

**B.Sc. 3rd Semester (Honours) Examination, 2022 (CBCS)****Subject : Botany****Course : CC-VI****(Plant Systematics)****Time: 2 Hours****Full Marks: 40**

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

1. Answer *any five* of the following questions: 2×5=10
- What is Numerical taxonomy?
  - Name the largest Botanical Garden in the world. Where is it situated?
  - What is Typification?
  - Write two contributions of Linnaeus.
  - What is artificial system of classification? Give an example.
  - Define E-flora. Give an example.
  - What is meant by cladogram?
  - Define paraphyly.
2. Answer *any two* of the following questions: 5×2=10
- Define monophyly and polyphyly with proper diagram. 2½+2½
  - Write down the functions of Herbaria.
  - Write the role of cytology in plant systematics.
  - Differentiate homology and analogy on the context of phylogeny.
3. Answer *any two* of the following questions: 10×2=20
- Give an outline classification of Takhtajan (1997) up to sub-class. Point out the merits of its classification. 7+3
  - Describe the role of palynology and phytochemistry in studying systematic of angiosperms. 5+5
  - What is principle of priority? Briefly describe the different nomenclatural types with explanation. 2+8
  - What do you mean by Biological species concept? Briefly discuss any three major theories of origin of angiosperm. 2+8