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.
- (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)

 $5 \times 3 = 15$ 

- (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

Contd.

- (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