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

## (2015 – 2017 Admission)

Time : 3 Hours

Max. Marks : 80

**P** – 2840

## SECTION - A

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

- 1. Why is thyrsus?
- 2. Define quinquintial aestivation.
- 3. What is isotype?
- 4. Give an applications of taxonomy in agriculture.
- 5. Explain polyadelphous condition.
- 6. What is trimerous condition?
- 7. Name an International botanical garden.
- 8. Give details of any cytological character used in taxonomy.
- 9. What are acronyms?
- 10. Name the family having pollinia.

(10 × 1 = 10 Marks)

**P.T.O.** 

#### SECTION – B

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

- 11. What are the diagnostic traits of the family Asteraceae?
- 12. With suitable illustrations, describe the internal structure of Hypanthodium.
- 13. Explain how taxonomy is important in plant breeding?
- 14. How chromosome morphology helps in resolving taxonomic problems?
- 15. Explain floral morphology of Nymphaea.
- 16. What is staminal corona?
- 17. Explain the fruit in Asteraceae and its dispersal mechanism.
- 18. What is etymology in plant taxonomy?
- 19. Write the identification characters of Rutaceae. Name any two economically important members from this family.
- 20. Explain the peculiar placentation in Cucurbitaceae.
- 21. Which are the fruits showing anemochory? Comment on its adaptations.
- 22. List out the differences between holotype and paratype.

(8 × 2 = 16 Marks)

#### SECTION – C

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

- 23. Comment on international Herbaria.
- 24. Compare and contrast Apocynaceae with Asclepiadaceae. List out their primitive characteristics.

- 25. Describe the fruit morphology in Curcurbitaceae.
- 26. Explain valid the effective publications.
- 27. List out the general characters of the family Sapotaceae. Give binomial of any two economically important members its specific uses.
- 28. 'Poaceae is regarded as an advanced family'. Substantiate the statement.
- 29. Briefly describe the structure of an exalbuminous seed.
- 30. Comment on the significance of fruit characters in taxanomy.
- 31. What are aggregate and multiple fruits?

#### (6 × 4 = 24 Marks)

### SECTION – D

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

- 32. Briefly explain the process of herbarium preparation.
- 33. Make a comparative analysis of Rubiaceae and Solanaceae.
- 34. Detail Bentham and Hookers system of classification. List out its merits and demerits.
- 35. With suitable illustrations, explain the classification of fruits. Mention examples of each type.

(2 × 15 = 30 Marks)