

Reg. No. :

Name :

Fifth Semester B.Sc. Degree Examination, December 2021

First Degree Programme Under CBCSS

Botany

Core Course

**BO 1541 – ANGIOSPERM MORPHOLOGY, SYSTEMATIC BOTANY,
ECONOMIC BOTANY, ETHNOBOTANY AND PHARMACOGNOSY**

(2019 Admission)

Time : 3 Hours

Max. Marks : 80

I. Answer **all** questions in **one** word or sentence.

1. Define phyllotaxy.
2. What is an Albuminous seed?
3. Define siliquila.
4. What is a spike?
5. A classification based on very few arbitrarily selected characters are called as?
6. Who is regarded as the father of Taxonomy?
7. Inter petiolar stipules are a characteristic features of ?
8. Provide the binomial of clove.

9. *Trichopus zeylanicus* is commonly known as?
10. Spikelet is seen in which family.

(10 × 1 = 10 Marks)

II. Answer **any eight** questions, short answer (Not to exceed **one** paragraph).

11. What are the diagnostic traits of Acanthaceae?
12. What are morphotypes?
13. What is Thyrsus? In which family can it be seen?
14. Explain monadelphous condition.
15. What is meant by the retroactive nature of the code?
16. Which is the currently active code?
17. Explain principle of priority.
18. Define obdiplostemonous condition, and the family in which it can be seen.
19. List out the diagnostics features of the family Nyctaginaceae.
20. What are the advanced characters of the family poaceae?
21. Give binomial, family and morphology of the useful part of any two beverages that you have studied.
22. Give binomial, family and insecticidal properties of neem.
23. Comment on the ethnobotanical significance of Ocimum sanctum.
24. Define pharmacognosy.

25. Comment on the sources of some common crude drugs from plants.
26. Give the botanical name, family and morphology of any two dye yielding plants that you have studied.

(8 × 2 = 16 Marks)

III. Short Essay (Answer any six questions).

27. Explain the structure of Cyathium and Hypanthodium. Mention the families in which these inflorescence can be seen.
28. List out the evidences in support of flowers as a modified shoot.
29. What are the various types of aggregate and multiple fruits? Differentiate between these two.
30. Explain the Artificial classificatory system with an example. What are its major demerits?
31. Explain the principles of IC(B)N.
32. List out the general characters of the family asteraceae. List out the binomials of economically important members with its specific uses.
33. Compare the characters of Combretaceae with Rubiaceae.
34. Differentiate between Apocynaceae with Asclepiadaceae.
35. What is herbarium? What is its significance?
36. Explain chemotaxonomy with examples.
37. Anemophilous pollination in angiosperms is considered to be advanced. Explain.
38. What are the primitive characters of Annonaceae and Nymphaeaceae.

(6 × 4 = 24 Marks)

IV. Essay (Answer **any two** questions)

39. Describe in detail with illustrations wherever necessary, the various kinds of fruits.
40. Briefly outline a natural system of classification that you have studied. List out its merits and demerits.
41. Compare and contrast the subfamilies of Leguminosae. List out the binomials of its members having economic importance.
42. Describe in detail the binomial, family, economical importance and specific uses of major cereals, millets and pulses that you have studied.
43. Discuss the various methods of Ethnobotanical data collection. Comment on the plants used by the tribal people in their daily life.
44. According to one evolutionary theory Poaceae and Orchidaceae are believed to have originated from Liliceae ancestors. Provide your inputs in supports and against this by providing comparative morphological analysis of the 3 families.

(2 × 15 = 30 Marks)