18156

BRAINWARE UNIVERSITY

Term End Examination 2025-2026
Programme – B.Sc.(Ag)-Hons-2025
Course Name – Fundamentals of Horticulture
Course Code - BAG17104(T)
(Semester I)

Full Marks : 40 **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 10=10

1. *Choose the correct alternative from the following :*

(i) Choose the correct answer: Indian Institute of Horticulture Research is situated at which Indian City?

a) Bangalore b) Kolkata
c) Chennai d) Delhi

(ii) Select the correct answer: Olericulture is related to-

a) The cultivation of vegetables b) The cultivation of fruits
c) The cultivation of spices and condiments d) The cultivation of flowers and ornamental plants

(iii) Choose the irrigation system, where the maximum water use efficiency has been achieved.

a) Pitcher system of irrigation b) Ring Basin system of irrigation
c) Drip system of irrigation d) Flood method of irrigation

(iv) What is the edible part of Elephant Apple?

a) Calyx b) Stigma
c) Corolla d) Seed

(v) Which cultivated crop is in the same botanical family as the mango?

a) Cashew Nut b) Betel Vine
c) Coconut d) Arecanut

(vi) Which fruit crop contains the highest amount of ascorbic acid (vitamin C)?

a) Indian Gooseberry b) Guava
c) Barbados Cherry d) Phalsa

(vii) Which fruit crop contains the highest amount of riboflavin (vitamin B2)?

a) Bael b) Litchi
c) Mango d) Pineapple

(viii) Which of the following best defines a climacteric fruit?

a) Fruits that must ripen on the plant and do not respond to ethylene

b) Fruits that continue to ripen after harvest, with increased respiration and ethylene production

c) Fruits that soften due to microbial activity only after picking

d) Fruits that never change flavor or texture once picked

(ix) Which of the following best defines a non-climacteric fruit?

a) Fruits that continue to ripen after harvest, showing a surge in respiration and ethylene production.

b) Fruits that never soften, change flavor, or aroma—even if left attached to the plant.

c) Fruits whose spoilage is primarily caused by microbial activity rather than plant physiology.

d) Fruits that must ripen fully on the parent plant, showing no significant rise in respiration or ethylene once picked.

(x) Which of the following defines epigeal germination from the given options below?

a) The epicotyl elongates, keeping cotyledons below ground throughout germination.

b) The hypocotyl elongates, pushing the cotyledons above the soil where they may become photosynthetic.

c) Germination where the seed coat ruptures underground and the plumule emerges directly.

d) Seeds that require microbial activity to germinate and decompose before sprouting.

Group-B

(Short Answer Type Questions) 2.5 x 10=25

2. Demonstrate the importance of horticulture. (2.5)
3. Summarize the different branches of horticulture. (2.5)
4. Demonstrate the scope of horticulture. (2.5)
5. How can you define plant propagation? (2.5)
6. What are the types of plant propagation? (2.5)
7. What are the different advantages of sexual propagation? (2.5)
8. What are the different disadvantages of sexual propagation? (2.5)
9. What are the different advantages of asexual propagation? (2.5)
10. What are the different disadvantages of asexual propagation? (2.5)
11. What is scion? (2.5)

OR

What is viviparous germination? (2.5)

Group-C

(Long Answer Type Questions) 5 x 1=5

12. Explain the classification of fruit crops based on nature of growth, climatic requirement, ripening behavior. (5)

OR

Explain the role of auxin. (5)

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