

**Assessment Evidence
Guide
For
“Pesticides and Fertiliser
Technology”**

Level-2

**Operate Computer Functions (General)
(Formative Assessment)**



**National Vocational & Technical
Training Commission**

Instruction Sheet for the Candidate

Title of Qualification: National Vocational Certificate Level 2 in Pesticide & Fertiliser Technology (Assistant Technician)	CS Code: 724DOT04A	Level: 02	Version: 01
Competency Standard Title: <ul style="list-style-type: none"> Perform Basic Computer Operations Maintain Personal Health, hygiene and safety Perform Basic Communication Skills 	Assessment Date (DD/MM/YY):		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):</p> <p>1. Assessment Task 1: Candidate is required to set up the Computer and organise assigned files/folders as per instructions, given by assessor.</p> <p>And complete:</p> <p>2. Knowledge assessment test (Written or Oral)</p> <p>3. Portfolios at the time of assessment (if any)</p>
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: Identify physical components of computer</p> <p>Performance Criteria 2: Identify peripheral devices of the computer</p> <p>Performance Criteria 3: Connect all components of computer</p> <p>Performance Criteria 4: Follow procedures to turn on the computer system</p> <p>Performance Criteria 5: Create folders/subfolders with suitable names</p> <p>Performance Criteria 6: Save files in relevant folders</p> <p>Performance Criteria 7: Rename and move folders in different drives</p> <p>Performance Criteria 8: Move folders and files using drag and drop techniques</p> <p>Performance Criteria 9: Save folders and files on different media</p> <p>Performance Criteria 10: Search for folders/subfolders and files using appropriate tool bars</p> <p>Performance Criteria 11: Delete Folder files</p> <p>Performance Criteria 12: Restore deleted folder files</p> <p>Performance Criteria 13: Save any work to be retained</p> <p>Performance Criteria 14: Close open application programs correctly</p> <p>Performance Criteria 15: Shut down computer</p>

	Performance Criteria 16: Switch off any unused peripheral devices Performance Criteria 17: Ensure computer safety
	Portfolios required at the time of assessment (if any) for

Assessors Judgment Guide

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment	✓	✓					
Other Requirement							

Observation Checklist

Assessment Task 1		Description of Assessment Task 1		
		Candidate is required to set up the Computer and organise assigned files/folders as per instructions, given by assessor.		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Identify physical components of computer			
2.	Identify peripheral devices of the computer			
3.	Connect all components of computer			
4.	Follow procedures to turn on the computer system			
5.	Create folders/subfolders with suitable names			
6.	Save files in relevant folders			
7.	Rename and move folders in different drives			
8.	Move folders and files using drag and drop techniques			
9.	Save folders and files on different media			
10.	Search for folders/subfolders and files using appropriate tool bars			
11.	Delete Folder files			
12.	Restore deleted folder files			
13.	Save any work to be retained			
14.	Close open application programs correctly			
15.	Shut down computer			
16.	Switch off any unused peripheral devices			
17.	Ensure computer safety			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		
Each Assessment Task (with performance criteria)				

Knowledge Assessment

Title of Qualification: National Vocational Certificate Level 2 in Pesticide & Fertiliser Technology (Assistant Technician)	CS Code: 724DOT04A	Level: 02	Version: 01
Competency Standard Title: <ul style="list-style-type: none"> Perform Basic Computer Operations Maintain Personal Health, hygiene and safety Perform Basic Communication Skills 	Assessment Date (DD/MM/YY): Assessment Time: 30mins		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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Candidate Details	Name: Registration/Roll Number: Candidate Signature:
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)	
1. A computer cannot "boot" if it does not have the?	
2. The combination of operating system and processor in a compute is referred to as computers?	
3. Modem is a?	
4. Which of the following can be considered as portable computer?	
5. CPU is an abbreviation for?	
6. What is CPU of computer?	
7. A desktop computer is also known as?	

