



# Pesticide & Fertilizer Applicator

QP Code: AGR/Q1202

Version: 4.0

NSQF Level: 2.5

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/Q1202: Pesticide & Fertilizer Applicator

### Brief Job Description

A Pesticide & Fertilizer Applicator is responsible for assessing nutrient needs along with pest and disease infestation in agricultural crops and applying pesticides and fertilizers.

### Personal Attributes

The individual must be physically fit to work for long hours in outdoor settings. The person must have problem-solving skills along with the ability to co-ordinate with others to achieve the work objectives. Ability to read, write and communicate well are the other important attributes required in this job role.

### Applicable National Occupational Standards (NOS)

#### Compulsory NOS:

1. [AGR/N1210: Assess pest infestation and fertilizer needs of the crop](#)
2. [AGR/N1211: Prepare and apply pesticides and fertilizers](#)
3. [AGR/N9903: Maintain health and safety at the workplace](#)
4. [DGT/VSQ/N0102: Employability Skills \(60 Hours\)](#)

### Qualification Pack (QP) Parameters

<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Agriculture Crop Production
<b>Occupation</b>	Farm Management
<b>Country</b>	India
<b>NSQF Level</b>	2.5
<b>Credits</b>	9
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/8341.9900

<b>Minimum Educational Qualification &amp; Experience</b>	<p>9th grade pass OR 8th grade pass with 1.5 years of experience relevant experience in Agriculture and allied sectors OR 5th grade pass with 4.5 years of experience relevant experience in Agriculture and allied sectors OR Ability to read and write with 6 Years of experience relevant experience in Agriculture and allied sectors OR Previous relevant Qualification of NSQF Level (2) with 6 Months of experience relevant experience in Agriculture and allied sectors</p>
<b>Minimum Level of Education for Training in School</b>	
<b>Pre-Requisite License or Training</b>	NA
<b>Minimum Job Entry Age</b>	18 Years
<b>Last Reviewed On</b>	NA
<b>Next Review Date</b>	NA
<b>NSQC Approval Date</b>	
<b>Version</b>	4.0

## **AGR/N1210: Assess pest infestation and fertilizer needs of the crop**

### **Description**

This unit is about identifying the pest infestation and nutrient deficiencies of the crop.

### **Scope**

The scope covers the following :

- Identify the pests infesting the crop
- identify the nutrient deficiencies of the crop

### **Elements and Performance Criteria**

#### *Identify the pests infesting the crop*

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

- PC1.** conduct a field survey to determine the occurrence of pest damage
- PC2.** check if a specific type of crop has been attacked
- PC3.** collect samples of pests and damaged crops
- PC4.** detect the symptoms of damage caused by pest
- PC5.** examine the pest's feeding pattern to establish the type of damage
- PC6.** identify the pest by observing its physical attributes
- PC7.** establish the stage of pest growth
- PC8.** identify the disease infesting the crop
- PC9.** evaluate various measures available to control pest and diseases
- PC10.** select the most appropriate control measure
- PC11.** use the appropriate Personal Protective Equipment (PPE) while examining the crop and collecting samples

#### *Identify the nutrient deficiencies of the crop*

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

- PC12.** identify the signs of nutrient deficiency in the crop such as foliage discoloration and stunted plants
- PC13.** co-ordinate with an authorised lab to diagnose any disease in the crop due to nutrient deficiency
- PC14.** determine the effect of prevailing weather conditions on crop growth
- PC15.** collect soil sample from the field to get the nutrient availability in the soil tested
- PC16.** coordinate with an authorised lab to get the soil sample tested
- PC17.** identify the need of appropriate macro and micro nutrients
- PC18.** select the fertilizer with the required macro and micro nutrients

