

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	Handling of sophisticated level Equipment 1
Assessment Task	<p>Task 1: Configure and run sophisticated instruments such as Block Digestion Unit, Pipette Dispenser, Flame Photometer, Vacuum Filtration Device, and Water Distillation Unit.</p> <p>Task 2: Execute calibration and operation of Spectrophotometer, Centrifuge machine, Auto clave, Reciprocating and Oscillator shaker</p> <p>Task 3: Calibrate and run the Atomic Absorption Spectrophotometer, Flow Injection Analyser, Kjeldahl Unit, Laminar Flow etc</p>

I can.....

Performance Criteria	Yes	No
1. Ensure cleanliness of equipment before and after use	<input type="checkbox"/>	<input type="checkbox"/>
2. Ensure availability of standard operating procedure for every equipment	<input type="checkbox"/>	<input type="checkbox"/>
3. Maintain 'Repair and Maintenance history sheet' for each specific equipment as per given standard	<input type="checkbox"/>	<input type="checkbox"/>
4. Avoid self-repairing and adjustments of equipment without informing in-charge	<input type="checkbox"/>	<input type="checkbox"/>
5. Ensure proper placing of equipment after use as per lab protocols	<input type="checkbox"/>	<input type="checkbox"/>
6. Maintain list of sophisticated level of equipment following prescribed format	<input type="checkbox"/>	<input type="checkbox"/>
7. Periodically verify and update maintenance list according to plan	<input type="checkbox"/>	<input type="checkbox"/>
8. Follow safety guidelines as per equipment manual	<input type="checkbox"/>	<input type="checkbox"/>

9. Follow SOPs for operating specific equipment as given in manuals	<input type="checkbox"/>	<input type="checkbox"/>
10. Inspect equipment properly before and after use	<input type="checkbox"/>	<input type="checkbox"/>
11. Operate sophisticated level of equipments only under presence of In-charge	<input type="checkbox"/>	<input type="checkbox"/>
12. Perform intermediate checks of equipment according to set instructions before use as per requirement	<input type="checkbox"/>	<input type="checkbox"/>
13. Inspect complete function of equipment	<input type="checkbox"/>	<input type="checkbox"/>
14. After completing standard procedure switch off all equipments as instructed	<input type="checkbox"/>	<input type="checkbox"/>
15. Follow safety guidelines while operating equipments	<input type="checkbox"/>	<input type="checkbox"/>
16. Monitor all errors and record data as instructed	<input type="checkbox"/>	<input type="checkbox"/>
17. Perform basic troubleshoot as prescribed	<input type="checkbox"/>	<input type="checkbox"/>
18. Follow safety guideline during troubleshooting	<input type="checkbox"/>	<input type="checkbox"/>
19. Report in-charge immediately as instructed	<input type="checkbox"/>	<input type="checkbox"/>
20. Maintain troubleshoot history sheet as instructed	<input type="checkbox"/>	<input type="checkbox"/>
21. Prepare document for calibrating equipments as instructed	<input type="checkbox"/>	<input type="checkbox"/>
22. Maintain reference standard record as instructed	<input type="checkbox"/>	<input type="checkbox"/>
23. Calibrate instruments as per given procedures in manuals	<input type="checkbox"/>	<input type="checkbox"/>
24. Manage calibrations from authorized service provider if required as per given standard	<input type="checkbox"/>	<input type="checkbox"/>
25. Distinguish calibrated and non calibrated instruments with labels as instructed	<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)	Handling of sophisticated level Equipment
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>Task 1: Configure and run sophisticated instruments such as Block Digestion Unit, Pipette Dispenser, Flame Photometer, Vacuum Filtration Device, and Water Distillation Unit.</p> <p>Task 2: Execute calibration and operation of Spectrophotometer, Centrifuge machine, Auto clave, Reciprocating and Oscillator shaker</p> <p>Task 3: Calibrate and run the Atomic Absorption Spectrophotometer, Flow Injection Analyser, Kjeldahl Unit, Laminar Flow etc</p>
Time:240 Mins	<p>During a practical assessment, under observation by an assessor, you are required to</p> <p>Task 1: Configure and run sophisticated instruments such as Block Digestion Unit, Pipette Dispenser, Flame Photometer, Vacuum Filtration Device, and Water Distillation Unit.</p> <p>Task 2: Execute calibration and operation of Spectrophotometer, Centrifuge machine, Auto clave, Reciprocating and Oscillator shaker</p> <p>Task 3: Calibrate and run the Atomic Absorption Spectrophotometer, Flow Injection Analyser, Kjeldahl Unit, Laminar Flow etc</p>

