

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, NOV /DEC 2024

Fifth Semester

Agricultural Engineering

AI3015 - Protected Cultivation

Regulations - 2021

Duration : 3 Hrs

Maximum : 100 Marks

PART - A (ANSWER ALL QUESTIONS) (Marks 10*2=20)

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
1.	How polyhouse farming differs from net house farming?	RE	1	2
2.	List out the artificial ventilation systems used in protected cultivation.	RE	1	2
3.	List out the production cultivation technologies suitable for vegetables.	RE	2	2
4.	How the green houses are classified based on covering material, shape and environmental control?	RE	2	2
5.	Name the flower crops that are cultivated under protected cultivation in India.	RE	3	2
6.	List any two significance in growing flower crops under protected cultivation.	RE	3	2
7.	Write the applications of mobile mapping system in precision farming.	RE	4	2
8.	Write about the uses of drone in agriculture.	RE	4	2
9.	List out the 5R's of precision farming.	RE	5	2
10.	Name the leading Indian state for vegetable production under precision farming (crop wise).	RE	5	2

PART - B (ANSWER ALL QUESTIONS) (Marks 5*13 = 65)

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a i Explain about various soilless media and its properties.	UN	1	7
	ii Explain the criteria for selection of growing media in protected cultivation.	UN	1	6
	Or			
	b Explain the methods of irrigation and fertilizer application in protected cultivation.	UN	1	13
12.	a Write the advantages of greenhouse cultivation and mist chamber cultivation.	UN	2	13
	Or			
	b Explain about the integrated pest management practices followed in protected cultivation.	UN	2	13

13.	a	Discuss in detail about anthurium cultivation under protected cultivation system.	CR	3	13
		Or			
	b	Discuss about the post-harvest handling processes in protected cultivation.	CR	3	13
14.	a	Discuss about the present scenario of precision farming in India.	CR	4	13
		Or			
	b	Discuss about the role of GIS and GPS in precision farming.	CR	4	13
15.	a	Write down the precision farming techniques for tomato in detail.	RE	5	13
		Or			
	b	Write down the precision farming techniques for jasmine in detail.	RE	5	13

*PART – C (Marks 1*15 = 15)*

<i>Q.No</i>		<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
16.	a i	Critically discuss on how protected cultivation differs from other cultivation methods.	CR		8
	ii	Discuss the merits and demerits of protected cultivation.	CR		7
		Or			
	b	Discuss precision farming leads to sustainable farm income. Justify the statement by correlating with concepts and techniques of precision farming.	CR		15