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)	
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8. Numeric pad is in the?	
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ANSWER KEY

Sr.	Answers
1.	Operating system
2.	Platform
3.	Hardware
4.	PDA
5.	Central Processing Unit
6.	Brain
7.	PC
8.	Keyboard

Assessment Evidence Guide

For

“Pesticides and Fertiliser Technology”

Level-2

Perform Soil Sampling for Lab Test

(Formative Assessment)



**National Vocational & Technical
Training Commission**

Instruction Sheet for the Candidate

Title of Qualification: National Vocational Certificate Level 2 in Pesticide & Fertiliser Technology (Assistant Technician)	CS Code: 081PF01A	Level: 02	Version: 01
Competency Standard Title: <ul style="list-style-type: none"> • Perform Soil Sampling for Lab Test • Comply with Work Health and Safety Policies • Maintain Personal Health, hygiene and safety • Perform Basic Communication Skills 	Assessment Date (DD/MM/YY): 		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):</p> <p>1. Assessment Task1: Candidate is required to collect soil samples from different locations according to requirement, including following tasks:</p> <ul style="list-style-type: none"> ○ Sampling (Homogenous, Heterogeneous and Composite) ○ Packaging ○ Labeling <p>(Note: Locations must be assigned by assessor/trainer)</p> <p>And complete:</p> <p>2. Knowledge assessment test (Written or Oral)</p> <p>3. Portfolios at the time of assessment (if any)</p>
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: Identify areas on basis of soil topography for sampling</p> <p>Performance Criteria 2: Select the field to be surveyed on the base of crop, salinity, soil level, etc.</p> <p>Performance Criteria 3: Select and maintain tools and equipment as per requirement</p> <p>Performance Criteria 4: Perform homogenous and Heterogeneous soil sample</p> <p>Performance Criteria 5: Perform Composite soil sampling</p> <p>Performance Criteria 6: Perform labeling of collected soil sample as per set standards</p> <p>Performance Criteria 7: Perform Packaging appropriately as per set standards</p>

	<p>Performance Criteria 8: Identify relevant organizational safety policies and procedures</p> <p>Performance Criteria 9: Follow established safety procedures during work activities</p> <p>Performance Criteria 10: Select personal protective equipment in terms of type and quantity according to work orders</p> <p>Performance Criteria 11: Treat team members with respect and maintain positive relationships to achieve common organizational goals</p> <p>Performance Criteria 12: Listen to instructions carefully & comply with those instructions</p>
	Portfolios required at the time of assessment (if any) for

Assessors Judgment Guide

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment	✓	✓					
Other Requirement							

Observation Checklist

Assessment Task 1	Description of Assessment Task 1 Candidate is required to collect soil samples from different locations according to requirement, including following tasks: <ul style="list-style-type: none"> ○ Sampling (Homogenous, Heterogeneous and Composite) ○ Packaging ○ Labeling 		
During the practical assessment, candidate demonstrated the following:	Yes	No	Remarks
1. Identify areas on basis of soil topography for sampling			
2. Select the field to be surveyed on the base of crop, salinity, soil level, etc.			
3. Select and maintain tools and equipment as per requirement			
4. Perform homogenous and Heterogeneous soil sample			
5. Perform Composite soil sampling			
6. Perform labeling of collected soil sample as per set standards			
7. Perform Packaging appropriately as per set standards			
8. Identify relevant organizational safety policies and procedures			
9. Follow established safety procedures during work activities			
10. Select personal protective equipment in terms of type and quantity according to work orders			
11. Treat team members with respect and maintain positive relationships to achieve common organizational goals			
12. Listen to instructions carefully & comply with those instructions			
13. Identify areas on basis of soil topography for sampling			
14. Select the field to be surveyed on the base of crop, salinity, soil level, etc.			
15. Select and maintain tools and equipment as per requirement			
16. Perform homogenous and Heterogeneous soil sample			
17. Perform Composite soil sampling			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>	
Each Assessment Task (with performance criteria)			

Knowledge Assessment

Title of Qualification: National Vocational Certificate Level 2 in Pesticide & Fertiliser Technology (Assistant Technician)	CS Code: 081PF01A	Level: 02	Version: 01
Competency Standard Title: <ul style="list-style-type: none"> Perform Soil Sampling for Lab Test Comply with Work Health and Safety Policies Maintain Personal Health, hygiene and safety Perform Basic Communication Skills 	Assessment Date (DD/MM/YY): Assessment Time: 30 min		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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Candidate Details	Name: Registration/Roll Number: Candidate Signature:
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)	
1. Define Soil?	
2. Enlist any three types of soil?	
3. Define soil structure?	
4. Define soil texture?	
5. Define sandy soil?	
6. Define clay soil?	

