

## Instruction Sheet for the Candidate

|                                  |   |
|----------------------------------|---|
| <b>Qualification</b>             | Tunnel Farming, Greenhouse & Agribusiness (Level-5)   |
| <b>Competency Standard</b>       | Perform soil sampling and check soil nutrient composition   |
| <b>Purpose of Assessment</b>     | Formative Assessment  |
| <b>Candidate Details</b>         | Name_____   |
|                                  | Registration/Roll Number_____   |
| <b>Guidance for Candidate</b>    | <p><b>To meet this standard, you are required to complete the following within time frame (for practical demonstration &amp; assessment):</b></p> <ol style="list-style-type: none"> <li>1. Prepare for soil sampling</li> <li>2. Collect soil sample</li> <li>3. Evaluate and implement recommendations</li> </ol>   |
| <b>Time: 03 Hrs.</b>             | <p>During a practical assessment, under observation by an assessor, you are required to :</p> <ol style="list-style-type: none"> <li><b>1. Prepare for soil sampling</b> <ul style="list-style-type: none"> <li>• Identify and arrange required sampling tools</li> <li>• Ensure personal safety measures as per job requirement</li> <li>• Maintain phytosanitary conditions at site as per standards</li> </ul> </li> <li><b>2. Collect soil sample</b> <ul style="list-style-type: none"> <li>• Arrange tools for sampling as per requirements.</li> <li>• Collect sub-samples of given site as per random sampling techniques</li> <li>• Collect sub-samples of given site as per zone based sampling techniques</li> <li>• Collect sub-samples of given site as per grid sampling techniques</li> <li>• Collect sub-samples of given site as per stratified sampling techniques</li> <li>• Make composite sample according to standard method</li> <li>• Draw representative sample for laboratory testing</li> <li>• Transport sample to laboratory as per SOPs</li> </ul> </li> <li><b>3. Evaluate and implement recommendations</b> <ul style="list-style-type: none"> <li>• Collect report</li> <li>• Identify deficient and excess nutrients as per prescribed standard</li> <li>• Adopt appropriate measures according to the report recommendations as per standard requirements</li> </ul> </li> </ol> |
| <b>Minimum Evidence Required</b> |   |

|  |  |
|--|--|
|  | <ul style="list-style-type: none"> <li>• Monitor/Evaluate the results</li> <li>• Ensure health and safety standards</li> </ul> |
|--|--|

## Self-Assessment Checklist

|                              |   |
|------------------------------|---|
| <b>Candidate Name</b>        |   |
| <b>Registration No.</b>      |   |
| <b>Qualification</b>         | Tunnel Farming, Greenhouse & Agribusiness (Level-5)   |
| <b>Competency Standard</b>   | Perform soil sampling and check soil nutrient composition   |
| <b>Purpose of Assessment</b> | Formative Assessment  |
| <b>Assessment Task</b>       | <ol style="list-style-type: none"> <li>1. Prepare for soil sampling</li> <li>2. Collect soil sample</li> <li>3. Evaluate and implement recommendations</li> </ol> |

I can.....

| <b>Performance Criteria</b>  | <b>Yes</b>               | <b>No</b>                |
|--|--------------------------|--------------------------|
| 1. Identify and arrange required sampling tools                            | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Ensure personal safety measures as per job requirement                  | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Maintain phytosanitary conditions at site as per standards              | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Arrange tools for sampling as per requirements.                         | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Collect sub-samples of given site as per random sampling techniques     | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Collect sub-samples of given site as per zone based sampling techniques | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Collect sub-samples of given site as per grid sampling techniques       | <input type="checkbox"/> | <input type="checkbox"/> |

|   |                      |                      |
|---|----------------------|----------------------|
| 8. Collect sub-samples of given site as per stratified sampling techniques                          | <input type="text"/> | <input type="text"/> |
| 9. Make composite sample according to standard method   | <input type="text"/> | <input type="text"/> |
| 10. Draw representative sample for laboratory testing   | <input type="text"/> | <input type="text"/> |
| 11. Transport sample to laboratory as per SOPs  | <input type="text"/> | <input type="text"/> |
| 12. Collect report  | <input type="text"/> | <input type="text"/> |
| 13. Identify deficient and excess nutrients as per prescribed standard                              | <input type="text"/> | <input type="text"/> |
| 14. Adopt appropriate measures according to the report recommendations as per standard requirements | <input type="text"/> | <input type="text"/> |
| 15. Monitor/Evaluate the results  | <input type="text"/> | <input type="text"/> |
| 16. Ensure health and safety standards  | <input type="text"/> | <input type="text"/> |

