

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.

22P/1282

(Turn Over)

(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) Syngensis

(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

(3)

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