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)	
7. Define silt soil?	
8. Define loamy soil	
9. Which tools are used for soil sampling?	
10. What are the methods of soil sampling?	
11. What is grid sampling?	
12. What is zone-based sampling?	
13. What are the 5 most important work ethics?	
14. Enlist different types of waste?	

ANSWER KEY

Sr.	Answers
1.	It is the upper layer of earth in which plants grow; it consists of clay, organic matter and rock particles.
2.	<ol style="list-style-type: none"> 1. Sandy soil 2. Clay soil 3. Silt soil 4. loamy soil
3.	Soil structure is the arrangement of soil particles (sand, silt, clay and organic matter)
4.	Texture indicates the relative content of particles of various sizes, such as sand, silt and clay in the soil.
5.	Light, warm, dry and low in nutrients with high water drainage properties.
6.	Comprised of very fine mineral particles with less organic material and drainage.
7.	Light in weight, retains moisture content with high fertility rate.
8.	Fertile soil contains different minerals and nutrients, With good drainage capability.
9.	Push probes; hammer probes and bucket augers.
10.	<p>There are two main methods used for soil sampling</p> <ul style="list-style-type: none"> • Zone based sampling • Grid sampling
11.	It involves sampling at regular intervals across the landscape of a field.
12.	It is the upper layer of earth in which plants grow; it consists of clay, organic matter and rock particles.
13.	<ol style="list-style-type: none"> 1. Sandy soil 2. Clay soil 3. Silt soil 4. loamy soil
14.	Soil structure is the arrangement of soil particles (sand, silt, clay and organic matter)

Assessment Evidence Guide For “Pesticides and Fertiliser Technology”

Level-2

**Diagnose Plant Health Problems
(Formative Assessment)**



**National Vocational & Technical
Training Commission**

Instruction Sheet for the Candidate

Title of Qualification: National Vocational Certificate Level 2 in Pesticide & Fertiliser Technology (Assistant Technician)	CS Code: 081PF01B	Level: 02	Version: 01
Competency Standard Title: <ul style="list-style-type: none"> • Diagnose Plant health problems • Comply with Work Health and Safety Policies • Maintain Personal Health, hygiene and safety • Perform Basic Communication Skills 	Assessment Date (DD/MM/YY):		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):</p> <p>1. Assessment Task1: Candidate is required to collect Plant samples from different locations according to requirement, including following tasks:</p> <ul style="list-style-type: none"> • Sampling • Packaging • Labeling <p>(Note: Locations must be assigned by assessor/trainer)</p> <p>And complete:</p> <p>2. Knowledge assessment test (Written or Oral)</p> <p>3. Portfolios at the time of assessment (if any)</p>
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: Identify symptoms of plant disease</p> <p>Performance Criteria 2: Identify biotic/abiotic factors</p> <p>Performance Criteria 3: Study habit and habitat of the pest</p> <p>Performance Criteria 4: Assess the severity and extent of disease in a crop</p> <p>Performance Criteria 5: Select and maintain tools and equipment as per requirement</p> <p>Performance Criteria 6: Select diseased plant sample</p> <p>Performance Criteria 7: Perform labeling of collected plant sample as per set standards</p> <p>Performance Criteria 8: Perform Packaging appropriately as per set standards</p> <p>Performance Criteria 9: Identify relevant organizational safety policies and procedures</p> <p>Performance Criteria 10: Follow established safety procedures during work activities</p>

	<p>Performance Criteria 11: Select personal protective equipment in terms of type and quantity according to work orders</p> <p>Performance Criteria 12: Treat team members with respect and maintain positive relationships to achieve common organizational goals</p> <p>Performance Criteria 13: Listen to instructions carefully & comply with those instruction</p>
	Portfolios required at the time of assessment (if any) for

Assessors Judgment Guide

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment	✓	✓					
Other Requirement							

Observation Checklist

Assessment Task 1	Description of Assessment Task 1 Candidate is required to collect Plant samples from different locations according to requirement, including following tasks: <ul style="list-style-type: none"> ○ Sampling ○ Packaging ○ Labeling 		
During the practical assessment, candidate demonstrated the following:	Yes	No	Remarks
1. Identify symptoms of plant disease			
2. Identify biotic/abiotic factors			
3. Study habit and habitat of the pest			
4. Assess the severity and extent of disease in a crop			
5. Select and maintain tools and equipment as per requirement			
6. Select diseased plant sample			
7. Perform labeling of collected plant sample as per set standards			
8. Perform Packaging appropriately as per set standards			
9. Identify relevant organizational safety policies and procedures			
10. Follow established safety procedures during work activities			
11. Select personal protective equipment in terms of type and quantity according to work orders			
12. Treat team members with respect and maintain positive relationships to achieve common organizational goals			
13. Listen to instructions carefully & comply with those instructions			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>	
Each Assessment Task (with performance criteria)			

