



Greenhouse Installer

QP Code: AGR/Q1001

Version: 3.0

NSQF Level: 4

Agriculture Skill Council of India || 6th Floor, GNG Tower, Plot No. 10, Sector -44, Gurgaon
Haryana-122004 || email: priyanka@asci-india.com

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AGR/Q1001: Greenhouse Installer

Brief Job Description

A Greenhouse Installer assists in preparing the layout for a greenhouse structure after assessing the site conditions and installs the greenhouse. The individual is also responsible for carrying out the repair and maintenance of the greenhouse.

Personal Attributes

The individual must be physically fit to work for long hours and possess problem-solving skills. The ability to communicate well and coordinate with others are the other important attributes required in this job role.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [AGR/N1001: Prepare for the greenhouse installation](#)
2. [AGR/N1002: Install greenhouse as per the layout](#)
3. [AGR/N1003: Carry out repair and maintenance of greenhouse](#)
4. [AGR/N9903: Maintain health and safety at the workplace](#)
5. [DGT/VSQ/N0102: Employability Skills \(60 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Precision Farming
Country	India
NSQF Level	4
Credits	13
Aligned to NCO/ISCO/ISIC Code	NCO-2015/6113.0501

Minimum Educational Qualification & Experience	12th grade Pass OR Completed 2nd year of the 3-year diploma after 10 (and pursuing regular diploma) OR 10th grade pass (plus 2-year NTC) OR 10th grade pass (plus 1-year NTC plus 1 year NAC) OR 8th grade pass with 2 year NTC plus 1 year NAC plus 1 year CITS OR 10th grade pass and pursuing continuous schooling OR 10th grade pass with 2 Years of experience relevant experience OR Previous relevant Qualification of NSQF Level (Level 3.0 with minimum education as 8th Grade pass) with 3 Years of experience relevant experience OR Previous relevant Qualification of NSQF Level (Level 3.5 with 1.5- year relevant experience)
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	25/11/2024
Deactivation Date	25/11/2024
NSQC Approval Date	25/11/2021
Version	3.0
Reference code on NQR	QG-04-AG-00329-2023-V1.1-ASCI
NQR Version	1.1

AGR/N1001: Prepare for the greenhouse installation

Description

This OS unit is about assisting in surveying the site and preparing the layout of the greenhouse. It also covers arranging the resources required for the installation.

Scope

The scope covers the following :

- Assist in assessing the site conditions and preparing the layout
- Arrange the required resources

Elements and Performance Criteria

Assist in assessing the site conditions and preparing the layout

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

- PC1.** assist the design team in conducting a site survey and checking the suitability of climatic conditions for greenhouse installation
- PC2.** ensure the availability of water and electricity at the site
- PC3.** coordinate with the design team to assess land levelling and measure angles at the site
- PC4.** assist in selecting a spot for greenhouse installation that is well-drained with the required exposure to sunlight
- PC5.** coordinate with the design team to calculate the specifications for the foundation of the greenhouse
- PC6.** assist in preparing the layout for the greenhouse structure as per the client's requirements

Arrange the required resources

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

- PC7.** identify various materials required for the installation of greenhouse
- PC8.** estimate the cost of greenhouse installation and arrange the necessary funds as per the estimates
- PC9.** select a vendor based on the quality of installation material and purchase the material in the required quantity
- PC10.** store the installation material appropriately
- PC11.** organise the relevant tools, equipment and Personal Protective Equipment (PPE) for the greenhouse installation

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** basics of designing
- KU2.** different types of greenhouse structures

- KU3.** various parameters to be considered while selecting a location for greenhouse installation such as topography, windbreaks, exposure to sunlight, soil type, surface levelling, pest pressure, availability and quality of water, market accessibility, availability of electricity, etc.
- KU4.** various types of materials required for the installation of a greenhouse
- KU5.** preparation required for the installation of a greenhouse
- KU6.** the process of taking measurements for preparing the layout of a greenhouse
- KU7.** relevant tools, equipment and PPE used during the installation of a greenhouse
- KU8.** basics of crop cultivation under a greenhouse environment
- KU9.** the concept of protected cultivation

Generic Skills (GS)

