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N – 1358

Reg. No. :

Name :

Sixth Semester B.Sc. Degree Examination, April 2022

First Degree Programme under CBCSS

Botany

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

(2018 Admission)

Time : 3 Hours

Max. Marks : 80

(Draw diagrams wherever necessary)

SECTION – A

Answer **all** questions. **Each** question carries 1 mark.

1. T-budding
2. Bonsai
3. Inter specific hybridization
4. Heterosis
5. Hand trowel
6. What is citation in research?
7. Vermiculite

P.T.O.

8. Hypothesis
9. Topiary
10. What is Ikebana?

(10 × 1 = 10 Marks)

SECTION – B

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

11. Explain Polyploidy breeding with example.
12. Differentiate between composite and synthetic varieties.
13. Write a note on various methods of ground layering.
14. What is Vermi-compost? How is it prepared?
15. Differentiate between qualitative and quantitative research.
16. What are foliar sprays? Comment on its advantages.
17. Briefly explain the differences between Indoor garden and Roof garden.
18. Name any two national institutes for plant breeding. Comment on their contributions.
19. Comment on the significance of review of literature.
20. How is male sterility used in plant breeding?
21. What is compost? How is it prepared?
22. Briefly explain various methods in landscape designing.
23. Explain the procedures followed in approach grafting.
24. What is acclimatization in plant breeding?

25. What are greenhouses? Comment on their uses.
26. What is bibliography?

(8 × 2 = 16 Marks)

SECTION – C

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

27. Write a note on various selection methods in plant breeding.
28. Explain randomized and completely randomized block designs.
29. Explain various garden tools and their uses.
30. Explain the types of graphs used in data interpretation.
31. Write a note on various procedures in plant introduction, with a list of agencies involved.
32. Explain the types of potting media. Comment on their significance.
33. Differentiate bio fertilizers with chemical fertilizers. Cite examples.
34. What is Mutation breeding? How do they differ from polyploidy breeding?
35. Explain various methods in data analysis.
36. Explain various methods of flower arrangement.
37. List out various irrigation methods.
38. Write a note on soil types and their components.

(6 × 4 = 24 Marks)

SECTION – D

Write an essay on any **two** of the following, each question carries **15** marks.

39. Explain the steps involved in the preparation of a project report.
40. Explain various breeding techniques associated with Wheat, Rice and Coconut.
41. Write a note on various hybridization methods in plant breeding, with examples.
42. Give detailed account of various plant propagation methods.
43. Explain the principles and practices of garden making.
44. Write an essay on the components of garden. Explain the landscaping principles included.

(2 × 15 = 30 Marks)
