

Qualification Pack



Hatchery Production Worker

QP Code: AGR/Q4901

Version: 3.0

NSQF Level: 3

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AGR/Q4901: Hatchery Production Worker

Brief Job Description

The hatchery production worker assists in pre-spawning, spawning and post-spawning activities and performs general maintenance of the hatchery.

Personal Attributes

The individual must have attention to detail and stamina to work for long durations. The person must be able to work as per the given instructions and in coordination with others to achieve the work objectives. The individual must know how to read and write.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [AGR/N4902: Assist in setting up the hatchery and carrying out pre-spawning activities](#)
2. [AGR/N4903: Assist in carrying out larvae production](#)
3. [AGR/N4904: Assist in carrying out the post-spawning process](#)
4. [AGR/N4905: Maintain the hatchery](#)
5. [AGR/N9903: Maintain health and safety at the workplace](#)
6. [DGT/VSQ/N0101: Employability Skills \(30 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Agriculture
Sub-Sector	Fisheries
Occupation	Aquaculture
Country	India
NSQF Level	3
Credits	9
Aligned to NCO/ISCO/ISIC Code	NCO-2015/6221.0102

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Minimum Educational Qualification & Experience	10th Class OR 8th grade pass (with two years of (NTC/ NAC) after 8th) OR 8th grade pass (and pursuing continuous schooling in regular school with vocational subject) OR 8th grade pass with 2 Years of experience relevant experience OR 5th grade pass with 5 Years of experience relevant experience OR Previous relevant Qualification of NSQF Level (Level 2) with 1 Year of experience relevant experience OR Previous relevant Qualification of NSQF Level (Level 2.5) with 6 Months of experience relevant experience
Minimum Level of Education for Training in School	8th Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	16 Years
Last Reviewed On	NA
Next Review Date	30/12/2024
NSQC Approval Date	30/12/2021
Version	3.0
Reference code on NQR	QG-03-AG-00330-2023-V1.1-ASCI
NQR Version	1.1

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AGR/N4902: Assist in setting up the hatchery and carrying out pre-spawning activities

Description

This OS unit is about assisting in setting up a hatchery and carrying out various pre-spawning activities.

Scope

The scope covers the following :

- Assist in setting up the hatchery
- Assist in selecting healthy broodstock
- Follow the broodstock quarantine procedure
- Assist in acclimatising the broodstock

Elements and Performance Criteria

Assist in setting up the hatchery

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

- PC1.** assist in setting up the required facility and infrastructure for the hatchery including the pre and post-spawning tanks, etc.
- PC2.** assist in setting up and checking the operation of pumps, filters and other equipment

Assist in selecting healthy broodstock

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

- PC3.** assist in selecting healthy broodstock of the selected species through careful examination
- PC4.** check the origin of the broodstock and their weight to ensure compliance with the established quality standards

Follow the broodstock quarantine procedure

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

- PC5.** quarantine the broodstock as per instructions until their disease/ infection status is ascertained
- PC6.** maintain an adequate number of containers in the quarantine room for effective routine in and out movement of broodstock
- PC7.** maintain separate treatment and disinfection areas, following the recommended practices to prevent the growth of infectious organisms
- PC8.** dispose the infected/ unfit broodstock and wastewater following the supervisor's instructions/ recommended practices
- PC9.** disinfect the tools and equipment used in the quarantine area regularly

Assist in acclimatising the broodstock

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

- PC10.** assist in acclimatising the broodstock to the environment in the maturation facility, regulating the temperature as per the supervisor's instructions
- PC11.** maintain the recommended water, salinity, pH and oxygen levels in the maturation facility

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PC12. follow the appropriate measures/ supervisor's instructions to prevent contamination and growth of harmful organisms in the maturation facility