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- KU1.** identification of pest/ disease infestation through field visit
- KU2.** collection of samples of crop infested by pests and diseases
- KU3.** various symptoms of damage caused by pests
- KU4.** examination of the feeding pattern to establish the type of damage
- KU5.** identification of the pest through its physical attributes and the stage of growth
- KU6.** the criteria for selecting control measures for crop pests and disease
- KU7.** use of the appropriate PPE while examining the crop and collecting samples
- KU8.** signs of nutrient deficiency in the crop such as foliage discoloration and stunted plants
- KU9.** the process of diagnosing diseases in the crop caused by nutrient deficiency
- KU10.** the effect of weather conditions on crop growth
- KU11.** the process of collecting and testing a soil sample through an authorised lab to assess its nutrient levels
- KU12.** the process of identifying a fertilizer with the required macro and micro nutrients based on the soil test

### **Generic Skills (GS)**

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

- GS1.** write work-related notes and maintain relevant records
- GS2.** read the relevant literature to get latest updates about 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.** plan and prioritise 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 work objectives
- GS8.** identify possible disruptions to work and take appropriate preventive measures
- GS9.** take quick decisions to deal with workplace emergencies/ accidents

**Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Identify the pests infesting the crop</i>	<b>20</b>	<b>25</b>	-	<b>20</b>
<b>PC1.</b> conduct a field survey to determine the occurrence of pest damage	-	-	-	-
<b>PC2.</b> check if a specific type of crop has been attacked	-	-	-	-
<b>PC3.</b> collect samples of pests and damaged crops	-	-	-	-
<b>PC4.</b> detect the symptoms of damage caused by pest	-	-	-	-
<b>PC5.</b> examine the pest's feeding pattern to establish the type of damage	-	-	-	-
<b>PC6.</b> identify the pest by observing its physical attributes	-	-	-	-
<b>PC7.</b> establish the stage of pest growth	-	-	-	-
<b>PC8.</b> identify the disease infesting the crop	-	-	-	-
<b>PC9.</b> evaluate various measures available to control pest and diseases	-	-	-	-
<b>PC10.</b> select the most appropriate control measure	-	-	-	-
<b>PC11.</b> use the appropriate Personal Protective Equipment (PPE) while examining the crop and collecting samples	-	-	-	-
<i>Identify the nutrient deficiencies of the crop</i>	<b>10</b>	<b>15</b>	-	<b>10</b>
<b>PC12.</b> identify the signs of nutrient deficiency in the crop such as foliage discoloration and stunted plants	-	-	-	-
<b>PC13.</b> co-ordinate with an authorised lab to diagnose any disease in the crop due to nutrient deficiency	-	-	-	-
<b>PC14.</b> determine the effect of prevailing weather conditions on crop growth	-	-	-	-

<b>Assessment Criteria for Outcomes</b>	<b>Theory Marks</b>	<b>Practical Marks</b>	<b>Project Marks</b>	<b>Viva Marks</b>
<b>PC15.</b> collect soil sample from the field to get the nutrient availability in the soil tested	-	-	-	-
<b>PC16.</b> coordinate with an authorised lab to get the soil sample tested	-	-	-	-
<b>PC17.</b> identify the need of appropriate macro and micro nutrients	-	-	-	-
<b>PC18.</b> select the fertilizer with the required macro and micro nutrients	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	<b>-</b>	<b>30</b>



**National Occupational Standards (NOS) Parameters**

<b>NOS Code</b>	AGR/N1210
<b>NOS Name</b>	Assess pest infestation and fertilizer needs of the crop
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Agriculture Crop Production
<b>Occupation</b>	Farm Management
<b>NSQF Level</b>	2.5
<b>Credits</b>	2
<b>Version</b>	3.0
<b>Next Review Date</b>	NA

## **AGR/N1211: Prepare and apply pesticides and fertilizers**

### **Description**

This OS unit is about preparing pesticides and fertilizers and applying them in a safe manner along with resource utilisation and waste management.

