Digital Agriculture Extension Promoter

Farm Production/ Agri Supply Chain

QP Code: AGR/Q1010

Version: 1.0

NSQF Level: 5.5

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Contents

AGR/Q1010: Digital Agriculture Extension Promoter

Brief Job Description

The individual is responsible for advising and facilitating farmers towards the successful integration of digital technologies into agricultural practices at farmers level and at a broader level with the agri-food systems. The person is involved in collecting and analyzing the agricultural data for facilitating data-driven decision making. The person is also responsible for creating digital content and disseminating it through various digital media platforms.

Personal Attributes

The individual should possess strong communication skills to effectively convey complex technical information in a clear and understandable manner to farmers with varying levels of technological literacy. The facilitator must be adaptable and flexible in their approach. The individual should be able to quickly adjust to changes in technology, farming practices, and local conditions, while remaining resilient in the face of challenges. In addition, the individual should possess strong problem-solving and critical thinking skills to address the diverse needs and challenges encountered in digital agriculture extension.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. AGR/N1044: Evaluate available agricultural technologies to enhance production

2. AGR/N1045: Create and manage digital content

3. AGR/N1046: Apply digital extension strategies for mass outreach

4. AGR/N1047: Collect and handle data

5. AGR/N1048: Analyse and use agricultural data

6. DGT/VSQ/N0103: Employability Skills (90 Hours)

Electives*(mandatory to select at least one):*

Elective 1: Farm Production

1. AGR/N1049: Facilitate deployment of Digital Applications for Crop Management/Precision Farming

Elective 2: Agri Supply Chain

1. AGR/N1050: Facilitate deployment of digital applications in Post-harvest management, Supply Chain Management and Financial Inclusion

Qualification Pack (QP) Parameters

Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Precision Farming
Country	India
NSQF Level	5.5
Credits	23
Aligned to NCO/ISCO/ISIC Code	NCO-2015/3142.9900

Minimum Educational Qualification & Experience	Completed 1st year of UG (UG Certificate) (or equivalent in Agriculture/Horticulture/Forestry/Agriculture Engineering/Veterinary Sciences and Animal Husbandry/Diary Technology)
	                    OR
	Completed 2nd year of UG (UG Diploma) (in Agriculture/Horticulture/Forestry/Agriculture Engineering/Veterinary Sciences and Animal Husbandry/Diary Technology)
	                    OR
	Completed 3 year diploma after 10th (Agriculture/Horticulture/Forestry/Agriculture Engineering/Veterinary Sciences and Animal Husbandry/Diary Technology) with 3 Years of experience in Agriculture and allied sectors
	                    OR
	12th grade Pass (or equivalent)
	                    OR
	Previous relevant Qualification of NSQF Level (5)
	                    OR
	Previous relevant Qualification of NSQF Level (4.5)

Minimum Level of Education for Training in School	NA
Pre-Requisite License or Training	NA
Minimum Job Entry Age	NA Years
Last Reviewed On	30/04/2024
Next Review Date	30/04/2027
NSQC Approval Date	30/04/2024

Version	1.0
Reference code on NQR	QC-5.5-AG-02423-2024-V1-ASCI
NQR Version	1.0

AGR/N1044: Evaluate available agricultural technologies to enhance production

Description

This OS unit is about identifying and evaluating various agricultural technologies technology to improve operational efficiency, productivity and sustainability.

Scope

The scope covers the following :

- Evaluate the need for agricultural technology

Elements and Performance Criteria

- *Evaluate the need for agricultural technology*

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

PC1. Identify and evaluate farm/organisational tasks and processes that could be supported by technological applications

PC2. Identify the applications of the commonly used digital technologies in agriculture, such as precision farming tools, sensor-based monitoring systems, and remote sensing technologies

PC3. Assess opportunities and limitations for operational improvements that may result from adopting specific technological applications

PC4. Evaluate equipment, tools and resource requirements and select most appropriate options

PC5. Evaluate cost-benefit of using technology

PC6. Seek independent technical advice and sources of information as required

PC7. Develop plan to incorporate use of technology to improve operational efficiency, productivity and sustainability

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. trends and developments in technology relevant to agriculture

KU2. sources of information related to agricultural technology

KU3. the role of digital technologies in transforming farming practices, enhancing agricultural productivity, sustainability, and resilience, and contributing to the overall development of the agricultural sector in India.

