

- (vii) Plants which have the ability to grow in extremely scar condition of water, summarized as:
- a) Heliophytes
 - b) Xerophytes
 - c) Lithophytes
 - d) Epiphyte
- (viii) The Wind-breaks are generally planted in commercial fruit orchards to reduce the velocity of the wind by coverting the windward side into leeward side. Choose the exact direction of a orchard where the windbreaks are planted.
- a) North-Western Side of the orchard
 - b) South-Western Side of the orchard
 - c) North-Eastern Side of the orchard
 - d) South-Eastern Side of the orchard
- (ix) Identify the seedless variety of mango
- a) Sindhu
 - b) Ratna
 - c) Mulgoa
 - d) Amrapali
- (x) Identify the mango variety which is suitable for HDP planting
- a) Sindhu
 - b) Ratna
 - c) Mulgoa
 - d) Amrapali
- (xi) Choose the most common and the easiest method of propagation in litchi
- a) Ground Layering
 - b) Air Layering
 - c) Serpentine Layering
 - d) All of these
- (xii) 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
- (xiii) Choose the chemical, which is used for early initiation of vegetative flushes during September to October to get an early and profuse flowering and more annual yield without affecting fruit size and quality in mango orchard
- a) Paclobutrazol
 - b) IAA
 - c) GA3
 - d) Zeaxanthin
- (xiv) Explain the cause of Spongy tissue (A 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
- (xv) Identify the Indian city where National Research Centre (NRC) for Citrus is located
- a) Nagpur
 - b) Shilong
 - c) Kolkata
 - d) Mumbai
- (xvi) Choose the malformation free variety of mango
- a) Bahaduran
 - b) Neelam
 - c) Alphanso
 - d) Ratna
- (xvii) Any abnormalities in plants which are associated to non-pathogenic factors can be summarized as
- a) Disease
 - b) Physiological disorder
 - c) Infection
 - d) All of these
- (xviii) 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
- (xix) Choose the planting material, which is used commercially for planting in case of Date Palm?
- a) off-shoots
 - b) Rhizome
 - c) Corm
 - d) Bulb
- (xx) Identify the fruit crop in which Ratooning is practised
- a) Mango
 - b) Apple
 - c) Grape
 - d) Banana

Group-B

(Short Answer Type Questions)

2.5 x 10=25

2. Illustrate the floral biology and pollination of mango. (2.5)
3. Illustrate the economic importance of Plantation Crops in India. (2.5)
4. Identify 5 important varieties of papaya with their specific characteristics. (2.5)
5. Explain the process of air layering in Litchi. (2.5)
6. Explain the process of papain extraction from papaya. (2.5)
7. Explain the process of plucking in tea. (2.5)
8. Discuss about the various features of Arabica Coffee and Robusta Coffee. (2.5)
9. Discuss the maturity indices of papaya. (2.5)
10. Discuss the differences between plantation crops vs. fruit crops. (2.5)
11. Illustrate the climatic requirements for successful grape cultivation. (2.5)

OR

Illustrate the Importance and uses of coconut. (2.5)

Group-C

(Long Answer Type Questions)

5 x 1=5

12. Discuss about the effectiveness of the Plant growth regulators which have been extensively used in fruit production at various growth and development stages of plants. (5)

OR

Discuss about the effective control measures to overcome the problem of Black tip and spongy tissue of mango. (5)