

Qualification Pack



Dairy Farm Supervisor

QP Code: AGR/Q4103

Version: 3.0

NSQF Level: 5

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AGR/Q4103: Dairy Farm Supervisor

Brief Job Description

A Dairy Farm Supervisor plans, coordinates and manages the day-to-day operations of a dairy farm. The Individual is responsible for milk production, health and well-being of the farm animals and also personnel management. The Individual is responsible for implementing the short and long-term business plans of the farm owner. On larger farms, a farm supervisor is also responsible for recruiting and managing staff.

Personal Attributes

A Dairy Farm Supervisor must have the ability to plan, organize, prioritize, calculate and handle pressure. The individual must have a mechanical aptitude and must possess reading, writing and communication skills. In addition, the individual must have stamina and professional hygiene.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [AGR/N4109: Dairy herd management, feeding and milking](#)
2. [AGR/N4110: Dairy Herd Health Management](#)
3. [AGR/N4111: Complete documentation, record keeping and inventory management related to dairy farm operations](#)
4. [AGR/N4112: Ensure safety, hygiene and sanitation in a dairy farm](#)
5. [AGR/N4113: Manage and lead a team for dairy farm management](#)
6. [DGT/VSQ/N0103: Employability Skills \(90 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Agriculture
Sub-Sector	Dairying
Occupation	Dairy Farm Management
Country	India
NSQF Level	5

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Credits	16
Aligned to NCO/ISCO/ISIC Code	NCO-2015/6121.0601
Minimum Educational Qualification & Experience	Completed 2nd year of UG (UG Diploma) OR Pursuing 2nd year of UG (and continuous education) OR Completed 2nd year diploma after 12th OR Pursuing 2nd year of 2-year diploma after 12th OR 12th pass with 1 year Vocational Education & training (NTC or NAC or CITS) OR Completed 3 year diploma after 10th with 1 Year of experience relevant experience OR 12th grade Pass with 2 Years of experience relevant experience OR 10th grade pass with 4 Years of experience relevant experience OR Previous relevant Qualification of NSQF Level (Level 4 and with minimum education as 8th Grade pass) with 3 Years of experience relevant experience OR Previous relevant Qualification of NSQF Level (Level 4.5 with 1.5- year relevant experience)
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	20 Years
Last Reviewed On	NA
Next Review Date	30/04/2025
NSQC Approval Date	31/03/2022
Version	3.0
Reference code on NQR	QG-05-AG-00321-2023-V1.1-ASCI
NQR Version	1.1

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AGR/N4109: Dairy herd management, feeding and milking

Description

This OS unit is about dairy herd management including milking, feeding and reproductive management of the herd.

Scope

The scope covers the following :

- Feeding of dairy herd
- Milking of dairy herd

Elements and Performance Criteria

Feeding of dairy herd

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

- PC1.** identify the various types of locally available feeds and fodders
- PC2.** ensure that there are adequate number of sources for providing food supplements and fodders
- PC3.** ensure that the herds feed and water requirements are met
- PC4.** plan and allocate feed using feed budgeting techniques
- PC5.** ensure the feed fed to dairy animals is fit for the purpose and will not adversely impact the quality or safety of milk or meat
- PC6.** check all animals on a timely basis to be certain that they are receiving adequate feed and clean water at all times
- PC7.** calculate and evaluate feed rations for individual dairy animals or groups to maximise milk production and avoid over and/or under feeding
- PC8.** ensure that the necessary feed or forage is regularly tested for nutrient contents
- PC9.** ensure appropriate storage conditions to avoid feed spoilage or contamination
- PC10.** ensure that water storage and dispensing vessels are cleaned periodically

Milking of dairy herd

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

- PC11.** ensure effective management of all aspects of milking process, including hygiene and somatic cell count, to maintain milk quality
- PC12.** identify individual animals that require special milking management
- PC13.** ensure appropriate udder preparation for milking
- PC14.** ensure that animals are milked regularly using consistent milking techniques
- PC15.** ensure that the dairy animals are milked at their peak yield so as to reach the highest milk production level
- PC16.** identify animals with potential health problems and take preventive measures to ensure that milk production does not suffer
- PC17.** group animals by yield, which can result in faster milking

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- PC18.** ensure milking equipments are correctly installed and maintained
- PC19.** ensure that the milk of a treated animal is not mixed with the milk of other animals in the bulk milk tank
- PC20.** evaluate long-term milk production for individual animals to plan breeding
- PC21.** evaluate and ensure personal hygiene of milkers

