

Reg. No. :

Name :

Fifth Semester B.Sc. Degree Examination, December 2022

First Degree Programme under CBCSS

Botany

Core Course

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

(2019 Admission Onwards)

Time : 3 Hours

Max. Marks : 80

PART – A

Answer **all** questions in **one** word to maximum of **2** sentences.

1. Family where monothealous anthers are seen
2. How many families are there in Bentham and Hooker system of classification?
3. Expand APG.
4. What are false fruits?
5. What is a follicle?
6. Parietal placentation is seen in
 - (a) Fabaceae
 - (b) Rubiaceae
 - (c) Cucurbitaceae
 - (d) Solanaceae

P.T.O.

7. What is ray floret?
8. The acronym K stands for which herbarium?
9. What is the standard size of a herbarium sheet?
10. What is gynostegium?

(10 × 1 = 10 Marks)

PART – B

Answer any **eight** questions in not more than **one** paragraph.

11. What is Caryopsis?
12. Comment on the perianth of Poaceae.
13. Where was the last International Botanical congress held? Specify the year.
14. Draw the floral diagram of any of the members of Solanaceae.
15. Write the systematic position of Euphorbiaceae as per Bentham and Hooker system.
16. Compare the style in Acanthaceae with that of Lamiaceae.
17. Comment on the anthers in Apocynaceae.
18. What is a bad character?
19. Distinguish between hypanthium and Hypanthodium?
20. How will you distinguish an Umbel from a Corymb?
21. Comment on the ethnobotanical uses of *Aegle marmelos*.
22. Flower is a modified shoot. Justify the statement with reasons.
23. Write the binomial of Green gram and mention the aestivation found in its corolla.

24. Differentiate between Epigyny and Hypogyny ovary.
25. Name two well known herbaria from India and give their acronym.
26. Compare the ovary in Apocynaceae and Rubiaceae.

(8 × 2 = 16 Marks)

PART – C

Answer any **six** questions in not more than **120** words.

27. What is pharmacognosy? How it helps to prevent adulteration in various medicinal formulations in plant based healing systems
28. Write the economic importance of Solanceae.
29. Explain the advantages of molecular taxonomy.
30. Outline the merits and demerits of Engler and Prantle system of classification.
31. Compare the androecium in Asteraceae with that of Cucurbitaceae.
32. Diagrammatically explain verticillaster inflorescence.
33. Distinguish between homogamous and heterogamous heads.
34. Comment on the various types of multiple fruits.
35. Write an account on the floral characters of Aracaceae.
36. Write an account on the medicinal uses of *Vinca rosea* and *Aloe vera*.
37. Diagrammatically represent the various placentations.
38. Compare the ovaries in Cucurbitaceae, Apocynaceae and Malvaceae.

(6 × 4 = 24 Marks)

PART – D

Answer any **two** questions.

39. Write an essay on the classification of inflorescences.
40. Discuss the use of Chemotaxonomy in classification of plants.
41. Explain the principles of ICBN and point out the various nomenclatural types.
42. Explain Bentham and Hooker system of classification. Discuss on its merits and demerits.
43. Compare the subfamilies in Fabaceae.
44. Explain the steps involved in the preparation of herbarium and discuss on the role of herbaria in taxonomic research.

(2 × 15 = 30 Marks)
