

Reg. No. :

Name :

Sixth Semester B.Sc. Degree Examination, April 2023

First Degree Programme under CBCSS

Botany

Core Course X

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

(2014 & 2018 Admission)

Time : 3 Hours

Max. Marks : 80

SECTION – A

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

1. Define olericulture.
2. What is potting mixture?
3. What is plant introduction?
4. What is scion?
5. Name any two important National Plant Breeding Institutes.
6. What is inbreeding depression?
7. Define heterosis.
8. What is ikebana?

9. What is meant by experimental design?
10. What is bibliography?

(10 × 1 = 10 Marks)

SECTION – B

Answer any **eight** questions. Each question carries **2** marks.

11. What is the advantage of drip irrigation?
12. What is clonal selection?
13. What is the use of vermiculite in horticulture?
14. Differentiate between qualitative research and quantitative research.
15. What is intergeneric hybridization? Give one example.
16. Distinguish between autopolyploidy and allopolyploidy.
17. Define T-budding.
18. What is the use of lawn mower?
19. What is air layering?
20. What is the benefit of foliar sprays?
21. What is the importance of review of literature in research?
22. What are biofertilizers?

(8 × 2 = 16 Marks)

SECTION – C

Answer any **six** questions. Each question carries **4** marks.

23. Give a brief account on indoor gardening.
24. What is the difference between completely randomized design and randomized block design?

25. Give an outline of the procedure of hybridization
26. Explain the technology of vermicomposting.
27. What is polyploidy breeding? List out its advantages and disadvantages.
28. Write a short note on garden tools and implements.
29. Write an account on procedures adopted for plant introduction.
30. Elaborate on different stages of research.
31. Explain the process of production of bonsai.

(6 × 4 = 24 Marks)

SECTION – D

Answer any **two** questions. Each question carries **15** marks.

32. Describe the procedure and applications of mutation breeding.
33. Explain the different methods of grafting and layering.
34. What is the importance of selection in plant breeding? Discuss mass selection and pure line selection with a note on their advantages and disadvantages.
35. Give an outline on the structure of a research project.

(2 × 15 = 30 Marks)