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organization's methods for the preparation of feeding schedule, processing of fodder, methods of feeding and watering
- KU2.** various feeding strategies such as libitum feeding, challenge feeding/feeding to yield and feed change over
- KU3.** process of silage, haymaking and treatment of straw
- KU4.** the bacterial quality of milk - methylene blue reduction test, titrable acidity, COB test, alcohol test
- KU5.** the advantages and disadvantages of various feeding systems such as manual concentrate feeding, computerized concentrate feeding, Total Mixed Ration (TMR), Partly Mixed Ration (PMR)
- KU6.** plotting of the milk yield and ration on a chart and analyze feeding and milking pattern of the animals
- KU7.** hygiene and sanitation techniques for sheds, parlours and personnel

Generic Skills (GS)

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

- GS1.** note the information communicated by the regional dairy manager
- GS2.** note the details of dairy animals, feeding patterns, milking patterns, etc.
- GS3.** read equipment manuals and storage documents to understand the equipment's operation and storage requirement
- GS4.** effectively communicate with the team members
- GS5.** communicate clearly with the regional dairy manager and cross-department team on the issues faced during dairy farm operations
- GS6.** analyze critical points in the day-to-day tasks through experience and observation and identify control measures to solve the issue
- GS7.** plan and organize the work order and jobs for various dairy assistants and workers
- GS8.** plan and prioritize the work based on the instructions received from the regional dairy manager
- GS9.** plan to utilize time and equipment effectively
- GS10.** understand customer requirements and their priority and respond as per their needs

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Feeding of dairy herd</i>	21	14	-	10
PC1. identify the various types of locally available feeds and fodders	-	-	-	-
PC2. ensure that there are adequate number of sources for providing food supplements and fodders	-	-	-	-
PC3. ensure that the herds feed and water requirements are met	-	-	-	-
PC4. plan and allocate feed using feed budgeting techniques	-	-	-	-
PC5. ensure the feed fed to dairy animals is fit for the purpose and will not adversely impact the quality or safety of milk or meat	-	-	-	-
PC6. check all animals on a timely basis to be certain that they are receiving adequate feed and clean water at all times	-	-	-	-
PC7. calculate and evaluate feed rations for individual dairy animals or groups to maximise milk production and avoid over and/or under feeding	-	-	-	-
PC8. ensure that the necessary feed or forage is regularly tested for nutrient contents	-	-	-	-
PC9. ensure appropriate storage conditions to avoid feed spoilage or contamination	-	-	-	-
PC10. ensure that water storage and dispensing vessels are cleaned periodically	-	-	-	-
<i>Milking of dairy herd</i>	25	17	-	13
PC11. ensure effective management of all aspects of milking process, including hygiene and somatic cell count, to maintain milk quality	-	-	-	-
PC12. identify individual animals that require special milking management	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. ensure appropriate udder preparation for milking	-	-	-	-
PC14. ensure that animals are milked regularly using consistent milking techniques	-	-	-	-
PC15. ensure that the dairy animals are milked at their peak yield so as to reach the highest milk production level	-	-	-	-
PC16. identify animals with potential health problems and take preventive measures to ensure that milk production does not suffer	-	-	-	-
PC17. group animals by yield, which can result in faster milking	-	-	-	-
PC18. ensure milking equipments are correctly installed and maintained	-	-	-	-
PC19. ensure that the milk of a treated animal is not mixed with the milk of other animals in the bulk milk tank	-	-	-	-
PC20. evaluate long-term milk production for individual animals to plan breeding	-	-	-	-
PC21. evaluate and ensure personal hygiene of milkers	-	-	-	-
NOS Total	46	31	-	23

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N4109
NOS Name	Dairy herd management, feeding and milking
Sector	Agriculture
Sub-Sector	Dairying
Occupation	Dairy Farm Management
NSQF Level	5
Credits	2
Version	2.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022

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AGR/N4110: Dairy Herd Health Management

Description

This OS unit is about managing herd health and ensuring that the dairy animals are free from diseases and there is an effective health care programme in place.

