

Instruction Sheet for the Candidate

Qualification	Tunnel Farming, Greenhouse & Agribusiness (Level-5)
Competency Standard	<ol style="list-style-type: none"> 1. Select suitable site for crop production 2. Prepare layout plan for sowing 3. Perform soil sampling and check soil nutrient composition 4. Manage soil nutrient through manuring 5. Prepare land for crop production 6. Prepare beds/ridges for sowing 7. Perform transplanting and direct seeding 8. Perform management practices for crop production 9. Maintain environment for healthy crop
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 style="text-align: center;">Select suitable site and perform land preparation & sowing of off season vegetable</p>
Time: 04 Hrs.	<p>During a practical assessment, under observation by an assessor, you are required to :</p> <ul style="list-style-type: none"> • Implement site selection procedure for off season vegetable production • Perform soil testing and evaluate the results for application of prerequisite dose of nutrients • Check TDS (Total Dissolved Solid) and pH levels of soil and adjust them accordingly. • Perform layout plan for sowing/transplanting • Perform tractor operation (land levelling, ploughing, planking and rotavating). • Perform beds/ridges/furrows preparation according to layout plan • Adjust the furrows/beds/ridges width and depth. • Perform organic or black polythene mulching.
Minimum Evidence Required	

	<ul style="list-style-type: none"> • Ensure healthy seeds/seedlings for transplanting/sowing. • Perform chemical treatment before transplanting/sowing. • Apply and adjust irrigation by either means; furrow/beds/drip irrigation. • Apply basal nutrient doses as per crop species and sampling size
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	Tunnel Farming, Greenhouse & Agribusiness (Level-5)
Competency Standard	<ol style="list-style-type: none"> 1. Select suitable site for crop production 2. Prepare layout plan for sowing 3. Perform soil sampling and check soil nutrient composition 4. Manage soil nutrient through manuring 5. Prepare land for crop production 6. Prepare beds/ridges for sowing 7. Perform transplanting and direct seeding 8. Perform management practices for crop production 9. Maintain environment for healthy crop
Purpose of Assessment	Summative Assessment
Assessment Task	<ol style="list-style-type: none"> 1. Select suitable site and perform land preparation & sowing of off season vegetable

I can.....

Performance Criteria	Yes	No
1. Implement site selection procedure for off season vegetable production	<input type="checkbox"/>	<input type="checkbox"/>
2. Perform soil testing and evaluate the results for application of prerequisite dose of nutrients	<input type="checkbox"/>	<input type="checkbox"/>
3. Check TDS (Total Dissolved Solid) and pH levels of soil and adjust them accordingly.	<input type="checkbox"/>	<input type="checkbox"/>
4. Perform layout plan for sowing/transplanting	<input type="checkbox"/>	<input type="checkbox"/>
5. Perform tractor operation (land levelling, ploughing, planking and rotavating).	<input type="checkbox"/>	<input type="checkbox"/>
6. Perform beds/ridges/furrows preparation according to layout plan	<input type="checkbox"/>	<input type="checkbox"/>
7. Adjust the furrows/beds/ridges width and depth.	<input type="checkbox"/>	<input type="checkbox"/>
8. Perform organic or black polythene mulching.	<input type="checkbox"/>	<input type="checkbox"/>
9. Ensure healthy seeds/seedlings for transplanting/sowing.	<input type="checkbox"/>	<input type="checkbox"/>
10. Perform chemical treatment before transplanting/sowing.	<input type="checkbox"/>	<input type="checkbox"/>
11. Apply and adjust irrigation by either means; furrow/beds/drip irrigation.	<input type="checkbox"/>	<input type="checkbox"/>
12. Apply basal nutrient doses as per crop species and sampling size	<input type="checkbox"/>	<input type="checkbox"/>

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	Tunnel Farming, Greenhouse & Agribusiness (Level-5)
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	9. Maintain environment for healthy crop
Purpose of Assessment	Summative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	<p>COMPETENT <input type="checkbox"/> NOT YETCOMPETENT <input type="checkbox"/></p> <p>Name of the Assessor _____</p> <p>Assessor's code: _____</p> <p>Signature: _____</p>

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	1. Select suitable site and perform land preparation & sowing of off season vegetable
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During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Implement site selection procedure for off season vegetable production	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Perform soil testing and evaluate the results for application of prerequisite dose of nutrients	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Check TDS (Total Dissolved Solid) and pH levels of soil and adjust them accordingly.	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Perform layout plan for sowing/transplanting	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Perform tractor operation (land levelling, ploughing, planking and rotavating).	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Perform beds/ridges/furrows preparation according to layout plan	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Adjust the furrows/beds/ridges width and depth.	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Perform organic or black polythene mulching.	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Ensure healthy seeds/seedlings for transplanting/sowing.	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Perform chemical treatment before transplanting/sowing.	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Apply and adjust irrigation by either means; furrow/beds/drip irrigation.	<input type="checkbox"/>	<input type="checkbox"/>	
12.	Apply basal nutrient doses as per crop species and sampling size	<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	<ol style="list-style-type: none"> 1. Select suitable site for crop production 2. Prepare layout plan for sowing 3. Perform soil sampling and check soil nutrient composition 4. Manage soil nutrient through manuring 5. Prepare land for crop production 6. Prepare beds/ridges for sowing

	7. Perform transplanting and direct seeding 8. Perform management practices for crop production 9. Maintain environment for healthy crop
Purpose of Assessment	Summative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> 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.	Enlist tools required for site selection?		
2.	What are the properties of ideal site?		
3.	What is the basic operating procedure of tools and equipment used for site selection?		

4.	Explain the report writing criteria?		
5.	What is the basic procedure involved in layout planning?		
6.	What are the measuring units for layout planning?		
7.	What are the preparation criteria for furrows/ridges/beds?		
8.	Enlist essential nutrients required for off-season vegetable production?		
9.	What is the optimum quantity required for trace elements?		

10.	Name the instruments required for soil sampling?		
11.	Explain soil sampling techniques?		
12.	Differentiate between mobile and immobile nutrients?		
13.	How to identify soil type?		
14.	What is manuring?		

15.	What is green manuring?		
16.	What is compost?		
17.	What are different types of in-organic fertilizers?		
18.	Explain application methods of organic manures?		
19.	Explain application methods of in-organic fertilizer?		
20.	Enlist different tools and equipment for land preparation?		

21.	What is the role of laser land leveler?		
22.	Explain mechanical operation for land preparation?		
23.	Explain manual operation for land preparation?		
24.	What are the steps for preparation of beds/ridges for sowing?		
25.	What are the advantages to prepare beds/ridges for sowing?		

26.	How to prepare beds for sowing?		
27.	What is meant by transplantation?		
28.	Which conditions are required to transplant nursery seedling?		
29.	What is meant by seedling?		
30.	How to perform direct sowing?		

31.	What is mulching?		
32.	Why seed treatment is necessary before sowing?		
33.	What is meant by crop production?		
34.	Define thinning and earthing up?		
35.	Why thinning is necessary?		

36.	Difference between stacking process and deflowering?		
37.	Define emasculation?		
38.	What is the purpose of pruning?		
39.	What is pinching?		
40.	What phytosanitary measures are required for harvested produce?		

41.	How to maintain environment for healthy crop?		
42.	Define environment?		
43.	Difference between humidity and temperature?		
44.	How to maintain humidity and temperature for poly tunnel?		

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