

B.Sc. Semester-IV Examination, 2022-23**ENVIRONMENTAL SCIENCE [Honours]**

Course ID : 41811 Course Code : SH/ENV/401/C-8

Course Title : Systematics & Biogeography

Time : 1 Hour 15 Minutes Full Marks : 25

*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 **five** questions of the following:

1×5=5

- a) Who coined the term 'palynology'?
- b) How do you read a phylogenetic tree?
- c) What factors causes adaptive radiation?
- d) Who proposed the concept of taxonomic hierarchy?
- e) Why phylogeography is important?
- f) What are protected areas?
- g) Which animal is the biggest hybrid animal?
- h) What is Allen and Bergmann's rules?

2. Answer any **two** questions of the following:

5×2=10

- a) State the continental drift theory with a diagram.
- b) State the process of speciation.
- c) How DNA barcoding used in taxonomy?
- d) State the importance of gene in the study of evolution.

3. Answer any **one** question of the following:

10×1=10

- a) State the use of remote sensing in conservation planning. Write a short note on biosphere reserves. 5+5
- b) State the classification given by Bentham and Hooker. Write the types and rules of author's nomenclature. 5+5