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

- GS1.** read the relevant literature to get the latest updates about the field of work
- GS2.** communicate politely and professionally
- GS3.** write work-related notes
- GS4.** take quick decisions to deal with any disruptions to work
- GS5.** maintain professional relationships with co-workers and clients
- GS6.** identify possible disruptions to work and take preventive measures
- GS7.** evaluate all possible solutions to a problem to select the best one
- GS8.** apply domain knowledge and experience to improve the quality of work

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Assist in assessing the site conditions and preparing the layout</i>	15	20	-	15
PC1. assist the design team in conducting a site survey and checking the suitability of climatic conditions for greenhouse installation	-	-	-	-
PC2. ensure the availability of water and electricity at the site	-	-	-	-
PC3. coordinate with the design team to assess land levelling and measure angles at the site	-	-	-	-
PC4. assist in selecting a spot for greenhouse installation that is well-drained with the required exposure to sunlight	-	-	-	-
PC5. coordinate with the design team to calculate the specifications for the foundation of the greenhouse	-	-	-	-
PC6. assist in preparing the layout for the greenhouse structure as per the client's requirements	-	-	-	-
<i>Arrange the required resources</i>	15	20	-	15
PC7. identify various materials required for the installation of greenhouse	-	-	-	-
PC8. estimate the cost of greenhouse installation and arrange the necessary funds as per the estimates	-	-	-	-
PC9. select a vendor based on the quality of installation material and purchase the material in the required quantity	-	-	-	-
PC10. store the installation material appropriately	-	-	-	-
PC11. organise the relevant tools, equipment and Personal Protective Equipment (PPE) for the greenhouse installation	-	-	-	-
NOS Total	30	40	-	30

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1001
NOS Name	Prepare for the greenhouse installation
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Precision Farming
NSQF Level	4
Credits	2
Version	2.0
Next Review Date	25/11/2024

AGR/N1002: Install greenhouse as per the layout

Description

This OS unit is about installing a greenhouse as per the prepared layout.

Scope

The scope covers the following :

- Erect the greenhouse structure and install various equipment
- Install the nets and sheets
- Set up the fertigation system
- Optimise resource utilisation

Elements and Performance Criteria

Erect the greenhouse structure and install various equipment

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

- PC1.** prepare a frame for the greenhouse structure as per the layout
- PC2.** assemble various parts of the greenhouse firmly
- PC3.** install well-insulated doors in the greenhouse for entry and exit
- PC4.** create adjustable vents in the greenhouse ceiling
- PC5.** install the appropriate cooling/ heating system according to the climatic conditions
- PC6.** install a CO₂ generator for the optimum growth of plants in the greenhouse environment
- PC7.** set up a thermometer in the greenhouse to monitor the temperature

Install the nets and sheets

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

- PC8.** install insect nets on the sides of the greenhouse while avoiding any wrinkles or damage to them
- PC9.** install shade nets as per the shading requirement of the greenhouse
- PC10.** apply sheet cover of the prescribed material on the greenhouse structure

Set up the fertigation system

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

- PC11.** install valves on the water supply pipes to prevent back flow of water
- PC12.** connect a diverter pipe to the main water supply
- PC13.** set up the fertiliser tray and fertiliser pump
- PC14.** connect the fertiliser tray with the fertiliser pump
- PC15.** install root feeders to supply water mixed with fertiliser to the plants

Optimise resource utilisation

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

- PC16.** optimise the usage of electricity and other resources in various tasks and activities
- PC17.** connect electrical tools and equipment safely and turn them off when not in use

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the process of installing a greenhouse
- KU2.** how to erect a firm and durable greenhouse structure
- KU3.** handling of the relevant tools and equipment
- KU4.** the process and importance of installing different types of cooling and heating systems in a greenhouse
- KU5.** the process and importance of installing a CO₂ generator in a greenhouse
- KU6.** advantages and the process of installing a fertigation system and the materials required
- KU7.** importance of following environmental and ecological best practices to minimise the impact on the environment
- KU8.** benefits of resource optimisation
- KU9.** ways of efficiently managing various materials used in greenhouse operations
- KU10.** common practices of conserving electricity

Generic Skills (GS)