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the process of setting up a hatchery
- KU2.** the criteria for selecting healthy broodstock
- KU3.** the importance of checking the origin of broodstock to ensure their quality
- KU4.** the method and applicable requirements for isolating broodstock
- KU5.** the importance and process of disinfecting the tools and equipment used in the quarantine facilities
- KU6.** the process of treating and recycling wastewater and other types of waste
- KU7.** the process of disposing different types of waste in an environment-friendly manner
- KU8.** the importance and process of regulating temperature in the maturation facility
- KU9.** the process of acclimatising the broodstock

Generic Skills (GS)

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

- GS1.** take quick decisions to deal with workplace emergencies
- GS2.** communicate politely and professionally
- GS3.** plan and schedule tasks for effective time management
- GS4.** write work-related notes
- GS5.** read the relevant literature to get the latest updates about the field of work
- GS6.** listen attentively to understand the information/ instructions being shared

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Assist in setting up the hatchery</i>	6	10	-	6
PC1. assist in setting up the required facility and infrastructure for the hatchery including the pre and post-spawning tanks, etc.	-	-	-	-
PC2. assist in setting up and checking the operation of pumps, filters and other equipment	-	-	-	-
<i>Assist in selecting healthy broodstock</i>	4	6	-	4
PC3. assist in selecting healthy broodstock of the selected species through careful examination	-	-	-	-
PC4. check the origin of the broodstock and their weight to ensure compliance with the established quality standards	-	-	-	-
<i>Follow the broodstock quarantine procedure</i>	8	10	-	10
PC5. quarantine the broodstock as per instructions until their disease/ infection status is ascertained	-	-	-	-
PC6. maintain an adequate number of containers in the quarantine room for effective routine in and out movement of broodstock	-	-	-	-
PC7. maintain separate treatment and disinfection areas, following the recommended practices to prevent the growth of infectious organisms	-	-	-	-
PC8. dispose the infected/ unfit broodstock and wastewater following the supervisor's instructions/ recommended practices	-	-	-	-
PC9. disinfect the tools and equipment used in the quarantine area regularly	-	-	-	-
<i>Assist in acclimatising the broodstock</i>	12	14	-	10

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. assist in acclimatising the broodstock to the environment in the maturation facility, regulating the temperature as per the supervisor's instructions	-	-	-	-
PC11. maintain the recommended water, salinity, pH and oxygen levels in the maturation facility	-	-	-	-
PC12. follow the appropriate measures/ supervisor's instructions to prevent contamination and growth of harmful organisms in the maturation facility	-	-	-	-
NOS Total	30	40	-	30

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N4902
NOS Name	Assist in setting up the hatchery and carrying out pre-spawning activities
Sector	Agriculture
Sub-Sector	Fisheries
Occupation	Aquaculture
NSQF Level	3
Credits	2
Version	2.0
Last Reviewed Date	30/12/2021
Next Review Date	30/12/2024
NSQC Clearance Date	30/12/2021

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AGR/N4903: Assist in carrying out larvae production

Description

This OS unit is about assisting in the production of larvae by maturing, spawning, hatching, and disinfecting the broodstock.

Scope

The scope covers the following :

- Assist in maintaining the maturation room and broodstock
- Assist in spawning
- Assist in hatching
- Assist in screening the larvae

Elements and Performance Criteria

Assist in maintaining the maturation room and broodstock

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

- PC1.** maintain appropriate light in the maturation room as per the supervisor's instructions to support the maturation of broodstock
- PC2.** drain the maturation tanks and clean them periodically as per instructions
- PC3.** maintain minimum noise and movement in the maturation room
- PC4.** maintain the broodstock in the maturation room until their maturation

Assist in spawning

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

- PC5.** maintain the required water quality parameters for spawning as per the supervisor's instructions
- PC6.** identify the gravid female broodstock and place it in a container
- PC7.** disinfect the spawning tank for stocking the gravid female
- PC8.** transfer the gravid female broodstock with spermatophore to the spawning tank
- PC9.** feed the broodstock with a balanced diet containing the recommended quantity of vitamins, minerals, and fatty acids
- PC10.** monitor the spawning rate and process
- PC11.** count the eggs to determine the quality of egg production and fertilization
- PC12.** collect the eggs to be transferred to the hatching tank

