



ATN – 37

B.Sc. (Semester – V) Examination, October/November 2018
BOTANY

Paper – IX : Systematics of Angiosperms

Duration : 2 Hours

Max. Marks : 80

- Instructions :**
- i) **All questions are compulsory.**
 - ii) **Briefly answer sub-questions in Question No. 1 and 2.**
 - iii) **Figures to the right indicate maximum marks per question.**
 - iv) **Draw neat labelled diagrams wherever necessary.**

1. Answer **any four** of the following : 16
- i) Briefly explain classification in taxonomy.
 - ii) Explain the concept of species in identification of plants.
 - iii) Define numerical taxonomy. Add a note on its concept.
 - iv) Give merits and demerits of Hutchinson's system of classification.
 - v) Define various types of floras studied by you.
 - vi) What is typification ? Differentiate between paratype, neotype, epitype and topotype.
2. Answer **any four** of the following : 16
- a) Write a note on nomenclature of cultivars.
 - b) Write a short note on primitive living angiosperms.
 - c) What is a pepo ? With a suitable example, mention in which family it is found.
 - d) Give botanical names of any four members of family Brassicaceae with their common names.
 - e) Define the terms : Cladograms, plesiomorphic characters, analogy and convergence.
 - f) What are yoked or intended keys ?
3. A) Explain the process of collection in herbarium preparation. Add a note on preservation of herbaria. 6

OR

- A) What is the role of anatomy as evidence in classification of plants ?
- B) With respect to family Palmae, give the systematic position, floral structure and names of two economically important plants. 6

P.T.O.



4. A) Describe the co-evolution of flowers and insects.

6

OR

A) State the role of computers and databases in identification.

B) Give a general account of the origin and evolution of angiosperms with respect to their herbaceous origin.

6

5. A) With reference to family Apocynaceae, briefly write on its systematic position, vegetative features and the floral formula.

6

OR

A) Give diagnostic features and give the names of two economically important plants from family Verbanaceae.

B) Give the floral features of family Asclepiadaceae.

6

6. A) Compare and contrast the calyx and corolla forms of Annonaceae and Capparidaceae.

6

OR

A) Give the floral features of Myrtaceae. List any two plants of economic importance from the family.

B) Differentiate between the families Zingiberaceae and Commelinaceae.

6