



Fishing Boat Mechanic

QP Code: AGR/Q5103

Version: 3.0

NSQF Level: 4

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AGR/Q5103: Fishing Boat Mechanic

Brief Job Description

A Fishing Boat Mechanic is responsible for carrying out the repair and maintenance of a boat and ensuring it is fit for fishing operation. It includes the maintenance of different systems of the boat such as fuel, electrical, hydraulic and steering systems.

Personal Attributes

The individual must have attention to detail, an aptitude for machines and problem-solving skills. The person must be physically fit to work for long durations. The ability to read, write and co-ordinate with others to achieve the work objectives are the other important attributes required in this job role.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [AGR/N5106: Carry out repair and maintenance of the boat's fuel and electrical systems](#)
2. [AGR/N5107: Carry out repair and maintenance of the boat's propeller, hulls, hydraulic and steering systems](#)
3. [AGR/N9903: Maintain health and safety at the workplace](#)
4. [DGT/VSQ/N0102: Employability Skills \(60 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Agriculture
Sub-Sector	Fisheries
Occupation	Assistance (Fisheries)
Country	India
NSQF Level	4
Credits	13
Aligned to NCO/ISCO/ISIC Code	NCO-2015/6223.9900

Minimum Educational Qualification & Experience	12th grade Pass OR Completed 2nd year of the 3-year diploma after 10 (and pursuing regular diploma) OR 10th grade pass (plus 2-year NTC) OR 10th grade pass (plus 1-year NTC plus 1 year NAC) OR 8th grade pass with 2 year NTC plus 1 year NAC plus 1 year CITS OR 10th grade pass and pursuing continuous schooling OR 10th grade pass with 2 Years of experience relevant experience OR Previous relevant Qualification of NSQF Level (Level 3.0 with minimum education as 8th Grade pass) with 3 Years of experience relevant experience OR Previous relevant Qualification of NSQF Level (Level 3.5 with 1.5- year relevant experience)
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	24/02/2025
Deactivation Date	17/12/2024
NSQC Approval Date	24/02/2022
Version	3.0
Reference code on NQR	QG-04-AG-00325-2023-V1.1-ASCI
NQR Version	1.1

AGR/N5106: Carry out repair and maintenance of the boat's fuel and electrical systems

Description

This OS unit is about carrying out repair and maintenance of the boat's fuel and electrical systems. It also covers resource optimisation and waste management practices at work.

Scope

The scope covers the following :

- Prepare for the repair and maintenance activities
- Repair and maintain the boat's fuel system
- Repair and maintain the boat's electrical system
- Optimise resource utilisation
- Perform waste management

Elements and Performance Criteria

Prepare for the repair and maintenance activities

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

- PC1.** determine the boat's manufacturer, model and maintenance schedule
- PC2.** arrange manufacturer-approved tools, equipment, spare parts and PPE for the repair and maintenance activities
- PC3.** prepare the repair and maintenance tools and equipment for use
- PC4.** select a well-ventilated and hazard-free area for the repair and maintenance activities

Repair and maintain the boat's fuel system

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

- PC5.** check the fuel system and hoses for any leakages and bad connections, and the tank surface for wear and tear or damage
- PC6.** check all the fluid levels such as the fuel, engine oil, power steering, power trim reservoirs and coolant
- PC7.** change the engine oil, oil filter and drive lubricants as per the maintenance schedule
- PC8.** repair or replace the worn-out or damaged fuel system components with the new ones
- PC9.** plug the leakages in the fuel system and replace the defective hoses
- PC10.** ensure all the fittings and clamps are secured
- PC11.** test the engine, exhaust and ventilation systems to ensure the correct functioning
- PC12.** check the fuel consumption to ensure it is as recommended and take appropriate action in case of over-consumption
- PC13.** ensure the fuel has the recommended ratio of ethanol to protect any damages to the engine

Repair and maintain the boat's electrical system

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

- PC14.** check all electrical connections are clean, tight and corrosion-free

- PC15.** remove the corroded terminals and use a wire brush to clean them along with all the cable ends
- PC16.** replace the worn-out or damaged cables
- PC17.** check the battery is connected safely
- PC18.** check the battery is sufficiently charged and is able to hold charge, using a multimeter
- PC19.** install a new battery to replace the faulty battery
- PC20.** test the working and functioning of all the pumps onboard