Assist in hatching

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

- PC13.** prepare the isolation room and hatching tank
- PC14.** stock the eggs in the hatching tank, maintaining the same temperature as the spawning tank
- PC15.** aerate the tanks as per instructions to keep the eggs moving
- PC16.** carry out aeration until the appearance of nauplii

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PC17. harvest the larvae as per instructions

PC18. wash and disinfect the harvested larvae through an immersion bath to prevent contamination

PC19. discard the weaker larvae and unhatched eggs

Assist in screening the larvae

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

PC20. select larvae samples for health analysis

PC21. assist in screening the larvae on the relevant parameters

PC22. maintain the harvested larvae in optimal conditions

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. the process of preparing the maturation room and maintaining broodstock in it

KU2. the importance of maintaining minimum noise and movement in the maturation room

KU3. the importance of maintaining the required water quality parameters for spawning

KU4. the process of identifying the gravid female broodstock and transferring it to the spawning tank

KU5. feeding requirements of the broodstock

KU6. the process of preparing the isolation room and hatchery tank

KU7. the importance of stocking the eggs in the hatching tank, maintaining the same temperature as the spawning tank

KU8. the practice of aerating the hatching tanks as per instructions to keep the eggs moving

KU9. the process of harvesting and disinfecting the larvae

KU10. the process of screening the larvae

Generic Skills (GS)

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

GS1. perform basic calculations

GS2. write work-related notes and maintain relevant records

GS3. read the relevant literature to get the latest updates about the field of the work

GS4. listen attentively to understand the information/ instructions being shared by the speaker

GS5. communicate clearly and politely with co-workers and clients

GS6. plan and prioritise tasks to ensure timely completion

GS7. evaluate all possible solutions to a problem to select the best one

GS8. co-ordinate with co-workers to achieve work objectives

GS9. identify possible disruptions to work and take appropriate preventive measures

GS10. take quick decisions to deal with workplace emergencies/ accidents

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Assist in maintaining the maturation room and broodstock</i>	8	6	-	10
PC1. maintain appropriate light in the maturation room as per the supervisor's instructions to support the maturation of broodstock	-	-	-	-
PC2. drain the maturation tanks and clean them periodically as per instructions	-	-	-	-
PC3. maintain minimum noise and movement in the maturation room	-	-	-	-
PC4. maintain the broodstock in the maturation room until their maturation	-	-	-	-
<i>Assist in spawning</i>	6	12	-	8
PC5. maintain the required water quality parameters for spawning as per the supervisor's instructions	-	-	-	-
PC6. identify the gravid female broodstock and place it in a container	-	-	-	-
PC7. disinfect the spawning tank for stocking the gravid female	-	-	-	-
PC8. transfer the gravid female broodstock with spermatophore to the spawning tank	-	-	-	-
PC9. feed the broodstock with a balanced diet containing the recommended quantity of vitamins, minerals, and fatty acids	-	-	-	-
PC10. monitor the spawning rate and process	-	-	-	-
PC11. count the eggs to determine the quality of egg production and fertilization	-	-	-	-
PC12. collect the eggs to be transferred to the hatching tank	-	-	-	-
<i>Assist in hatching</i>	4	6	-	8

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. prepare the isolation room and hatching tank	-	-	-	-
PC14. stock the eggs in the hatching tank, maintaining the same temperature as the spawning tank	-	-	-	-
PC15. aerate the tanks as per instructions to keep the eggs moving	-	-	-	-
PC16. carry out aeration until the appearance of nauplii	-	-	-	-
PC17. harvest the larvae as per instructions	-	-	-	-
PC18. wash and disinfect the harvested larvae through an immersion bath to prevent contamination	-	-	-	-
PC19. discard the weaker larvae and unhatched eggs	-	-	-	-
<i>Assist in screening the larvae</i>	12	16	-	4
PC20. select larvae samples for health analysis	-	-	-	-
PC21. assist in screening the larvae on the relevant parameters	-	-	-	-
PC22. maintain the harvested larvae in optimal conditions	-	-	-	-
NOS Total	30	40	-	30