Scope

The scope covers the following :

- Establish the herd with resistance to diseases
- Prevent entry of diseases onto the farm
- Ensure implementation of effective herd health management program
- Ensure reproductive health
- Ensure proper usage of chemical and veterinary medicines

Elements and Performance Criteria

Establish the herd with resistance to diseases

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

- PC1.** choose breeds and animals well suited to the local environment and dairy farming system
- PC2.** determine herd size and stocking rate based on manpower skills
- PC3.** analyse local conditions and the availability of land, infrastructure, feed, and other inputs
- PC4.** supervise vaccination and deworming sessions of all animals as recommended or required by local animal health authorities

Prevent entry of diseases onto the farm

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

- PC5.** ensure that only those animals with proper health check-up (both herd and individual animals) are bought
- PC6.** ensure that introduction of new animals to the farm is controlled using quarantine measures
- PC7.** ensure animal does not get affected during transportation
- PC8.** ensure that the access of people to the farm is limited and only through a certain number of entry points with foot dips
- PC9.** monitor the vermin control programme
- PC10.** monitor and ensure control to restriction of wild-life in the farm

Ensure implementation of effective herd health management program

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

- PC11.** develop an identification system that allows all animals to be identified individually from birth to death/disposal
- PC12.** develop an effective herd health management programme (vaccination) focused on prevention that meets farm needs as well as regional and national regulatory requirements
- PC13.** ensure that the animals are regularly checked for signs of diseases
- PC14.** ensure that the sick animals are attended quickly and in an appropriate manner

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PC15. ensure that the sick animals are kept in isolation

PC16. ensure that written records of all treatments are kept and the treated animals are identified appropriately

PC17. manage animal disease that can affect public health

Ensure reproductive health

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

PC18. ensure that the dairy animals have a stress-free environment

PC19. ensure that animals which show early signs of heat are given nutritious feed and other supplements to support their pregnancy

PC20. identify the signs of heat in dairy animals and ensure that animals that show high signs of heat are selected for natural or artificial insemination (AI)

PC21. ensure that the parturition process happens in a safe and sanitary environment

PC22. ensure post-partum care to avoid genital infections and nutrient deficiency

Ensure proper usage of chemical and veterinary medicines

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

PC23. ensure the usage of chemicals that have been approved for supply and use under the relevant legislation

PC24. ensure the dosage is calculated carefully and the animals is observed after regular intervals

PC25. ensure that only those medicines which have been prescribed by veterinarians are used on animals

PC26. ensure that chemicals and veterinary medicines are stored safely and are disposed off responsibly

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. organization standards, process standards and procedures followed in the various operations at the dairy farm

KU2. the knowledge of hazardous materials and chemicals

KU3. the knowledge of dairy animal physiology, life cycle and factors affecting health and milk production

KU4. the knowledge about various types of diseases and disturbances that can affect animal health: retained placenta, milk fever, ketosis, left-side displacement of abomasum (lida) acidosis, mastitis, lameness, FMD, nutrient deficiencies, signs of ill health

KU5. the stress management systems and procedures

Generic Skills (GS)

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

GS1. note the information communicated by the regional dairy manager

GS2. note the details of dairy animals, feeding patterns, milking patterns, disease and parasite patterns, etc.

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- GS3.** read prescriptions, equipment manuals and storage documents to understand medication, equipment operation and storage requirement
- GS4.** discuss task lists, schedules and activities with the regional dairy manager
- GS5.** effectively communicate with the team members
- GS6.** analyze critical points in the day-to-day tasks through experience and observation and identify control measures to solve the issue
- GS7.** plan and prioritize the work based on the instructions received from the regional dairy manager
- GS8.** plan to utilize time, manpower chemicals and equipment effectively
- GS9.** understand customer requirements and their priority and respond as per their needs