KU4. Farmers' need, their current practices and the gaps that require technological interventions

KU5. commonly used digital technologies in agriculture, such as precision farming tools, sensor-based monitoring systems, and remote sensing technologies.

KU6. functionalities and applications of digital tools and platforms in optimizing agricultural processes, decision-making, and resource management.

KU7. emerging trends and advancements in agricultural technology, including artificial intelligence, machine learning, and blockchain, and their potential impact on farming practices.

KU8. real-world examples and case studies where digital solutions have improved crop yields, reduced resource usage, and enhanced farm profitability, both globally and within the Indian context.

KU9. the potential benefits and limitations of digitalization in agriculture, considering its impact on efficiency, productivity, profitability, environmental sustainability, and social equity.

KU10. commonly discussed digital agriculture projects in India, including key initiatives, stakeholders, challenges, and opportunities.

KU11. the importance of data management, interoperability, and connectivity in maximizing the value and impact of digital solutions on farm operations and decision-making processes.

KU12. basic principles of cost-benefit analysis

KU13. context in which particular farm/organisations operate and how this may impact on the selection and use of technology

KU14. potential barriers to learning to use technological applications, and strategies to address these

Generic Skills (GS)

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

GS1. maintain work-related notes and records

GS2. read the relevant literature to get information about the latest developments in the field of work

GS3. listen attentively to understand the information/ instructions being shared by the speaker

GS4. communicate clearly and politely with co-workers and clients

GS5. co-ordinate with co-workers to achieve work objectives

GS6. plan and prioritise tasks to ensure timely completion

GS7. identify possible disruptions to work and take appropriate preventive measures

GS8. take quick decisions to deal with workplace emergencies/ accidents

GS9. evaluate all possible solutions to a problem to select the best one

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
• *Evaluate the need for agricultural technology*	**30**	**10**	**-**	**10**
PC1. Identify and evaluate farm/organisational tasks and processes that could be supported by technological applications	-	-	-	-
PC2. Identify the applications of the commonly used digital technologies in agriculture, such as precision farming tools, sensor-based monitoring systems, and remote sensing technologies	-	-	-	-
PC3. Assess opportunities and limitations for operational improvements that may result from adopting specific technological applications	-	-	-	-
PC4. Evaluate equipment, tools and resource requirements and select most appropriate options	-	-	-	-
PC5. Evaluate cost-benefit of using technology	-	-	-	-
PC6. Seek independent technical advice and sources of information as required	-	-	-	-
PC7. Develop plan to incorporate use of technology to improve operational efficiency, productivity and sustainability	-	-	-	-
NOS Total	**30**	**10**	**-**	**10**

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1044
NOS Name	Evaluate available agricultural technologies to enhance production
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Precision Farming
NSQF Level	5.5
Credits	1
Version	1.0
Last Reviewed Date	30/04/2024
Next Review Date	30/04/2027
NSQC Clearance	30/04/2024

AGR/N1045: Create and manage digital content

Description

This unit is about content creation in digital media for sharing through various platforms

Scope

The scope covers the following :

- Identify the knowledge gap for content creation
- Create content and disseminate through various media

Elements and Performance Criteria

Identify the knowledge gap for content creation

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

PC1. Identify existing knowledge gap and services required by farmers

PC2. Assess and prioritize the identified needs

Create and manage content using digital tools

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

PC3. Collect and review the required content from various sources using digital media tools

PC4. Create content suitable for various digital media

PC5. Customize the content to suit various digital media and audience

PC6. Ensure personalization and localization to enhance user engagement

PC7. Validate the designed content with various stakeholders

PC8. Review and proofread the content

PC9. Finalize the content in appropriate digital media for dissemination through various media tools

PC10. Store and retrieve content for use

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. Trends and developments in digital content technologies

KU2. Sources of information on farmers' problems, felt and unfelt, issues related to agriculture

KU3. Basic need assessment tools

KU4. Different types of digital tools for content development

KU5. Treatment of content suitable for various digital media

KU6. Potential barriers in using various digital media tools

KU7. Strategies for selection of appropriate media

KU8. Training and technical support options available to develop skills in the use of technology

Generic Skills (GS)

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

GS1. Maintain work-related notes and records

GS2. Read the relevant literature to get information about the latest developments in digital media and farming

GS3. Listen attentively to understand the information/ instructions being shared by the speaker