Optimise resource utilisation

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

- PC21.** optimise the usage of water, electricity and other resources in various processes
- PC22.** connect electrical tools and equipment safely and turn them off when not in use
- PC23.** plug water leakages to prevent its wastage

Perform waste management

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

- PC24.** segregate waste into appropriate categories
- PC25.** dispose the non-recyclable waste in an environment-friendly manner
- PC26.** recycle the recyclable waste appropriately

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the importance of checking the condition of the fishing boat and various mechanical equipment onboard before departure
- KU2.** how to read gauges, dials and symbols associated with various onboard machineries
- KU3.** different types of boats and their maintenance schedule
- KU4.** the importance of using manufacturer-approved tools, equipment, spare parts for the repair and maintenance activities
- KU5.** the appropriate conditions required for the repair and maintenance of a boat
- KU6.** the process of carrying out repair and maintenance of a boat's fuel system
- KU7.** the recommended fluid levels such as the fuel, engine oil, power steering, power trim reservoirs and coolant to be maintained in the fuel system
- KU8.** how to check the fuel consumption to ensure it is within the prescribed limits
- KU9.** the importance and process of checking that the fuel has the recommended ratio of ethanol
- KU10.** the process of carrying out repair and maintenance of the boat's electrical system
- KU11.** how to check the battery's charge using a multimeter
- KU12.** the benefits of resource optimisation
- KU13.** the criteria for segregating waste into appropriate categories
- KU14.** how to recycle and dispose different types of waste

Generic Skills (GS)

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

- GS1.** make short and precise notes
- GS2.** read the relevant guides and manuals
- GS3.** communicate politely and professionally
- GS4.** listen attentively for clear instructions
- GS5.** take quick decisions to resolve work-related problems in a timely manner
- GS6.** plan and prioritise tasks to ensure timely completion
- GS7.** co-ordinate with the co-workers to achieve the work objectives
- GS8.** evaluate all possible solutions to a problem to select the best one

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare for the repair and maintenance activities</i>	8	6	-	6
PC1. determine the boat's manufacturer, model and maintenance schedule	-	-	-	-
PC2. arrange manufacturer-approved tools, equipment, spare parts and PPE for the repair and maintenance activities	-	-	-	-
PC3. prepare the repair and maintenance tools and equipment for use	-	-	-	-
PC4. select a well-ventilated and hazard-free area for the repair and maintenance activities	-	-	-	-
<i>Repair and maintain the boat's fuel system</i>	10	12	-	10
PC5. check the fuel system and hoses for any leakages and bad connections, and the tank surface for wear and tear or damage	-	-	-	-
PC6. check all the fluid levels such as the fuel, engine oil, power steering, power trim reservoirs and coolant	-	-	-	-
PC7. change the engine oil, oil filter and drive lubricants as per the maintenance schedule	-	-	-	-
PC8. repair or replace the worn-out or damaged fuel system components with the new ones	-	-	-	-
PC9. plug the leakages in the fuel system and replace the defective hoses	-	-	-	-
PC10. ensure all the fittings and clamps are secured	-	-	-	-
PC11. test the engine, exhaust and ventilation systems to ensure the correct functioning	-	-	-	-
PC12. check the fuel consumption to ensure it is as recommended and take appropriate action in case of over-consumption	-	-	-	-
PC13. ensure the fuel has the recommended ratio of ethanol to protect any damages to the engine	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Repair and maintain the boat's electrical system</i>	8	14	-	10
PC14. check all electrical connections are clean, tight and corrosion-free	-	-	-	-
PC15. remove the corroded terminals and use a wire brush to clean them along with all the cable ends	-	-	-	-
PC16. replace the worn-out or damaged cables	-	-	-	-
PC17. check the battery is connected safely	-	-	-	-
PC18. check the battery is sufficiently charged and is able to hold charge, using a multimeter	-	-	-	-
PC19. install a new battery to replace the faulty battery	-	-	-	-
PC20. test the working and functioning of all the pumps onboard	-	-	-	-
<i>Optimise resource utilisation</i>	2	4	-	2
PC21. optimise the usage of water, electricity and other resources in various processes	-	-	-	-
PC22. connect electrical tools and equipment safely and turn them off when not in use	-	-	-	-
PC23. plug water leakages to prevent its wastage	-	-	-	-
<i>Perform waste management</i>	2	4	-	2
PC24. segregate waste into appropriate categories	-	-	-	-
PC25. dispose the non-recyclable waste in an environment-friendly manner	-	-	-	-
PC26. recycle the recyclable waste appropriately	-	-	-	-
NOS Total	30	40	-	30