Knowledge Assessment

Title of Qualification: National Vocational Certificate Level 2 in Pesticide & Fertiliser Technology (Assistant Technician)	CS Code: 081PF01B	Level: 02	Version: 01
Competency Standard Title: <ul style="list-style-type: none"> Diagnose Plant health problems Comply with Work Health and Safety Policies Maintain Personal Health, hygiene and safety Perform Basic Communication Skills 	Assessment Date (DD/MM/YY): Assessment Time: 30 min		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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Candidate Details	Name: Registration/Roll Number: Candidate Signature:
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)	
1. What is meant by term "disease" in plants?	
2. Define pest?	
3. Define symptoms?	
4. Define disease signs?	
5. Enlist the examples of disease signs?	
6. Enlist type of plant disease symptoms?	

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)	
7. Enlist specific sign for fungal diseases?	
8. Enlist any two Fungal disease symptoms:	
9. Enlist any two symptoms for bacterial diseases?	
10. Enlist any two symptoms for plant viral diseases?	
11. Enlist any two biotic factors?	
12. Enlist any two abiotic factors?	
13. Enlist any two basic tools required for plant sampling?	
14. Enlist any two general safety rules?	
15. What is the basic concept communication?	
16. Enlist any three PPPs?	
17. Enlist non –verbal communication techniques?	

ANSWER KEY

Sr.	Answers
1.	A disease is a particular abnormal condition that negatively affects the structure or function of all or part of a plant.
2.	A pest is an unwanted organism that lives and grows where they are not required.
3.	Symptoms are the changes in plant growth or appearance in response to biotic or abiotic factors
4.	Signs are the evidence of the damaging factor.
5.	Chemical residue, egg masses, frass, mycelium, and spores.
6.	Stunning, yellowing, wilting, crinkling, rusting etc
7.	<ul style="list-style-type: none"> • Leaf rust (common leaf rust in corn) • Stem rust (wheat stem rust) • Sclerotinia (white mold) • Powdery mildew
8.	<ul style="list-style-type: none"> • Birds-eye spot on berries (Anthracnose) • Damping off of seedlings (Phytophthora) • Leaf spot (Septoria brown spot) • Chlorosis (Yellowing of leaves)
9.	<ul style="list-style-type: none"> • Leaf spot with yellow halo • Fruit spot • Canker • Crown gall • Shepherd's crook stem ends on woody plants
10.	<ul style="list-style-type: none"> • Mosaic leaf pattern • Crinkled leaves • Yellowed leaves • Plant stunting
11.	Animals, plants, fungi, viruses, bacteria, and protists.
12.	Drought, salinity, temperature extremes, moisture and weather conditions.
13.	Stainless scissors, gloves, knife, lawn scissors, pruning shears, plastic bags, markers etc.
14.	<ol style="list-style-type: none"> 1. Your safety is your personal responsibility. 2. Always follow the correct procedures. 3. Never take shortcuts. 4. Take responsibility and clean up if you made a mess. 5. Clean and organize your workspace. 6. Ensure a clear and easy route to emergency exits and equipment. 7. Be alert and awake on the job.
15.	The basic concept of communication is the process of sending and receiving messages or transferring information from one part (sender) to another (receiver).
16.	<p>Following are important PPPs:</p> <ol style="list-style-type: none"> 1. Safety gloves 2. Safety goggles 3. Helmets 4. Safety shoes etc
17.	<ul style="list-style-type: none"> • Tone of voice • Body language