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N4903
NOS Name	Assist in carrying out larvae production
Sector	Agriculture
Sub-Sector	Fisheries
Occupation	Aquaculture
NSQF Level	3
Credits	2
Version	2.0
Last Reviewed Date	30/12/2021
Next Review Date	30/12/2024
NSQC Clearance Date	30/12/2021

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AGR/N4904: Assist in carrying out the post-spawning process

Description

This OS unit is about assisting in carrying out the post-spawning process by maintaining the larvae.

Scope

The scope covers the following :

- Assist in performing larvae's feed management
- Assist in performing larvae's health management
- Prepare the fry for being transported
- Optimise resource utilisation

Elements and Performance Criteria

Assist in performing larvae's feed management

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

- PC1.** prepare larvae's feed as per the supervisor's instructions
- PC2.** follow the recommended practices to protect the feed from contamination during its handling
- PC3.** store the feed in cool and dry condition
- PC4.** feed the larvae ensuring an appropriate quantity of nutrients
- PC5.** apply changes to the feed according to the stages of larvae's growth

Assist in performing larvae's health management

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

- PC6.** maintain the water quality parameters as per the instructions to ensure optimum growth of larvae
- PC7.** stock larvae in groups in separate units according to the stages of their growth, maintaining the recommended stocking density
- PC8.** check the health of larvae regularly as per the supervisor's instructions
- PC9.** maintain the record of health checks, larvae growth, water quality parameters, etc.
- PC10.** carry out the stress test under supervision
- PC11.** identify the signs of disease and infection in the larvae with the supervisor's help
- PC12.** assist in taking larvae samples to be examined in a laboratory to determine the type of infection and disease affecting them
- PC13.** maintain the larvae until they grow to the size of fry

Prepare the fry for being transported

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

- PC14.** stock the fry in appropriate containers/ tanks for being transported
- PC15.** follow the recommended practices to protect the fry from contamination during their handling and transportation
- PC16.** check that the transport vehicle has the appropriate temperature and hygienic conditions for transporting fry

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Optimise resource utilisation

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

- PC17.** optimise the usage of water, electricity and other resources in various tasks and processes
- PC18.** connect the electrical tools and equipment safely and turn them off when not in use
- PC19.** plug any water leakages to prevent its wastage

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the process of preparing the larvae feed and feeding the larvae
- KU2.** recommended practices to be followed to protect the feed from contamination during its handling
- KU3.** appropriate quantity of nutrients to be maintained in the larvae feed
- KU4.** the importance of maintaining the recommended water quality parameters to ensure optimum growth of larvae
- KU5.** the practice of stocking larvae in groups in separate units according to the stages of their growth
- KU6.** the process of carrying out the stress test
- KU7.** the signs of disease and infection among larvae
- KU8.** the process of sampling the larvae samples to be examined in a laboratory to determine the type of infection and disease among them
- KU9.** the process of preparing the fry for being transported and the appropriate temperature to be maintained during transportation
- KU10.** the importance of transporting fry in hygienic conditions to protect it from contamination
- KU11.** benefits of resource optimisation

Generic Skills (GS)

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

- GS1.** write work-related notes
- GS2.** read the relevant guides and manuals
- GS3.** listen attentively to understand the client requirements
- GS4.** communicate professionally and politely
- GS5.** plan and schedule tasks for effective time management
- GS6.** co-ordinate with the co-workers to achieve work objectives
- GS7.** identify possible disruptions to work and take preventive measures
- GS8.** evaluate all possible solutions to a problem before choosing the best one
- GS9.** take quick action to deal with any emergencies/ accidents

