

## Knowledge Assessment

|                               |   |
|-------------------------------|---|
| <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> | <b>Perform Conductivity test of water by EC Meter</b>   |
| <b>Candidate Details</b>      | Name: _____<br><br>Registration/Roll Number: _____ Candidate Signature: _____<br>_____  |
| <b>Assessment Outcome</b>     | <div style="display: flex; justify-content: space-around; align-items: center;"> <span>COMPETENT <input type="checkbox"/></span> <span>NOT YET COMPETENT <input type="checkbox"/></span> </div><br>Name of the Assessor: _____ Assessor's code: _____<br><br>Signature of the Assessor: _____ |

| Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application) |  | Satisfactory | Not Satisfactory |
|---|--|--------------|------------------|
| 1.  | What is Electric conductivity?                     |              |                  |
|   |  |              |                  |
| 2.  | What is SI unit of electric conductivity?          |              |                  |
|   |  |              |                  |
| 3.  | What are the other units of electric conductivity? |              |                  |
|   |  |              |                  |

|    |  |  |  |
|----|--|--|--|
| 4. | What are the factors that affect electric conductivity?                  |  |  |
|    |  |  |  |
| 5. | At what temperature EC reported?   |  |  |
|    | a) 25°C<br>b) 55°C<br>c) 15°C<br>d) 5°                                   |  |  |
| 6. | How does Electrical conductivity meter works?                            |  |  |
|    |  |  |  |
| 7. | Which type water used for washing electrode of EC meter?                 |  |  |
|    | a) Tape water<br>b) River water<br>c) Distilled water<br>d) Acidic water |  |  |
| 8. | Why EC is important in water?  |  |  |

## Key

National Vocational Certificate level 2 to 5, in **Agriculture Sector (Soil, Water and Fertilizer Testing Lab Technician)**

### Perform Conductivity test of water by EC Meter

| <b>Questions</b> (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application) |   | <b>Satisfactory</b> | <b>Not Satisfactory</b> |
|--|---|---------------------|-------------------------|
| 1.   | What is Electric conductivity?  |                     |                         |
|  | Electrical conductivity is the ability of a material to conduct electricity   |                     |                         |
| 2.   | What is SI unit of electric conductivity?   |                     |                         |
|  | The SI unit of conductivity is Siemens per meter (S/m).   |                     |                         |
| 3.   | What are the other units of electric conductivity?  |                     |                         |
|  | <ul style="list-style-type: none"> <li>• S/cm</li> <li>• mS/cm</li> <li>• <math>\mu</math>S/cm</li> </ul>   |                     |                         |
| 4.   | What are the factors that affect electric conductivity?   |                     |                         |
|  | There are three main factors that affect the conductivity of a solution: the concentrations of ions, the type of ions, and the temperature of the solution. |                     |                         |
| 5.   | At what temperature EC reported?  |                     |                         |
|  | 25°C  |                     |                         |
| 6.   | How does Electrical conductivity meter works?   |                     |                         |

|    |  |  |  |
|----|--|--|--|
|    |  |  |  |
|    | Conductivity meter consists of a probe that measures conductivity. A small electrical current flow between two electrodes set a certain distance apart, usually around 1 cm. If there is a high concentration of ions in the solution, the conductance is high, resulting in a fast current. |  |  |
| 7. | Which type water used for washing electrode of EC meter?   |  |  |
|    | Distilled water  |  |  |
| 8. | Why EC is important in water?  |  |  |
|    | The conductivity of water refers to the ability of water to conduct an electrical current. ... The reason that the conductivity of water is important is because it can tell you how much dissolved substances, chemicals, and minerals are present in the water.                            |  |  |