### **Scope**

The scope covers the following :

- Prepare for applying pesticides and fertilizers
- Prepare spray solutions
- Prepare the plant protection equipment for use
- Apply pesticides and fertilizers
- Carry out after-application activities
- Optimise resource utilisation

### **Elements and Performance Criteria**

#### *Prepare for applying pesticides and fertilizers*

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

- PC1.** assess the risks involved in the application of pesticides and fertilizers
- PC2.** examine the environmental conditions for the safe use of pesticides and fertilizers
- PC3.** arrange the appropriate Personal Protective Equipment (PPE)

#### *Prepare spray solutions*

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

- PC4.** select a safe place for the preparation of pesticides and fertilizers solutions
- PC5.** prepare pesticide and fertilizer spray solutions using water of the recommended quality in a clean drum/ plastic bucket
- PC6.** use a long-handled stir to mix the pesticide/ fertilizer solution appropriately
- PC7.** prepare bordeaux mixture and paste as per the manufacturer's instructions
- PC8.** ensure to prepare the pesticide and fertilizer spray solutions within the recommended time duration prior to their use

#### *Prepare the plant protection equipment for use*

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

- PC9.** identify the relevant Plant Protection Equipment (PPE) such as duster, sprayer and fogging machine for applying pesticides and fertilizers
- PC10.** examine the PPE for any wear and tear/ damage and replace if required
- PC11.** adjust the PPE for use as per the manufacturer's instructions

#### *Apply the pesticides and fertilizers*

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

- PC12.** select the most appropriate method for the application of pesticides and fertilizers
- PC13.** apply pesticides and fertilizers in the recommended quantity and at the right stage of crop growth

- PC14.** maintain the optimum application rate while applying the pesticides and fertilizers
- PC15.** arrange for the protection of non-target crop during the application of pesticides and fertilizers
- PC16.** use the recommended antidotes and treatment methods to treat accidental chemical poisoning

*Carry out after-application activities*

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

- PC17.** store the pesticides and fertilizers after use as per the safety instructions
- PC18.** dispose the expired pesticides and fertilizers in an environment-friendly manner
- PC19.** maintain the record of pesticides and fertilizers used on the crop

*Optimise resource utilisation*

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

- PC20.** optimise the usage of water/ electricity/ materials in various tasks/ processes
- PC21.** connect electrical tools and equipment safely and turn off when not in use
- PC22.** segregate waste into appropriate categories
- PC23.** dispose non-recyclable waste appropriately
- PC24.** 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.** how to assess the risks involved in the application of pesticides and fertilizers
- KU2.** suitable environmental conditions for the safe use of pesticides and fertilizers
- KU3.** identification and correct use of the appropriate PPE for applying pesticides and fertilizers
- KU4.** the importance of adjusting the PPE and ensuring it is fit for use
- KU5.** how to prepare spray fluid, bordeaux mixture and paste and the appropriate time duration to prepare it before use
- KU6.** safety instructions and warnings regarding the use of pesticides and fertilizers
- KU7.** relevant plant protection equipment for applying pesticides and fertilizers such as duster, sprayer, fogging machine, etc.
- KU8.** how to prepare the plant protection equipment for use
- KU9.** different methods of applying pesticides and fertilizers
- KU10.** recommended quantity of pesticides and fertilizers to apply according to the stage of crop's growth
- KU11.** optimum application rate for applying pesticide and fertilizers
- KU12.** ways to protect the non-target crop during the application of pesticides and fertilizers
- KU13.** use of the recommended antidotes and treatment methods to treat accidental chemical poisoning
- KU14.** safe storage and disposal of pesticides and fertilizers
- KU15.** the importance of maintaining the record of the usage of pesticides and fertilizers
- KU16.** the importance of following environmental and ecological best practice to minimise the impact on the environment

- KU17.** benefits of resource optimisation
- KU18.** ways of efficiently using various materials and water
- KU19.** common practices of conserving electricity
- KU20.** different methods of recycling and disposing different types of waste
- KU21.** common sources of pollution and ways to minimise it

