

## Self-Assessment Checklist

<b>Candidate Name</b>	
<b>Registration No.</b>	
<b>Qualification</b>	National Vocational Certificate level 2 to 5, in Agriculture Sector (Soil, water and fertilizer testing lab technician)
<b>Competency Standards</b>	Adhere To Lab Safety Rules
<b>Assessment Task</b>	<b>Perform health safety measures while working for soil, water and fertilizer analysis</b> <b>a) For collecting samples from the field</b> <b>b) For undertaking laboratory analysis</b>

I can.....

<b>Performance Criteria</b>	<b>Yes</b>	<b>No</b>
1. Ensure cleanliness of work Place as per requirement	<input type="checkbox"/>	<input type="checkbox"/>
2. Ensure accessibility of all emergency points as per safety rules	<input type="checkbox"/>	<input type="checkbox"/>
3. Assort necessary materials according to need at workstation	<input type="checkbox"/>	<input type="checkbox"/>
4. Store lightweight items on top and heavy items at base of cabinets	<input type="checkbox"/>	<input type="checkbox"/>
5. Ensure placement of acid containers at ground level according to prescribed standards	<input type="checkbox"/>	<input type="checkbox"/>
6. Ensure frequent cleaning of laboratory sink to prevent choking	<input type="checkbox"/>	<input type="checkbox"/>
7. Maintain aeration for equipments to prevent overheating	<input type="checkbox"/>	<input type="checkbox"/>
8. Maintain environmental conditions as per given standards	<input type="checkbox"/>	<input type="checkbox"/>
9. Wear hair covering cap if required	<input type="checkbox"/>	<input type="checkbox"/>
10. Ensure safety of loose clothing or jewelry	<input type="checkbox"/>	<input type="checkbox"/>
11. Use completely covering footwear.	<input type="checkbox"/>	<input type="checkbox"/>
12. Wear full coverage clothes in lab.	<input type="checkbox"/>	<input type="checkbox"/>
13. Prohibit use of acrylic nails while working with burners, light splints, matches, etc	<input type="checkbox"/>	<input type="checkbox"/>
14. Treat all Chemicals as per Material Safety Data Sheet (MSDS).	<input type="checkbox"/>	<input type="checkbox"/>
15. Use chemical resistant gloves while handling chemicals.	<input type="checkbox"/>	<input type="checkbox"/>

16. Label chemicals as per safety standards.	<input type="checkbox"/>	<input type="checkbox"/>
17. Ensure disposal of chemicals as per set safety rules.	<input type="checkbox"/>	<input type="checkbox"/>
18. Ensure proper selection of chemicals for your work.	<input type="checkbox"/>	<input type="checkbox"/>
19. Use fume hood for working with volatile and flammable chemicals.	<input type="checkbox"/>	<input type="checkbox"/>
20. Clean spillage according to protocols.	<input type="checkbox"/>	<input type="checkbox"/>
21. Ensure storage of chemicals according to compatibility list	<input type="checkbox"/>	<input type="checkbox"/>
22. Avoid leaving instruments unattended when analysis is in progress	<input type="checkbox"/>	<input type="checkbox"/>
23. Ensure personal hygiene with clean lab coat, gloves, face masks, goggles, etc.	<input type="checkbox"/>	<input type="checkbox"/>
24. Refrain from eating, smoking & drinking in lab.	<input type="checkbox"/>	<input type="checkbox"/>
25. Ensure Cleanliness of lab as per lab requirement.	<input type="checkbox"/>	<input type="checkbox"/>
26. Undertake fumigation as per given standards	<input type="checkbox"/>	<input type="checkbox"/>
27. Ensure disposal of laboratory waste as per standard rules	<input type="checkbox"/>	<input type="checkbox"/>
28. Sterilize glassware before and after use as per test method requirement	<input type="checkbox"/>	<input type="checkbox"/>
29. Wash hands properly before and after each task as per safety standard	<input type="checkbox"/>	<input type="checkbox"/>
30. Place all equipment's at designated sites after use	<input type="checkbox"/>	<input type="checkbox"/>
31. Maintain laboratory environment in accordance with lab standards	<input type="checkbox"/>	<input type="checkbox"/>
32. Ensure permission from Lab In-charge before using any high voltage equipment	<input type="checkbox"/>	<input type="checkbox"/>
33. Avoid altering or modifying high-voltage equipment.	<input type="checkbox"/>	<input type="checkbox"/>
34. Ensure high-voltage power supply is switched off when attaching switch.	<input type="checkbox"/>	<input type="checkbox"/>
35. Using one hand only when adjusting high voltage devices.	<input type="checkbox"/>	<input type="checkbox"/>
36. Ensure direct access to electrical panels in accordance with standard safety guidelines.	<input type="checkbox"/>	<input type="checkbox"/>
37. Avoid extensions or loose wire in laboratory.	<input type="checkbox"/>	<input type="checkbox"/>
38. Avoid water and wet hands when working with electrical	<input type="checkbox"/>	<input type="checkbox"/>

