



**2023/TDC(CBCS)/EVEN/SEM/
BOTHCC-403T/227**

TDC (CBCS) Even Semester Exam., 2023

BOTANY

(Honours)

(4th Semester)

Course No. : BOTHCC-403T

(Plant Systematics)

Full Marks : 50

Pass Marks : 20

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

SECTION—A

Answer any *ten* of the following questions : $2 \times 10 = 20$

1. What is acronym? Write the acronym of Central National Herbarium.
2. Define flora and monographs.
3. What do you mean by phytochemistry?



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4. What is author citation?
5. What do you mean by holotype and isotype?
6. What is taxonomic rank? Identify the rank Ranales.
7. What are the major contributions of Theophrastus?
8. Write down at least four important publications of Carolus Linnaeus.
9. Write the name of monographic work published by Engler and his associate.
10. What is phenogram?
11. What do you mean by cladistics?
12. Define cladogram.
13. What are the advanced characters of leaves in angiosperms?
14. Define monophyly and polyphyly.
15. What do you mean by phylogenetic tree?

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SECTION—B

Answer any *five* of the following questions : 6×5=30

16. What do you mean by molecular taxonomy? What are the roles of palynology in solving taxonomic problem? 1+5=6
17. Write a brief note on the objectives of systematic botany. Write a note on taxonomic key. 3+3=6
18. Write an elaborate note on the principles of priority with suitable example. State its limitation. 5+1=6
19. Write an overview of the concept of family, genus and species. 6
20. What is phylogenetic system of classification? Describe the phylogenetic system of classification as proposed by Engler and Prantl. 1+5=6
21. Make a comparative account on the classification system proposed by Bentham and Hooker and Engler and Prantl. 6
22. Write short notes on (a) OTU and (b) numerical taxonomy. 3+3=6

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23. Write down the principles of ICN. 6
24. Write a brief note on the coevolution of angiosperms. 6
25. Make a comparative list on primitive and advanced characters of angiosperms. 6
