

**PG CBCS**  
**M.SC. Semester-IV Examination, 2021**  
**BOTANY**  
**PAPER: BOT 402A**  
**(ANGIOSPERM TAXONOMY)**

**Full Marks: 40****Time: 2 Hours**

**Answer any FOUR questions from the following: 10 x 2 = 20**

1. Define Phytogeography. Who first classified phytogeographical Zones in India based on vegetation? Classify different phytogeographic zones with respect to dominating plants, rainfall and temperature. 2+1+7
2. Who coined the term 'Biodiversity'? Differentiate between  $\alpha$  and  $\beta$  diversity. Mention the different causes of biodiversity loss. What is hot spot? 1+3+4+2
3. What is pollen bank? Briefly describe different strategies for *ex situ* conservation. Write about IUCN categories of threatened species. 2+5+3
4. What is Paleoherb? What are the main differences between APG III and APG IV? Write a short note on phylogenetic relationship of Angiosperms. 2+4+4
5. Define Serology. Write the role of Photochemistry in solving taxonomic problems giving at least two examples. 2+8
6. What is phylocode? What is the basic difference between ICBN and ICN? Write a short note on Nomenclatural types. 2+3+5
7. Name two internationally recognised herbarium with their acronym. What do you mean by monograph? Write a brief note on the role of botanical Survey of India (BSI) for taxonomic studies. 3+2+5
8. Write notes on : 2.5×4
  - a. Plesiomorphy and Apomorphy
  - b. Paraphyly and Polyphyly
  - c. Flora and Vegetation
  - d. Convergent and Divergent evolution

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