

M.Sc. 2nd Semester Examination, 2023

BOTANY

(Angiosperm Taxonomy & Biosystematics)

PAPER – BOT-201

Full Marks : 40

Time : 2 hours

*The figures in the right hand margin indicate marks
Candidates are required to give their answers in their
own words as far as practicable*

1. Answer any *four* of the following : 2 × 4
- (a) Define symplesomorphy.
 - (b) Define monograph. Cite an example.
 - (c) What are OTUs ?
 - (d) Define ethnobotany. Who introduced it ?
 - (e) Define paleoherb.
 - (f) Write the full form of ICN and ICBN.

2. Write the differences between the following pairs
(any *four*) : 4 × 4

(a) Flora and Vegetation

(b) Apomorphy and Plesiomorphy

(c) Traditional and Digital herbarium

(d) Phenetics and Cladistics

(e) Hotspots and Hottest Hotspots

(f) Threatened and Endangered species (IUCN).

3. Answer any *two* of the following : 8 × 2

(a) Define natural, artificial and phylogenetic systems of classifications with examples and who proposed these systems of classification. What are the basic differences between APG and traditional system of classification ?

2 + 2 + 2 + 2

(b) Define biodiversity. Who proposed the term biodiversity ? Mention, the significance of biodiversity. What are the differences of alpha-beta and gama biodiversity. 2 + 1 + 2 + 3

- (c) Define taximetrics. Who first proposed this ?
Write the method of phenetic study. Mention
the merits and demerits of taximetrics.

2 + 1 + 3 + 2

- (d) Circumscribe the subclass Magnoliidae.
Mention the primitive features of Alismatidae.
Point out the advanced characters of Asteridae.

3 + 2 + 3