GS4. Communicate clearly and politely with co-workers and clients

GS5. Co-ordinate with co-workers to achieve work objectives

GS6. Plan and prioritize tasks to ensure timely completion

GS7. Identify possible disruptions in digital media

GS8. plan and use appropriate digital media

GS9. Evaluate all possible solutions to a problem to select the best one

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Identify the knowledge gap for content creation	5	5	-	5
PC1. Identify existing knowledge gap and services required by farmers	-	-	-	-
PC2. Assess and prioritize the identified needs	-	-	-	-
Create and manage content using digital tools	10	20	-	5
PC3. Collect and review the required content from various sources using digital media tools	-	-	-	-
PC4. Create content suitable for various digital media	-	-	-	-
PC5. Customize the content to suit various digital media and audience	-	-	-	-
PC6. Ensure personalization and localization to enhance user engagement	-	-	-	-
PC7. Validate the designed content with various stakeholders	-	-	-	-
PC8. Review and proofread the content	-	-	-	-
PC9. Finalize the content in appropriate digital media for dissemination through various media tools	-	-	-	-
PC10. Store and retrieve content for use	-	-	-	-
NOS Total	15	25	-	10

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1045
NOS Name	Create and manage digital content
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Precision Farming
NSQF Level	5.5
Credits	2
Version	1.0
Last Reviewed Date	30/04/2024
Next Review Date	30/04/2027
NSQC Clearance	30/04/2024

AGR/N1046: Apply digital extension strategies for mass outreach

Description

This unit is about identifying the digital extension gaps and employing strategies for mass outreach.

Scope

The scope covers the following :

- Identify the Digital Extension needs and gap
- Apply Digital Extension methodologies and strategies
- Establish partnerships and collaboration for mass outreach

Elements and Performance Criteria

Identify the digital extension needs and gap

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

PC1. Identify existing digital extension knowledge gaps and needs

PC2. Assess and prioritize needs and need assessment tools

PC3. Collect data on users, user preference, application of digital tools

PC4. Leverage data analytics and performance metrics for strategic decision making

Apply digital Extension methodologies and Strategies

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

PC5. select appropriate digital media platforms/applications/tools to meet the required objective

PC6. Utilize multichannel approach such as websites, mobile app., social media, and other social networking platforms for sharing the digital content

Establish partnerships and Collaboration for mass outreach

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

PC7. Identify partners and collaborators for enhancing digital presence

PC8. Develop strategic partnerships and collaborate with stakeholders so as to amplify reach and co-create content in digital space

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. Trends and developments in digital extension approaches and strategies

KU2. Sources of information on farmers' problems, felt and unfelt, issues related to agriculture

KU3. Basic need assessment tools

KU4. Different types of digital media platforms/apps, its applications, features and its usage

KU5. Approaches and strategies for different types of digital media tools

KU6. Context in which various digital tools can be deployed

KU7. Potential barriers in using various digital media platforms/apps

KU8. Strategies for selection of appropriate media

KU9. Use of data analytics and performance metrics for decision making

KU10. Training and technical support options available to develop skills in the use of technology

Generic Skills (GS)

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

GS1. Maintain work-related notes and records

GS2. Read the relevant literature to get information about the latest developments in digital extension strategies and approaches

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

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

GS6. Co-ordinate with co-workers to achieve work objectives

GS7. Plan and prioritize tasks to ensure timely completion

GS8. identify possible disruptions in digital media / digital approaches

GS9. plan and use appropriate digital media as per the requirement

GS10. Evaluate all possible solutions to a problem to select the best one

GS11. Use digital systems and tools to complete tasks

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Identify the digital extension needs and gap	5	4	-	5
PC1. Identify existing digital extension knowledge gaps and needs	-	-	-	-
PC2. Assess and prioritize needs and need assessment tools	-	-	-	-
PC3. Collect data on users, user preference, application of digital tools	-	-	-	-
PC4. Leverage data analytics and performance metrics for strategic decision making	-	-	-	-
Apply digital Extension methodologies and Strategies	8	14	-	8
PC5. select appropriate digital media platforms/applications/tools to meet the required objective	-	-	-	-
PC6. Utilize multichannel approach such as websites, mobile app., social media, and other social networking platforms for sharing the digital content	-	-	-	-
Establish partnerships and Collaboration for mass outreach	2	2	-	2
PC7. Identify partners and collaborators for enhancing digital presence	-	-	-	-
PC8. Develop strategic partnerships and collaborate with stakeholders so as to amplify reach and co-create content in digital space	-	-	-	-
NOS Total	**15**	**20**	**-**	**15**

