2025

(FYUGP)

(5th Semester)

BOTANY (MAJOR)

Paper Code: BCC-10

(Plant Systematics)

Full Marks: 75 Pass Marks: 40%

Time: 3 hours

The figures in the margin indicate full marks for the questions

1. (a) What is meant by flora? Write the techniques of flora documentation. 15

Or

(b) Write short notes on the following: 71/2×2=15

- (i) Single access taxonomic keys
- (ii) Importance of botanical gardens

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(Turn Over)

2.	(a)	Write the salient features of floral formula, floral diagram and economic importance of Zingiberaceae and Solanaceae family.
		Or
	(b)	Write short notes on the following: $7\frac{1}{2} \times 2 = 15$
		(i) Evolutionary trends of Ranunculaceae
		(ii) General characteristics of Cucurbitaceae
3.	(a)	Explain the principles and rules of ICN in botanical nomenclature.
		Or
	(b)	Write short notes on the following: $7\frac{1}{2} \times 2 = 15$
		(i) Concept of taxonomic genus and species
		(ii) Principle of priority in botanical nomenclature
4.	(a)	What is meant by clades in phylogenetics? Describe the monophyletic and polyphyletic clades. 15

(Continued)

Or

- (b) Write short notes on the following: $7\frac{1}{2} \times 2 = 15$
 - (i) Contribution of Takhtajan in plant taxonomy
 - (ii) Merits and demerits of Bentham and Hooker classification
- 5. Write on any two of the following: $7\frac{1}{2} \times 2 = 15$
 - (a) Importance of virtual herbarium
 - (b) Economic importance of Fabaceae
 - (c) Requirements for valid publication of scientific names
 - (d) Concept of parallelism and convergence