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

- GS1.** write work-related notes
- GS2.** read the relevant manuals, guides and literature on new developments in the field of work
- GS3.** communicate politely and professionally
- GS4.** apply domain knowledge and experience to improve the quality of work
- GS5.** plan and schedule tasks to ensure timely completion
- GS6.** evaluate all possible solutions to a problem to select the best one
- GS7.** co-ordinate with co-workers to achieve the work objectives
- GS8.** identify possible disruptions to work and take preventive measures

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Erect the greenhouse structure and install various equipment</i>	10	15	-	10
PC1. prepare a frame for the greenhouse structure as per the layout	-	-	-	-
PC2. assemble various parts of the greenhouse firmly	-	-	-	-
PC3. install well-insulated doors in the greenhouse for entry and exit	-	-	-	-
PC4. create adjustable vents in the greenhouse ceiling	-	-	-	-
PC5. install the appropriate cooling/ heating system according to the climatic conditions	-	-	-	-
PC6. install a CO ₂ generator for the optimum growth of plants in the greenhouse environment	-	-	-	-
PC7. set up a thermometer in the greenhouse to monitor the temperature	-	-	-	-
<i>Install the nets and sheets</i>	5	10	-	5
PC8. install insect nets on the sides of the greenhouse while avoiding any wrinkles or damage to them	-	-	-	-
PC9. install shade nets as per the shading requirement of the greenhouse	-	-	-	-
PC10. apply sheet cover of the prescribed material on the greenhouse structure	-	-	-	-
<i>Set up the fertigation system</i>	10	10	-	10
PC11. install valves on the water supply pipes to prevent back flow of water	-	-	-	-
PC12. connect a diverter pipe to the main water supply	-	-	-	-
PC13. set up the fertiliser tray and fertiliser pump	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. connect the fertiliser tray with the fertiliser pump	-	-	-	-
PC15. install root feeders to supply water mixed with fertiliser to the plants	-	-	-	-
<i>Optimise resource utilisation</i>	5	5	-	5
PC16. optimise the usage of electricity and other resources in various tasks and activities	-	-	-	-
PC17. connect electrical tools and equipment safely and turn them off when not in use	-	-	-	-
NOS Total	30	40	-	30

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1002
NOS Name	Install greenhouse as per the layout
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Precision Farming
NSQF Level	4
Credits	3
Version	3.0
Next Review Date	25/11/2024

AGR/N1003: Carry out repair and maintenance of greenhouse

Description

This OS unit is about carrying out the repair and maintenance of the greenhouse.

Scope

The scope covers the following :

- Carry out repair and maintenance
- Perform waste management

Elements and Performance Criteria

Carry out repair and maintenance

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

- PC1.** sterilise the greenhouse structure, pots, containers, propagation benches, capillary matting and floor using the approved disinfectant to prevent any infections and disease
- PC2.** clean dust from the greenhouse sheets to allow sunlight to get through
- PC3.** inspect the greenhouse structure to identify the repair and maintenance needs
- PC4.** check the lightings in the greenhouse structure for the correct functioning and repair or replace them as required
- PC5.** tighten any loose nuts and bolts in the structure using the relevant tools and equipment
- PC6.** apply grease on any metal parts of the structure to prevent rusting
- PC7.** carry out maintenance of the cooling/ heating and fertigation systems as per their maintenance schedule

Perform waste management

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

- PC8.** segregate waste into appropriate categories
- PC9.** dispose the non-recyclable waste appropriately
- PC10.** deposit the recyclable and reusable materials at the identified location

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** routine maintenance activities of a greenhouse structure
- KU2.** how to sanitise relevant parts and components of a greenhouse
- KU3.** recommended disinfectants and cleaning products to be used in a greenhouse
- KU4.** safe method of carrying out any repair and maintenance activities in a greenhouse
- KU5.** periodic maintenance of cooling, heating and fertigation systems
- KU6.** handling of the relevant repair and maintenance tools and equipment
- KU7.** methods of recycling and disposing different types of waste
- KU8.** common sources of pollution and ways to minimise it

Generic Skills (GS)

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

- GS1.** write work-related notes
- GS2.** communicate politely and professionally
- GS3.** read the relevant literature to get the latest updates about the field of work
- GS4.** plan and prioritise tasks for effective time-management
- GS5.** identify possible disruptions to work and take preventive measures
- GS6.** co-ordinate with the co-workers to achieve the work objectives
- GS7.** take quick decisions to deal with emergencies/ accidents

