Total No. of Printed Pages—3

4 SEM TDC BOTH (CBCS) C 10

2022

(June/July)

BOTANY

(Core)

Paper : C–10

(Plant Systematics)

Full Marks : 53
Pass Marks : 21

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. *(a)* Choose the correct answer from the following alternatives : 1×3=3

(i) The author of *Flora of British India* is Carolus Linnaeus/Sir J. D. Hooker/Kanjilal et al.

(ii) The inflorescence of Marigold is corymb/umbel/capitulum.

(iii) The unbranch, erect, cylindrical stout stem is known as aerial stem/culm/caudex.

(b) Fill in the blanks : 1×2=2

(i) The term 'taxon' was first used by _____.

(ii) When anthers as well as filaments of stamens are united, it is called _____.

(c) Write short notes on the following (any *five*) : 2×5=10

(i) Verticillaster inflorescence

(ii) Syngenesis

(iii) Monotypic genus

(iv) Biological species

(v) Monograph

(vi) ICN

2. Write notes on the following (any *three*) : 4×3=12

(a) Palynology

(b) Virtual herbarium

(c) Functions of botanical garden

(d) Typification

(e) Single-access key

3. What is cytotaxonomy? Discuss, how cytological data helps in plant taxonomy. 2+6=8

Or

Write morphological characters and economic importances of the following families : 4×2=8

(a) Lamiaceae

(b) Orchidaceae

4. By mentioning its merits and demerits, discuss Bentham and Hooker's system of classification. 4+6=10

Or

Write notes on the following : 5×2=10

(a) Merits and demerits of Engler and Prantl's system of classification

(b) APG III system of classification

5. Why can angiosperms be considered as highest evolved plants? Discuss the Gnetales-Angiosperms theory of evolution of angiosperms. 2+6=8

Or

Write short notes on the following : 4×2=8

(a) Numerical taxonomy

(b) E-flora

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