HORTICULTURE

Time Allowed : 3 hours Full Marks : 100

The figures in the margin indicate full marks for the questions.

Attempt any 10 (ten) questions taking 5 (five) questions from each section.

SECTION A

1. What do you understand by the term micro propagation? Enumerate its various techniques. Enlist the horticultural plants in which these techniques are now being exploited for commercialization. (10)

2. Write short notes on any five of the following: (5 × 2 = 10)
   (i) Drip irrigation
   (ii) Mulching
   (iii) Parthenocarpy
   (iv) Spoilage in pickles
   (v) Dormancy
   (vi) Rest period
   (vii) Topiary

(Contd. 2)
3. Differentiate between training and pruning. Describe how the growth and fruiting habit of fruit trees determine the type of training and pruning to be adopted for different fruit crops. (10)

4. Enumerate the principles involved in the preservation of fruit products by canning, freezing, fermentation and freeze drying. (10)

OR

Discuss the principles and various methods of fruit and vegetable preservation. (10)

5. It has been observed that the greatest limiting factor in the fruit production in this country is the non availability of right type of planting materials. What concrete suggestion can you offer to solve this problem? (10)

6. What are the various causes of fruit drop? Suggest measures to overcome this problem. (10)

7. Differentiate between growth regulators and growth inhibitors giving suitable examples. Enumerate the role of auxins and gibberellins in relation to propagation and fruit setting. (10)

8. “Fruits and vegetables are natural source of protective food.” Justify the statement. (10)
SECTION B

9. What are the limiting factors for successful cultivation of banana, pineapple and passion fruit in north eastern hill region? (10)

10. What is male sterility? What are the genetic mechanisms for economic hybrid seed production in vegetables? (10)

11. What are the causes of citrus decline and guava wilt in India? What steps have been suggested to reduce these problems? (10)

12. Give the distinguishing features of Moghul Garden. How does it differ from English and Japanese gardens? (10)

13. Cashew nut is said to be an important wasteland crop of India. Discuss advances made with respect to cashew production and marketing in the country. (10)

14. Discuss the problems and prospects of cultivation and marketing of medicinal and aromatic plants. (10)

15. Describe the practices and important considerations for successful production of vegetable in polyhouses in India. Give the package of practice for polyhouse production of two most suitable vegetable crops. (10)

(Contd. 4)
16. Write short notes on any five of the following: (5×2=10)
   
   (i) Synthetic variety
   (ii) True potato seeds
   (iii) Mango malformation
   (iv) Indoor gardening
   (v) High density planting
   (vi) Multi-tier cropping with pepper
   (vii) Transgenic in vegetables
   (viii) Value added products of ginger

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