### **Generic Skills (GS)**

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

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

**Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare for applying pesticides and fertilizers</i>	<b>3</b>	<b>5</b>	-	<b>5</b>
<b>PC1.</b> assess the risks involved in the application of pesticides and fertilizers	-	-	-	-
<b>PC2.</b> examine the environmental conditions for the safe use of pesticides and fertilizers	-	-	-	-
<b>PC3.</b> arrange the appropriate Personal Protective Equipment (PPE)	-	-	-	-
<i>Prepare spray solutions</i>	<b>5</b>	<b>5</b>	-	<b>5</b>
<b>PC4.</b> select a safe place for the preparation of pesticides and fertilizers solutions	-	-	-	-
<b>PC5.</b> prepare pesticide and fertilizer spray solutions using water of the recommended quality in a clean drum/ plastic bucket	-	-	-	-
<b>PC6.</b> use a long-handled stir to mix the pesticide/ fertilizer solution appropriately	-	-	-	-
<b>PC7.</b> prepare bordeaux mixture and paste as per the manufacturer's instructions	-	-	-	-
<b>PC8.</b> ensure to prepare the pesticide and fertilizer spray solutions within the recommended time duration prior to their use	-	-	-	-
<i>Prepare the plant protection equipment for use</i>	<b>2</b>	<b>5</b>	-	<b>5</b>
<b>PC9.</b> identify the relevant Plant Protection Equipment (PPE) such as duster, sprayer and fogging machine for applying pesticides and fertilizers	-	-	-	-
<b>PC10.</b> examine the PPE for any wear and tear/ damage and replace if required	-	-	-	-
<b>PC11.</b> adjust the PPE for use as per the manufacturer's instructions	-	-	-	-
<i>Apply the pesticides and fertilizers</i>	<b>10</b>	<b>15</b>	-	<b>5</b>
<b>PC12.</b> select the most appropriate method for the application of pesticides and fertilizers	-	-	-	-

<b>Assessment Criteria for Outcomes</b>	<b>Theory Marks</b>	<b>Practical Marks</b>	<b>Project Marks</b>	<b>Viva Marks</b>
<b>PC13.</b> apply pesticides and fertilizers in the recommended quantity and at the right stage of crop growth	-	-	-	-
<b>PC14.</b> maintain the optimum application rate while applying the pesticides and fertilizers	-	-	-	-
<b>PC15.</b> arrange for the protection of non-target crop during the application of pesticides and fertilizers	-	-	-	-
<b>PC16.</b> use the recommended antidotes and treatment methods to treat accidental chemical poisoning	-	-	-	-
<i>Carry out after-application activities</i>	<b>5</b>	<b>5</b>	-	<b>5</b>
<b>PC17.</b> store the pesticides and fertilizers after use as per the safety instructions	-	-	-	-
<b>PC18.</b> dispose the expired pesticides and fertilizers in an environment-friendly manner	-	-	-	-
<b>PC19.</b> maintain the record of pesticides and fertilizers used on the crop	-	-	-	-
<i>Optimise resource utilisation</i>	<b>5</b>	<b>5</b>	-	<b>5</b>
<b>PC20.</b> optimise the usage of water/ electricity/ materials in various tasks/ processes	-	-	-	-
<b>PC21.</b> connect electrical tools and equipment safely and turn off when not in use	-	-	-	-
<b>PC22.</b> segregate waste into appropriate categories	-	-	-	-
<b>PC23.</b> dispose non-recyclable waste appropriately	-	-	-	-
<b>PC24.</b> deposit the recyclable and reusable materials at the identified location	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	-	<b>30</b>

**National Occupational Standards (NOS) Parameters**

<b>NOS Code</b>	AGR/N1211
<b>NOS Name</b>	Prepare and apply pesticides and fertilizers
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Agriculture Crop Production
<b>Occupation</b>	Farm Management
<b>NSQF Level</b>	2.5
<b>Credits</b>	4
<b>Version</b>	3.0
<b>Next Review Date</b>	NA

