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(Pages : 2)

Name.....

Reg. No.....

**THIRD SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY)
EXAMINATION, NOVEMBER 2023**

(CBCSS)

Botany

**BOT 3C 08—ANGIOSPERM MORPHOLOGY, ANGIOSPERM TAXONOMY AND PLANT
RESOURCES**

(2019 Admission onwards)

Time : Three Hours

Maximum : 30 Weightage

Section A (Short Answer Type Questions)

*Answer any **four** questions.*

Each question carries 2 weightage.

1. What is the significance of the inferior ovary in plant evolution ?
2. Define and differentiate between primitive and advanced traits in taxonomy.
3. What is the focus of cytotaxonomy ?
4. What are the key morphological features of the rice plant, and which part of it is used as food ?
5. What are the differences in morphology between maize and other cereals ?
6. What are the steps involved in the development of herbarium ?
7. What is the binomial system of nomenclature ?

(4 × 2 = 8 weightage)

Section B (Short Essay Type Questions)

*Answer any **four** questions.*

Each question carries 3 weightage.

8. Briefly explain the co-evolution between flowers and pollinators.
9. Explain the concept of character weighting and its relevance in taxonomic analysis.
10. Define the concepts of genus and family in taxonomy.

Turn over

11. Briefly explain the key features and major provisions of the International Code of Botanical Nomenclature.
12. Briefly explain the essentialism, nominalism, and empiricism approaches to classification.
13. Discuss the importance of typification and author citation in naming plant species.
14. What is the APG system of plant classification ?

(4 × 3 = 12 weightage)

Section C (Long Essay Type Questions)

Answer any two questions.

Each question carries 5 weightage.

15. Discuss the types of botanical gardens and their importance in taxonomic studies. Give the examples of important national and international botanical gardens and their roles in conservation.
16. Explain the origin and evolution of the structure and morphology of stamens, nectarines, and nectar in angiosperms. How do these adaptations contribute to the reproductive success of flowering plants ?
17. Explain the significance of DNA barcoding in molecular taxonomy.
18. Explain the classification of taxonomic literature, including general indices, floras, icons, monographs, reviews, and journals. How do these resources support taxonomic research and documentation ?

(2 × 5 = 10 weightage)