

(6 Pages)

Reg. No. :

Code No. : 20207 E Sub. Code : SEBO 5 C

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2023

Fifth Semester

Botany

Major Elective - II — HORTICULTURE AND PLANT BREEDING

(For those who joined in July 2017-2019)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Bryophyllum is propagated by
(a) stem (b) leaves
(c) root (d) seeds
2. T-budding is otherwise called
(a) patch budding (b) chip budding
(c) shield budding (d) flute budding

3. Plants used to grow in rockery
(a) water plants
(b) mangrove plants
(c) shade loving plants
(d) xerophytic plants
4. Technique involved in bonsai
(a) budding (b) wiring
(c) layering (d) defoliation
5. It is a weedicide
(a) IAA (b) NAA
(c) 2,4 D (d) IBA
6. Which one of the following is an organic manure?
(a) Green manure (b) Farmyard manure
(c) Vermicompost (d) All the above
7. Removal of stamens from a bisexual flower
(a) Pollination (b) Emasculation
(c) Hybridization (d) Mutation

8. In mass selection method, the time taken to release a new variety
- (a) 10 years (b) 5 years
(c) 8 years (d) 20 years
9. Mutation breeding was first initiated by
- (a) Muller (b) Stadler
(c) Nicolson (d) Howard
10. Colchicine is used to
- (a) Chromosome doubling
(b) Chromosome reduction
(c) Nullisomic stage
(d) None of these

PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing either (a) or (b).
Each answer should not exceed 250 words.

11. (a) Write notes on air layering.
- Or
- (b) Write an essay on the importance of horticulture.

Page 3 Code No. : 20207 E

12. (a) Briefly explain the technique involved in making bonsai plant.

Or

- (b) Write about any two garden implements used in horticulture.

13. (a) Explain the layout of a kitchen garden with suitable diagram.

Or

- (b) Give an account on transplantation methods.

14. (a) What are the objectives of plant breeding?

Or

- (b) Briefly explain about pureline selection.

15. (a) Describe briefly about mutagens.

Or

- (b) Write an essay on polyploidy breeding.

Page 4 Code No. : 20207 E

[P.T.O.]

PART C — (5 × 8 = 40 marks)

Answer ALL questions choosing either (a) or (b).
Each answer should not exceed 600 words.

16. (a) Write an account on grafting.

Or

(b) Enumerate the advantages and disadvantages of vegetative reproduction.

17. (a) How do you establish terrarium Explain?

Or

(b) Give an account on construction of a lawn.

18. (a) Write an essay on role of plant growth hormones in horticulture.

Or

(b) Give a detailed account on types of organic manure.

19. (a) Write elaborately about hybridization technique.

Or

(b) Describe in detail about mass selection.

Page 5 Code No. : 20207 E

20. (a) Discuss about the different features of mutation breeding.

Or

(b) Write an essay on breeding for disease resistance.

Page 6 Code No. : 20207 E