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1046
NOS Name	Apply digital extension strategies for mass outreach
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Precision Farming
NSQF Level	5.5
Credits	1
Version	1.0
Last Reviewed Date	30/04/2024
Next Review Date	30/04/2027
NSQC Clearance	30/04/2024

AGR/N1047: Collect and handle data

Description

This OS unit is about collecting and managing data

Scope

The scope covers the following :

- • Determine the type and extent of data to be collected
- • Access and collate data
- • Evaluate data
- • Manage and retrieve data

Elements and Performance Criteria

Determine the type and extent of data to be collected

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

PC1. Define the type and extent of data required

PC2. Consider privacy or sensitive data concerns and appropriate methods to address these concerns

PC3. Identify data sources

PC4. Define data collection methods and techniques relative to data requirements

PC5. Communicate data requirements to staff involved in data collection

PC6. Identify workplace health and safety hazards and risks associated with data collecting

Access and collate data

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

PC7. Format data to assist collection

PC8. Collect data from field source

PC9. Identify and access relevant satellite imagery and data sources for crop management

PC10. Collate data by appropriate electronic means

PC11. Monitor appropriateness of data and record during collection

PC12. Review information using appropriate methods and technologies

PC13. Establish and maintain contacts to aid in data collection

PC14. Follow workplace health and safety requirements and work practices

Evaluate data

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

PC15. Organise and review data

PC16. Seek clarification and assistance where data is unclear or difficult to interpret

PC17. Obtain and review additional data as required

Manage and retrieve data

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

PC18. Store data by appropriate electronic means

PC19. Present data using appropriate graphical aids and techniques

PC20. Assemble data and provide to the manager or client

PC21. Retrieve data as required

PC22. Suggest new methods of recording and storing data as required

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. sensitive data collection, access and storage techniques

KU2. data collection techniques and procedures

KU3. How to access and acquire satellite imagery and data from reliable sources.

KU4. data recording and evaluation techniques

KU5. data storage and retrieval methods

KU6. data analysis and interpretive techniques

KU7. data reporting and presentation formats.

Generic Skills (GS)

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

GS1. Use clear language, accurate industry terminology and logical structure to complete reports

GS2. Initiate discussions with contacts, using clear language to discuss and clarify data and research information

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Determine the type and extent of data to be collected	6	4	-	4
PC1. Define the type and extent of data required	-	-	-	-
PC2. Consider privacy or sensitive data concerns and appropriate methods to address these concerns	-	-	-	-
PC3. Identify data sources	-	-	-	-
PC4. Define data collection methods and techniques relative to data requirements	-	-	-	-
PC5. Communicate data requirements to staff involved in data collection	-	-	-	-
PC6. Identify workplace health and safety hazards and risks associated with data collecting	-	-	-	-
Access and collate data	3	8	-	5
PC7. Format data to assist collection	-	-	-	-
PC8. Collect data from field source	-	-	-	-
PC9. Identify and access relevant satellite imagery and data sources for crop management	-	-	-	-
PC10. Collate data by appropriate electronic means	-	-	-	-
PC11. Monitor appropriateness of data and record during collection	-	-	-	-
PC12. Review information using appropriate methods and technologies	-	-	-	-
PC13. Establish and maintain contacts to aid in data collection	-	-	-	-
PC14. Follow workplace health and safety requirements and work practices	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Evaluate data	3	4	-	3
PC15. Organise and review data	-	-	-	-
PC16. Seek clarification and assistance where data is unclear or difficult to interpret	-	-	-	-
PC17. Obtain and review additional data as required	-	-	-	-
Manage and retrieve data	3	4	-	3
PC18. Store data by appropriate electronic means	-	-	-	-
PC19. Present data using appropriate graphical aids and techniques	-	-	-	-
PC20. Assemble data and provide to the manager or client	-	-	-	-
PC21. Retrieve data as required	-	-	-	-
PC22. Suggest new methods of recording and storing data as required	-	-	-	-
NOS Total	15	20	-	15

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1047
NOS Name	Collect and handle data
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Precision Farming
NSQF Level	5.5
Credits	2
Version	1.0
Last Reviewed Date	30/04/2024
Next Review Date	30/04/2027
NSQC Clearance	30/04/2024

AGR/N1048: Analyse and use agricultural data

Description

This unit is about interpreting and using agricultural data

Scope

The scope covers the following :