Candidate's Signature\_\_\_\_\_ Assessor's Signature\_\_\_\_\_

Date: \_\_\_\_\_

## Assessors Judgment Guide

|                              |  |
|------------------------------|--|
| <b>Qualification</b>         | Tunnel Farming, Greenhouse & Agribusiness (Level-5)  |
| <b>Competency Standard</b>   | Perform soil sampling and check soil nutrient composition  |
| <b>Purpose of Assessment</b> | Formative Assessment   |
| <b>Candidate Details</b>     | Name: _____<br>Registration/Roll Number: _____ Signature: _____  |
| <b>Assessment Outcome</b>    | <div style="display: flex; justify-content: space-between; align-items: center;"> <span><b>COMPETENT</b> <input type="checkbox"/></span> <span><b>NOT YETCOMPETENT</b> <input type="checkbox"/></span> </div> Name of the Assessor _____<br>Assessor's code: _____<br>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>  | 1. Prepare for soil sampling<br>2. Collect soil sample<br>3. Evaluate and implement recommendations |   |                          |                |
| <b>During the practical assessment, candidate demonstrated the following:</b> |   | <b>Yes</b>  | <b>No</b>                | <b>Remarks</b> |
| 1.  | Identify and arrange required sampling tools  | <input type="checkbox"/>                          | <input type="checkbox"/> |                |
| 2.  | Ensure personal safety measures as per job requirement  | <input type="checkbox"/>                          | <input type="checkbox"/> |                |
| 3.  | Maintain phytosanitary conditions at site as per standards  | <input type="checkbox"/>                          | <input type="checkbox"/> |                |
| 4.  | Arrange tools for sampling as per requirements.   | <input type="checkbox"/>                          | <input type="checkbox"/> |                |
| 5.  | Collect sub-samples of given site as per random sampling techniques                                 | <input type="checkbox"/>                          | <input type="checkbox"/> |                |
| 6.  | Collect sub-samples of given site as per zone based sampling techniques                             | <input type="checkbox"/>                          | <input type="checkbox"/> |                |
| 7.  | Collect sub-samples of given site as per grid sampling techniques                                   | <input type="checkbox"/>                          | <input type="checkbox"/> |                |
| 8.  | Collect sub-samples of given site as per stratified sampling techniques                             | <input type="checkbox"/>                          | <input type="checkbox"/> |                |
| 9.  | Make composite sample according to standard method  | <input type="checkbox"/>                          | <input type="checkbox"/> |                |
| 10.   | Draw representative sample for laboratory testing   | <input type="checkbox"/>                          | <input type="checkbox"/> |                |
| 11.   | Transport sample to laboratory as per SOPs  | <input type="checkbox"/>                          | <input type="checkbox"/> |                |
| 12.   | Collect report  | <input type="checkbox"/>                          | <input type="checkbox"/> |                |
| 13.   | Identify deficient and excess nutrients as per prescribed standard                                  | <input type="checkbox"/>                          | <input type="checkbox"/> |                |
| 14.   | Adopt appropriate measures according to the report recommendations as per standard requirements     | <input type="checkbox"/>                          | <input type="checkbox"/> |                |
| 15.   | Monitor/Evaluate the results  | <input type="checkbox"/>                          | <input type="checkbox"/> |                |
| 16.   | Ensure health and safety standards  | <input type="checkbox"/>                          | <input type="checkbox"/> |                |
| <b>Competent</b> <input type="checkbox"/>                                     |   | <b>Not Yet Competent</b> <input type="checkbox"/> |                          |                |

## Knowledge Assessment

|                              |   |
|------------------------------|---|
| <b>Qualification</b>         | Tunnel Farming, Greenhouse & Agribusiness (Level-5)   |
| <b>Competency Standard</b>   | Perform soil sampling and check soil nutrient composition   |
| <b>Purpose of Assessment</b> | Formative Assessment  |
| <b>Candidate Details</b>     | Name: _____<br>Registration/Roll Number: _____ Candidate Signature: _____   |
| <b>Assessment Outcome</b>    | <div style="display: flex; justify-content: space-around; align-items: center;"> <span><b>COMPETENT</b> <input type="checkbox"/></span> <span><b>NOT YET COMPETENT</b> <input type="checkbox"/></span> </div> Name of the Assessor: _____<br>Assessor's code: _____<br>Signature of the Assessor: _____ |

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

| Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application) |   | Satisfactory | Not Satisfactory |
|---|---|--------------|------------------|
| 1.  | What are the essential nutrients for off-season vegetable production? |              |                  |
|   |   |              |                  |
| 2.  | What is the ideal requirement/quantity of trace elements?             |              |                  |
|   |   |              |                  |
| 3.  | Name the instruments required for soil sampling?                      |              |                  |

|    |  |  |  |
|----|--|--|--|
|    |  |  |  |
| 4. | Explain soil sampling techniques?                  |  |  |
|    |  |  |  |
| 5. | What are the mobile and immobile nutrients?        |  |  |
|    |  |  |  |
|    |  |  |  |
| 6. | How we can measure soil type (Loamy/Sandy/Clayey)? |  |  |
|    |  |  |  |
|    |  |  |  |

| Feedback to the Candidate |
|---------------------------|
|                           |
|                           |
|                           |
|                           |
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**Candidate's Signature**\_\_\_\_\_ **Assessor's Signature** \_\_\_\_\_