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) $1 \times 7 = 7$
 - (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.
- (1) 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

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- (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