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Assist in performing larvae's feed management</i>	10	12	-	8
PC1. prepare larvae's feed as per the supervisor's instructions	-	-	-	-
PC2. follow the recommended practices to protect the feed from contamination during its handling	-	-	-	-
PC3. store the feed in cool and dry condition	-	-	-	-
PC4. feed the larvae ensuring an appropriate quantity of nutrients	-	-	-	-
PC5. apply changes to the feed according to the stages of larvae's growth	-	-	-	-
<i>Assist in performing larvae's health management</i>	8	14	-	10
PC6. maintain the water quality parameters as per the instructions to ensure optimum growth of larvae	-	-	-	-
PC7. stock larvae in groups in separate units according to the stages of their growth, maintaining the recommended stocking density	-	-	-	-
PC8. check the health of larvae regularly as per the supervisor's instructions	-	-	-	-
PC9. maintain the record of health checks, larvae growth, water quality parameters, etc.	-	-	-	-
PC10. carry out the stress test under supervision	-	-	-	-
PC11. identify the signs of disease and infection in the larvae with the supervisor's help	-	-	-	-
PC12. assist in taking larvae samples to be examined in a laboratory to determine the type of infection and disease affecting them	-	-	-	-
PC13. maintain the larvae until they grow to the size of fry	-	-	-	-
<i>Prepare the fry for being transported</i>	8	8	-	8

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. stock the fry in appropriate containers/ tanks for being transported	-	-	-	-
PC15. follow the recommended practices to protect the fry from contamination during their handling and transportation	-	-	-	-
PC16. check that the transport vehicle has the appropriate temperature and hygienic conditions for transporting fry	-	-	-	-
<i>Optimise resource utilisation</i>	4	6	-	4
PC17. optimise the usage of water, electricity and other resources in various tasks and processes	-	-	-	-
PC18. connect the electrical tools and equipment safely and turn them off when not in use	-	-	-	-
PC19. plug any water leakages to prevent its wastage	-	-	-	-
NOS Total	30	40	-	30

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N4904
NOS Name	Assist in carrying out the post-spawning process
Sector	Agriculture
Sub-Sector	Fisheries
Occupation	Aquaculture
NSQF Level	3
Credits	2
Version	3.0
Last Reviewed Date	NA
Next Review Date	30/12/2024
NSQC Clearance Date	30/12/2021

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AGR/N4905: Maintain the hatchery

Description

This OS unit is about undertaking routine maintenance at the hatchery and maintaining the relevant records.

Scope

The scope covers the following :

- Assist in maintaining hygiene and safety in the hatchery
- Carry out repair and maintenance work
- Perform waste management

Elements and Performance Criteria

Assist in maintaining hygiene and safety in the hatchery

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

- PC1.** maintain hygiene and dry the floor in the hatchery to prevent disease/ infections and any accidents
- PC2.** clean and disinfect the tanks, tools and equipment regularly
- PC3.** follow the recommended safety measures while handling different types of chemicals
- PC4.** treat the water with chlorine and filter it before using it in the hatchery

Carry out repair and maintenance work

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

- PC5.** check the hatchery regularly to identify any infrastructural repair and maintenance needs
- PC6.** check the water supply and disposal systems to identify their repair and maintenance needs
- PC7.** arrange an alternative water supply with the supervisor's help before carrying out any repair and maintenance of the water supply system
- PC8.** carry out all repair and maintenance activities as per the Standard Operating Procedure (SOP) and report complex repair needs to the supervisor
- PC9.** assist the supervisor in maintaining the record of repair and maintenance activities

Perform waste management

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

- PC10.** segregate waste into appropriate categories
- PC11.** assist in treating and recycling wastewater and other types of waste
- PC12.** dispose the non-recyclable waste in an environment-friendly manner

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** various practices to maintain hygiene and safety in a hatchery

