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RNLKWC/P.G./CBCS/IIS/BOT/201/22

2022

BOTANY

[P.G.]

(M.Sc. Second Semester End Examination-2022)

PAPER-201

[Taxonomy and Biosystematics]

Full Marks: 40

Time: 02 Hrs

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

Illustrate the answers wherever necessary

Unit-I

F.M=20

Answer any four Questions

4x1=04

1. Define any four of the following-
 - a. Paratype
 - b. Holo taxonomy
 - c. Flora
 - d. Beta taxonomy
 - e. Tautonym.
 - f. Monograph
 - g. Superfluous names.
2. **Write short notes on [Any two]**
 - a. Utilities of the herbarium.

2x4=08

(2)

- b. Role of Botanical Garden in ex- situ conservation.
- c. Primitive features of Magnoliidae.
- d. Traditional and Digital Herbarium.

3. Answer any one question **1x8=08**

- a. Give the outline classification of A.Cronquist(1988). Discuss its merits and demerits. 4+4
- b. State the salient features of Lilidae and Asteridae. What are Biocodes and Phylocodes. 5+3

Unit-II

F.M=20

1. Define any four of the following- **4x1=04**

- a. Valid publication.
- b. Classical taxonomy.
- c. Numerical taxonomy.
- d. Semantides.
- e. Clades
- f. Homoplasy.
- g. Phylogenetic tree.

2. Write short notes on [any two] **2x4=08**

- a. Paraphyly and polyphyly
- b. Cladogram and Phenogram.
- c. Phenetics and cladistics
- d. Palynology in relation to taxonomy.

(3)

3. Answer any one Question **1x8=08**

- a. What are the basic principles of Biosystematics? Discuss the different categories of Biosystematics. 3+5
- b. Distinguish between parallelism and convergence. Write the merits and demerits of numerical taxonomy. 3+5