

Total number of printed pages – 4

**63 (FY)SEM-3/MAJ/BOTMAJ2024**

**2025**

**BOTANY**

Paper : BOTMAJ2024

**(Plant Taxonomy)**

Full Marks : 50

Pass Marks : 20

Time : Two hours

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

1. Choose the correct answer : 1×5=5
- (i) In Linnaeus system of classification, the plants have been classified into
- (A) 25 classes
  - (B) 24 classes
  - (C) 23 classes
  - (D) 26 classes

(ii) Which of the following is a demerit of Bentham and Hooker's system of plant classification ?

- (A) Easy to follow for all practical purposes
- (B) Ranals have been placed in the beginning of the order
- (C) Many floral characters have been neglected
- (D) Monocots are derived from dicots

(iii) 'Historia Naturalist' was authored by

- (A) Pliny
- (B) Albertus Magbus
- (C) Dioscorides
- (D) Otto Brunfels

(iv) The name ICBN has been changed to ICN in\_\_\_\_\_.

- (A) Paris Code (1867)
- (B) Vienna Code (1905)
- (C) Melbourne Code (2011)
- (D) Shenzhen Code (2017)

(v) The rule of Author Citations was incorporated in

- (A) Paris Code, 1867
- (B) Rochester Code, 1892
- (C) Vienna Code, 1905
- (D) Melbourne Code, 2011

2. Answer the following questions : **(any five)**

2×5=10

- (a) What is a virtual herbarium ? Write its importance. 1+1=2
- (b) Who first coined the term 'taxonomy', and where ? 1+1=2
- (c) Mention the outcomes of the synthetic phase in plant taxonomy.
- (d) Why is Latin used in plant taxonomy ?
- (e) Differentiate between Flora and Manual.
- (f) What is a phylogenetic tree ? State its importance. 1+1=2
- (g) What is APG system of classification ? State the features of this system of classification. 1+1=2

3. Write short notes on **any five** of the following : 5×5=25
- (a) Artificial system of classification
  - (b) Concept of family
  - (c) Numerical taxonomy
  - (d) Rejection of names
  - (e) Contributions of Theophrastus in Botany
  - (f) *Infraspecific taxa*
  - (g) International Code of Nomenclature (ICNafp)
  - (h) Binomial nomenclature
  - (i) Monophyly *vs* Polyphyly

4. Answer **any one** of the following questions : 10×1=10
- (a) What is a natural system? Discuss a natural system of plant classification you have studied. Add a note on the advantages and limitations of the system. 2+6+2=10
  - (b) Discuss the importance of herbaria and botanical garden citing examples. Write the steps of herbarium preparation. 6+4=10
-