- Identify, access and apply agricultural data
- Interpret and explain agricultural data
- Analyse agricultural data
- Identify and address data gaps
- Use agricultural data
- Present data/findings
- Review and report agricultural data

Elements and Performance Criteria

Identify, access and apply agricultural data

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

PC1. Discuss workplace business objectives, goals and farming system with business/farm owner or farm manager to determine purpose of information being sought

PC2. Identify existing sources of agricultural data available in the workplace to support workplace business objectives

PC3. Review and select appropriate software programs or applications (app) to meet workplace business objectives

PC4. Access existing agricultural data and enter into software program or app

PC5. Create maps, graphs and summary reports using existing data

Interpret and explain agricultural data

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

PC6. Interpret maps or reports to identify opportunities and limitations for operational improvements that support business objectives

PC7. Conduct field work to ground truth data and record interpretations of data for future use

PC8. Document data results using appropriate interpretation and presentation techniques

PC9. Discuss and explain data results and information with business/farm owner or farm manager

Analyse agricultural data

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

PC10. Collect and analyse data to determine significance of results

PC11. Undertake simple statistical analysis to detect data outliers, imbalances in generated data sets and identify erroneous data points, including determining spatial density of the managed data set

PC12. Produce variability maps from suitable data sets

PC13. Discuss and recommend solutions utilising agricultural data, and present to business/farm owner or farm manager for approval

Identify and address data gaps

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

PC14. Identify validity and reliability, and gaps in existing agricultural data

PC15. Identify solutions to address data gaps utilising existing sources

PC16. Identify and cost hardware and software solutions to address data gaps where required

PC17. Discuss and recommend solutions and seek approval from business/farm owner or farm manager

Use agricultural data

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

PC18. Collect and organise agricultural data and enter into software program or app

PC19. Generate maps and reports for agricultural activities for review and discussion with key business personnel

PC20. Incorporate agricultural data into business operations

PC21. Determine if corrective action is required and take appropriate action

Present data/findings

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

PC22. Prepare and report data in an appropriate format, style and structure using appropriate software

PC23. Check structure and format of reports are clear and conform to enterprise requirements

PC24. Present findings of analysis, with conclusions, to work team

PC25. Obtain feedback and comments on suitability and sufficiency of findings

Review and report agricultural data

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

PC26. Review production data to identify changes in productivity as a result of using agricultural data, and document results

PC27. Identify opportunities for improvements using agricultural data with the support of a domain expert

PC28. Report results to business/farm owner or farm manager

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. the concept of farming as a system, including the interconnection of:
- Plants,
- soil
- water
- environment
- weather
- finance
- production systems

KU2. principles and practices for interpreting and using agricultural data, including:

KU3. how to distinguish between valid and invalid data and how to clean data

KU4. how to review data for spatial and temporal variance and compare current data to previous, or average data for consistency or variations

KU5. how to generate profitability maps of paddocks to highlight areas of differing return
  • how to transfer data to hardware controllers from generated maps
  • the importance of standardised data in generating whole of farm data analysis
  • data tracking and data inputs and outputs of the business
  • the importance of ground truthing
  • how to utilize high-resolution, multispectral satellite or aerial imagery and Artificial Intelligence (AI), Machine Learning (ML), and Computer Vision (CV) algorithms to collect image data and transfer into management solutions for crop health and improved production targets.
  • how agricultural data and decisions fit into the business plan, business drivers, costs and return on investment

KU6. sources of data to assist with monitoring:
  • plants
  • soil
  • water
  • environment
  • salinity
  • erosion
  • weeds
  • biodiversity

KU7. sources of data to assist with managing:
  • water use
  • precision mapping
  • precision and variable rate prescriptions
  • field record keeping
  • compliance record keeping
  • yield or harvest data
  • soil survey data
  • sensor network data, including; moisture probes, weather stations and canopy sensors
  • crop planning
  • agricultural machinery operation and monitoring

KU8. types of data systems relevant to agricultural production, including:
  • Global Navigation Satellite Systems (GNSS)
  • relevant vegetation indices and their use
  • Unmanned Aerial Vehicle (UAV) imagery.