devices		
39. Follow lab layout	<input type="checkbox"/>	<input type="checkbox"/>
40. Equip with standard protocols for Sampling	<input type="checkbox"/>	<input type="checkbox"/>
41. Adopt standard procedures for each soil analysis	<input type="checkbox"/>	<input type="checkbox"/>
42. Adopt standard procedures for each water analysis	<input type="checkbox"/>	<input type="checkbox"/>
43. Follow the standard test method (STM) for each fertilizer analysis	<input type="checkbox"/>	<input type="checkbox"/>
44. Ensure availability of standard laboratory manuals	<input type="checkbox"/>	<input type="checkbox"/>
45. Display Lab emergency exit plan layout	<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)	Adhere To Lab Safety Rules
Candidate Details	Name_____ Registration/Roll Number_____
Guidance for Candidate	<p><b>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration &amp; assessment):</b></p> <p><b>Perform health safety measures while working for soil, water and fertilizer analysis</b></p> <p><b>a) For collecting samples from the field</b></p> <p><b>b) For undertaking laboratory analysis</b></p>
Time:180 mins	<p>During a practical assessment, under observation by an assessor, you are required to <b>Perform health safety measures while working for soil, water and fertilizer analysis</b></p> <p><b>a) For collecting samples from the field</b></p> <p><b>b) For undertaking laboratory analysis</b></p> <p>Demonstrate the following criteria:</p>
Minimum Evidence Required	<ol style="list-style-type: none"> <li>1. Ensure cleanliness of work Place as per requirement</li> <li>2. Ensure accessibility of all emergency points as per safety rules</li> <li>3. Assort necessary materials according to need at workstation</li> <li>4. Store lightweight items on top and heavy items at base of cabinets</li> <li>5. Ensure placement of acid containers at ground level according to prescribed standards</li> <li>6. Ensure frequent cleaning of laboratory sink to prevent choking</li> <li>7. Maintain aeration for equipments to prevent overheating</li> <li>8. Maintain environmental conditions as per given standards</li> <li>9. Wear hair covering cap if required</li> <li>10. Ensure safety of loose clothing or jewelry</li> <li>11. Use completely covering footwear.</li> <li>12. Wear full coverage clothes in lab.</li> <li>13. Prohibit use of acrylic nails while working with burners, light splints, matches, etc</li> <li>14. Treat all Chemicals as per Material Safety Data Sheet (MSDS).</li> <li>15. Use chemical resistant gloves while handling chemicals.</li> <li>16. Label chemicals as per safety standards.</li> <li>17. Ensure disposal of chemicals as per set safety rules.</li> <li>18. Ensure proper selection of chemicals for your work.</li> <li>19. Use fume hood for working with volatile and flammable chemicals.</li> </ol>

	<ul style="list-style-type: none"> <li>20. Clean spillage according to protocols.</li> <li>21. Ensure storage of chemicals according to compatibility list</li> <li>22. Avoid leaving instruments unattended when analysis is in progress</li> <li>23. Ensure personal hygiene with clean lab coat, gloves, face masks, goggles, etc.</li> <li>24. Refrain from eating, smoking &amp; drinking in lab.</li> <li>25. Ensure Cleanliness of lab as per lab requirement.</li> <li>26. Undertake fumigation as per given standards</li> <li>27. Ensure disposal of laboratory waste as per standard rules</li> <li>28. Sterilize glassware before and after use as per test method requirement</li> <li>29. Wash hands properly before and after each task as per safety standard</li> <li>30. Place all equipments at designated sites after use</li> <li>31. Maintain laboratory environment in accordance with lab standards</li> <li>32. Ensure permission from Lab In-charge before using any high voltage equipment</li> <li>33. Avoid altering or modifying high-voltage equipment.</li> <li>34. Ensure high-voltage power supply is switched off when attaching switch.</li> <li>35. Using one hand only when adjusting high voltage devices.</li> <li>36. Ensure direct access to electrical panels in accordance with standard safety guidelines.</li> <li>37. Avoid extensions or loose wire in laboratory.</li> <li>38. Avoid water and wet hands when working with electrical devices</li> <li>39. Follow lab layout</li> <li>40. Equip with standard protocols for Sampling</li> <li>41. Adopt standard procedures for each soil analysis</li> <li>42. Adopt standard procedures for each water analysis</li> <li>43. Follow the standard test method (STM) for each fertilizer analysis</li> <li>44. Ensure availability of standard laboratory manuals</li> <li>45. Display Lab emergency exit plan layout</li> </ul>
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## Assessors Judgment Guide