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- KU2.** the process of cleaning and disinfecting the tanks, and relevant tools and equipment
- KU3.** the process of treating and filtering water
- KU4.** common repair and maintenance needs at a hatchery such as infrastructural maintenance, water supply and disposal systems, etc.
- KU5.** the process of carrying out regular repair and maintenance at a hatchery
- KU6.** applicable documentation requirements
- KU7.** the criteria for segregating waste into appropriate categories
- KU8.** the methods of recycling and disposing different types of waste

Generic Skills (GS)

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

- GS1.** maintain work-related records
- GS2.** read and follow the health and safety instructions
- GS3.** listen attentively to understand the information/ instructions being shared by the speaker
- GS4.** communicate clearly and politely with co-workers and clients
- GS5.** plan and prioritise tasks to ensure timely completion
- GS6.** identify possible disruptions to work and take appropriate preventive measures
- GS7.** take quick decisions to deal with workplace emergencies/ accidents
- GS8.** evaluate all possible solutions to a problem to select the best one
- GS9.** co-ordinate with the co-workers to achieve the work objectives

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Assist in maintaining hygiene and safety in the hatchery</i>	8	12	-	10
PC1. maintain hygiene and dry the floor in the hatchery to prevent disease/ infections and any accidents	-	-	-	-
PC2. clean and disinfect the tanks, tools and equipment regularly	-	-	-	-
PC3. follow the recommended safety measures while handling different types of chemicals	-	-	-	-
PC4. treat the water with chlorine and filter it before using it in the hatchery	-	-	-	-
<i>Carry out repair and maintenance work</i>	14	18	-	12
PC5. check the hatchery regularly to identify any infrastructural repair and maintenance needs	-	-	-	-
PC6. check the water supply and disposal systems to identify their repair and maintenance needs	-	-	-	-
PC7. arrange an alternative water supply with the supervisor's help before carrying out any repair and maintenance of the water supply system	-	-	-	-
PC8. carry out all repair and maintenance activities as per the Standard Operating Procedure (SOP) and report complex repair needs to the supervisor	-	-	-	-
PC9. assist the supervisor in maintaining the record of repair and maintenance activities	-	-	-	-
<i>Perform waste management</i>	8	10	-	8
PC10. segregate waste into appropriate categories	-	-	-	-
PC11. assist in treating and recycling wastewater and other types of waste	-	-	-	-
PC12. dispose the non-recyclable waste in an environment-friendly manner	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
NOS Total	30	40	-	30

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N4905
NOS Name	Maintain the hatchery
Sector	Agriculture
Sub-Sector	Fisheries
Occupation	Aquaculture
NSQF Level	3
Credits	1
Version	2.0
Last Reviewed Date	30/12/2021
Next Review Date	30/12/2024
NSQC Clearance Date	30/12/2021

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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:

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- 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

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- 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

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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	-	-	-	-

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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 incase 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

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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	3.0
Last Reviewed Date	26/05/2022
Next Review Date	27/05/2024
NSQC Clearance Date	27/05/2021

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

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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

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- 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	-	-	-	-

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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	23/06/2026
NSQC Clearance Date	23/06/2023

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

- 1.Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
- 2.The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
- 3.Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
- 4.Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
- 5.In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.
- 6.In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack

Qualification Pack

Minimum Aggregate Passing % at QP Level : 50

(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/N4902.Assist in setting up the hatchery and carrying out pre-spawning activities	30	40	-	30	100	20
AGR/N4903.Assist in carrying out larvae production	30	40	-	30	100	20
AGR/N4904.Assist in carrying out the post-spawning process	30	40	-	30	100	25
AGR/N4905.Maintain the hatchery	30	40	-	30	100	20
AGR/N9903.Maintain health and safety at the workplace	40	25	-	35	100	10
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	0	0	50	5
Total	180	215	-	155	550	100

Qualification Pack

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

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.

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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.