**Assessment Evidence
Guide
For
“Pesticides and Fertiliser
Technology”**

Level-2

**Perform Pesticide Pre-Application Tasks
(Formative Assessment)**



**National Vocational & Technical
Training Commission**

Instruction Sheet for the Candidate

Title of Qualification: National Vocational Certificate Level 2 in Pesticide & Fertiliser Technology (Assistant Technician)	CS Code: 081PF01C	Level: 02	Version: 01
Competency Standard Title: <ul style="list-style-type: none"> Perform Pesticide Pre-Application Tasks Comply with Work Health and Safety Policies Maintain Personal Health, hygiene and safety Perform Basic Communication Skills 	Assessment Date (DD/MM/YY):		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):</p> <p>Assessment Task1: Candidate is required to perform pest scouting as per Instructions given by assessor and present insect collection box.</p> <p>Assessment Task2: Candidate is required to submit Pest Collection Report.</p> <p>And complete:</p> <ol style="list-style-type: none"> Knowledge assessment test (Written or Oral) Portfolios at the time of assessment (if any)
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: Select appropriate time for scouting</p> <p>Performance Criteria 2: Select appropriate method for scouting (Zig zag, Maryo's and Diagonal)</p> <p>Performance Criteria 3: Perform field visit for pest inspection</p> <p>Performance Criteria 4: Assess the severity of pest infestation</p> <p>Performance Criteria 5: Prepare a site report for supervisor</p> <p>Performance Criteria 6: Select appropriate tools and equipment</p> <p>Performance Criteria 7: Collect pest sample</p> <p>Performance Criteria 8: Follow established safety procedures during work activities</p> <p>Performance Criteria 9: Identify existing or potential safety issues to designated persons</p> <p>Performance Criteria 10: Report work-related incidents and accidents to supervisor</p> <p>Performance Criteria 11: Take necessary measures to minimizing risks</p> <p>Performance Criteria 12: Identify relevant organizational safety policies and procedures</p>

	<p>Performance Criteria 13: Treat team members with respect and maintain positive relationships to achieve common organizational goals</p> <p>Performance Criteria 14: Carefully listen and note down the instructions</p>
	<p>Assessment Task 2</p> <p>Performance Criteria 1: Submit a pest collection report to the supervisor</p> <p>Performance Criteria 2: Carry out the instructions of the supervisor</p> <p>Performance Criteria 3: Report to the supervisor as per organizational SOPs</p>
	<p>Portfolios required at the time of assessment (if any) for</p>

Assessors Judgment Guide

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment	✓	✓					
Other Requirement							

Observation Checklist

Assessment Task 1		Description of Assessment Task 1 Candidate is required to perform pest scouting as per Instructions given by assessor and present insect collection box.		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Select appropriate time for scouting			
2.	Select appropriate method for scouting (Zig zag, Maryo's and Diagonal)			
3.	Perform field visit for pest inspection			
4.	Assess the severity of pest infestation			
5.	Prepare a site report for supervisor			
6.	Select appropriate tools and equipment			
7.	Collect pest sample			
8.	Follow established safety procedures during work activities			
9.	Identify existing or potential safety issues to designated persons			
10.	Report work-related incidents and accidents to supervisor			
11.	Take necessary measures to minimizing risks			
12.	Identify relevant organizational safety policies and procedures			
13.	Treat team members with respect and maintain positive relationships to achieve common organizational goals			
14.	Carefully listen and note down the instructions			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		
Each Assessment Task (with performance criteria)				

Assessment Task 2		Description of Assessment Task 2 Candidate is required to submit Pest Collection Report.		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Submit a pest collection report to the supervisor			
2.	Carry out the instructions of the supervisor			
3.	Report to the supervisor as per organizational SOPs			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		
Each Assessment Task (with performance criteria)				

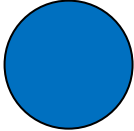

Knowledge Assessment

Title of Qualification: National Vocational Certificate Level 2 in Pesticide & Fertiliser Technology (Assistant Technician)	CS Code: 081PF01C	Level: 02	Version: 01
Competency Standard Title: <ul style="list-style-type: none"> Perform Pesticide Pre-Application Tasks Comply with Work Health and Safety Policies Maintain Personal Health, hygiene and safety Perform Basic Communication Skills 	Assessment Date (DD/MM/YY): Assessment Time: 30 min		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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Candidate Details	Name: Registration/Roll Number: Candidate Signature:
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)	
1. What is pest scouting?	
2. What is pest survey?	
3. What is best time for pest scouting?	
4. Enlist any three methods used for pest scouting?	
5. Define pest infestation?	
6. How to access pest infestation?	