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N5106
NOS Name	Carry out repair and maintenance of the boat's fuel and electrical systems
Sector	Agriculture
Sub-Sector	Assistance (Fisheries)
Occupation	Aquaculture
NSQF Level	4
Credits	4
Version	3.0
Last Reviewed Date	NA
Next Review Date	24/02/2025
NSQC Clearance Date	24/02/2022

AGR/N5107: Carry out repair and maintenance of the boat's propeller, hulls, hydraulic and steering systems

Description

This OS unit is about carrying out repair and maintenance of the boat's propeller, hulls, hydraulic and steering systems. It also covers maintenance of records and scheduling the boat's maintenance.

Scope

The scope covers the following :

- Repair and maintain the propeller and hulls
- Repair and maintain the hydraulic system
- Repair and maintain the steering system
- Maintain the records and schedule the maintenance

Elements and Performance Criteria

Repair and maintain the propeller and hulls

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

- PC1.** check the propellers for dings, pitting, cracks and distortion
- PC2.** ensure the balance plates are attached securely and are in good condition
- PC3.** ensure the propeller is secured and replace its bearings, if required
- PC4.** check the hull for blisters, distortions and cracks
- PC5.** test the bilge pump for the correct functioning and remove debris and clogging from the pump hose
- PC6.** examine the position and condition of the centre bearing on intermediate shafts and long shafts, the protection cap, seals, bearing bracket and bearing body
- PC7.** ensure the drain plug is secure in its place
- PC8.** clean the hull, deck, and topsides using clean water and an environmentally safe cleaning solution
- PC9.** remove fouling from the propeller and apply grease on the propeller shaft

Repair and maintain the hydraulic system

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

- PC10.** check the hydraulic oil to ensure it is clean and free of any contaminants
- PC11.** check all the pipes, pipe connections and system hoses for wear and tear or damage
- PC12.** check the hydraulic system temperature to ensure it is within the recommended limits
- PC13.** maintain the recommended level of hydraulic fluid and a sufficient stock of spare hoses onboard for critical equipment
- PC14.** clear of dust and debris around the dipsticks and fuel plugs
- PC15.** clean and replace the hydraulic fluid filters with new ones as per the maintenance schedule
- PC16.** check the hydraulic rod for corrosion and pitting, and clean it appropriately
- PC17.** apply new hydraulic system seals to replace the worn-out seals
- PC18.** ensure the fittings are tight and couplers are clean

PC19. carry out maintenance of the hydraulic valves

Repair and maintain the steering system

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

PC20. check the engine order telegraph to ensure proper functioning and response to the wheel

PC21. check the tightness of all the fasteners and fittings in the steering system

PC22. check all the hoses and fittings for wear and tear, kinks and leaks

PC23. check for any bends, nicks or damage to the steering ram shaft

PC24. check the belts and cables for wear and tear or damage

PC25. ensure the belts fit tightly around the pulleys to prevent slipping

PC26. check actuating system tank for the required oil level and refill it, if necessary

PC27. check the rudder carrier bearing and bottom sea gland and apply grease, if necessary

PC28. test the pump's response to the gear

PC29. check the steering system for abnormal noise and heat and take the necessary action

PC30. test the steering system to ensure an appropriate and quick response from the engine and driving unit

PC31. ensure the steering cables and connections are in a good condition

PC32. replace the worn-out belts and hoses with the new ones

PC33. repair the faulty hydraulic and steering systems

PC34. remove the support rod from the steering/ tilt tube, clean used grease and apply new grease on the support rod and the tilt tube

PC35. remove the steering wheel and re-grease the wheel shaft

Maintain the records and schedule the maintenance

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

PC36. maintain the manual and/ or electronic record of repair and maintenance activities using the physical registers and/ or the relevant computer application