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Carry out repair and maintenance</i>	20	25	-	20
PC1. sterilise the greenhouse structure, pots, containers, propagation benches, capillary matting and floor using the approved disinfectant to prevent any infections and disease	-	-	-	-
PC2. clean dust from the greenhouse sheets to allow sunlight to get through	-	-	-	-
PC3. inspect the greenhouse structure to identify the repair and maintenance needs	-	-	-	-
PC4. check the lightings in the greenhouse structure for the correct functioning and repair or replace them as required	-	-	-	-
PC5. tighten any loose nuts and bolts in the structure using the relevant tools and equipment	-	-	-	-
PC6. apply grease on any metal parts of the structure to prevent rusting	-	-	-	-
PC7. carry out maintenance of the cooling/heating and fertigation systems as per their maintenance schedule	-	-	-	-
<i>Perform waste management</i>	10	15	-	10
PC8. segregate waste into appropriate categories	-	-	-	-
PC9. dispose the non-recyclable waste appropriately	-	-	-	-
PC10. deposit the recyclable and reusable materials at the identified location	-	-	-	-
NOS Total	30	40	-	30

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N1003
NOS Name	Carry out repair and maintenance of greenhouse
Sector	Agriculture
Sub-Sector	Agriculture Crop Production
Occupation	Precision Farming
NSQF Level	4
Credits	2
Version	2.0
Next Review Date	25/11/2024

AGR/N9903: Maintain health and safety at the workplace

Description

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

Scope

The scope covers the following :

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

Elements and Performance Criteria

Maintain personal hygiene

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

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

Maintain clean and safe workplace

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

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

Administer appropriate emergency procedures

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

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

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

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

Generic Skills (GS)

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

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

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

Assessment Criteria

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

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

National Occupational Standards (NOS) Parameters

NOS Code	AGR/N9903
NOS Name	Maintain health and safety at the workplace
Sector	Agriculture
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	1
Version	3.0
Last Reviewed Date	27/08/2024
Next Review Date	27/08/2027
NSQC Clearance Date	27/08/2024

DGT/VSQ/N0102: Employability Skills (60 Hours)

Description

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

Scope

The scope covers the following :

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

Elements and Performance Criteria

Introduction to Employability Skills

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

- PC1.** identify employability skills required for jobs in various industries
- PC2.** identify and explore learning and employability portals

Constitutional values - Citizenship

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

- PC3.** recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.
- PC4.** follow environmentally sustainable practices

Becoming a Professional in the 21st Century

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

- PC5.** recognize the significance of 21st Century Skills for employment
- PC6.** practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life

Basic English Skills

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

- PC7.** use basic English for everyday conversation in different contexts, in person and over the telephone
- PC8.** read and understand routine information, notes, instructions, mails, letters etc. written in English
- PC9.** write short messages, notes, letters, e-mails etc. in English

Career Development & Goal Setting

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

- PC10.** understand the difference between job and career
- PC11.** prepare a career development plan with short- and long-term goals, based on aptitude

Communication Skills

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

- PC12.** follow verbal and non-verbal communication etiquette and active listening techniques in various settings
- PC13.** work collaboratively with others in a team

Diversity & Inclusion

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

- PC14.** communicate and behave appropriately with all genders and PwD
- PC15.** escalate any issues related to sexual harassment at workplace according to POSH Act

Financial and Legal Literacy

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

- PC16.** select financial institutions, products and services as per requirement
- PC17.** carry out offline and online financial transactions, safely and securely
- PC18.** identify common components of salary and compute income, expenses, taxes, investments etc
- PC19.** identify relevant rights and laws and use legal aids to fight against legal exploitation

Essential Digital Skills

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

- PC20.** operate digital devices and carry out basic internet operations securely and safely
- PC21.** use e- mail and social media platforms and virtual collaboration tools to work effectively
- PC22.** use basic features of word processor, spreadsheets, and presentations

Entrepreneurship

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

- PC23.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- PC24.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- PC25.** identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity

Customer Service

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

- PC26.** identify different types of customers
- PC27.** identify and respond to customer requests and needs in a professional manner.
- PC28.** follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

