

**2025/FYUG/EVEN/SEM/
BOTDSC-252/059**

FYUG Even Semester Exam., 2025

**BOTANY
(4th Semester)**

Course No. : BOTDSC-252

(Plant Systematics)

Full Marks : 70

Pass Marks : 28

Time : 3 hours

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

UNIT—I

1. Answer any *two* questions from the following : 2×2=4

- (a) What do you mean by taxon?
- (b) Write down the acronym of Central National Herbarium, Botanical Survey of India.
- (c) What is artificial system of classification? Give an example.

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(Turn Over)

(2)

2. (a) What is herbarium? Write down the taxonomic significance of herbarium. Name two important botanical gardens of India. $1+7+2=10$

Or

- (b) Write notes on species concept and genus concept. $5+5=10$

UNIT—II

3. Answer any two questions from the following : $2 \times 2 = 4$

- (a) What is author's citation of a name?
(b) Define synonym.
(c) What is valid publication?

4. (a) (i) Write a note on typification.
(ii) Write the six principles of ICN. $5+5=10$

Or

- (b) Define key. Mention the types of keys. Write, in detail, bracketed key with proper example. $1+2+7=10$

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(Continued)

(3)

UNIT—III

5. Answer any two questions from the following : $2 \times 2 = 4$

- (a) Define OTUs.
(b) How many natural orders are there in Bentham and Hooker system of classification?
(c) Write one merit and one demerit of numerical taxonomy.

6. (a) Write in detail about Bentham and Hooker system of classification. 10

Or

- (b) Write short notes on the following : $5 \times 2 = 10$
(i) Contribution of Linnaeus
(ii) APG III classification

UNIT—IV

7. Answer any two questions from the following : $2 \times 2 = 4$

- (a) What is rostellum?
(b) What is spadix? In which family it is found?
(c) What is the significance of floral formula?

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(Turn Over)

(4)

8. (a) Write down the vegetative and floral characters of the family Asteraceae. Why is Asteraceae considered as advanced family? 10

Or

- (b) Describe the floral characters of Orchidaceae. Name two species of orchids. 8+2=10

UNIT—V

9. Answer any two questions from the following : 2×2=4

- (a) What is cladogram?
(b) Define convergence.
(c) What do you mean by homology?

10. (a) Write down the method of constructing phylogenetic tree. 10

Or

- (b) Write an account of origin and evolution of angiosperms. 5+5=10

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