VIDYASAGAR UNIVERSITY

Question Paper

B.Sc. Honours Examinations 2022

(Under CBCS Pattern)

Semester - IV

Subject : BOTANY

Paper : C 10-T

Plant Systematics

Full Marks : 40

Time : 2 Hours

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

Group-A

1. Answer any *four* of the following questions :   5×4=20

   (a) What is APG system of plant classification? Briefly describe the APG IV system of plant classification.   1+4

   (b) How palynological characters are used in taxonomic study? Discuss with example. What is meant by stenopalynous taxon?   4+1

   (c) What is meant by e-Flora? Write the significance of e-Flora. Mention the role of botanical gardens for conservation of plants.   1+2+2

   (d) What is numerical taxonomy? State the principles of numerical taxonomy. Discuss the advantage and disadvantage of numerical taxonomy over the conventional taxonomy.   1+2+2

(e) Enumerate the characters of a primitive dicot. Mention the advanced characters of Orchidaceae. 2+3

(f) Write notes on the following : 2½×2

    (i) Law of priority

    (ii) Nomen nudum.

Group-B

2. Answer any *two* of the following questions : 10×2=20

(a) What is author citation? Write the different types of author citations with proper examples. How the nomenclature was done in hybrid plants? 2+6+2

(b) What is co-evolution? Briefly describe the origin and evolution of Angiosperms. 2+8

(c) Write the difference between the following pairs : 2×5

(i) Paratype and lectotype, (ii) Homonym and synonym, (iii) Cladogram and phenogram, (iv) Divergence and convergence, (v) Allopatric species and sympatric species.

(d) Schematically describe the Bentham and Hooker's system of plant classification. Mention the merits of this system of classification. Define Archichlamydeae. 6+2+2

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