

Reg. No. :

Name :

Sixth Semester B.Sc. Degree Examination, April 2022.

First Degree Programme under CBCSS

Botany

Core Course

**BO 1643 – HORTICULTURE, PLANT BREEDING AND RESEARCH
METHODOLOGY**

(2019 Admission)

Time : 3 Hours

Max. Marks : 80

Draw diagrams wherever necessary

SECTION – A

- I. Answer **all** questions in one word or two sentences. Each question carries 1 mark
1. What is (a) Arboriculture (b) Training.
 2. Name two plant introduction agencies (a) National (b) International.
 3. Define heterosis.
 4. Describe topiary.
 5. Give an account of impact factor of journals.
 6. Name the chemical used in inducing polyploidy.
 7. What is Gootee?

P.T.O.

8. What is bibliography?
9. What is humus?
10. Define fertigation.

(10 × 1 = 10 Marks)

SECTION – B

II. Answer **any eight** of the following. Each question carries 2 marks.

11. How are plants propagated through cuttings?
12. Describe (a) Scion (b) Trophy.
13. What is null hypothesis?
14. Write note on biofertilizers.
15. Name any four garden tools and their uses.
16. Write notes on different types of pots and containers.
17. Explain inbreeding depression.
18. Write a note on the uses of Indoor garden
19. Explain (a) Plant Quarantine (b) Acclimatization
20. Write an account on different types of soil.
21. Comment on Plagiarism.
22. What is farm yard manure?
23. What is the significance of conservatories and greenhouses?
24. Briefly explain the scope and importance of horticulture.
25. With neat labelled diagram, explain T Budding.
26. What is (a) Emasculation (b) Pomology

(8 × 2 = 16 Marks)

SECTION – C

III. Answer **any six** of the following. Each question carries **4** marks.

27. With suitable examples, describe how references are cited and arranged.
28. Describe the different methods of plant selection. Add a note on the advantages and disadvantages of pure line selection.
29. Briefly describe polyploidy breeding.
30. Differentiate between manure and fertilizers. Give two examples for each category.
31. Explain with neat labelled diagram, the process of Approach Grafting.
32. Write notes on the various mutagens used in mutation breeding.
33. What are Fertilizers? Explain the different methods of application of fertilizers.
34. Describe the process of vermicomposting.
35. Comment on the different garden components and their uses.
36. What are the different procedures of collecting data?
37. Explain the breeding techniques and achievements in India of (a) Rice (b) Coconut
38. Explain the steps in Bonsai making.

(6 × 4 = 24 Marks)

SECTION – D

IV. Answer **any two** of the following. Each question carries **15** marks.

39. Write an essay on various methods of irrigation.
40. Explain the different styles of flower arrangement.

41. With suitable labelled diagrams, explain in detail, different methods of layering.
42. Describe how a project report can be made. Add notes on different sources used for literature review.
43. Elaborate on the basic principles of good experimental design. Comment on completely Randomized Design (CRD).
44. Write an essay on various methods of hybridization with suitable examples.

(2 × 15 = 30 Marks)