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)	
7. Enlist any three tools and equipment's used for insects sample collection?	
8. Blue circle 	
9. What are the 3P's in first aid?	
10. Yellow triangle with black outline and zigzag arrow 	

ANSWER KEY

Sr.	Answers
1.	It determines the number of insect/pest and their crop losses in a specific area
2.	It is used to access pest population and their losses over large area
3.	Scout either early morning and/or late afternoon
4.	Zigzag, M-shaped, W-shaped and X-shaped.
5.	It is the occurrence of one or more pest species in an area or location
6.	It is accessed by determining a sudden increase in destructiveness or population numbers of a pest species in a given area.
7.	<ul style="list-style-type: none"> • Jars • bags • Nets • Irritating liquids • Sticky traps • Lights
8.	Mandatory action
9.	“Three P’s” <ul style="list-style-type: none"> • Preserve life • Prevent further injury • Provide pain relief
10.	Warning sign – a sign giving warning of a hazard or danger (e.g. ‘danger: electricity’)

Assessment Evidence Guide For “Pesticides and Fertiliser Technology”

**Level-2
Apply Fertiliser
(Formative Assessment)**



**National Vocational & Technical
Training Commission**

Instruction Sheet for the Candidate

Title of Qualification: National Vocational Certificate Level 2 in Pesticide & Fertiliser Technology (Assistant Technician)	CS Code: 081PF01D	Level: 02	Version: 01
Competency Standard Title: <ul style="list-style-type: none"> • Apply Fertiliser • Comply with Work Health and Safety Policies • Maintain Personal Health, hygiene and safety • Perform Basic Communication Skills 	Assessment Date (DD/MM/YY):		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):</p> <ol style="list-style-type: none"> Assessment Task1: Candidate is required to identify different Fertilisers assigned by assessor and calculate the Fertiliser ratio as per recommendations. Assessment Task2: Candidate is required to identify and apply Fertiliser as per crop/soil requirements. <p>And complete:</p> <ol style="list-style-type: none"> Knowledge assessment test (Written or Oral) Portfolios at the time of assessment (if any)
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: Classify different types of Fertilisers (Urea, CAN, DAP, SSP, MOP, SOP, etc.)</p> <p>Performance Criteria 2: Calculate the Fertiliser ratio as per recommendations</p> <p>Performance Criteria 3: Identify relevant organizational safety policies and procedures</p>
	<p>Assessment Task 2</p> <p>Performance Criteria 1:</p> <p>Performance Criteria 1: Select Fertilisers according to crop requirement</p> <p>Performance Criteria 2: Adopt appropriate method for the application of Fertiliser</p> <p>Performance Criteria 3: Select appropriate tools/equipment</p> <p>Performance Criteria 4: Perform the Fertiliser application as per instructions</p>

	<p>Performance Criteria 5: Follow established safety procedures during work activities</p> <p>Performance Criteria 6: Identify existing or potential safety issues to designated persons</p> <p>Performance Criteria 7: Take necessary measures to minimizing risks</p> <p>Performance Criteria 8: Select personal protective equipment in terms of type and quantity according to work orders.</p> <p>Performance Criteria 9: Carefully listen and note down the instructions of Supervisor</p> <p>Performance Criteria 10: Carry out the instructions of the supervisor</p> <p>Performance Criteria 11: Report to the supervisor as per organizational SOPs</p>
	Portfolios required at the time of assessment (if any) for

Assessors Judgment Guide

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment	✓	✓					
Other Requirement							

Observation Checklist

Assessment Task 1		Description of Assessment Task 1		
		Candidate is required to identify different Fertilisers assigned by assessor and calculate the Fertiliser ratio as per recommendations.		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Classify different types of Fertilisers (Urea, CAN, DAP, SSP, MOP, SOP, etc.)			
2.	Calculate the Fertiliser ratio as per recommendations			
3.	Identify relevant organizational safety policies and procedures			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		
Each Assessment Task (with performance criteria)				

Assessment Task 2		Description of Assessment Task 2		
		Candidate is required to identify and apply Fertiliser as per crop/soil requirements.		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Select Fertilisers according to crop requirement			
2.	Adopt appropriate method for the application of Fertiliser			
3.	Select appropriate tools/equipment			
4.	Perform the Fertiliser application as per instructions			
5.	Follow established safety procedures during work activities			
6.	Identify existing or potential safety issues to designated persons			
7.	Take necessary measures to minimizing risks			
8.	Select personal protective equipment in terms of type and quantity according to work orders.			
9.	Carefully listen and note down the instructions of Supervisor			
10.	Carry out the instructions of the supervisor			
11.	Report to the supervisor as per organizational SOPs			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		
Each Assessment Task (with performance criteria)				

