3 (Sem-5/CBCS) BOT HE 1

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(Held in 2022)

BOTANY

(Honours Elective)

Paper: BOT-HE-5016

(Natural Resource Management)

(DSE(H)-1)

Full Marks: 60

Time: Three hours

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

1. Answer the following:

 $1 \times 7 = 7$

- (a) What are natural resources?
- (b) Who first coined the term
 Biodiversity?
- (c) What are the five Fs of Chipko Movement?

- (d) Name the two types of soil erosion.
- (e) What is Bioprospecting?
 - (f) Give two examples of inexhaustible resources.
 - (g) What is hotspot of surface water?
- 2. Answer the following questions: 2×4=8
 - (a) What is Green economy?
 - (b) Write about desertification.
 - (c) Silviculture
 - (d) Which is the largest wetland in India?
- 3. Answer **any three** of the following questions: $5\times3=15$
 - (a) Write in brief about National Biodiversity Action Plan.
 - (b) Write about Geographic Information System (GIS).
 - (c) Write a note on non-renewable and renewable sources of energy.
 - (d) Write about the practice of Jhum cultivation in North-East India.

- (e) What are the principles of sustainable development?
- 4. Answer the following questions: 10×3=30
 - (a) Discuss the various schemes of social forestry in India.

Or

Discuss the role of governmental organisation in the field of EIA (Environmental Imapet Assessment) in India.

(b) What are wastelands? Discuss the wasteland management with reference to North-East India. 2+8=10

Or

Enumerate the wetland conservation stratagies in India.

(c) Define conservation. Describe different methods of soil conservation. 10

Or

What is the role of international agencies for conservation of natural resources? Point out the important reasons as to why natural resources should be preserved.

5+5=10

3 (Sem-5/CBCS) BOT HE 2

2021

(Held in 2022)

BOTANY

(Honours Elective)

Paper: BOT-HE-5026

(Horticulture 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.

GROUP-A

Marks: 30

- 1. Answer the following questions in brief: $1 \times 7 = 7$
 - (a) What is 'Hydroponics'?

- (b) Define 'ecotourism'.
- (c) Write the botanical name of 'Gulmohar'.
- (d) Which PGR is involved in regulating dormancy in seeds?
- (e) What is 'starter culture'?
- (f) What is 'crop sanitation'?
- (g) What is the origin of banana crop?
- 2. Answer the following questions: 2×4=8
 - (a) What is Integrated Pest Management (IPM)?
 - (b) What is micropropagation in plant tissue culture?
 - (c) Differences between furrow and border irrigation.
 - (d) What is cryopreservation?
- 3. Write short notes on: (any three)

 5×3=15
 - (a) Importance of food security in society
 - (b) Bonsai
 - (c) Mughal garden

- (d) Prospects of Floriculture in India
- (e) Quarantine practices.

GROUP-B

Marks: 30

- 4. Answer the following : (any three)

 10×3=30
 - (a) Discuss the role of horticulture in rural economy and employment generation in Assam. 5+5=10
 - (b) Describe the advantages and disadvantages of food irradiation. What are the new regulations on food irradiation processing in India?

 4+4+2=10
 - (c) Discuss the management and marketing approaches of vegetable and fruit crops. 5+5=10
 - (d) What is IPR (Intellectual Property Rights)? Mention how IPR is helpful in safeguarding the conservation and management of horticultural crops with reference to India. 2+8=10

- (d) Prospects of Floriculture in India
- (e) Quarantine practices.

GROUP-B

Marks: 30

- 4. Answer the following : (any three)

 10×3=30
 - (a) Discuss the role of horticulture in rural economy and employment generation in Assam. 5+5=10
 - (b) Describe the advantages and disadvantages of food irradiation. What are the new regulations on food irradiation processing in India?

 4+4+2=10
 - (c) Discuss the management and marketing approaches of vegetable and fruit crops. 5+5=10
 - (d) What is IPR (Intellectual Property Rights)? Mention how IPR is helpful in safeguarding the conservation and management of horticultural crops with reference to India. 2+8=10

- (e) Describe the importance of different post-harvest technologies in horticultural crops.
- (f) Discuss the important methods of Germplasm conservation. State the important features of plant genetic resources. 6+4=10