

Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Certificate level 2 to 5, in Agriculture Sector (Soil, water and fertilizer testing lab technician)
Competency Standards	Perform Soil Extractable Phosphorus Test
Assessment Task	Determine available / extractable phosphorus in soil Step 1: Prepare a sample of soil for testing. Step 2: Perform analysis of the prepared sample to determine phosphorus

I can.....

Performance Criteria	Yes	No
1. Check the sample label for the required test.	<input type="checkbox"/>	<input type="checkbox"/>
2. Ensure Laboratory room temperature as per requirement.	<input type="checkbox"/>	<input type="checkbox"/>
3. Arrange equipment and safety requirements as per standard method.	<input type="checkbox"/>	<input type="checkbox"/>
4. Set up apparatus in accordance with the standard work instructions.	<input type="checkbox"/>	<input type="checkbox"/>
5. Conduct pre-use and safety checks.	<input type="checkbox"/>	<input type="checkbox"/>
6. Take required amount of soil in extraction/reagent bottle as per recommended procedure.	<input type="checkbox"/>	<input type="checkbox"/>
7. Add recommended amount of extracting solution as per standard method.	<input type="checkbox"/>	<input type="checkbox"/>
8. Transfer filtered sample to volumetric flask as per standard method.	<input type="checkbox"/>	<input type="checkbox"/>
9. Add recommended amount of color developing reagent, mix and leave as per standard method.	<input type="checkbox"/>	<input type="checkbox"/>
10. Prepare phosphorus standards as per requirement.	<input type="checkbox"/>	<input type="checkbox"/>
11. Observe reading on spectrophotometer as per standard method.	<input type="checkbox"/>	<input type="checkbox"/>
12. Ensure run time of instrument as per manual.	<input type="checkbox"/>	<input type="checkbox"/>
13. Run blank sample accordingly.	<input type="checkbox"/>	<input type="checkbox"/>
14. Perform replicate/re-testing as per lab standards.	<input type="checkbox"/>	<input type="checkbox"/>
15. Record quality control data as per lab procedure	<input type="checkbox"/>	<input type="checkbox"/>
16. Calculate soil phosphorus through spectrophotometer reading using recommended formula.	<input type="checkbox"/>	<input type="checkbox"/>
17. Submit the results to lab In-charge	<input type="checkbox"/>	<input type="checkbox"/>
18. Clear and restore work area.	<input type="checkbox"/>	<input type="checkbox"/>
19. Ensure calibration of equipment if required.	<input type="checkbox"/>	<input type="checkbox"/>

20. Use clean and good quality cuvette as per standard method.	<input type="text"/>	<input type="text"/>
21. Use fresh color developing reagent for phosphorus as per standard requirement.	<input type="text"/>	<input type="text"/>
22. Ensure safety protocols as per standard method.	<input type="text"/>	<input type="text"/>

Candidate's Signature _____

Assessor's Signature _____

Date: _____

Instruction Sheet for the Candidate

Qualification	National Vocational Certificate level 2 to 5, in Agriculture Sector (Soil, water and fertilizer testing lab technician)
Competency Standard(s)	Perform Soil Extractable Phosphorus Test
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>Determine available / extractable phosphorus in soil Step 1: Prepare a sample of soil for testing. Step 2: Perform analysis of the prepared sample to determine phosphorus</p>
Time:240 Mins	<p>During a practical assessment, under observation by an assessor, you are required to</p> <p>Determine available / extractable phosphorus in soil Step 1: Prepare a sample of soil for testing. Step 2: Perform analysis of the prepared sample to determine phosphorus</p> <p>Demonstrate the following criteria:</p> <ol style="list-style-type: none"> 1. Check the sample label for the required test. 2. Ensure Laboratory room temperature as per requirement. 3. Arrange equipment and safety requirements as per standard method. 4. Set up apparatus in accordance with the standard work instructions. 5. Conduct pre-use and safety checks. 6. Take required amount of soil in extraction/reagent bottle as per recommended procedure.

<p>Minimum Evidence Required</p>	<ol style="list-style-type: none"> 7. Add recommended amount of extracting solution as per standard method. 8. Transfer filtered sample to volumetric flask as per standard method. 9. Add recommended amount of color developing reagent, mix and leave as per standard method. 10. Prepare phosphorus standards as per requirement. 11. Observe reading on spectrophotometer as per standard method. 12. Ensure run time of instrument as per manual. 13. Run blank sample accordingly. 14. Perform replicate/re-testing as per lab standards. 15. Record quality control data as per lab procedure 16. Calculate soil phosphorus through spectrophotometer reading using recommended formula. 17. Submit the results to lab In-charge 18. Clear and restore work area. 19. Ensure calibration of equipment if required. 20. Use clean and good quality cuvette as per standard method. 21. Use fresh color developing reagent for phosphorus as per standard requirement. 22. Ensure safety protocols as per standard method.
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Assessors Judgment Guide

Qualification	National Vocational Certificate level 2 to 5, in Agriculture Sector (Soil, water and fertilizer testing lab technician)
Competency Standard(s)	Perform Soil Extractable Phosphorus Test
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-between; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div> Name of the Assessor ----- Assessor's code:----- Signature: -----

Assessment Summary (to be filled by the assessor)

Activity	Method					Result	
	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Nature of Activity							
Practical Skill Demonstration			✓				
Knowledge Assessment		✓					
Other Requirement							

Observation Checklist

Assessment Task		Determine available / extractable phosphorus in soil Step 1: Prepare a sample of soil for testing. Step 2: Perform analysis of the prepared sample to determine phosphorus			
During the practical assessment, candidate demonstrated the following:			Yes	No	Remarks
1.	Checked the sample label for the required test.				
2.	Ensured Laboratory room temperature as per requirement.				
3.	Arranged equipment and safety requirements as per standard method.				

4.	Set up apparatus in accordance with the standard work instructions.				
5.	Conducted pre-use and safety checks.				
6.	Took required amount of soil in extraction/reagent bottle as per recommended procedure.				
7.	Added recommended amount of extracting solution as per standard method.				
8.	Transferred filtered sample to volumetric flask as per standard method.				
9.	Added recommended amount of color developing reagent, mix and leave as per standard method.				
10.	Prepared phosphorus standards as per requirement.				
11.	Observed reading on spectrophotometer as per standard method.				
12.	Ensured run time of instrument as per manual.				
13.	Run blank sample accordingly.				
14.	Performed replicate/re-testing as per lab standards.				
15.	Recorded quality control data as per lab procedure				
16.	Calculated soil phosphorus through spectrophotometer reading using recommended formula.				
17.	Submitted the results to lab In-charge				
18.	Cleared and restore work area.				
19.	Ensured calibration of equipment if required.				
20.	Use clean and good quality cuvette as per standard method.				
21.	Used fresh color developing reagent for phosphorus as per standard requirement.				
22.	Ensured safety protocols as per standard method.				
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>			

Feedback to the Candidate

Candidate's Signature_____	Assessor's Signature_____