

2022

M.Sc.

2nd Semester Examination

BOTANY

PAPER—201

Full Marks : 50

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Unit 201.1 Angiosperm Taxonomy

1. Answer any two questions. 2×2
- (a) What is Plesiomorphy? Give an example.
- (b) Define eudicot. Give an example.

(Turn Over)

(c) Define 'Nothotaxa'. Give an example.

(d) Name an endemic plant from North east India with family.

2. Answer any *two* questions. 2×4

Differences between :

(a) Flora and Vegetation.

(b) Homology and Homoplasy.

(c) Monograph and Revision.

(d) Paraphyly and Polyphyly.

3. Answer any *one* question. 1×8

(a) Define herbarium. Briefly write the significance of herbarium in Taxonomy study. What are the differences between traditional and digital herbarium? 2+3+3

(b) What is the full form of APG? Write the schematic presentation of APG-IV with merits and demerits. Define paleoherb. 1+3+3+1

Unit 201.2 Biosystematics

4. Answer any *two* questions. 2×2

(a) Define megadiversity centre.

(b) What are biosystematics ?

(c) What are sementides ? Give example.

(d) What are plastid genes ? Give an example.

5. Answer any *two* questions. 2×4

Differences between :

(a) Cladogram and Dendogram.

(b) Basal and Primitive angiosperms.

(c) Monoporate and Tricolporate.

(d) Micromorphology and macromorphology.

6. Answer any *one* question. 1×8

(a) What is biodiversity ? Who first proposed this term mentioning the year of publication ?
What are the categories of Biodiversity from mathematical point of view ? 2+2+3

- (b) Define Numerical Taxonomy. What are the basic differences between Phenetic and cladistic? Write the merits and demerits of Numerical Taxonomy. 2+3+3

[Internal Assessment - 10 Marks]