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

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

**National Occupational Standards (NOS) Parameters**

<b>NOS Code</b>	AGR/N9903
<b>NOS Name</b>	Maintain health and safety at the workplace
<b>Sector</b>	Agriculture
<b>Sub-Sector</b>	Generic
<b>Occupation</b>	Generic
<b>NSQF Level</b>	4
<b>Credits</b>	1
<b>Version</b>	4.0
<b>Last Reviewed Date</b>	30/05/2024
<b>Next Review Date</b>	30/05/2027
<b>NSQ Clearance Date</b>	30/05/2024

## **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>	<b>1</b>	<b>1</b>	-	-
<b>PC1.</b> identify employability skills required for jobs in various industries	-	-	-	-
<b>PC2.</b> identify and explore learning and employability portals	-	-	-	-
<i>Constitutional values - Citizenship</i>	<b>1</b>	<b>1</b>	-	-
<b>PC3.</b> 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.	-	-	-	-
<b>PC4.</b> follow environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	<b>2</b>	<b>4</b>	-	-
<b>PC5.</b> recognize the significance of 21st Century Skills for employment	-	-	-	-
<b>PC6.</b> 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>	<b>2</b>	<b>3</b>	-	-
<b>PC7.</b> use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
<b>PC8.</b> read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
<b>PC9.</b> write short messages, notes, letters, e-mails etc. in English	-	-	-	-
<i>Career Development &amp; Goal Setting</i>	<b>1</b>	<b>2</b>	-	-

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

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

## National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	DGT/VSQ/N0102
<b>NOS Name</b>	Employability Skills (60 Hours)
<b>Sector</b>	Cross Sectoral
<b>Sub-Sector</b>	Professional Skills
<b>Occupation</b>	Employability
<b>NSQF Level</b>	4
<b>Credits</b>	2
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	30/09/2023
<b>Next Review Date</b>	30/09/2026
<b>NSQC Clearance Date</b>	30/09/2023

## Assessment Guidelines and Assessment Weightage

### Assessment Guidelines

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

### Minimum Aggregate Passing % at QP Level : 50

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

## Assessment Weightage

Compulsory NOS

<b>National Occupational Standards</b>	<b>Theory Marks</b>	<b>Practical Marks</b>	<b>Project Marks</b>	<b>Viva Marks</b>	<b>Total Marks</b>	<b>Weightage</b>
AGR/N1210.Assess pest infestation and fertilizer needs of the crop	30	40	-	30	100	40
AGR/N1211.Prepare and apply pesticides and fertilizers	30	40	-	30	100	40
AGR/N9903.Maintain health and safety at the workplace	40	25	-	35	100	15
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	-	-	50	5
<b>Total</b>	<b>120</b>	<b>135</b>	<b>-</b>	<b>95</b>	<b>350</b>	<b>100</b>

**Acronyms**

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

**Glossary**

<b>Sector</b>	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.
<b>Sub-sector</b>	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
<b>Occupation</b>	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
<b>Job role</b>	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
<b>Occupational Standards (OS)</b>	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.
<b>Performance Criteria (PC)</b>	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
<b>National Occupational Standards (NOS)</b>	NOS are occupational standards which apply uniquely in the Indian context.
<b>Qualifications Pack (QP)</b>	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.
<b>Unit Code</b>	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
<b>Unit Title</b>	Unit title gives a clear overall statement about what the incumbent should be able to do.
<b>Description</b>	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.
<b>Scope</b>	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.
<b>Knowledge and Understanding (KU)</b>	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.



<b>Organisational Context</b>	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.
<b>Technical Knowledge</b>	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
<b>Core Skills/ Generic Skills (GS)</b>	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.
<b>Electives</b>	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.
<b>Options</b>	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.