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Reg. No. : .....

Name : .....

Third Semester B.Sc. Degree Examination, March 2022

First Degree Programme under CBCSS

Botany

Complementary Course

BO 1331 – SYSTEMATIC BOTANY, ECONOMIC BOTANY, ENTHNOBOTANY, PLANT BREEDING

(2014-2018 Admission)

Time : 3 Hours Max. Marks : 80

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

1. Dichlamydeous flower.
2. Syngenesious stamen.
3. Name any two chemical mutagens.
4. What do you mean by LD 50.
5. Name the source plant of alkaloid piperin.
6. Define heterosis.
7. Name any two chemical compounds found in neem plant.
8. Name the tribal community found in Agasthyakoodam ranges in Kerala.
9. Name the source plant of alkaloid colchicines.
10. Name the binomial of turmeric.

(10 × 1 = 10 Marks)

P.T.O.

27. Briefly explain the distinguishing features of the family Asteraceae.

28. What do you mean by aestivation? Mention different types of aestivation with suitable diagrams.

29. Give an account on basic rules of binomial nomenclature.

30. Describe the process of herbarium technique.

31. Compare and contrast the families Malvaceae and Rutaceae.

(6 × 4 = 24 Marks)

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

32. Write an essay on types of inflorescences you have studied with suitable diagrams.

33. Give a detailed account on Bentham and Hookers system of classification with its merits and demerits.

34. Describe the procedure of breeding in mutation breeding and polyploidy breeding.

35. Compare and contrast the floral characters of gamopetalous families you have studied.

(2 × 15 = 30 Marks)

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

11. Differentiate diplostemonous and obdiplostemonous stamens.

12. Write a note on the economic importance of family Euphorbiaceae.

13. Differentiate hypogynous flower and epigynous flower.

14. Differentiate axile placentation and free central placentation.

15. What are the objectives of plant breeding?

16. Give an account on the agencies of plant introduction in India.

17. Define ethnobotany with its significance.

18. Write a note on the inflorescence of family Poaceae.

19. Distinguish autopolyploids and allopolyploids.

20. What do you mean by emasculation? Name the different methods of emasculation.

21. Differentiate vertical and horizontal disease resistance among plants.

22. Write the binomial and family of any two legumes you have studied.

(8 × 2 = 16 Marks)

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

23. Explain briefly the procedure of plant introduction.

24. What do you mean by plant hybridization? Explain different types of plant hybridization.

25. Describe the procedure of breeding for disease resistance.

26. Write the binomial, family and useful part of four medicinal plants you have studied.