

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2023**(Regular/Improvement/Supplementary)****ZOOLOGY****GZOL6B13T: ETHOLOGY, EVOLUTION AND ZOOGEOGRAPHY****Time: 2 Hours****Maximum Marks: 60****SECTION A: Answer the following questions. Each carries *two* marks.****(Ceiling 20 Marks) →**

1. What are living fossils? Give two examples.
2. Write note on Neutral theory.
3. What is cosmopolitan distribution?
4. What do you know about the phenomenon of Orientation in animals.
5. What is Wallace line?
6. List out the four hotspots in India.
7. Name two Continental islands.
8. Explain Weismann's germplasm theory.
9. What is Genetic Drift?
10. Write note on faunal characteristics of Galapagos Islands.
11. What are Vestigeal organs? Give two examples.
12. What is break up of Gondwana?

SECTION B: Answer the following questions. Each carries *five* marks.**(Ceiling 30 Marks)**

13. Write note on chemical communication and its significance
14. What is Hardy-Weinberg principle? Discuss the factors that upset its equilibrium.
15. Explain the important postulates of Darwin's theory.
16. Give an account on learned behavior.
17. Write note on embryological evidences of organic evolution.
18. Discuss the social groups in termites and their sociobiological behaviour.
19. Write note on the evolutionary trends from the ape-man to Modern man.

SECTION C: Answer any *one* question. Each carries *ten* marks.

20. Explain the origin of life with appropriate experimental proofs.
21. What is Adaptive radiation? Discuss the causes and significance with special reference to Darwin's finches.

(1 × 10 = 10 Marks)