Generic Skills (GS)

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

GS1. maintain work-related notes and records

GS2. read the relevant literature to get information about the latest developments in the field of work

GS3. listen attentively to understand the information/ instructions being shared by the speaker

GS4. communicate clearly and politely with co-workers and clients

GS5. co-ordinate with co-workers to achieve work objectives

GS6. plan and prioritise tasks to ensure timely completion

GS7. identify possible disruptions to work and take appropriate preventive measures

GS8. take quick decisions to deal with workplace emergencies/ accidents

GS9. evaluate all possible solutions to a problem to select the best one

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Identify, access and apply agricultural data	2	4	-	2
PC1. Discuss workplace business objectives, goals and farming system with business/farm owner or farm manager to determine purpose of information being sought	-	-	-	-
PC2. Identify existing sources of agricultural data available in the workplace to support workplace business objectives	-	-	-	-
PC3. Review and select appropriate software programs or applications (app) to meet workplace business objectives	-	-	-	-
PC4. Access existing agricultural data and enter into software program or app	-	-	-	-
PC5. Create maps, graphs and summary reports using existing data	-	-	-	-
Interpret and explain agricultural data	2	6	-	2
PC6. Interpret maps or reports to identify opportunities and limitations for operational improvements that support business objectives	-	-	-	-
PC7. Conduct field work to ground truth data and record interpretations of data for future use	-	-	-	-
PC8. Document data results using appropriate interpretation and presentation techniques	-	-	-	-
PC9. Discuss and explain data results and information with business/farm owner or farm manager	-	-	-	-
Analyse agricultural data	10	12	-	4
PC10. Collect and analyse data to determine significance of results	-	-	-	-
PC11. Undertake simple statistical analysis to detect data outliers, imbalances in generated data sets and identify erroneous data points, including determining spatial density of the managed data set	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. Produce variability maps from suitable data sets	-	-	-	-
PC13. Discuss and recommend solutions utilising agricultural data, and present to business/farm owner or farm manager for approval	-	-	-	-
Identify and address data gaps	**6**	**6**	**-**	**1**
PC14. Identify validity and reliability, and gaps in existing agricultural data	-	-	-	-
PC15. Identify solutions to address data gaps utilising existing sources	-	-	-	-
PC16. Identify and cost hardware and software solutions to address data gaps where required	-	-	-	-
PC17. Discuss and recommend solutions and seek approval from business/farm owner or farm manager	-	-	-	-
Use agricultural data	**3**	**8**	**-**	**2**
PC18. Collect and organise agricultural data and enter into software program or app	-	-	-	-
PC19. Generate maps and reports for agricultural activities for review and discussion with key business personnel	-	-	-	-
PC20. Incorporate agricultural data into business operations	-	-	-	-
PC21. Determine if corrective action is required and take appropriate action	-	-	-	-
Present data/findings	**4**	**10**	**-**	**3**
PC22. Prepare and report data in an appropriate format, style and structure using appropriate software	-	-	-	-
PC23. Check structure and format of reports are clear and conform to enterprise requirements	-	-	-	-
PC24. Present findings of analysis, with conclusions, to work team	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC25. Obtain feedback and comments on suitability and sufficiency of findings	-	-	-	-
Review and report agricultural data	3	4	-	3
PC26. Review production data to identify changes in productivity as a result of using agricultural data, and document results	-	-	-	-
PC27. Identify opportunities for improvements using agricultural data with the support of a domain expert	-	-	-	-
PC28. Report results to business/farm owner or farm manager	-	-	-	-
NOS Total	30	50	-	20

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1048
NOS Name	Analyse and use agricultural data
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Precision Farming
NSQF Level	5.5
Credits	2
Version	1.0
Last Reviewed Date	30/04/2024
Next Review Date	30/04/2027
NSQC Clearance	30/04/2024

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

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

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

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

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	**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	-	-	-	-
Constitutional values – Citizenship	**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	-	-	-	-
Becoming a Professional in the 21st Century	**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	-	-	-	-
Basic English Skills	**3**	**4**	**-**	**-**
PC9. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-

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	-	-	-	-
Career Development & Goal Setting	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	-	-	-	-
Communication Skills	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	-	-	-	-
Diversity & Inclusion	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	-	-	-	-
Financial and Legal Literacy	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	-	-	-	-

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	-	-	-	-
Essential Digital Skills	**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	-	-	-	-
Entrepreneurship	**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	-	-	-	-
Customer Service	**1**	**2**	-	-
PC33. identify different types of customers and ways to communicate with them	-	-	-	-

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	-	-	-	-
Getting ready for apprenticeship & Jobs	**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**	-	-

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	31/01/2024
Next Review Date	31/01/2027
NSQC Clearance Date	31/01/2024

AGR/N1049: Facilitate deployment of Digital Applications for Crop Management/Precision Farming

