

**2024/FYUG/EVEN/SEM/  
BOTDSM-151T/035**

**FYUG Even Semester Exam., 2024**

**BOTANY**

**( 2nd Semester )**

Course No. : BOTDSM-151T

**( Morphology and Taxonomy )**

Full Marks : 70

Pass Marks : 28

Time : 3 hours

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

**SECTION—A**

Answer any *ten* of the following questions :

2×10=20

1. What is opposite decussate?
2. What are the special types of inflorescence?
3. Write a note on underground modified stem.

4. Name two important herbaria of India with their acronym.
5. Name two important flora of Assam.
6. Write about A. J. C. Bose Indian Botanic Garden.
7. What is binomial nomenclature? Who proposed it?
8. What are the taxonomic ranks?
9. What is typification?
10. What are the systems of classification?
11. What is numerical taxonomy?
12. What is phylogenetic classification?
13. What are perianth and labellum?
14. Define verticillaster inflorescence.
15. Write the scientific names of two economically important species of Poaceae.

## SECTION—B

Answer any *five* of the following questions :

10×5=50

16. Describe the different types of modified tap root and adventitious roots with suitable example and neat diagram.
17. Write short notes on (a) flower as a modified shoot and (b) taxonomic significance of floral formula and floral diagram. 5+5=10
18. What is herbarium? Write in detail about herbarium preparation. State the role of herbarium. 1+5+4=10
19. Write short notes on the following : 5+5=10
  - (a) Taxonomic hierarchy
  - (b) Taxonomic keys
20. What is ICN? Write the six principles of ICN. State the rules of binomial nomenclature. 1+6+3=10
21. Write short notes on the following : 5+5=10
  - (a) Principle of priority
  - (b) Author citation

22. What is natural system of classification? Describe in detail Bentham and Hooker's system of classification. State its merits and demerits.  $1+7+1+1=10$
23. Write short notes on the following :  $5+5=10$
- (a) Phenograms and cladograms
  - (b) Linnaeus system of classification
24. Discuss the range of vegetative and floral characters of the Asteraceae. Mention two economical important species of Asteraceae.  $4+4+2=10$
25. Write short notes on the following :  $5+5=10$
- (a) Flower morphology of Orchidaceae
  - (b) Floral morphology of Musaceae

\*\*\*