Minimum Evidence Required	<p>Demonstrate the following criteria:</p> <ol style="list-style-type: none"> 1. Ensure cleanliness of equipment before and after use 2. Ensure availability of standard operating procedure for every equipment 3. Maintain 'Repair and Maintenance history sheet' for each specific equipment as per given standard 4. Avoid self-repairing and adjustments of equipment without informing in-charge 5. Ensure proper placing of equipment after use as per lab protocols 6. Maintain list of sophisticated level of equipment following prescribed format 7. Periodically verify and update maintenance list according to plan 8. Follow safety guidelines as per equipment manual 9. Follow SOPs for operating specific equipment as given in manuals 10. Inspect equipment properly before and after use 11. Operate sophisticated level of equipments only under presence of In-charge 12. Perform intermediate checks of equipment according to set instructions before use as per requirement 13. Inspect complete function of equipment 14. After completing standard procedure switch off all equipments as instructed 15. Follow safety guidelines while operating equipments 16. Monitor all errors and record data as instructed 17. Perform basic troubleshoot as prescribed 18. Follow safety guideline during troubleshooting 19. Report in-charge immediately as instructed 20. Maintain troubleshoot history sheet as instructed 21. Prepare document for calibrating equipments as instructed 22. Maintain reference standard record as instructed 23. Calibrate instruments as per given procedures in manuals 24. Manage calibrations from authorized service provider if required as per given standard 25. Distinguish calibrated and non-calibrated instruments with labels as instructed
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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)	Handling of sophisticated level Equipment
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	<p>Task 1: Configure and run sophisticated instruments such as Block Digestion Unit, Pipette Dispenser, Flame Photometer, Vacuum Filtration Device, and Water Distillation Unit.</p> <p>Task 2: Execute calibration and operation of Spectrophotometer, Centrifuge machine, Auto clave, Reciprocating and Oscillator shaker</p> <p>Task 3: Calibrate and run the Atomic Absorption Spectrophotometer, Flow Injection Analyser, Kjeldahl Unit, Laminar Flow etc</p>
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During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Ensured cleanliness of equipment before and after use			
2.	Ensured availability of standard operating procedure for every equipment			
3.	Maintained 'Repair and Maintenance history sheet' for each specific equipment as per given standard			
4.	Avoided self-repairing and adjustments of equipment without informing in-charge			
5.	Ensured proper placing of equipment after use as per lab protocols			
6.	Maintained list of sophisticated level of equipment following prescribed format			
7.	Periodically verified and updated maintenance list according to plan			
8.	Followed safety guidelines as per equipment manual			
9.	Followed SOPs for operating specific equipment as given in manuals			
10	Inspected equipment properly before and after use			
11	Operated sophisticated level of equipments only under presence of In-charge			
12	Performed intermediate checks of equipment according to set instructions before use as per requirement			
13	Inspected complete function of equipment			
14	After completing standard procedure switch off all equipment as instructed			
15	Follow safety guidelines while operating equipment			
16	Monitored all errors and record data as instructed			
17	Performed basic troubleshoot as prescribed			
18	Followed safety guideline during troubleshooting			
19	Reported in-charge immediately as instructed			
20	Maintained troubleshoot history sheet as instructed			
21	Prepared document for calibrating equipment as instructed			
22	Maintained reference standard record as instructed			

23	Calibrated instruments as per given procedures in manuals			
24	Managed calibrations from authorized service provider if required as per given standard			
25	Distinguished calibrated and non-calibrated instruments with labels as instructed			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Feedback to the Candidate

Candidate's Signature _____	Assessor's Signature _____