Description

This unit is about facilitating deployment of digital applications for crop management and precision farming

Scope

The scope covers the following :

- Identify the scope and use of digital tools for crop management/precision farming
- Deploy various digital applications for crop management/ precision farming

Elements and Performance Criteria

Identify the scope and use of digital tools in crop management/precision farming

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

PC1. Identify key interventions in crop production, crop management, plant protection and harvest

PC2. Assess the existing practices in crop production

PC3. Identify the scope for the use of digital applications in crop production

PC4. Prepare a deployment plan for the use of AI, Mobile apps. for various field interventions

PC5. Prepare digital agriculture toolkit for crop monitoring and management

Deploy various digital tools for crop management/precision farming

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

PC6. deploy GIS / GPS technologies for mapping and other operations

PC7. Deploy IoT / AI applications for SMART irrigation management

PC8. Deploy AI and mobile app. for farm management, plant protection and harvest

PC9. Integrate various precision farming tools, technologies in crop management

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. Trends and developments in digital tools, especially, GIS, GPS, IoT, AI, Drones, Automated Weather Stations and mobile applications

KU2. Nature of farm interventions, and scope for integrating, replacing the farm level operations with digital technologies

KU3. Context in which various digital tools has to be deployed

KU4. various digital tools, its applications, features and its usage

KU5. Potential barriers in using various digital technologies

KU6. technical and financial feasibility for implementing the digital technologies

KU7. Strategies for selection of appropriate digital technologies

KU8. Training and technical support options available to develop skills in the use of technology

Generic Skills (GS)

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

GS1. Maintain work-related notes and records, ability to handle digital tools

GS2. Read the relevant literature to get information about the latest developments in digital Technologies in farming

GS3. Co-ordinate with co-workers to achieve work objectives

GS4. Plan and prioritize tasks to ensure timely completion

GS5. identify possible disruptions in digital technologies in crop production and management

GS6. plan and use appropriate digital tool

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

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Identify the scope and use of digital tools in crop management/precision farming	10	15	-	10
PC1. Identify key interventions in crop production, crop management, plant protection and harvest	-	-	-	-
PC2. Assess the existing practices in crop production	-	-	-	-
PC3. Identify the scope for the use of digital applications in crop production	-	-	-	-
PC4. Prepare a deployment plan for the use of AI, Mobile apps. for various field interventions	-	-	-	-
PC5. Prepare digital agriculture toolkit for crop monitoring and management	-	-	-	-
Deploy various digital tools for crop management/precision farming	20	35	-	10
PC6. deploy GIS / GPS technologies for mapping and other operations	-	-	-	-
PC7. Deploy IoT / AI applications for SMART irrigation management	-	-	-	-
PC8. Deploy AI and mobile app. for farm management, plant protection and harvest	-	-	-	-
PC9. Integrate various precision farming tools, technologies in crop management	-	-	-	-
NOS Total	30	50	-	20

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1049
NOS Name	Facilitate deployment of Digital Applications for Crop Management/PrecisionFarming
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Precision Farming
NSQF Level	5.5
Credits	4
Version	1.0
Last Reviewed Date	30/04/2024
Next Review Date	30/04/2027
NSQC Clearance	30/04/2024

AGR/N1050: Facilitate deployment of digital applications in Post-harvest management, Supply Chain Management and Financial Inclusion

Description

This unit is about facilitating the deployment of digital applications in Post-harvest management, Supply Chain Management including traceability, E-commerce and Financial Inclusion

Scope

The scope covers the following :

- Identify the scope and use of digital tools in Post-Harvest Management, Supply Chain Management including traceability, E-commerce and Financial Inclusion
- Deploy various digital tools for Post-harvest Management, Supply Chain Management including traceability, E-commerce and Financial Inclusion

Elements and Performance Criteria

Identify the scope and use of digital tools in Post-Harvest Management, Traceability, Supply Chain, E-commerce and Financial Inclusion

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

PC1. Identify key interventions in Post-harvest management, Supply Chain Management including traceability, E-commerce

PC2. Identify the scope of financial inclusion for agricultural development

PC3. Assess the digital technologies / tools suitable for PHM, Supply Chain Management including traceability, E-commerce and financial inclusion

PC4. Prepare a deployment plan for the use of digital applications for PHM, Supply Chain Management including traceability, E-commerce and Financial Inclusion

PC5. Prepare digital agriculture toolkit for Post-harvest management, Supply chain management and Financial Inclusion

