

Total number of printed pages-4

3 (Sem-5/CBCS) BOT HE 2

2022

BOTANY

(Honours Elective)

Paper : BOT-HE- 5026

**(Horticultural Practices and
Post-Harvest Technology)**

[DSE (H)-2]

Full Marks : 60

Time : Three hours

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

1. Answer the following as directed : **(any seven)**

1×7=7

- (a) What is the origin of citrus fruit ?
- (b) Mention *one* advantage of Hydroponics.
- (c) What do you mean by quarantine practices ?
- (d) Write the botanical name of Indian laburnum.

Contd.

- (e) Define germplasm.
- (f) Mention *one* symptom of magnesium (Mg) deficiency in crop.
- (g) *Dendrobium* sp. belongs to _____ family. (Fill in the blank)
- (h) Give the definition of Irradiation of Food.
- (i) Auxin causes shoot cell division and elongation. (State True or False)
- (j) The name Gibberellin is based on which organism ?
- (k) Give examples – one each from biofertilizer and biopesticides.
- (l) What is 'starter culture' ?

2. Write in brief about : (any four) 2×4=8

- (a) Seed propagation
- (b) Economic importance of orchids
- (c) Perennials
- (d) Surface irrigation
- (e) Importance of flower shows
- (f) Benefits of urban forestry
- (g) Difference between cutting and layering
- (h) Patents

3. Answer the following : (any three)

5×3=15

- (a) Explain about Integrated Pest Management (IPM).
- (b) Write briefly on the role of fruits and vegetables in Indian economy.
- (c) Discuss the role of micropropagation and tissue culture techniques in conservation.
- (d) State the rules for making Bonsai.
- (e) Why is food safety an important scientific discipline ? Explain.
- (f) How can one minimize the loss during transportation of fruits ?
- (g) Write a note on conservation of germplasm.
- (h) Give an account on post-harvest diseases.

4. Answer the following : (any three)

10×3=30

- (a) Define Horticulture. What are its branches ? How Horticultural practices can provide employment opportunities ?

2+5+3=10

- (b) Write about the salient features, botany and uses of *Tagetes* sp. 2+5+3=10
- (c) Give an account on management and marketing approaches of vegetables and fruit crops in India. 5+5=10
- (d) What is manure? What are its types? Explain how manure can enhance the soil fertility and crop productivity. 1+4+5=10
- (e) Describe about the different methods applied in horticulture to control weeds.
- (f) Explain how the different nutritional management practices can reduce the mineral deficiency diseases in horticultural crops.
- (g) Discuss the characteristic features of Mughal gardens and Japanese gardens. 5+5=10
- (h) What is IPR? What are its types? How IPR helps in conservation and management of economically important crops in Indian agriculture? 1+2+7=10