

Instruction Sheet for the Candidate

Qualification	Tunnel Farming, Greenhouse & Agribusiness(Level-5)
Competency Standard	<ol style="list-style-type: none"> 1. Perform Integrated Pest Management (IPM) 2. Perform weeding 3. Perform Integrated Disease Management (IDM)
Purpose of Assessment	Summative Assessment
Candidate Details	Name_____ Registration/Roll Number_____
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within time frame (for practical demonstration & assessment):</p> <p>Perform field survey of the infected area and suggest appropriate methods for the management of plant diseases, insects and weeds.</p>
Time: 04 Hrs.	<p>During a practical assessment, under observation by an assessor, you are required to:</p> <ol style="list-style-type: none"> 1. Survey the field of infected crop. 2. Perform disease /pest identification on the basis of sign and symptoms. 3. Perform collection of diseased samples. 4. Perform collection of infected soil samples. 5. Perform packaging and labelling of diseased plant and soil samples for laboratory diagnoses. 6. Perform isolation of pathogen from diseased samples. 7. Perform slide preparation for microscopic analysis. 8. Perform media preparation and inoculation of pathogen. 9. Monitor the balance status between insect/pest and beneficial organisms by selecting the specific areas of the field. 10. Perform identification and manual eradication / hoeing of weeds. 11. Suggest cultural practices on the basis of type and severity of the infection. 12. Apply pre/post emergence weedicides. 13. Apply suitable insecticides, fungicides and bactericides. 14. Maintain the data sheets for record keeping.
Minimum Evidence Required	

Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	Tunnel Farming, Greenhouse & Agribusiness (Level-5)
Competency Standard	<ol style="list-style-type: none"> 1. Perform Integrated Pest Management (IPM) 2. Perform weeding 3. Perform Integrated Disease Management (IDM)
Purpose of Assessment	Summative Assessment
Assessment Task	Perform field survey of the infected area and suggests appropriate methods for the management of plant diseases, insects and weeds.

I can.....

Performance Criteria	Yes	No
1. Survey the field of infected crop.	<input type="checkbox"/>	<input type="checkbox"/>
2. Perform disease /pest identification on the basis of sign and symptoms.	<input type="checkbox"/>	<input type="checkbox"/>
3. Perform collection of diseased samples.	<input type="checkbox"/>	<input type="checkbox"/>
4. Perform collection of infected soil samples.	<input type="checkbox"/>	<input type="checkbox"/>
5. Perform packaging and labelling of diseased plant and soil samples for laboratory diagnoses.	<input type="checkbox"/>	<input type="checkbox"/>
6. Perform isolation of pathogen from diseased samples.	<input type="checkbox"/>	<input type="checkbox"/>
7. Perform slide preparation for microscopic analysis.	<input type="checkbox"/>	<input type="checkbox"/>
8. Perform media preparation and inoculation of pathogen.	<input type="checkbox"/>	<input type="checkbox"/>
9. Monitor the balance status between insect/pest and beneficial organisms by selecting the specific areas of the field.	<input type="checkbox"/>	<input type="checkbox"/>
10. Perform identification and manual eradication / hoeing of weeds.	<input type="checkbox"/>	<input type="checkbox"/>
11. Suggest cultural practices on the basis of type and severity of the infection.	<input type="checkbox"/>	<input type="checkbox"/>
12. Apply pre/post emergence weedicides.	<input type="checkbox"/>	<input type="checkbox"/>
13. Apply suitable insecticides, fungicides and bactericides.	<input type="checkbox"/>	<input type="checkbox"/>
14. Maintain the data sheets for record keeping.	<input type="checkbox"/>	<input type="checkbox"/>

Candidate's Signature _____ Assessor's Signature _____

Date: _____

Assessors Judgment Guide

Qualification	Tunnel Farming, Greenhouse & Agribusiness(Level-5)
Competency Standard	1. Perform Integrated Pest Management (IPM) 2. Perform weeding 3. Perform Integrated Disease Management (IDM)
Purpose of Assessment	Summative Assessment
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	Perform field survey of the infected area and suggests appropriate methods for the management of plant diseases, insects and weeds.			
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Survey the field of infected crop.	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Perform disease /pest identification on the basis of sign and symptoms.	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Perform collection of diseased samples.	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Perform collection of infected soil samples.	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Perform packaging and labelling of diseased plant and soil samples for laboratory diagnoses.	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Perform isolation of pathogen from diseased samples.	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Perform slide preparation for microscopic analysis.	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Perform media preparation and inoculation of pathogen.	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Monitor the balance status between insect/pest and beneficial organisms by selecting the specific areas of the field.	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Perform identification and manual eradication / hoeing of weeds.	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Suggest cultural practices on the basis of type and severity of the infection.	<input type="checkbox"/>	<input type="checkbox"/>	
12.	Apply pre/post emergence weedicides.	<input type="checkbox"/>	<input type="checkbox"/>	
13.	Apply suitable insecticides, fungicides and bactericides.	<input type="checkbox"/>	<input type="checkbox"/>	
14.	Maintain the data sheets for record keeping.	<input type="checkbox"/>	<input type="checkbox"/>	
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	Tunnel Farming, Greenhouse & Agribusiness(Level-5)
Competency Standard	Perform Integrated Pest Management (IPM)
Purpose of Assessment	Summative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div> Name of the Assessor: _____ Assessor's code: _____ 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.	Define Pest and disease?		
2.	What is ETL?		
3.	What is meant by IPM?		
4.	Enlist Personal Protective Equipment (PPE) used for IPM/IDM?		

5.	Define Pesticides and their major categories?		
6.	Define weed?		
7.	Differentiate between weeds and non-target species?		
8.	Differentiate between annual and perennial weeds?		
9.	What are the major control practices for weed management?		
10.	Give examples of economically important weeds?		
11.	Differentiate between biotic and abiotic diseases?		
12.	Differentiate between sign and symptoms of plant diseases?		
13.	Enlist different methods used for plant diseases management?		

14.	Define and enlist cultural control methods for disease management?		
15.	Explain different types of chemicals used for management of plant diseases?		
16.	What is meant by 'biological control'?		
17.	Explain different types of biological control?		
18.	Give some examples of commercially available biological control agents?		

Feedback to the Candidate	
Candidate's Signature _____	Assessor's Signature _____