PC37. schedule the next maintenance as per the manufacturer-recommended maintenance schedule

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. the process of carrying out repair and maintenance of the boat's propeller and hulls, and hydraulic system

KU2. the process of carrying out repair and maintenance of the boat's hydraulic system

KU3. the importance of ensuring the hydraulic oil is clean and free of any contaminants

KU4. the recommended maintenance schedule for hoses in the steering system

KU5. the recommended level of hydraulic fluid to be maintained in the boat's hydraulic system

KU6. the process of applying new hydraulic system seals

KU7. the maintenance needs of the hydraulic valves

KU8. the process of carrying out repair and maintenance of the boat's steering system

KU9. the process of testing the steering system to ensure an appropriate and quick response from the engine and driving unit

- KU10.** the importance of ensuring the steering cables and connections are in a good condition
- KU11.** how to maintain various records manually and electronically
- KU12.** the recommended maintenance schedule for a variety of fishing boats

Generic Skills (GS)

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

- GS1.** write work-related notes
- GS2.** read the relevant literature to get the latest updates about the field of work
- GS3.** communicate politely and professionally
- GS4.** listen attentively to understand the information/ instructions being shared
- GS5.** plan and schedule tasks for efficient use of time
- GS6.** co-ordinate with the co-workers to achieve the work objectives
- GS7.** take quick actions to deal with any emergencies/accident
- GS8.** evaluate all possible solutions to a problem to select the best one

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Repair and maintain the propeller and hulls</i>	8	12	-	8
PC1. check the propellers for dings, pitting, cracks and distortion	-	-	-	-
PC2. ensure the balance plates are attached securely and are in good condition	-	-	-	-
PC3. ensure the propeller is secured and replace its bearings, if required	-	-	-	-
PC4. check the hull for blisters, distortions and cracks	-	-	-	-
PC5. test the bilge pump for the correct functioning and remove debris and clogging from the pump hose	-	-	-	-
PC6. examine the position and condition of the centre bearing on intermediate shafts and long shafts, the protection cap, seals, bearing bracket and bearing body	-	-	-	-
PC7. ensure the drain plug is secure in its place	-	-	-	-
PC8. clean the hull, deck, and topsides using clean water and an environmentally safe cleaning solution	-	-	-	-
PC9. remove fouling from the propeller and apply grease on the propeller shaft	-	-	-	-
<i>Repair and maintain the hydraulic system</i>	10	12	-	10
PC10. check the hydraulic oil to ensure it is clean and free of any contaminants	-	-	-	-
PC11. check all the pipes, pipe connections and system hoses for wear and tear or damage	-	-	-	-
PC12. check the hydraulic system temperature to ensure it is within the recommended limits	-	-	-	-
PC13. maintain the recommended level of hydraulic fluid and a sufficient stock of spare hoses onboard for critical equipment	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. clear of dust and debris around the dipsticks and fuel plugs	-	-	-	-
PC15. clean and replace the hydraulic fluid filters with new ones as per the maintenance schedule	-	-	-	-
PC16. check the hydraulic rod for corrosion and pitting, and clean it appropriately	-	-	-	-
PC17. apply new hydraulic system seals to replace the worn-out seals	-	-	-	-
PC18. ensure the fittings are tight and couplers are clean	-	-	-	-
PC19. carry out maintenance of the hydraulic valves	-	-	-	-
<i>Repair and maintain the steering system</i>	10	12	-	10
PC20. check the engine order telegraph to ensure proper functioning and response to the wheel	-	-	-	-
PC21. check the tightness of all the fasteners and fittings in the steering system	-	-	-	-
PC22. check all the hoses and fittings for wear and tear, kinks and leaks	-	-	-	-
PC23. check for any bends, nicks or damage to the steering ram shaft	-	-	-	-
PC24. check the belts and cables for wear and tear or damage	-	-	-	-
PC25. ensure the belts fit tightly around the pulleys to prevent slipping	-	-	-	-
PC26. check actuating system tank for the required oil level and refill it, if necessary	-	-	-	-
PC27. check the rudder carrier bearing and bottom sea gland and apply grease, if necessary	-	-	-	-
PC28. test the pump's response to the gear	-	-	-	-
PC29. check the steering system for abnormal noise and heat and take the necessary action	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC30. test the steering system to ensure an appropriate and quick response from the engine and driving unit	-	-	-	-
PC31. ensure the steering cables and connections are in a good condition	-	-	-	-
PC32. replace the worn-out belts and hoses with the new ones	-	-	-	-
PC33. repair the faulty hydraulic and steering systems	-	-	-	-
PC34. remove the support rod from the steering/ tilt tube, clean used grease and apply new grease on the support rod and the tilt tube	-	-	-	-
PC35. remove the steering wheel and re-grease the wheel shaft	-	-	-	-
<i>Maintain the records and schedule the maintenance</i>	2	4	-	2
PC36. maintain the manual and/ or electronic record of repair and maintenance activities using the physical registers and/ or the relevant computer application	-	-	-	-
PC37. schedule the next maintenance as per the manufacturer-recommended maintenance schedule	-	-	-	-
NOS Total	30	40	-	30