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Establish the herd with resistance to diseases</i>	5	4	-	4
PC1. choose breeds and animals well suited to the local environment and dairy farming system	-	-	-	-
PC2. determine herd size and stocking rate based on manpower skills	-	-	-	-
PC3. analyse local conditions and the availability of land, infrastructure, feed, and other inputs	-	-	-	-
PC4. supervise vaccination and deworming sessions of all animals as recommended or required by local animal health authorities	-	-	-	-
<i>Prevent entry of diseases onto the farm</i>	6	9	-	6
PC5. ensure that only those animals with proper health check-up (both herd and individual animals) are bought	-	-	-	-
PC6. ensure that introduction of new animals to the farm is controlled using quarantine measures	-	-	-	-
PC7. ensure animal does not get affected during transportation	-	-	-	-
PC8. ensure that the access of people to the farm is limited and only through a certain number of entry points with foot dips	-	-	-	-
PC9. monitor the vermin control programme	-	-	-	-
PC10. monitor and ensure control to restriction of wild-life in the farm	-	-	-	-
<i>Ensure implementation of effective herd health management program</i>	9	10	-	6
PC11. develop an identification system that allows all animals to be identified individually from birth to death/disposal	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. develop an effective herd health management programme (vaccination) focused on prevention that meets farm needs as well as regional and national regulatory requirements	-	-	-	-
PC13. ensure that the animals are regularly checked for signs of diseases	-	-	-	-
PC14. ensure that the sick animals are attended quickly and in an appropriate manner	-	-	-	-
PC15. ensure that the sick animals are kept in isolation	-	-	-	-
PC16. ensure that written records of all treatments are kept and the treated animals are identified appropriately	-	-	-	-
PC17. manage animal disease that can affect public health	-	-	-	-
<i>Ensure reproductive health</i>	9	6	-	6
PC18. ensure that the dairy animals have a stress-free environment	-	-	-	-
PC19. ensure that animals which show early signs of heat are given nutritious feed and other supplements to support their pregnancy	-	-	-	-
PC20. identify the signs of heat in dairy animals and ensure that animals that show high signs of heat are selected for natural or artificial insemination (AI)	-	-	-	-
PC21. ensure that the parturition process happens in a safe and sanitary environment	-	-	-	-
PC22. ensure post-partum care to avoid genital infections and nutrient deficiency	-	-	-	-
<i>Ensure proper usage of chemical and veterinary medicines</i>	8	8	-	4
PC23. ensure the usage of chemicals that have been approved for supply and use under the relevant legislation	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC24. ensure the dosage is calculated carefully and the animals is observed after regular intervals	-	-	-	-
PC25. ensure that only those medicines which have been prescribed by veterinarians are used on animals	-	-	-	-
PC26. ensure that chemicals and veterinary medicines are stored safely and are disposed off responsibly	-	-	-	-
NOS Total	37	37	-	26

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N4110
NOS Name	Dairy Herd Health Management
Sector	Agriculture
Sub-Sector	Dairying
Occupation	Dairy Farm Management
NSQF Level	5
Credits	2
Version	2.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022

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AGR/N4111: Complete documentation, record keeping and inventory management related to dairy farm operations

Description

This OS unit is about documenting, maintaining records and inventory management related to dairy farm operations.

Scope

The scope covers the following :

- Animal record management
- Feed equipments & financial record management
- Budgeting for farm operations

Elements and Performance Criteria

Animal record management

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

- PC1.** ensure that the mentioned records are maintained and updated regularly - record of animal health with their age, sex, date of birth, date of purchase etc., breeding record, production record, calf record, feeding record, health record, mortality record, sale record
- PC2.** ensure that a daily record of milk yield from each animal is maintained and any abnormal yield is identified for further investigation
- PC3.** ensure that a proper record of diseased, treated or under-treatment animals is maintained

Feed, equipment and financial record management

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

- PC4.** classify inventory items into consumable and non-consumable, fast and slow moving, critical inventory levels and store them appropriately
- PC5.** document and maintain records of parameters such as amount of feed and fodder purchased, amount of feed consumed, stocked feed etc.
- PC6.** maintain record of all dairy equipments along with the status of their operation and identify the equipments that might need repair / replacement in the near future
- PC7.** maintain financial record to gauge the financial health of the dairy farm - cash analysis book, statement of debtors and creditors, dairy output, dairy variable and fixed costs, labour costs, machinery cost, records of manpower and its cost, statutory records related to establishment
- PC8.** maintain financial records (per dairy animal) for value of milk produced, value of calves (sold and retained), cost of concentrate food, cost of other purchased feedstuffs, forage cost, income from sale of milk and products

Budgeting for farm operations

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

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- PC9.** prepare a budget for the operations of the farm by taking into account list of available resources, estimation of forage area and livestock numbers, estimation of physical inputs and outputs, estimation of prices of feed, equipment, manpower, electricity fuel, etc., estimation of total fixed costs and overheads
- PC10.** prepare a monthly or weekly cash flow budget
- PC11.** compare the budgeted and actual cash flow for each month/week

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** documentation system followed in the organization like, production chart, process chart and finished products chart
- KU2.** code of business conduct
- KU3.** process of inventory/stock write off and disposal
- KU4.** dress code to be followed
- KU5.** job responsibilities/duties and standard operating procedures
- KU6.** organization methods to document and maintain records on observations (if any) related to procured milk, process and finished products
- KU7.** entering the details in ERP system followed by the organization
- KU8.** organization methods to document and maintain records on observations (if any) related to dairy farm operations
- KU9.** basic accounting skills
- KU10.** basic dairy economics
- KU11.** identification and characterization of dairy farm articles
- KU12.** accounting of dairy farm articles
- KU13.** creation of quality and quantity checklist
- KU14.** basic computer knowledge, data compilation and analysis and report through appropriate statistical and mathematical tools.

