

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 Chloride (Cl) test by Titrimetric Method
Assessment Task	Test the water sample for the estimation of chloride ions using Argentometric procedure

I can.....

Performance Criteria	Yes	No
1. Check sample label for required test	<input type="checkbox"/>	<input type="checkbox"/>
2. Keep sample at required temperature	<input type="checkbox"/>	<input type="checkbox"/>
3. Ensure availability of standard solutions according to test procedure	<input type="checkbox"/>	<input type="checkbox"/>
4. Set equipment according to test requirement	<input type="checkbox"/>	<input type="checkbox"/>
5. Standardize silver nitrate with sodium chloride solution according to test method.	<input type="checkbox"/>	<input type="checkbox"/>
6. Wash all glassware as per lab procedure	<input type="checkbox"/>	<input type="checkbox"/>
7. Take required amount of sample in titration flask according to procedural requirement.	<input type="checkbox"/>	<input type="checkbox"/>
8. Add potassium dichromate indicator as per test method.	<input type="checkbox"/>	<input type="checkbox"/>
9. Titrate sample against known concentration of AgNO_3 solution as per procedure.	<input type="checkbox"/>	<input type="checkbox"/>
10. Note down reading according to lab format.	<input type="checkbox"/>	<input type="checkbox"/>
11. Perform replicate test as per standard procedure.	<input type="checkbox"/>	<input type="checkbox"/>
12. Calculate results according to procedure	<input type="checkbox"/>	<input type="checkbox"/>
13. Standardize AgNO_3 standard solution as per lab quality assurance plan	<input type="checkbox"/>	<input type="checkbox"/>
14. Run blank sample accordingly.	<input type="checkbox"/>	<input type="checkbox"/>

15. Run Laboratory Control samples as per standard.	<input type="checkbox"/>	<input type="checkbox"/>
16. Perform replicate/re-testing as per lab standards.	<input type="checkbox"/>	<input type="checkbox"/>
17. Record quality control data as per lab procedure	<input type="checkbox"/>	<input type="checkbox"/>
18. Note down the Results on analyst workbook.	<input type="checkbox"/>	<input type="checkbox"/>
19. Record the results on result record form and submit to reporting section	<input type="checkbox"/>	<input type="checkbox"/>
20. Clear and restore work area	<input type="checkbox"/>	<input type="checkbox"/>
21. Store Silver nitrate stock solution as per standard requirement	<input type="checkbox"/>	<input type="checkbox"/>
22. Use washed and cleaned glassware for analysis	<input type="checkbox"/>	<input type="checkbox"/>
23. Weigh silver nitrate as per standard requirement	<input type="checkbox"/>	<input type="checkbox"/>
24. Ensure PPE required for analysis	<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 Chloride (Cl) test by Titrimetric Method
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>Test the water sample for the estimation of chloride ions using Argentometric procedure</p>
Time:240 Mins	<p>During a practical assessment, under observation by an assessor, you are required to</p> <p>Test the water sample for the estimation of chloride ions using Argentometric procedure</p> <p>Demonstrate the following criteria:</p> <ol style="list-style-type: none"> 1. Check sample label for required test 2. Keep sample at required temperature 3. Ensure availability of standard solutions according to test procedure 4. Set equipment according to test requirement 5. Standardize silver nitrate with sodium chloride solution according to test method. 6. Wash all glassware as per lab procedure 7. Take required amount of sample in titration flask according to procedural requirement. 8. Add potassium dichromate indicator as per test method. 9. Titrate sample against known concentration of AgNO_3 solution as per

<p>Minimum Evidence Required</p>	<p>procedure.</p> <ol style="list-style-type: none"> 10. Note down reading according to lab format. 11. Perform replicate test as per standard procedure. 12. Calculate results according to procedure 13. Standardize AgNO_3 standard solution as per lab quality assurance plan 14. Run blank sample accordingly. 15. Run Laboratory Control samples as per standard. 16. Perform replicate/re-testing as per lab standards. 17. Record quality control data as per lab procedure 18. Note down the Results on analyst workbook. 19. Record the results on result record form and submit to reporting section 20. Clear and restore work area 21. Store Silver nitrate stock solution as per standard requirement 22. Use washed and cleaned glassware for analysis 23. Weigh silver nitrate as per standard requirement 24. Ensure PPE required for analysis
--	--

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 Chloride (Cl) test by Titrimetric Method
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 YETCOMPETENT <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		Test the water sample for the estimation of chloride ions using Argentometric procedure		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Checked sample label for required test			
2.	Kept sample at required temperature			
3.	Ensured availability of standard solutions according to test procedure			
4.	Set equipment according to test requirement			
5.	Standardized silver nitrate with sodium chloride solution according to test method.			
6.	Washed all glassware as per lab procedure			
7.	Took required amount of sample in titration flask according to procedural requirement.			
8.	Added potassium dichromate indicator as per test method.			
9.	Titrated sample against known concentration of AgNO_3 solution as per procedure.			
10	Noted down reading according to lab format.			
11	Performed replicate test as per standard procedure.			
12	Calculated results according to procedure			
13	Standardized AgNO_3 standard solution as per lab quality assurance plan			
14	Run blank sample accordingly.			
15	Run Laboratory Control samples as per standard.			
16	Performed replicate/re-testing as per lab standards.			
17	Recorded quality control data as per lab			

Candidate's Signature _____ **Assessor's Signature** _____