

(Pages : 4)

P – 2848

Reg. No. : .....

Name : .....

**Fifth Semester B.Sc. Degree Examination, December 2022**

**Career Related First Degree Programme under CBCSS**

**Group 2 (a) : Botany and Biotechnology / Group 2 (b) : Biotechnology  
(Multimajor)**

**BV 1541.1/BB 1542 : ANGIOSPERM MORPHOLOGY AND SYSTEMATIC  
BOTANY**

**(2018 Admission)**

Time : 3 Hours

Max. Marks : 80

SECTION – A

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

1. What is coenanthium?
2. Explain monadelphous condition.
3. Define twisted aestivation.
4. What is tetramerous condition?
5. Give one example for importance of taxonomy in medicine.
6. What are later homonyms?
7. Name an international herbarium.
8. Identify a gene commonly used in molecular taxonomy of Plants.

P.T.O.

9. What is a neotype?
10. Name the family having ruminant endosperm.

**(10 × 1 = 10 Marks)**

SECTION – B

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

11. What are the diagnostic traits of the family Amaranthaceae?
12. Which are the fruits showing Zoochory? Comment on its adaptations.
13. What is Corolline corona?
14. With suitable illustrations, describe the structure of Cyathium.
15. Elaborate the structure of Spikelet of paddy with suitable illustrations.
16. Explain head inflorescence in Asteraceae.
17. Identify the characters of Rubiaceae. Name the economically important members from this family.
18. Explain how taxonomy is important in conservation.
19. List out the differences between lectotype and neotype.
20. What are the reasons for choosing Latin for Botanical nomenclature?
21. What is author citation?
22. Explain how chromosome number helps in resolving taxonomic impasse?
23. What is obdiplostemonous condition?
24. Comment on monadelphous stamens in Malvaceae.

25. Write the diagnostic features of Apocynaceae.
26. What is an aggregate fruit?

**(8 × 2 = 16 Marks)**

### SECTION – C

Answer any **six** questions. **Each** question carries **4** marks. (Answer not to exceed **120** words).

27. What is a Botanical garden? Explain with examples.
28. List out the general characters of the family Acanthaceae. Give binomial of any two economically important members of the family with its specific uses.
29. Compare and contrast Nymphaeaceae with Annonaceae. List out its primitive characters.
30. Explain the principle of Priority.
31. Elaborate the concept 'flower as a modified shoot' with example evidence.
32. What are conserved names?
33. Comment on cohesion and adhesion of stamens.
34. Briefly describe the structure of an albuminous seed.
35. 'Orchidaceae is regarded as an advanced family'. Substantiate the statement.
36. Discuss the importance of chemotaxonomy in taxonomic studies.
37. Outline the classification of simple fruits.
38. List the important characters of Euphorbiaceae.

**(6 × 4 = 24 Marks)**

## SECTION – D

Answer any **two** questions. **Each** question carries **15** marks. (Answer not to exceed **three** pages).

39. Briefly explain major rules of botanical nomenclature.
40. Explain how the subfamilies of Leguminosae related to one another.
41. Briefly outline a Natural system of classification with its merits and demerits.
42. With suitable illustrations, explain the classification of inflorescence. Mention examples of each type.
43. What is a herbarium? Explain the process of herbarium preparation.
44. Give an account on diagnostic characters of Asteraceae. Add a note on advanced features and economic importance of the family.

**(2 × 15 = 30 Marks)**

---