Generic Skills (GS)

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

- GS1.** note the information communicated by the regional dairy manager
- GS2.** note down observations (if any) related to the dairy operations
- GS3.** write information documents to internal departments/internal teams
- GS4.** note down the data for ERP or as required by the organization
- GS5.** read and interpret design, drawings and construction of the dairy farm
- GS6.** read and understand standard operating procedure for all processes in the dairy farm
- GS7.** read internal information documents sent by internal teams
- GS8.** discuss task lists, schedules and activities with the regional dairy manager
- GS9.** effectively communicate with the team members

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- GS10.** question the regional dairy manager in order to understand the nature of the problem and to clarify queries
- GS11.** attentively listen and comprehend the information given by the speaker
- GS12.** communicate clearly with the regional dairy manager and cross department team on the issues faced during procedures and protocols.
- GS13.** analyse critical points in day to day tasks through experience and observation and identify control measures to solve the issue
- GS14.** handle issues in case the regional dairy manager is not available (as per the authority matrix defined by the organization)
- GS15.** plan and prioritize the work based on the instructions received from the regional dairy manager
- GS16.** plan to utilise time and stationery and resources effectively
- GS17.** organize all process/equipment manuals so as to access information easily
- GS18.** support the regional dairy manager in scheduling tasks for helper(s)
- GS19.** understand customer requirements and their priority and prepare reports as per their needs
- GS20.** support regional dairy manager in solving problems by detailing out problems
- GS21.** discuss the possible solutions with the regional dairy manager for problem solving
- GS22.** apply domain information about maintenance processes and technical knowledge about tools and equipment
- GS23.** use common sense and make judgments on day to day basis
- GS24.** use reasoning skills to identify and resolve basic problems
- GS25.** use intuition to detect any potential problems which could arise during operations
- GS26.** use acquired knowledge of the process for identifying monitoring and handling issues

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Animal record management</i>	8	10	-	7
PC1. ensure that the mentioned records are maintained and updated regularly - record of animal health with their age, sex, date of birth, date of purchase etc., breeding record, production record, calf record, feeding record, health record, mortality record, sale record	-	-	-	-
PC2. ensure that a daily record of milk yield from each animal is maintained and any abnormal yield is identified for further investigation	-	-	-	-
PC3. ensure that a proper record of diseased, treated or under-treatment animals is maintained	-	-	-	-
<i>Feed, equipment and financial record management</i>	16	18	-	11
PC4. classify inventory items into consumable and non-consumable, fast and slow moving, critical inventory levels and store them appropriately	-	-	-	-
PC5. document and maintain records of parameters such as amount of feed and fodder purchased, amount of feed consumed, stocked feed etc.	-	-	-	-
PC6. maintain record of all dairy equipments along with the status of their operation and identify the equipments that might need repair / replacement in the near future	-	-	-	-
PC7. maintain financial record to gauge the financial health of the dairy farm - cash analysis book, statement of debtors and creditors, dairy output, dairy variable and fixed costs, labour costs, machinery cost, records of manpower and its cost, statutory records related to establishment	-	-	-	-
PC8. maintain financial records (per dairy animal) for value of milk produced, value of calves (sold and retained), cost of concentrate food, cost of other purchased feedstuffs, forage cost, income from sale of milk and products	-	-	-	-
<i>Budgeting for farm operations</i>	11	12	-	7

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC9. prepare a budget for the operations of the farm by taking into account list of available resources, estimation of forage area and livestock numbers, estimation of physical inputs and outputs, estimation of prices of feed, equipment, manpower, electricity fuel, etc., estimation of total fixed costs and overheads	-	-	-	-
PC10. prepare a monthly or weekly cash flow budget	-	-	-	-
PC11. compare the budgeted and actual cash flow for each month/week	-	-	-	-
NOS Total	35	40	-	25

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National Occupational Standards (NOS) Parameters

NOS Code	AGR/N4111
NOS Name	Complete documentation, record keeping and inventory management related to dairy farm operations
Sector	Agriculture
Sub-Sector	Dairying
Occupation	Dairy Farm Management
NSQF Level	5
Credits	1
Version	2.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022

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AGR/N4112: Ensure safety, hygiene and sanitation in a dairy farm

Description

This OS unit is about maintaining animal and staff safety, hygiene and sanitation in the dairy farm.

