

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 pH test for water by pH Meter
Assessment Task	Determine the PH of the water sample using the standard test method

I can.....

Performance Criteria	Yes	No
1. Check sample label for requirement of pH testing	<input type="checkbox"/>	<input type="checkbox"/>
2. Ensure Laboratory room temperature according to lab requirement	<input type="checkbox"/>	<input type="checkbox"/>
3. Keep sample at room temperature for few minutes	<input type="checkbox"/>	<input type="checkbox"/>
4. Prepare pH buffer solution as per requirement	<input type="checkbox"/>	<input type="checkbox"/>
5. Arrange equipment as per test method requirement	<input type="checkbox"/>	<input type="checkbox"/>
6. Set up pH meter and/or reagents in accordance with the specified work instructions	<input type="checkbox"/>	<input type="checkbox"/>
7. Conduct pre-use and safety checks	<input type="checkbox"/>	<input type="checkbox"/>
8. Turn on instrument as per manual	<input type="checkbox"/>	<input type="checkbox"/>
9. Rinse electrode with distilled water and check calibration by running known buffers as per method requirement.	<input type="checkbox"/>	<input type="checkbox"/>
10. Take sample in a beaker according to test method.	<input type="checkbox"/>	<input type="checkbox"/>
11. Immerse probe and stir it until instrument gives stable pH reading.	<input type="checkbox"/>	<input type="checkbox"/>
12. Perform test sample replicates as per SOP.	<input type="checkbox"/>	<input type="checkbox"/>
13. Store unused reagents and dispose of wastes as required by relevant regulations and codes.	<input type="checkbox"/>	<input type="checkbox"/>

14. Clean and store equipment as per lab protocol	<input type="checkbox"/>	<input type="checkbox"/>
15. Perform pH meter intermediate checks as per lab quality assurance plan	<input type="checkbox"/>	<input type="checkbox"/>
16. Run blank sample accordingly.	<input type="checkbox"/>	<input type="checkbox"/>
17. Run Laboratory Control samples as per standard.	<input type="checkbox"/>	<input type="checkbox"/>
18. Perform replicate/re-testing as per lab standards.	<input type="checkbox"/>	<input type="checkbox"/>
19. Record quality control data as per lab procedure.	<input type="checkbox"/>	<input type="checkbox"/>
20. Prepare quality control charts of quality assurance activities according to lab procedure	<input type="checkbox"/>	<input type="checkbox"/>
21. Calculate and Note down Results on analyst workbook.	<input type="checkbox"/>	<input type="checkbox"/>
22. Submit the results to lab In-charge	<input type="checkbox"/>	<input type="checkbox"/>
23. Clear and restore work area	<input type="checkbox"/>	<input type="checkbox"/>
24. Ensure before taking any measurement that instrument has been calibrated.	<input type="checkbox"/>	<input type="checkbox"/>
25. Leave probe always in distilled water.	<input type="checkbox"/>	<input type="checkbox"/>
26. Submerge probe in sample to be tested while stirring it gently.	<input type="checkbox"/>	<input type="checkbox"/>
27. Rinse probe tip after use according to SOP	<input type="checkbox"/>	<input type="checkbox"/>

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 pH test for water by pH Meter
Candidate Details	
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 the PH of the water sample using the standard test method</p>
Time:180 mins	<p>During a practical assessment, under observation by an assessor, you are required to</p> <p>Determine the PH of the water sample using the standard test method</p> <p>Demonstrate the following criteria:</p> <ol style="list-style-type: none"> 1. Check sample label for requirement of pH testing 2. Ensure Laboratory room temperature according to lab requirement 3. Keep sample at room temperature for few minutes 4. Prepare pH buffer solution as per requirement 5. Arrange equipment as per test method requirement 6. Set up pH meter and/or reagents in accordance with the specified work instructions 7. Conduct pre-use and safety checks 8. Turn on instrument as per manual 9. Rinse electrode with distilled water and check calibration by running

Minimum Evidence Required	<p>known buffers as per method requirement.</p> <ol style="list-style-type: none"> 10. Take sample in a beaker according to test method. 11. Immerse probe and stir it until instrument gives stable pH reading. 12. Perform test sample replicates as per SOP. 13. Store unused reagents and dispose of wastes as required by relevant regulations and codes. 14. Clean and store equipment as per lab protocol 15. Perform pH meter intermediate checks as per lab quality assurance plan 16. Run blank sample accordingly. 17. Run Laboratory Control samples as per standard. 18. Perform replicate/re-testing as per lab standards. 19. Record quality control data as per lab procedure. 20. Prepare quality control charts of quality assurance activities according to lab procedure 21. Calculate and Note down Results on analyst workbook. 22. Submit the results to lab In-charge 23. Clear and restore work area 24. Ensure before taking any measurement that instrument has been calibrated. 25. Leave probe always in distilled water. 26. Submerge probe in sample to be tested while stirring it gently. 27. Rinse probe tip after use according to SOP
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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 pH test for water by pH Meter
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; 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	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment		✓					
Other Requirement							

Observation Checklist

Assessment Task		Determine the PH of the water sample using the standard test method		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Checked sample label for requirement of pH testing			
2.	Ensured Laboratory room temperature according to lab requirement			
3.	Kept sample at room temperature for few minutes			
4.	Prepared pH buffer solution as per requirement			
5.	Arranged equipment as per test method requirement			
6.	Set up pH meter and/or reagents in accordance with the specified work instructions			
7.	Conducted pre-use and safety checks			
8.	Turned on instrument as per manual			
9.	Rinsed electrode with distilled water and check calibration by running known buffers as per method requirement.			
10	Took sample in a beaker according to test method.			
11	Immerse probe and stirred it until instrument gives stable pH reading.			
12	Performed test sample replicates as per SOP.			
13	Stored unused reagents and dispose of wastes as required by relevant regulations and codes.			

14	Cleaned and store equipment as per lab protocol			
15	Performed pH meter intermediate checks as per lab quality assurance plan			
16	Ran blank sample accordingly.			
17	Ran laboratory Control samples as per standard.			
18	Performed replicate/re-testing as per lab standards.			
19	Recorded quality control data as per lab procedure.			
20	Prepared quality control charts of quality assurance activities according to lab procedure			
21	Calculated and Note down Results on analyst workbook.			
22	Submitted the results to lab In-charge			
23	Cleared and restored work area			
24	Ensured before taking any measurement that instrument has been calibrated.			
25	Left probe always in distilled water.			
26	Submerged probe in sample to be tested while stirring it gently.			
27	Rinsed probe tip after use according to SOP			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Feedback to the Candidate

Candidate's Signature _____ Assessor's Signature _____