Deploy various digital tools for Post-harvest Management, Supply Chain Management including traceability, E-commerce and Financial Inclusion

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

PC6. Deploy digital tools for Post-harvest Management and Traceability

PC7. Deploy digital tools for Financial Inclusion and e- Commerce

PC8. Deploy various fintech solutions for digital payment, transactions, farm financing and investment.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. Trends and developments in digital tools, especially, Post-harvest Management, Traceability, Supply chain, FinTech (Financial Inclusion) and e- Commerce

KU2. Nature of farm interventions, and scope for integrating, replacing the farm level Post harvest operations with digital technologies

KU3. Challenges faced by farmers in accessing formal financial services

KU4. the significance of capturing accurate and complete data at various stages of production for effective traceability

KU5. consumer demand and market specific traceability requirements

KU6. various digital tools, its applications, features and usage

KU7. Context in which various digital tools has to be deployed

KU8. Potential barriers in using various digital technologies

KU9. technical and financial feasibility for implementing the digital technologies

KU10. Strategies for selection of appropriate digital technologies

KU11. Training and technical support options available to develop skills in the use of technology

Generic Skills (GS)

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

GS1. Maintain work-related notes and records, ability to handle digital tools

GS2. Read the relevant literature to get information about the latest developments in digital Technologies in farming

GS3. Co-ordinate with co-workers to achieve work objectives

GS4. Plan and prioritize tasks to ensure timely completion

GS5. identify possible disruptions in digital technologies in crop production and management

GS6. plan and use appropriate digital tool

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

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Identify the scope and use of digital tools in Post-Harvest Management, Traceability, Supply Chain, E-commerce and Financial Inclusion	10	15	-	10
PC1. Identify key interventions in Post-harvest management, Supply Chain Management including traceability, E-commerce	-	-	-	-
PC2. Identify the scope of financial inclusion for agricultural development	-	-	-	-
PC3. Assess the digital technologies / tools suitable for PHM, Supply Chain Management including traceability, E-commerce and financial inclusion	-	-	-	-
PC4. Prepare a deployment plan for the use of digital applications for PHM, Supply Chain Management including traceability, E-commerce and Financial Inclusion	-	-	-	-
PC5. Prepare digital agriculture toolkit for Post-harvest management, Supply chain management and Financial Inclusion	-	-	-	-
Deploy various digital tools for Post-harvest Management, Supply Chain Management including traceability, E-commerce and Financial Inclusion	20	35	-	10
PC6. Deploy digital tools for Post-harvest Management and Traceability	-	-	-	-
PC7. Deploy digital tools for Financial Inclusion and e- Commerce	-	-	-	-
PC8. Deploy various fintech solutions for digital payment, transactions, farm financing and investment.	-	-	-	-
NOS Total	30	50	-	20

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1050
NOS Name	Facilitate deployment of digital applications in Post-harvest management, Supply Chain Management and Financial Inclusion
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Precision Farming
NSQF Level	5.5
Credits	4
Version	1.0
Last Reviewed Date	30/04/2024
Next Review Date	30/04/2027
NSQC Clearance	30/04/2024

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/optional set of NOS.

4. Individual assessment agencies will create unique question papers for the theory part for each candidate at each examination/training center (as per assessment criteria below).

5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.

6. To pass the Qualification Pack assessment, every trainee should score a minimum of 70% of % aggregate marks to successfully clear the assessment.

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/N1044.Evaluate available agricultural technologies to enhance production	30	10	-	10	50	8
AGR/N1045.Create and manage digital content	15	25	-	10	50	15
AGR/N1046.Apply digital extension strategies for mass outreach	15	20	-	15	50	12
AGR/N1047.Collect and handle data	15	20	-	15	50	15
AGR/N1048.Analyse and use agricultural data	30	50	-	20	100	15
DGT/VSQ/N0103.Employability Skills (90 Hours)	20	30	-	-	50	5
Total	125	155	-	70	350	70

Elective: 1 Farm Production

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N1049.Facilitate deployment of Digital Applications for Crop Management/Precision Farming	30	50	-	20	100	30
Total	30	50	-	20	100	30

Elective: 2 Agri Supply Chain

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
AGR/N1050.Facilitate deployment of digital applications in Post-harvest management, Supply Chain Management and Financial Inclusion	30	50	-	20	100	30
Total	30	50	-	20	100	30

Acronyms

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

Glossary

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

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