Scope

The scope covers the following :

- Ensure a safe and clean place for animals and dairy workers
- Ensure compliance with appropriate emergency procedures

Elements and Performance Criteria

Ensure a safe and clean place for animals and dairy workers

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

- PC1.** ensure the housing area design to provide good drainage, shade, and ventilation
- PC2.** ensure clean and safe housing for dairy animals
- PC3.** ensure personal hygiene of dairy workers, by usage of gloves, hairnets, safety shoes, etc. whenever required
- PC4.** maintain and monitor milking area and equipment periodically
- PC5.** ensure proper disposal of waste and other potentially hazardous materials
- PC6.** use safety equipment such as fire extinguisher, first aid kit and eye-wash station when required
- PC7.** identify, document and report problems such as rodents and pests to management

Ensure compliance with appropriate emergency procedures

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

- PC8.** ensure the procedures for dealing with accidents, fires and emergencies are followed at all times
- PC9.** ensure that first aid treatment is provided to any injured worker or animals in case of an accident
- PC10.** ensure that emergency equipment are in place and in a proper working condition

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organization's methods of maintaining safety checklists
- KU2.** the food safety and hygiene standards to be followed
- KU3.** organization's methods for cleaning and sanitation of equipment and work area
- KU4.** personal hygiene requirement
- KU5.** different types of sanitizers used for storage area and equipment and the procedure to use
- KU6.** the storage norms for produce, chemicals, gases, etc.

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Generic Skills (GS)

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

- GS1.** note the information communicated by the regional dairy manager
- GS2.** read internal information documents sent by internal teams
- GS3.** discuss task lists, schedules and activities with the regional dairy manager
- GS4.** effectively communicate with the team members
- GS5.** attentively listen and comprehend the information given by the speaker
- GS6.** organize all process/equipment manuals so as to access information easily
- GS7.** understand customer requirements and their priority and respond as per their needs
- GS8.** use acquired knowledge of the process for identifying and handling issues

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Ensure a safe and clean place for animals and dairy workers</i>	25	25	-	18
PC1. ensure the housing area design to provide good drainage, shade, and ventilation	-	-	-	-
PC2. ensure clean and safe housing for dairy animals	-	-	-	-
PC3. ensure personal hygiene of dairy workers, by usage of gloves, hairnets, safety shoes, etc. whenever required	-	-	-	-
PC4. maintain and monitor milking area and equipment periodically	-	-	-	-
PC5. ensure proper disposal of waste and other potentially hazardous materials	-	-	-	-
PC6. use safety equipment such as fire extinguisher, first aid kit and eye-wash station when required	-	-	-	-
PC7. identify, document and report problems such as rodents and pests to management	-	-	-	-
<i>Ensure compliance with appropriate emergency procedures</i>	13	9	-	10
PC8. ensure the procedures for dealing with accidents, fires and emergencies are followed at all times	-	-	-	-
PC9. ensure that first aid treatment is provided to any injured worker or animals in case of an accident	-	-	-	-
PC10. ensure that emergency equipment are in place and in a proper working condition	-	-	-	-
NOS Total	38	34	-	28

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N4112
NOS Name	Ensure safety, hygiene and sanitation in a dairy farm
Sector	Agriculture
Sub-Sector	Dairying
Occupation	Dairy Farm Management
NSQF Level	5
Credits	2
Version	2.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022

Qualification Pack

AGR/N4113: Manage and lead a team for dairy farm management

Description

This OS unit is about managing the team on a day-to-day basis, ensuring their deployment, motivating them by involving them in various engagement initiatives at the work area, helping them improve their skills levels and managing their grievances in the best possible manner in order to maximize people productivity for dairy farm management.

Scope

The scope covers the following :

- Manage and lead a team (for dairy farm management)

Elements and Performance Criteria

Manage and lead a team (for dairy farm management)

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

- PC1.** ensure that the team is aware of the schedule and job expectations on a daily basis
- PC2.** involve the team in regular meetings to communicate information intended for them
- PC3.** ensure communication to the team on any changes in policies/ processes by the organization through required verbal/ written mechanisms
- PC4.** ensure participation of the team in various engagement initiatives organized by the organization
- PC5.** counsel and address issues among the team for any work related issues
- PC6.** support the manager in deployment of the team as per production schedule and the organizational norms and guidelines
- PC7.** share knowledge of processes, techniques and products with the team to enhance their skill levels
- PC8.** provide feedback to the manager pertaining to performance of the team

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organizations standards of performance, services and products
- KU2.** relevant HR policies and processes followed by the organization
- KU3.** knowledge of organizational norms and guidelines
- KU4.** how and when to measure the performance of the team
- KU5.** how to share feedback with team members

Generic Skills (GS)

