

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 Potassium (k) test by Flame-Photometric Method
Assessment Task	Determine potassium contents of the water sample by flame-photometric process

I can.....

Performance Criteria	Yes	No
1. Check sample label for requirement of analysis of Sodium.	<input type="checkbox"/>	<input type="checkbox"/>
2. Keep sample at room temperature for few minutes.	<input type="checkbox"/>	<input type="checkbox"/>
3. Check for availability of potassium Standard solution of required concentration otherwise prepare as per standard procedure.	<input type="checkbox"/>	<input type="checkbox"/>
4. Arrange Glassware and related Equipment as per test requirements	<input type="checkbox"/>	<input type="checkbox"/>
5. Turn on instrument in accordance with the specified work instructions.	<input type="checkbox"/>	<input type="checkbox"/>
6. Conduct pre-use and safety checks as per manual.	<input type="checkbox"/>	<input type="checkbox"/>
7. Calibrate instrument as per lab protocol	<input type="checkbox"/>	<input type="checkbox"/>
8. Aspire standard solutions as per test method.	<input type="checkbox"/>	<input type="checkbox"/>
9. Aspire sample as per standard test method.	<input type="checkbox"/>	<input type="checkbox"/>
10. Perform test sample replicates as per requirement.	<input type="checkbox"/>	<input type="checkbox"/>
11. Store unused reagents and dispose of wastes as required by relevant regulations and codes.	<input type="checkbox"/>	<input type="checkbox"/>
12. Clean and store equipment as per lab protocol	<input type="checkbox"/>	<input type="checkbox"/>
13. Perform flame photometer intermediate checks 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. Calculate and 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. Do not leave the instrument running unattended while flame is alight.	<input type="checkbox"/>	<input type="checkbox"/>
22. Ensure running of instrument in fume hood or under chimney unit	<input type="checkbox"/>	<input type="checkbox"/>
23. Use deionized water after aspirating high concentration salt solution prior to shut down as per manual	<input type="checkbox"/>	<input type="checkbox"/>
24. Avoid using glass container to store calibration standards.		

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 Potassium (k) test by Flame-Photometric 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>Determine potassium contents of the water sample by flame-photometric process</p>
Time: 240 Mins	<p>During a practical assessment, under observation by an assessor, you are required to</p> <p>Determine potassium contents of the water sample by flame-photometric process</p> <p>Demonstrate the following criteria:</p> <ol style="list-style-type: none"> 1. Check sample label for requirement of analysis of Sodium. 2. Keep sample at room temperature for few minutes. 3. Check for availability of potassium Standard solution of required concentration otherwise prepare as per standard procedure. 4. Arrange Glassware and related Equipment as per test requirements 5. Turn on instrument in accordance with the specified work instructions. 6. Conduct pre-use and safety checks as per manual. 7. Calibrate instrument as per lab protocol 8. Aspire standard solutions as per test method. 9. Aspire sample as per standard test method.

Minimum Evidence Required	<ol style="list-style-type: none"> 10. Perform test sample replicates as per requirement. 11. Store unused reagents and dispose of wastes as required by relevant regulations and codes. 12. Clean and store equipment as per lab protocol 13. Perform flame photometer intermediate checks 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. Calculate and 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. Do not leave the instrument running unattended while flame is alight. 22. Ensure running of instrument in fume hood or under chimney unit 23. Use deionized water after aspirating high concentration salt solution prior to shut down as per manual 24. Avoid using glass container to store calibration standards.
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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 Potassium (k) test by Flame-Photometric 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		Determine potassium contents of the water sample by flame-photometric process		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Checked sample label for requirement of analysis of Sodium.			
2.	Kept sample at room temperature for few minutes.			
3.	Checked for availability of potassium Standard solution of required concentration otherwise prepare as per standard procedure.			
4.	Arranged Glassware and related Equipment as per test requirements			
5.	Turned on instrument in accordance with the specified work instructions.			
6.	Conducted pre-use and safety checks as per manual.			
7.	Calibrated instrument as per lab protocol			
8.	Aspired standard solutions as per test method.			
9.	Aspired sample as per standard test method.			
10	Performed test sample replicates as per requirement.			
11	Stored unused reagents and dispose of wastes as required by relevant regulations and codes.			
12	Cleaned and store equipment as per lab protocol			
13	Performed flame photometer intermediate checks 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 procedure.			
18	Calculated and Note down the Results on analyst workbook.			
19	Recorded the results on result record form and submit to reporting section			
20	Cleared and restore work area			
21	Did not leave the instrument running unattended while flame is alight.			
22	Ensured running of instrument in fume hood or under chimney unit			
23	Used deionized water after aspiring high concentration salt solution prior to shut down as per manual			
24	Avoided using glass container to store calibration standards.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Feedback to the Candidate

Candidate's Signature _____ Assessor's Signature _____