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N5107
NOS Name	Carry out repair and maintenance of the boat's propeller, hulls, hydraulic and steering systems
Sector	Agriculture
Sub-Sector	Fisheries
Occupation	Assistance (Fisheries)
NSQF Level	4
Credits	3
Version	2.0
Last Reviewed Date	24/02/2022
Next Review Date	24/02/2025
NSQC Clearance Date	24/02/2022

AGR/N9903: Maintain health and safety at the workplace

Description

This OS is about maintaining health and safety of self and other co-workers at the workplace

Scope

The scope covers the following :

- Maintain personal hygiene
- Maintain clean and safe workplace
- Administer appropriate emergency procedures

Elements and Performance Criteria

Maintain personal hygiene

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

- PC1.** wash hands, legs and face with soap/alcohol based sanitizer at reasonable intervals
- PC2.** wash the worn clothes with soap and sun dry before use next time
- PC3.** ensure the face is covered with mask or three layers of cloth-piece
- PC4.** follow the workplace sanitization norms including distancing from sick people

Maintain clean and safe workplace

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

- PC5.** carry out basic safety checks before operation of all tools, implements, and machinery and report identified hazards to the supervisor
- PC6.** wear appropriate Personal Protective Equipment (PPE) while performing work in accordance with the workplace policy
- PC7.** follow the instructions mentioned on the labels of chemicals/pesticides/fumigants etc to avoid hazards
- PC8.** assess risks prior to performing manual handling jobs, and work according to currently recommended safe practices
- PC9.** sanitize equipment, tools and machinery before and after use
- PC10.** use equipment and materials safely and correctly and return the same to designated storage after use
- PC11.** dispose waste safely and correctly in the designated area
- PC12.** recognize risks to bystanders and take required action to reduce the risks
- PC13.** work in a manner which minimizes environmental damage, ensuring all procedures and instructions for controlling risks are followed
- PC14.** report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger
- PC15.** follow government / workplace advisories incase of outbreak of any disease/disaster

Administer appropriate emergency procedures

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

- PC16.** follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to the location of emergency, as per the workplace requirements
- PC17.** use emergency equipment in accordance with manufacturer's specifications and workplace requirements
- PC18.** provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques
- PC19.** recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate
- PC20.** report details of first aid administered in accordance with workplace procedures

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** relevant legislation, standards, policies, and procedures at work
- KU2.** relevant health and safety requirements applicable to the work environment
- KU3.** own job role and responsibilities and sources of information pertaining to work
- KU4.** who to approach for support in order to obtain work related information, clarifications and support
- KU5.** importance of following health, hygiene, safety and quality standards and the impact of not following the standards on consumers and the business
- KU6.** personal hygiene and fitness requirement
- KU7.** importance of sanitization of the workplace
- KU8.** types of Personal Protective Equipment (PPE) required at the workplace and their importance
- KU9.** the correct and safe way to use materials and equipment required for the work
- KU10.** the importance of good housekeeping at the workplace
- KU11.** safe waste disposal methods
- KU12.** methods for minimizing environmental damage during work
- KU13.** the risks to health and safety including contagious diseases and the measures to be taken to control those risks in the area of work
- KU14.** workplace procedures and requirements for the prevention and treatment of workplace injuries/illnesses.
- KU15.** basic emergency first aid procedure
- KU16.** local emergency services
- KU17.** why accidents, incidents and problems should be reported and the appropriate actions to be taken