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

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- GS1.** note the information communicated to them
- GS2.** write information documents to internal departments/ internal teams
- GS3.** discuss task lists, schedules and activities
- GS4.** effectively communicate with the team members
- GS5.** ask question in order to understand the nature of the problem and to clarify queries
- GS6.** communicate clearly on the issues being faced
- GS7.** plan to utilize time and equipment effectively
- GS8.** support regional dairy manager in solving problems by detailing out problems
- GS9.** use common sense and make judgments on a day-to-day basis
- GS10.** use reasoning skills to identify and resolve basic problems
- GS11.** use acquired knowledge of the process for identifying and handling issues

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Manage and lead a team (for dairy farm management)</i>	41	32	-	27
PC1. ensure that the team is aware of the schedule and job expectations on a daily basis	-	-	-	-
PC2. involve the team in regular meetings to communicate information intended for them	-	-	-	-
PC3. ensure communication to the team on any changes in policies/ processes by the organization through required verbal/ written mechanisms	-	-	-	-
PC4. ensure participation of the team in various engagement initiatives organized by the organization	-	-	-	-
PC5. counsel and address issues among the team for any work related issues	-	-	-	-
PC6. support the manager in deployment of the team as per production schedule and the organizational norms and guidelines	-	-	-	-
PC7. share knowledge of processes, techniques and products with the team to enhance their skill levels	-	-	-	-
PC8. provide feedback to the manager pertaining to performance of the team	-	-	-	-
NOS Total	41	32	-	27

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N4113
NOS Name	Manage and lead a team for dairy farm management
Sector	Agriculture
Sub-Sector	Dairying
Occupation	Dairy Farm Management
NSQF Level	5
Credits	1
Version	2.0
Last Reviewed Date	31/03/2022
Next Review Date	31/03/2025
NSQC Clearance Date	31/03/2022

Qualification Pack

DGT/VSQ/N0103: Employability Skills (90 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.** understand the significance of employability skills in meeting the current job market requirement and future of work
- PC2.** identify and explore learning and employability relevant portals
- PC3.** research about the different industries, job market trends, latest skills required and the available opportunities

Constitutional values – Citizenship

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

- PC4.** 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.
- PC5.** follow environmentally sustainable practices

Becoming a Professional in the 21st Century

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

- PC6.** recognize the significance of 21st Century Skills for employment

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- PC7.** 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
- PC8.** adopt a continuous learning mindset for personal and professional development

Basic English Skills

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

- PC9.** use basic English for everyday conversation in different contexts, in person and over the telephone
- PC10.** read and understand routine information, notes, instructions, mails, letters etc. written in English
- PC11.** 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:

- PC12.** identify career goals based on the skills, interests, knowledge, and personal attributes
- PC13.** prepare a career development plan with short- and long-term goals

Communication Skills

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

- PC14.** follow verbal and non-verbal communication etiquette while communicating in professional and public settings
- PC15.** use active listening techniques for effective communication
- PC16.** communicate in writing using appropriate style and format based on formal or informal requirements
- PC17.** work collaboratively with others in a team

Diversity & Inclusion

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

- PC18.** communicate and behave appropriately with all genders and PwD
- PC19.** 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:

- PC20.** identify and select reliable institutions for various financial products and services such as bank account, debit and credit cards, loans, insurance etc.
- PC21.** carry out offline and online financial transactions, safely and securely, using various methods and check the entries in the passbook
- PC22.** identify common components of salary and compute income, expenses, taxes, investments etc
- PC23.** 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:

- PC24.** operate digital devices and use their features and applications securely and safely
- PC25.** carry out basic internet operations by connecting to the internet safely and securely, using the mobile data or other available networks through Bluetooth, Wi-Fi, etc.
- PC26.** display responsible online behaviour while using various social media platforms

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- PC27.** create a personal email account, send and process received messages as per requirement
- PC28.** carry out basic procedures in documents, spreadsheets and presentations using respective and appropriate applications
- PC29.** utilize virtual collaboration tools to work effectively

Entrepreneurship

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

- PC30.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- PC31.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- PC32.** 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:

- PC33.** identify different types of customers and ways to communicate with them
- PC34.** identify and respond to customer requests and needs in a professional manner
- PC35.** use appropriate tools to collect customer feedback
- PC36.** follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

- PC37.** create a professional Curriculum vitae (Résumé)
- PC38.** search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively
- PC39.** apply to identified job openings using offline /online methods as per requirement
- PC40.** answer questions politely, with clarity and confidence, during recruitment and selection
- PC41.** 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

