

Reg. No. :

Name :

Third Semester B.Sc. Degree Examination, February 2024

First Degree Programme under CBCSS

Botany

Complementary Course for Zoology

BO 1331 : SYSTEMATIC BOTANY, ECONOMIC BOTANY, ETHNOBOTANY,
PLANT BREEDING

(2019– 2021 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 peduncle?
 2. Define floral diagram.
 3. Define herbarium.
 4. Name a family which possess interpetiolar stipules.
 5. Name the type of fruit seen in Citrus.
 6. Give the binomial of Ragi.
 7. Name the family to which clove belongs?

8. Name any two plants commonly used by tribes.
9. What is acclimatization?
10. Name an agency involved in plant introduction in India.

(10 × 1 = 10 Marks)

SECTION – B

- II. Answer any **eight** questions in a paragraph. Each question carries **2** marks.
11. Explain binomial nomenclature.
 12. Define aestivation. Explain any one aestivation type you studied.
 13. Comment on phylogenetic system of classification with two examples.
 14. List out any two primitive features of Annonaceae.
 15. Write the binomials of any two economically important members of Solanaceae.
 16. List out any two distinguishing features of Liliaceae.
 17. Write about the medicinal importance of *Adhatoda*.
 18. Give the binomials of Sugarcane and Sesame.
 19. What is the importance of ethnobotanical studies.
 20. List any two objectives of plant breeding.
 21. What is plant introduction?
 22. Comment on uses of mutation breeding.

(8 × 2 = 16 Marks)

SECTION – C

- III. Answer any **six** questions; not to exceed **120** words. Each question carries **4** marks.
23. Briefly explain classification of fruits.
 24. Write an outline of Bentham and Hooker system of classification.
 25. List out identifying features of Rutaceae.
 26. Why Asteraceae family is considered to be the most advanced family among dicotyledons?

27. List out any two similarities and any two differences among subfamilies of Leguminosae.
28. Explain floral characters of Poaceae.
29. Comment on economic importance of tuber crops with special mention to Tapioca and Colocasia.
30. Comment on different types of selection practices.
31. What is heterosis? How can we use heterosis in plant breeding?

(6 × 4 = 24 Marks)

SECTION – D

- IV. Write an essay on any **two** of the following (not more than three pages).
Each question carries **15** marks.
32. Give a detailed account of different types of inflorescences with examples.
 33. Briefly explain the diagnostic features of the following families- (a) Malvaceae (b) Rubiaceae (c) Euphorbiaceae.
 34. Write the binomial, family, morphology of useful parts and utility of the following (a) Ground nut (b) Cardamom (c) Asafoetida (d) Banana (e) Turmeric
 35. Write an essay on the procedure of hybridization in crop improvement.

(2 × 15 = 30 Marks)