Reg. No. : .....

Name : .....

Sixth Semester B.Sc. Degree Examination, March 2020

First Degree Programme under CBCSS

Botany

Core Course XI

BO 1643 – HORTICULTURE, PLANT BREEDING AND RESEARCH METHODOLOGY

(2014 Admission Onwards)

Time : 3 Hours Max. Marks : 80

SECTION – A

I. Write a short note on the following. **All** questions are compulsory.

1. Randomised Block design.
2. NBPGR
3. Topiary
4. Bonsai
5. Plant introduction
6. Heterosis
7. Triticale
8. Rhizobium
9. Sphagnum moss
10. Layering

(10 × 1 = 10 Marks)

SECTION – B

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

11. What are the different irrigation methods?

12. What is the role of male sterility in plant breeding?

13. Compare scion and stock.

14. Name two national plant breeding institutes.

15. Comment on biofertilizers.

16. How will you prepare a potting mixture?

17. What are the components of an Experimental design?

18. What is a synthetic variety?

19. Name the different garden tools and implements.

20. Comment on the role of polyploidy breeding.

21. What is the use of Colchicine in plant breeding?

22. Name two plants suitable for indoor garden.

(8 × 2 = 16 Marks)

SECTION - C

III. Answer any **six** of the following.

23. Give an account on selection as a method of plant breeding.

24. Explain the genetic basis of heterosis.

25. Give an account on the methods and achievements of mutation breeding.

26. Explain the different types of pots and containers used in a garden.

27. Explain how the plant growth is controlled in bonsai formation.

28. Explain any two types of Flower arrangement.

29. Elaborate on different stages of research.

30. Give an account on the breeding techniques of potato.

31. Comment on the different objectives of plant breeding.

(6 × 4 = 24 Marks)

SECTION - D

IV. Write essay on any **two** of the following.

32. What are the different methods of vegetative propagation?

33. Write an essay on the preparation of a report on project work.

34. What are the procedures followed in hybridization? Add a note on different types of hybridization.

35. Discuss the breeding technique and achievements with reference to Rice and Coconut.

(2 × 15 = 30 Marks)
