first aid station and safe assembly points/areas in case of an emergency
- KU4.** contact details of personnel to be reached out to in case of emergencies or accidents/incidents including civic agencies like police, fire and hospital services
- KU5.** types, use and importance of personal protective equipment and clothing
- KU6.** various types of safety signs and warnings and their meaning
- KU7.** types of common hazards and risks at the workshop including fire, mechanical and electrical related
- KU8.** safe working practices with various workshop tools and equipment, and other facilities
- KU9.** safe working practices while carrying out various maintenance operations adhering to the manufacturers guidelines and procedures
- KU10.** procedure for safe lockdown/shutdown of machinery in case of an emergency in the workshop
- KU11.** guidelines for transport, storage and disposal of hazardous materials and waste
- KU12.** types of various fire extinguishers, their application and operating procedure
- KU13.** basic first aid treatment for common injuries in the workshop like cuts and bleeding, sprains and fractures, minor burns, eye injuries and electrical shock
- KU14.** reporting and documentation procedures related to health, safety, environmental and security matters
- KU15.** the ways to optimize the usage of materials and conservation of electricity
- KU16.** respect everyone without any personal bias like gender, disability, caste, religion, colour, sexual orientation and culture

Generic Skills (GS)

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

- GS1.** read and interpret signs, symbols, diagrams and decals both on the equipment and in the workshop
- GS2.** read and understand all safety manuals related to equipment service and repairs; and workshop equipment including facilities operation
- GS3.** read and understand all health and safety guidelines; environmental regulations and bulletins issued from time to time
- GS4.** use correct terms/phrases while interacting with team members and supervisor
- GS5.** give clear and concise instructions and advisories as applicable to team members and others to enable tasks to be completed safely and in time
- GS6.** organize own work area to include tools and equipment; time plan to minimize any risks related to health and safety
- GS7.** monitor progress of work regularly to assess delays and initiate remedial measures including timely escalation if beyond one's scope or ability



Qualification Pack

- GS8.** build and maintain congenial and positive relationships with all team members and other stake holders
- GS9.** follow up with supervisors/superiors on any unfavorable feedback related to safety and health issues

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Service workshop health and safety</i>	5	15	-	-
PC1. comply with all latest/current workshop safety, personal health, security and environmental related regulations and guidelines	1	1	-	-
PC2. inspect the work area and ensure it is safe from hazards, clean and with adequate lighting and ventilation as applicable, to enable repairs to be carried out efficiently	1	2	-	-
PC3. use appropriate personal protective clothing and equipment for various tasks and work conditions as per regulations	1	1	-	-
PC4. lift or haul as necessary, various tools and equipment safely from stowage area to repair bay as per the laid down procedures	-	1	-	-
PC5. carry out all repairs and maintenance tasks safely and correctly as per the manufacturers workshop procedures and guidelines	1	2	-	-
PC6. store the tools and equipment, post usage, at the designated places and ensure they are not left behind in the repair bay	-	1	-	-
PC7. keep the work area free from clutter and spillage on a regular basis to maintain basic hygiene and cleanliness at all times	-	1	-	-
PC8. handle the storage and disposal of waste including hazardous materials as per the safety, health and environmental regulations	-	1	-	-
PC9. operate various types and grades of fire extinguishers, as per the laid down procedures	1	1	-	-
PC10. support in administering basic first aid at the spot and report to supervisor, as required, in case of an accident needing evacuation	-	1	-	-
PC11. respond promptly and appropriately to any accident / incident or emergency, within the limits of ones roles and responsibilities	-	2	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. report and record, as applicable, details related to operations, incidents or accidents, in a factually correct manner	-	1	-	-
NOS Total	5	15	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	IES/N7602
NOS Name	Comply with Workshop Health and Safety Guidelines
Sector	Infrastructure Equipment
Sub-Sector	Equipment Service and spares
Occupation	Equipment Maintenance
NSQF Level	4
Credits	2
Version	3.0
Last Reviewed Date	NA
Next Review Date	17/11/2025
NSQC Clearance Date	17/11/2022

Qualification Pack

DGT/VSQ/N0101: Employability Skills (30 Hours)

Description

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

Scope

The scope covers the following :

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

Elements and Performance Criteria

Introduction to Employability Skills

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

PC1. understand the significance of employability skills in meeting the job requirements

Constitutional values - Citizenship

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

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

Becoming a Professional in the 21st Century

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

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

Basic English Skills

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

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

Communication Skills

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

PC5. follow good manners while communicating with others

PC6. work with others in a team

Qualification Pack

Diversity & Inclusion

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

PC7. communicate and behave appropriately with all genders and PwD

PC8. report any issues related to sexual harassment

Financial and Legal Literacy

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

PC9. use various financial products and services safely and securely

PC10. calculate income, expenses, savings etc.

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

Essential Digital Skills

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

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

PC13. use internet and social media platforms securely and safely

Entrepreneurship

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

PC14. identify and assess opportunities for potential business

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

Customer Service

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

PC16. identify different types of customers

PC17. identify customer needs and address them appropriately

PC18. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

PC19. create a basic biodata

PC20. search for suitable jobs and apply

PC21. identify and register apprenticeship opportunities as per requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. need for employability skills

KU2. various constitutional and personal values

KU3. different environmentally sustainable practices and their importance

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

KU5. how to use basic spoken English language

KU6. Do and dont of effective communication

KU7. inclusivity and its importance

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

KU9. different types of financial products and services

Qualification Pack

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

Generic Skills (GS)

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

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

Qualification Pack

Assessment Criteria

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

Qualification Pack

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

Qualification Pack

National Occupational Standards (NOS) Parameters

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

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each 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 70% 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/N1102.Assist in repair and maintenance of equipment's engine and power train systems	15	50	-	-	65	40
IES/N7801.Maintain the work area, tools and machine to support the operations	5	10	-	-	15	30
IES/N7602.Comply with Workshop Health and Safety Guidelines	5	15	-	-	20	15
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	15
Total	45	105	-	-	150	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.