

UG/3rd Sem(H)/23/(CBCS)

2023

BOTANY (Honours)

Paper Code : BOTH DC-5

[Plant Systematics]

Full Marks : 25

Time : Two Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

1. Answer any *five* from the following questions : 1×5=5

- (i) What is tautonym?
- (ii) What is valid publication?
- (iii) What is a virtual herbarium?
- (iv) Define polyphyly.
- (v) Name the first botanical garden established in India.
- (vi) Name the largest herbarium of the world.
- (vii) Define symplesiomorphy.
- (viii) Name one economically important species of the family — *Solanaceae*.

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(2)

2. Answer any *four* from the following questions : 3×4=12

- (i) Write a note on cluster analysis.
- (ii) State the principles of priority and its limitations.
- (iii) Discuss briefly the features of the inflorescence of *Asteraceae*.
- (iv) Write the demerits of natural system of classification.
- (v) State the advantages of numerical taxonomy.
- (vi) Write the importance and major roles of *Herbaria*.
- (vii) Write the characteristic features of *Euphorbiaceae*.

3. Answer any *one* from the following questions : 8×1=8

- (i) Differentiate between *Solanaceae* and *Lamiaceae* families. Write two unique characters of the family *Cucurbitaceae*. 6+2
- (ii) Briefly outline the classification system proposed by Linnaeus (1753). State the merits and demerits of this system. 4+2+2