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- KU11.** components of salary and 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
- KU16.** use applications such as word processors, spreadsheets etc.
- KU17.** how to identify business opportunities
- KU18.** types and needs of customers
- KU19.** how to apply for a job and prepare for an interview
- KU20.** 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 in English and other languages
- GS2.** communicate effectively using appropriate language in formal and informal settings
- GS3.** behave politely and appropriately with all to maintain effective work relationship
- GS4.** how to work in a virtual mode, using various technological platforms
- 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

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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 current job market requirement and future of work	-	-	-	-
PC2. identify and explore learning and employability relevant portals	-	-	-	-
PC3. research about the different industries, job market trends, latest skills required and the available opportunities	-	-	-	-
<i>Constitutional values – Citizenship</i>	1	1	-	-
PC4. 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.	-	-	-	-
PC5. follow environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	1	3	-	-
PC6. recognize the significance of 21st Century Skills for employment	-	-	-	-
PC7. 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	-	-	-	-
PC8. adopt a continuous learning mindset for personal and professional development	-	-	-	-
<i>Basic English Skills</i>	3	4	-	-
PC9. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
PC11. write short messages, notes, letters, e-mails etc. in English	-	-	-	-
<i>Career Development & Goal Setting</i>	1	2	-	-
PC12. identify career goals based on the skills, interests, knowledge, and personal attributes	-	-	-	-
PC13. prepare a career development plan with short- and long-term goals	-	-	-	-
<i>Communication Skills</i>	2	2	-	-
PC14. follow verbal and non-verbal communication etiquette while communicating in professional and public settings	-	-	-	-
PC15. use active listening techniques for effective communication	-	-	-	-
PC16. communicate in writing using appropriate style and format based on formal or informal requirements	-	-	-	-
PC17. work collaboratively with others in a team	-	-	-	-
<i>Diversity & Inclusion</i>	1	1	-	-
PC18. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC19. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
<i>Financial and Legal Literacy</i>	2	3	-	-
PC20. identify and select reliable institutions for various financial products and services such as bank account, debit and credit cards, loans, insurance etc.	-	-	-	-
PC21. carry out offline and online financial transactions, safely and securely, using various methods and check the entries in the passbook	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC22. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
PC23. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
<i>Essential Digital Skills</i>	3	5	-	-
PC24. operate digital devices and use their features and applications securely and safely	-	-	-	-
PC25. carry out basic internet operations by connecting to the internet safely and securely, using the mobile data or other available networks through Bluetooth, Wi-Fi, etc.	-	-	-	-
PC26. display responsible online behaviour while using various social media platforms	-	-	-	-
PC27. create a personal email account, send and process received messages as per requirement	-	-	-	-
PC28. carry out basic procedures in documents, spreadsheets and presentations using respective and appropriate applications	-	-	-	-
PC29. utilize virtual collaboration tools to work effectively	-	-	-	-
<i>Entrepreneurship</i>	2	3	-	-
PC30. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
PC31. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
PC32. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
<i>Customer Service</i>	1	2	-	-
PC33. identify different types of customers and ways to communicate with them	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC34. identify and respond to customer requests and needs in a professional manner	-	-	-	-
PC35. use appropriate tools to collect customer feedback	-	-	-	-
PC36. follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship & Jobs</i>	2	3	-	-
PC37. create a professional Curriculum vitae (Résumé)	-	-	-	-
PC38. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
PC39. apply to identified job openings using offline /online methods as per requirement	-	-	-	-
PC40. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
PC41. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
NOS Total	20	30	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0103
NOS Name	Employability Skills (90 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	5
Credits	3
Version	1.0
Last Reviewed Date	15/03/2024
Next Review Date	15/03/2027
NSQC Clearance Date	15/03/2024

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) will be assigned marks proportional to its importance in NOS. SSC will also lay down the proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on the knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for the theory part for each candidate at each examination/training centre (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on this criterion.
6. To pass the Qualification Pack, every trainee should score a minimum of 70% of aggregate marks to successfully clear the assessment.

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7. 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/N4109.Dairy herd management, feeding and milking	46	31	-	23	100	25
AGR/N4110.Dairy Herd Health Management	37	37	-	26	100	20
AGR/N4111.Complete documentation, record keeping and inventory management related to dairy farm operations	35	40	-	25	100	15
AGR/N4112.Ensure safety, hygiene and sanitation in a dairy farm	38	34	-	28	100	15
AGR/N4113.Manage and lead a team for dairy farm management	41	32	-	27	100	15
DGT/VSQ/N0103.Employability Skills (90 Hours)	20	30	-	-	50	10
Total	217	204	-	129	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

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.