Generic Skills (GS)

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

- GS1.** record the data as per the requirement
- GS2.** report problems to the appropriate personnel in a timely manner
- GS3.** read instruction manual for hand tool and equipments

- GS4.** communicate clearly and effectively with co-workers, and other stakeholders
- GS5.** comprehend information shared by senior people and experts
- GS6.** make decisions pertaining to personal hygiene and safety
- GS7.** schedule daily activities and draw up priorities
- GS8.** manage relationships with co-workers, manager and other stakeholders
- GS9.** assess situation and identify appropriate control measures

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain personal hygiene</i>	10	5	-	10
PC1. wash hands, legs and face with soap/alcohol based sanitizer at reasonable intervals	-	-	-	-
PC2. wash the worn clothes with soap and sun dry before use next time	-	-	-	-
PC3. ensure the face is covered with mask or three layers of cloth-piece	-	-	-	-
PC4. follow the workplace sanitization norms including distancing from sick people	-	-	-	-
<i>Maintain clean and safe workplace</i>	15	15	-	15
PC5. carry out basic safety checks before operation of all tools, implements, and machinery and report identified hazards to the supervisor	-	-	-	-
PC6. wear appropriate Personal Protective Equipment (PPE) while performing work in accordance with the workplace policy	-	-	-	-
PC7. follow the instructions mentioned on the labels of chemicals/pesticides/fumigants etc to avoid hazards	-	-	-	-
PC8. assess risks prior to performing manual handling jobs, and work according to currently recommended safe practices	-	-	-	-
PC9. sanitize equipment, tools and machinery before and after use	-	-	-	-
PC10. use equipment and materials safely and correctly and return the same to designated storage after use	-	-	-	-
PC11. dispose waste safely and correctly in the designated area	-	-	-	-
PC12. recognize risks to bystanders and take required action to reduce the risks	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. work in a manner which minimizes environmental damage, ensuring all procedures and instructions for controlling risks are followed	-	-	-	-
PC14. report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger	-	-	-	-
PC15. follow government / workplace advisories in case of outbreak of any disease/disaster	-	-	-	-
<i>Administer appropriate emergency procedures</i>	15	5	-	10
PC16. follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to the location of emergency, as per the workplace requirements	-	-	-	-
PC17. use emergency equipment in accordance with manufacturer's specifications and workplace requirements	-	-	-	-
PC18. provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques	-	-	-	-
PC19. recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate	-	-	-	-
PC20. report details of first aid administered in accordance with workplace procedures	-	-	-	-
NOS Total	40	25	-	35

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N9903
NOS Name	Maintain health and safety at the workplace
Sector	Agriculture
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	1
Version	4.0
Last Reviewed Date	22/10/2024
Next Review Date	22/10/2027
NSQC Clearance Date	22/10/2024

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:

- 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.
- 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
- 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

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	-	-

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	-	-	-	-
<i>Entrepreneurship</i>	2	3	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
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	-	-

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	18/02/2025
Next Review Date	18/02/2028
NSQC Clearance Date	18/02/2025

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

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

Criteria (PC) (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of

marks for Theory and Skills Practical for each PC.

2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.

3. Individual assessment agencies will create unique question papers for theory part for each candidate at each

examination/training center (as per assessment criteria below).

4. Individual assessment agencies will create unique evaluations for skill practical for every student at each

examination/ training center based on these criteria.

5. In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on

the balance NOSs to pass the Qualification Pack.

6. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack

Minimum Aggregate Passing % at QP Level : 70

(Please note: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N5106.Carry out repair and maintenance of the boat's fuel and electrical systems	30	40	-	30	100	45
AGR/N5107.Carry out repair and maintenance of the boat's propeller, hulls, hydraulic and steering systems	30	40	-	30	100	45
AGR/N9903.Maintain health and safety at the workplace	40	25	-	35	100	5
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	-	-	50	5
Total	120	135	-	95	350	100

Acronyms

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

Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.
Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.

Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.