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BRAINWARE UNIVERSITY

Term End Examination 2025-2026

Programme – B.Sc.(Ag)-Hons-2024

Course Name – Production Technology for Fruit and Plantation Crops

Course Code - CC-BAG474(T)

(Semester IV)

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) Select the seedless variety of mango from the given options below.
 - a) Sindhu
 - b) Ratna
 - c) Mulgoa
 - d) Amrapali
- (ii) Identify the suitable mango variety which is suitable for HDP planting.
 - a) Sindhu
 - b) Ratna
 - c) Mulgoa
 - d) Amrapali
- (iii) Choose the training method which is followed in High Density Planting (HDP).
 - a) Open Center
 - b) Central Leader
 - c) Modified Center
 - d) None of these
- (iv) Choose the cause of spongy tissue (an important physiological disorder of mango)
 - a) Imbalance in calcium concentration
 - b) High level of soil nitrogen
 - c) Heat in mature fruit at pre-and post-harvest stages
 - d) None of these
- (v) Choose the actual Indian city where National Research Centre (NRC) for Citrus is located.
 - a) Nagpur
 - b) Shilong
 - c) Kolkata
 - d) Mumbai
- (vi) Choose the malformation free variety of mango from the given options below.
 - a) Bahaduran
 - b) Neelam
 - c) Alphanso
 - d) Ratna
- (vii) Select the actual abnormalities in plants which are associated to non-pathogenic factors.
 - a) Disease
 - b) Physiological disorder
 - c) Infection
 - d) All of these
- (viii) Illustrate the control measure (s) to overcome the spongy tissue problem in mango.
 - a) Sod Culture
 - b) Mulching

- c) Harvesting the fruits at 3/4th maturity d) All of these
- (ix) Choose the correct fact about jhumka (a physiological disorder) in mango.
- a) Breakdown of the pulp on the ventral side and towards the apex b) Development of small, etiolated area at the distal end of the fruit
- c) Intensification of normal green colour d) Formation of a bunch of fruitlets at the tip of panicles
- (x) Choose the correct fact about Black Tip (a physiological disorder) in mango
- a) Breakdown of the pulp on the ventral side and towards the apex b) Development of small, etiolated area at the distal end of the fruit
- c) Intensification of normal green colour d) Formation of a bunch of fruitlets at the tip of panicles
- (xi) Choose the correct fact about Soft Nose (a physiological disorder) in mango.
- a) Breakdown of the pulp on the ventral side and towards the apex b) Development of small, etiolated area at the distal end of the fruit
- c) Intensification of normal green colour d) Formation of a bunch of fruitlets at the tip of panicles
- (xii) Select the actual symptom of reproductive malformation in mango.
- a) Compactness of panicle b) Reduced length of petiole
- c) Shortening of internodal length d) Bunching of mango leaves at terminal portion of leaf
- (xiii) Choose the actual symptom of vegetative malformation in mango.
- a) Reduced length of petiole b) Shortening of internodal length
- c) Bunching of mango leaves at terminal portion of leaf d) All of these
- (xiv) Spraying of NAA@ 200-300 PPM during november in mango is done to solve the problem of which disorder of the followings?
- a) Jhumka b) Soft Nose
- c) Spongy Tissue d) Black Tip
- (xv) Illustrate the actual cause of black tip in mango.
- a) Convective heat arising from soil b) Presence of brick kilns within 1 km of mango orchard
- c) Improper level of calcium in plant d) Lack of adequate pollination and fertilization
- (xvi) Choose the actual cause of spongy tissue in mango.
- a) Convective heat arising from soil b) Presence of Brick Kilns within 1 km of mango orchard
- c) Improper level of calcium in plant d) Lack of adequate pollination and fertilization
- (xvii) Choose the actual cause of jhumka in mango from the given options.
- a) Convective heat arising from soil b) Presence of Brick Kilns within 1 km of mango orchard
- c) Improper level of calcium in plant d) Lack of adequate pollination and fertilization
- (xviii) Illustrate the actual cause of frenching (a physiological disorder) in citrus.
- a) Zinc deficiency b) High temperature during fruit development
- c) Sudden rain following prolonged drought d) Calcium deficiency
- (xix) Select the actual cause of fruit cracking in citrus.
- a) Zinc deficiency b) High temperature during fruit development
- c) Sudden rain following prolonged drought d) Deficiency of phosphorus
- (xx) Choose the correct symptom of bronzing (a physiological disorder) in guava.
- a) Intervinal tissues of old leaves turn red to purplish red b) Lack of firmness in fruit
- c) Development of smaller fruits d) None of these

Group-B

(Short Answer Type Questions)

2.5 x
10=25

2. Summarize the taxonomic description of mango. (2.5)
3. Discuss some rootstocks of mango. (2.5)
4. Show some points to identify the problem of black tip in mango. (2.5)
5. Explain some points to solve the problem of biennial bearing in mango. (2.5)
6. Explain the process of Denavelling in banana. (2.5)
7. Illustrate the floral biology and pollination of mango. (2.5)
8. Discuss about the control measures which should be followed to solve the problem of alternate or, biennial bearing in mango plant. (2.5)
9. Discuss about the different special practices which need to be followed for taking Mrig-bahar in guava. (2.5)
10. Discuss the maturity indices of papaya. (2.5)
11. Predict the best Bahar technique of guava. (2.5)

OR

Discuss about the various categories of mango cultivars based on time of ripening. (2.5)

Group-C

(Long Answer Type Questions)

5 x 1=5

12. Discuss the different categories of banana cultivars based on genomic constitution, ploidy level and Simmond & Shepard score. (5)

OR

Discuss the effectiveness of the propping, Denavelling and Bunch covering (special cultural practices) in banana orchard. (5)