Knowledge Assessment

Title of Qualification: National Vocational Certificate Level 2 in Pesticide & Fertiliser Technology (Assistant Technician)	CS Code: 081PF01D	Level: 02	Version: 01
Competency Standard Title: <ul style="list-style-type: none"> Apply Fertiliser Comply with Work Health and Safety Policies Maintain Personal Health, hygiene and safety Perform Basic Communication Skills 	Assessment Date (DD/MM/YY): Assessment Time: 30 min		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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Candidate Details	Name: Registration/Roll Number: Candidate Signature:
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)	
1. Define fertilizer?	
2. Enlist any three inorganic Fertilisers?	
3. Enlist any two methods for fertiliser application?	
4. Categorize the types of fertilizer?	
5. What are organic fertilizers?	
6. What are inorganic fertilizers?	
7. What does CAN, DAP, SSP, MOP, SOP stands for? (any two)	

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)	
8. Red color means?	
9. Green color means?	
10. How many hazard groups?	

ANSWER KEY

Sr.	Answers
1.	A fertilizer is any material of natural or synthetic origin that is applied to soil or plant to supply nutrients for growth and development.
2.	<ul style="list-style-type: none"> • Nitrogen fertilizers • Phosphorus fertilizers • Potassium fertilizers • Calcium, • Magnesium, • Sulphur fertilizers
3.	<ol style="list-style-type: none"> 1. Broadcasting 2. Placement 3. Foliar application 4. Application through irrigation water (Fertigation) 5. Injection into soil
4.	There are two main types of fertilizers i.e., inorganic and organic.
5.	Organic fertilizers are derived from farmyard manure, green manure and poultry manure.
6.	Inorganic fertilizers are also called synthetic fertilizer. They are synthesized artificially having minerals or synthetic chemicals.
7.	CAN: Calcium ammonium nitrate SSP: Single super phosphate MOP: Muriate of Potash SOP: Sulfate of potash DAP: Diammonium phosphate
8.	Red is reserved for danger signs and labels
9.	Green is safety related and means there is no danger present.
10.	Hazardous products are divided into two hazard groups: physical hazards and health hazards.

**Assessment Evidence
Guide
For
“Pesticides and Fertilizer
Technology”
Level-2
(Summative Assessment)**



**National Vocational & Technical
Training Commission**

Instruction Sheet for the Candidate

Title of Qualification: National Vocational Certificate Level 2 in Pesticide & Fertiliser Technology (Assistant Technician)	CS Code:	Level: 02	Version: 01
Competency Standard Title: <ul style="list-style-type: none"> • Comply with Work Health and Safety Policies • Maintain Personal Health, hygiene and safety • Perform Basic Communication Skills • Operate Computer Functions (General) • Perform Soil Sampling for Lab Test • Diagnose Plant health problems • Perform Pesticide Pre-Application Tasks • Apply Fertiliser 	Assessment Date (DD/MM/YY): Assessment Time: 5 hours		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):</p> <ol style="list-style-type: none"> Assessment Task 1: Candidate is required to perform soil sampling using a method (Homogenous or Heterogeneous or Composite) assigned by assessor. Assessment Task 2: Candidate is required to perform Pest Scouting using a method (Zig zag or Maryo's or Diagonal) assigned by assessor to estimate the pest population. Assessment Task 3: Candidate is required to identify plant diseases in given samples, including following tasks: <ul style="list-style-type: none"> ○ Label the sample accordingly ○ Give reasons for the identification Assessment Task 4: Candidate is required to apply a fertiliser assigned by assessor, following SOPs. <p>And complete:</p> <ol style="list-style-type: none"> Knowledge assessment test (Written or Oral) Portfolios at the time of assessment (if any)
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: Identify areas on basis of soil topography for sampling</p> <p>Performance Criteria 2: Select the field to be surveyed on the base of crop, salinity, soil level, etc.</p> <p>Performance Criteria 3: Perform Homogenous/Heterogeneous/Composite soil sampling</p> <p>Performance Criteria 4: Perform labelling of collected soil sample as per set standards</p>

