



## BRAINWARE UNIVERSITY

Term End Examination 2024-2025  
Programme – B.Sc.(Ag)-Hons-2022  
Course Name – Protected Cultivation  
Course Code - EC-BAG571C (T)  
( Semester V )

Library  
Brainware University  
398, Ramkrishnapur Road, Barasat  
Kolkata, West Bengal-700125

Full Marks : 50

Time : 2:0 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

### Group-A

(Multiple Choice Type Question)

1 x 20=20

1. Choose the correct alternative from the following :

- (i) The radiation in the 400 to 700 nm wavelength is summarized as:
- |  |                        |
|--|------------------------|
| a) Photosynthetically Active Radiation | b) Infra Red Radiation |
| c) Ultra Violet Radiation              | d) None of these       |
- (ii) Show the correct answer: Mechanized harvesting is possible in which type of tomato cultivars?
- |                            |                               |
|----------------------------|-------------------------------|
| a) Determinate Cultivars   | b) Semi-Determinate Cultivars |
| c) Indeterminate Cultivars | d) All of these               |
- (iii) Show the correct answer: Presence of inflorescence at every internode is the common feature of which type of tomato cultivars?
- |                            |                               |
|----------------------------|-------------------------------|
| a) Determinate Cultivars   | b) Semi-Determinate Cultivars |
| c) Indeterminate Cultivars | d) All of these               |
- (iv) Show the correct answer: The term Self-topping or, Self-pruning is associated with which type of tomato cultivars?
- |                            |                               |
|----------------------------|-------------------------------|
| a) Determinate Cultivars   | b) Semi-Determinate Cultivars |
| c) Indeterminate Cultivars | d) All of these               |
- (v) Show the correct answer: Which type of tomato cultivars are most appropriate for growing under protected condition?
- |                            |                               |
|----------------------------|-------------------------------|
| a) Determinate Cultivars   | b) Semi-Determinate Cultivars |
| c) Indeterminate Cultivars | d) All of these               |
- (vi) Show the correct answer: Single Stem Training is the most common training method for which type of tomato cultivars?
- |                          |                               |
|--------------------------|-------------------------------|
| a) Determinate Cultivars | b) Semi-Determinate Cultivars |
|--------------------------|-------------------------------|

- c) Indeterminate Cultivars  
d) All of these
- (vii) Show the correct answer: Calcium deficiency in protected condition such as green house brings about which physiological disorder in tomato fruit?  
a) Puffiness  
b) Blossom End Rot (BER)  
c) Cat-face  
d) Golden Flake
- (viii) The concept of production of vegetable crops out of the normal season under protected condition can be summarized as:  
a) Kitchen Gardening  
b) Vegetable Forcing  
c) Floating Vegetable Garden  
d) Truck Garden
- (ix) Show the correct answer: The vegetable crop which have been called as The Christmas Ornaments of Vegetable World?  
a) Asparagus  
b) Sweet Pepper  
c) Tomato  
d) Chilli
- (x) The transferring of young seedlings into another bed, pan or tray is summarized as:  
a) Thinning  
b) Pricking  
c) Hardening off  
d) Mulching
- (xi) The practice of removal of excess seedling to facilitate aeration and better development, is summarized as:  
a) Thinning  
b) Pricking  
c) Hardening off  
d) Mulching
- (xii) Show the correct answer: The electromagnetic wavelength of Near Infrared Radiation (NIR)  
a) 400-700 nm  
b) 315-400 nm  
c) 300-315 nm  
d) 700-3000 nm
- (xiii) Show the correct answer: Which type of radiation is important for crop production?  
a) PAR (Photosynthetically Active Radiation)  
b) FIR (Far Infrared Radiation)  
c) NIR (Near Infrared Radiation)  
d) UB-A and UV-B (Ultraviolet Radiation-A and Ultraviolet Radiation-B)
- (xiv) Show the correct answer: Which type of radiation is responsible for heating in green houses?  
a) PAR (Photosynthetically Active Radiation)  
b) FIR (Far Infrared Radiation)  
c) NIR (Near Infrared Radiation)  
d) UB-A and UV-B (Ultraviolet Radiation-A and Ultraviolet Radiation-B)
- (xv) Show the correct answer: National Committee on Plasticulture Applications in Horticulture was formed in which year?  
a) 2012  
b) 1981  
c) 1999  
d) 2000
- (xvi) Show the correct answer: Green houses for commercial floriculture was 1st established in India in 1965 by which organization?  
a) Indian Agricultural Research Institute (IARI)  
b) Indo-American Hybrid Seed Company (IAHS)  
c) Institute of Himalayan Bio-resource Technology (IHBT)  
d) Indian Institute of Horticultural Research (IIHR)
- (xvii) Show the correct answer: The first F1 hybrid of cucumber developed in India in 1971  
a) Pusa Uday  
b) Pusa Sanyog  
c) Pusa Barkha  
d) Straight Eight
- (xviii) Show the correct answer: Head Quarter of World Trade Organization (WTO) is located at:  
a) Brussels, Belgium  
b) Rome, Italy  
c) New Delhi, India  
d) Lima, Peru

- (xix) Show the correct answer: Size of the insect proof net for virus free production:  
 a) 10-20 mesh  
 c) 60-80 mesh  
 b) 40-60 mesh  
 d) 100 mesh
- (xx) Show the correct answer: 1st crop raised in hydroponics:  
 a) Cucumber  
 c) Tomato  
 b) Ridge gourd  
 d) Pumpkin

### Group-B

(Short Answer Type Questions)

2.5 x  
10=25

- |  |       |
|--|-------|
| 2. Explain the term-Protected cultivation practices.           | (2.5) |
| 3. Explain the term-Poly house.                                | (2.5) |
| 4. Explain the term-Shade net house.                           | (2.5) |
| 5. Explain the term-Hydroponics.                               | (2.5) |
| 6. Explain the term-Aeroponics.                                | (2.5) |
| 7. Explain the term-plastic mulching.                          | (2.5) |
| 8. Discuss the advantages of off-season vegetable cultivation. | (2.5) |
| 9. Discuss Gravel culture.                                     | (2.5) |
| 10. Discuss Bottom heat box.                                   | (2.5) |
| 11. Discuss the principles of greenhouse cultivation.          | (2.5) |

OR

Discuss the role of CPCT.

(2.5)

### Group-C

(Long Answer Type Questions)

5 x 1=5

- |   |     |
|---|-----|
| 12. Discuss the national scenario of protected cultivation. | (5) |
|---|-----|

OR

Discuss the important criteria those should be followed while selecting the site for green houses.

(5)

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