- PC29.** create a professional Curriculum vitae (Résumé)
- PC30.** search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively
- PC31.** apply to identified job openings using offline /online methods as per requirement
- PC32.** answer questions politely, with clarity and confidence, during recruitment and selection
- PC33.** identify apprenticeship opportunities and register for it as per guidelines and requirements

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** need for employability skills and different learning and employability related portals
- KU2.** various constitutional and personal values
- KU3.** different environmentally sustainable practices and their importance
- KU4.** Twenty first (21st) century skills and their importance
- KU5.** how to use English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up
- KU6.** importance of career development and setting long- and short-term goals
- KU7.** about effective communication
- KU8.** POSH Act
- KU9.** Gender sensitivity and inclusivity
- KU10.** different types of financial institutes, products, and services
- KU11.** how to compute income and expenditure
- KU12.** importance of maintaining safety and security in offline and online financial transactions
- KU13.** different legal rights and laws
- KU14.** different types of digital devices and the procedure to operate them safely and securely
- KU15.** how to create and operate an e- mail account and use applications such as word processors, spreadsheets etc.
- KU16.** how to identify business opportunities
- KU17.** types and needs of customers
- KU18.** how to apply for a job and prepare for an interview
- KU19.** apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

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

- GS1.** read and write different types of documents/instructions/correspondence
- GS2.** communicate effectively using appropriate language in formal and informal settings
- GS3.** behave politely and appropriately with all
- GS4.** how to work in a virtual mode

- GS5.** perform calculations efficiently
- GS6.** solve problems effectively
- GS7.** pay attention to details
- GS8.** manage time efficiently
- GS9.** maintain hygiene and sanitization to avoid infection

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	1	1	-	-
PC1. identify employability skills required for jobs in various industries	-	-	-	-
PC2. identify and explore learning and employability portals	-	-	-	-
<i>Constitutional values – Citizenship</i>	1	1	-	-
PC3. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
PC4. follow environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	2	4	-	-
PC5. recognize the significance of 21st Century Skills for employment	-	-	-	-
PC6. practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
<i>Basic English Skills</i>	2	3	-	-
PC7. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
PC8. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
PC9. write short messages, notes, letters, e-mails etc. in English	-	-	-	-
<i>Career Development & Goal Setting</i>	1	2	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. understand the difference between job and career	-	-	-	-
PC11. prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
<i>Communication Skills</i>	2	2	-	-
PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
PC13. work collaboratively with others in a team	-	-	-	-
<i>Diversity & Inclusion</i>	1	2	-	-
PC14. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
<i>Financial and Legal Literacy</i>	2	3	-	-
PC16. select financial institutions, products and services as per requirement	-	-	-	-
PC17. carry out offline and online financial transactions, safely and securely	-	-	-	-
PC18. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
<i>Essential Digital Skills</i>	3	4	-	-
PC20. operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
PC22. use basic features of word processor, spreadsheets, and presentations	-	-	-	-
<i>Entrepreneurship</i>	2	3	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
PC24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
PC25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
<i>Customer Service</i>	1	2	-	-
PC26. identify different types of customers	-	-	-	-
PC27. identify and respond to customer requests and needs in a professional manner.	-	-	-	-
PC28. follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship & Jobs</i>	2	3	-	-
PC29. create a professional Curriculum vitae (Résumé)	-	-	-	-
PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
PC31. apply to identified job openings using offline /online methods as per requirement	-	-	-	-
PC32. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
NOS Total	20	30	-	-

National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0102
NOS Name	Employability Skills (60 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	4
Credits	2
Version	1.0
Last Reviewed Date	18/02/2025
Next Review Date	18/02/2028
NSQC Clearance Date	18/02/2025

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

- 1.Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
- 2.The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
- 3.Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
- 4.Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
- 5.In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.
- 6In 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/N1001.Prepare for the greenhouse installation	30	40	-	30	100	25
AGR/N1002.Install greenhouse as per the layout	30	40	-	30	100	35
AGR/N1003.Carry out repair and maintenance of greenhouse	30	40	-	30	100	30
AGR/N9903.Maintain health and safety at the workplace	40	25	-	35	100	5
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	0	0	50	5
Total	150	175	-	125	450	100

Acronyms

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

Glossary

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

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