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.

- Define germplasm.
- Mention one symptom of magnesium (f) (Mg) deficiency in crop.
- Dendrobium sp. belongs to family. (Fill in the blank)
- Give the definition of Irradiation of Food.
- Auxin causes shoot cell division and elongation. (State True or False)
- The name Gibberellin is based on which organism?
- Give examples one each from biofertilizer and biopesticides.
- What is 'starter culture'?
- Write in brief about : (any four) $2 \times 4 = 8$
 - Seed propagation (a)
 - Economic importance of orchids
 - Perennials (c)
 - Surface irrigation (d)
 - Importance of flower shows (e)
 - Benefits of urban forestry
 - Difference between cutting and layering (g)
 - Patents (h)

3 (Sem-5/CBCS) BOT HE 2/G

3. Answer the following: (any three)

 $5 \times 3 = 15$

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

10×3=30

Define Horticulture. What are its branches? How Horticultural practices can provide employment opportunities? 2+5+3=10

3

- (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