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P - 2546

Reg. No. : ......
Name :

# 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 monothecous 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

- 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?

 $(10 \times 1 = 10 \text{ Marks})$ 

#### 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.

 $(8 \times 2 = 16 \text{ Marks})$ 

## 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. Diagramatically 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. Diagramatically represent the various placentations.
- 38. Compare the ovaries in Cucurbitaceaea, Apocynaceae and Malvaceae.

 $(6 \times 4 = 24 \text{ Marks})$ 

# 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 Benthem 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.

 $(2 \times 15 = 30 \text{ Marks})$