

(6 pages)

Reg. No. :

Code No. : 30376 E Sub. Code : AEBO 61

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

Sixth Semester

Botany

Major Elective II – HORTICULTURE AND
PLANT BREEDING – I

(For those who joined in July 2020 only)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. One of the following is not a branch of Horticulture
- (a) Floriculture (b) Olèriculture
(c) Pomology (d) Silviculture

7. Emasculation is
- (a) Removal of male flower
(b) Removal of female flower
(c) Removal of male part
(d) Removal of female part
8. In the mass selection, the time taken to release a new variety
- (a) 10 years (b) 6 years
(c) 8 years (d) 5 years
9. Mutation breeding was first initiated by
- (a) Nilsson
(b) G.L.C. Howard
(c) L.J. Stadler
(d) H.J. Muller
10. Gamma rays are obtained from
- (a) p^3c (b) b^3
(c) Cobalt (d) C

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2. Indian Institute of Horticulture research is located at
- (a) Bangalore (b) New Delhi
(c) Bombay (d) Coimbatore
3. Alternate name for air layering is
- (a) Bonsai (b) Topiary
(c) Bootee (d) Gootee
4. Approach grafting is mostly practiced for
- (a) Apple (b) Mango
(c) Grapes (d) None of the above
5. Identity the edge plant
- (a) Acorus (b) Aerva
(c) Amaranthus (d) Alternanthera
6. Commonly grown grass in lawn is
- (a) Cyanodon
(b) Thuja
(c) Vinca
(d) None of the above

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PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) Write short notes on informal garden.
Or
(b) Write the various divisions of Horticulture.
12. (a) Explain Air layering.
Or
(b) Write notes on any two vegetative propagules.
13. (a) Write short notes on Rockery.
Or
(b) Write short notes on hanging basket.
14. (a) List the scope of plant breeding.
Or
(b) Give a brief account on Interspecific hybridization.

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15. (a) Write notes on chemical mutagens.

Or

(b) What is polyploidy breeding? Add a note on its applications.

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 essay on importance of Horticulture.

Or

(b) Explain the principles involved in the layout of a kitchen garden. Draw the outline of a kitchen garden.

17. (a) Explain the types of grafting with suitable examples.

Or

(b) Explain any two methods of budding in detail.

18. (a) Explain Bonsai technique.

Or

(b) Describe the implements used in garden.

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19. (a) Explain pureline selection.

Or

(b) Describe hybridization technique in self pollinated crops.

20. (a) Explain the procedure of mutation breeding.

Or

(b) Discuss the role of plant breeding in producing disease resistant plants.

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