

2021

BOTANY — HONOURS

Paper : CC-7

Full Marks : 50

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** of the following :
 - (a) Define synonym and cite one example. 2
 - (b) Distinguish between syntype and paratype. 1+1
 - (c) Define Omega taxonomy. 2
 - (d) Define plesiomorphy and synapomorphy. 1+1
 - (e) Distinguish between parallelism and convergence. 1+1
 - (f) What is meant by semantide? Give one example. 1+1
 - (g) Mention two important aspects of Botanic gardens. 1+1

2. Write brief notes on **any two** of the following : 5×2
 - (a) Dichotomous key
 - (b) Holotype and Lectotype
 - (c) Cytology in relation to taxonomy
 - (d) Pioneer phase and Consolidation phase.

3. Answer **any three** of the following :
 - (a) Give an outline idea of Cronquist (1988) system of classification up to subclasses. Mention two merits and two demerits of this classification. 6+2+2
 - (b) Mention the diagnostic characters of the family Leguminosae. Distinguish the subfamilies with the help of suitable characters. Name two plants of economic importance. 5+3+2
 - (c) Give diagnostic features of the family Orchidaceae. State its systematic position as treated by Bentham and Hooker and Cronquist. Mention two important features of advancement of this family. 6+2+2
 - (d) Compare the floral characters of the families :
 - (i) Labiatae (Lamiaceae) and Scrophulariaceae
 - (ii) Gramineae (Poaceae) and Cyperaceae. 5+5

Please Turn Over

(e) Write notes on **any two** of the following :

5×2

- (i) Molecular biological data in Taxonomy
 - (ii) Rules of Effective Publication and Valid Publication
 - (iii) Advance characters of Asteraceae
 - (iv) Primitive characters of Alismataceae.
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