<b>Qualification</b>	National Vocational Certificate level 2 to 5, in Agriculture Sector (Soil, water and fertilizer testing lab technician)
<b>Competency Standard(s)</b>	Adhere To Lab Safety Rules
<b>Candidate Details</b>	Name: _____ Registration/Roll Number: _____ Signature: _____
<b>Assessment Outcome</b>	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> 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

<b>Assessment Task</b>	Perform health safety measures while working for soil, water and fertilizer analysis a) For collecting samples from the field b) For undertaking laboratory analysis			
<b>During the practical assessment, candidate demonstrated the following:</b>		<b>Yes</b>	<b>No</b>	<b>Remarks</b>
1.	Ensured cleanliness of work Place as per requirement			
2.	Ensured accessibility of all emergency points as per safety rules			

3.	Assorted necessary materials according to need at workstation			
4.	Stored lightweight items on top and heavy items at base of cabinets			
5.	Ensured placement of acid containers at ground level according to prescribed standards			
6.	Ensured frequent cleaning of laboratory sink to prevent choking			
7.	Maintained aeration for equipments to prevent overheating			
8.	Maintained environmental conditions as per given standards			
9.	Wore hair covering cap if required			
10.	Ensured safety of loose clothing or jewelry			
11.	Used completely covering footwear.			
12.	Wore full coverage clothes in lab.			
13.	Prohibited use of acrylic nails while working with burners, light splints, matches, etc			
14.	Treated all Chemicals as per Material Safety Data Sheet (MSDS).			
15.	Used chemical resistant gloves while handling chemicals.			
16.	Labeled chemicals as per safety standards.			
17.	Ensured disposal of chemicals as per set safety rules.			
18.	Ensured proper selection of chemicals for your work.			
19.	Used fume hood for working with volatile and flammable chemicals.			
20.	Cleaned spillage according to protocols.			
21.	Ensured storage of chemicals according to compatibility list			
22.	Avoided leaving instruments unattended when analysis is in progress			
23.	Ensured personal hygiene with clean lab coat, gloves, face masks, goggles, etc.			
24.	Refrained from eating, smoking & drinking in lab.			
25.	Ensured Cleanliness of lab as per lab requirement.			
26.	Undertook fumigation as per given standards			
27.	Ensured disposal of laboratory waste as per standard rules			
28.	Sterilized glassware before and after use as			

	per test method requirement			
29	Washed hands properly before and after each task as per safety standard			
30	Placed all equipments at designated sites after use			
31	Maintained laboratory environment in accordance with lab standards			
32	Ensured permission from Lab In-charge before using any high voltage equipment			
33	Avoided altering or modifying high-voltage equipment.			
34	Ensured high-voltage power supply is switched off when attaching switch.			
35	Used one hand only when adjusting high voltage devices.			
36	Ensured direct access to electrical panels in accordance with standard safety guidelines.			
37	Avoided extensions or loose wire in laboratory.			
38	Avoided water and wet hands when working with electrical devices			
39	Followed lab layout			
40	Equipped with standard protocols for Sampling			
41	Adopted standard procedures for each soil analysis			
42	Adopted standard procedures for each water analysis			
43	Followed the standard test method (STM) for each fertilizer analysis			
44	Ensured availability of standard laboratory manuals			
45	Displayed Lab emergency exit plan layout			
<b>Competent</b> <input type="checkbox"/>		<b>Not Yet Competent</b> <input type="checkbox"/>		

<b>Feedback to the Candidate</b>



<b>Candidate's Signature</b> _____
<b>Assessor's Signature</b> _____