



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 4th Semester Examination, 2023

BOTACOR10T-BOTANY (CC10)

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.*

1. Answer the following questions: 1×6 = 6
- Who is regarded as the 'Father of Indian Botany'?
 - What do you mean by natural system of classification?
 - What is meant by 'CAL'?
 - What is 'nomen ambiguum'?
 - What is alpha taxonomy?
 - Define Taximetrics.
2. Answer any *eight* questions from the following: 3×8 = 24
- Write a short note on the contribution of Linnaeus to plant taxonomy. 3
 - Write three hierarchical ranks of plants above the rank of genus in proper sequence with example. 3
 - Compare isotype and paratype with examples. 3
 - What are semantides? How do they differ from secondary metabolites? 2+1
 - Give a brief idea of Virtual Herbarium and mention its significance. 2+1
 - Distinguish between monographs and journals giving one example for each. 3
 - Explain 'parallelism' and 'convergence' in term of evolution. 1 1/2 + 1 1/2
 - Name the major informal groups of APG-III classification, 2009. Write two basic differences of this classification from other phylogenetic systems. 2+1
 - Discuss the concept of OTU and OEU. 3
 - Differentiate indented and bracketed keys. 3
 - Name two Botanical Gardens present in West Bengal. Name the largest Botanical Garden of the world. 1+1+1
 - Write the full form of ICBN and ICN. Name the First code of Botanical Nomenclature and mention its year. 2+1
3. Answer any *two* questions from the following: 5×2 = 10
- Write the principles of ICN in proper sequence. 5
 - Give an outline of Engler and Prantl's system of classification upto subclasses with salient features. Point out one of its merits and demerits. 4+1
 - Give a brief idea of Biological species concept. Mention its limitations. 3+2
 - Enumerate the pollen characters of Taxonomic importance. Cite two examples for application as taxonomic markers. 2+3

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