

বিদ্যাসাগর বিশ্ববিদ্যালয় VIDYASAGAR UNIVERSITY

Question Paper

B.Sc. Honours Examinations 2022

(Under CBCS Pattern)

Semester - VI

Subject: ZOOLOGY

Paper: C 14-T

Evolutionary Biology

Full Marks: 40
Time: 2 Hours

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Answer any four questions:

 $5 \times 4 = 20$

- (a) How do genetic drift, non-random mating and migration upset genetic equilibrium?
- (b) Define species. Why is species so important in taxonomic hierarchy?
- (c) Give an account of sympatric speciation.
- (d) Write down in brief about 'Cambrian explosion'.
- (e) What is convergent and divergent evolution?
- (f) Describe in brief the Neutral Theory of molecular evolution.

2. Answer any two questions:

 $10 \times 2 = 20$

- (a) Discuss in brief about various pre-zygotic and post-zygotic isolating mechanisms with suitable examples.
- (b) Write down in brief about the origin and evolution of man.
- (c) Describe the 'big five' mass extinction events with their causes and effects.

(d) Briefly describe the major geological events of paleozoic era.