	<p>Assessment Task 2</p> <p>Performance Criteria 1: Select appropriate time for scouting</p> <p>Performance Criteria 2: Select appropriate method for scouting (Zig zag, Maryo's and Diagonal)</p> <p>Performance Criteria 3: Perform field visit for pest inspection</p> <p>Performance Criteria 4: Assess the severity of pest infestation</p> <p>Performance Criteria 5: Prepare a site report for supervisor</p> <p>Performance Criteria 6: Collect pest sample</p>
	<p>Assessment Task 3</p> <p>Performance Criteria 1: Identify symptoms of Plant disease</p> <p>Performance Criteria 2: Identify biotic/abiotic factors</p> <p>Performance Criteria 3: Study habit and habitat of the pest</p> <p>Performance Criteria 4: Assess the severity and extent of disease in a crop</p> <p>Performance Criteria 5: Select diseased Plant Sample</p> <p>Performance Criteria 6: Perform labeling of collected plant sample as per set standards</p>
	<p>Assessment Task</p> <p>Performance Criteria 1: Classify different types of Fertilisers (Urea, CAN, DAP, SSP, MOP, SOP, etc.)</p> <p>Performance Criteria 2: Select Fertilisers according to crop requirement as per given instructions</p> <p>Performance Criteria 3: Adopt appropriate method for the application of Fertiliser</p> <p>Performance Criteria 4: Select appropriate tools/equipment</p> <p>Performance Criteria 5: Perform the Fertiliser application as per instructions</p>
	<p>Portfolios required at the time of assessment (if any) for</p>

Assessors Judgment Guide

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: Assessor's code: Signature of the Assessor:.....

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment	✓	✓					
Other Requirement							

Observation Checklist

Assessment Task 1		Description of Assessment Task 1		
		Candidate is required to perform soil sampling using a method (Homogenous or Heterogeneous or Composite) assigned by assessor.		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Identify areas on basis of soil topography for sampling			
2.	Select the field to be surveyed on the base of crop, salinity, soil level, etc.			
3.	Perform Homogenous/Heterogeneous/Composite soil sampling			
4.	Perform labelling of collected soil sample as per set standards			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		
Each Assessment Task (with performance criteria)				

Assessment Task 2		Description of Assessment Task 2		
		Candidate is required to perform Pest Scouting using a method (Zig zag or Maryo's or Diagonal) assigned by assessor to estimate the pest population.		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Select appropriate time for scouting			
2.	Select appropriate method for scouting (Zig zag, Maryo's and Diagonal)			
3.	Perform field visit for pest inspection			
4.	Assess the severity of pest infestation			
5.	Prepare a site report for supervisor			
6.	Collect pest sample			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		
Each Assessment Task (with performance criteria)				

Assessment Task 3		Description of Assessment Task 3		
		Candidate is required to identify plant diseases in given samples, including following tasks: <ul style="list-style-type: none"> ○ Label the sample accordingly ○ Give reasons for the identification 		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Identify symptoms of Plant disease			
2.	Identify biotic/abiotic factors			
3.	Study habit and habitat of the pest			
4.	Assess the severity and extent of disease in a crop			
5.	Select diseased Plant Sample			
6.	Perform labeling of collected plant sample as per set standards			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		
Each Assessment Task (with performance criteria)				

Assessment Task 4		Description of Assessment Task 4		
		Candidate is required to apply a fertiliser assigned by assessor, following SOPs.		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Classify different types of Fertilisers (Urea, CAN, DAP, SSP, MOP, SOP, etc.)			
2.	Select Fertilisers according to crop requirement as per given instructions			
3.	Adopt appropriate method for the application of Fertiliser			
4.	Select appropriate tools/equipment			
5.	Perform the Fertiliser application as per instructions			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		
Each Assessment Task (with performance criteria)				

Portfolio		Description of Portfolio		
		Candidate is required to present a portfolio including:		
Current <input type="checkbox"/>	Sufficient <input type="checkbox"/>	Authentic <input type="checkbox"/>	Valid <input type="checkbox"/>	Reliable <input type="checkbox"/>
Portfolio meet the following performance standards:		Yes	No	Remarks
1.	File/folder of Perform Soil Sampling for Lab Test			
2.	File/folder of Diagnose Plant health problems			
3.	File/folder of Perform Pesticide Pre-Application Tasks			
4.	File/folder of Apply Fertiliser			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

