(6 pages)

Reg. No.:

Code No.: 20538 E Sub. Code: CEBO 61

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2024.

Sixth Semester

Botany

Elective I — HORTICULTURE AND PLANT BREEDING

(For those who joined in July 2021 onwards)

Time: Three hours

Maximum: 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer.

- 1. Vegetable are rich source of
 - (a) vitamins
- (b) carbohydrates
- (c) proteins
- (d) fats

- 2. The term olericulture is related to
 - (a) Vegetable science
 - (b) Flower science
 - (c) Crop science
 - (d) Fruit science
- 3. The most common vegetative propagation method in rose is
 - (a) layering
- (b) grafting
- (c) budding
- (d) tissue culture
- 4. Which one of the vegetables are the root plant?
 - (a) Brinjal
- (b) Carrot
- (c) Tomato
- (d) Cauliflower
- 5. "Bonsai" is Japanese art of
 - (a) Painting
 - (b) Growing small tree
 - (c) Making doll
 - (d) Arranging flowers

Page 2 Code No.: 20538 E

- 6. Which type of tool is try-square?
 - (a) marking and checking
 - (b) marking
 - (c) checking
 - (d) lining
- 7. Progeny of breeder seed is referred as
 - (a) breeder seed
 - (b) nucleus seed
 - (c) foundation seed
 - (d) certified seed
- 8. Wide crossing is also known as
 - (a) Distant hybridization
 - (b) Intergeneric hybridization
 - (c) Hybrid
 - (d) Cybrids
- 9. Triticale has been evolved by hybridization between
 - (a) rice and maize
 - (b) wheat and rice
 - (c) wheat and rye
 - (d) ragi and maize

Page 3 Code No.: 20538 E

- 10. Which is the chemical induced polyploid in plants
 - (a) Formaline
- (b) Colchicine
- (c) 5-Bromouracil
- (d) Glycerin

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Write the comment about kitchen garden.

Or

- (b) Mention about ornamental plant.
- 12. (a) Compare Bulb and Corm.

Or

- (b) How to prepare scion and stock? Describe.
- 13. (a) Compare watering can and tree pruner.

Or

(b) Distinguish between Fuchsias and hanging basket.

Page 4 Code No.: 20538 E

[P.T.O.]

14. (a) Write the objective of plant breeding.

Or

- (b) Discuss inter specific plant hybrids.
- 15. (a) Write the chemical mutagenesis.

Or

(b) Mention the benefits of plant breeding for disease resistance.

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Compare hydrophonic garden and informal garden.

Or

- (b) Explain about chip budding.
- 17. (a) Explain inverted T buds preparation.

Or

(b) Describe the layering method.

Page 5 Code No.: 20538 E

18. (a) Contrast air layering and tip layering.

Or

- (b) Explain the style of Bonsai.
- 19. (a) Enumerate the application of plant breeding.

Or

- (b) Explain the classical plant breeding.
- 20. (a) Induced mutation Explain.

Or

(b) Discuss about crop improvement by polyploidy breeding.

Page 6 Code No.: 20538 E