Reg. No ..... Name **23U544**

B. Sc. DEGREE END SEMESTER EXAMINATION : NOVEMBER 2023

SEMESTER 5 : ZOOLOGY

COURSE : **19U5CRZOO07 : EVOLUTION, ZOOGEOGRAPHY AND ETHOLOGY**

(For Regular 2021 Admission and Supplementary 2020/2019 Admissions)

Time : Three Hours Max. Marks: 60

PART A

Answer All (1 mark each)

1. What are panspermia?
2. What was Blanford's scheme of division of earth into different geographic regions.
3. Define sociobiology.
4. What is orthogenesis?
5. Which isotope of carbon is used in carbon dating?
6. What is Archaeopteryx?
7. Comment on any 2 reasons for animal distribution.
8. What do you mean by Darwinian fitness?

(1 x 8 = 8)

PART B

Answer any 6 (2 marks each)

9. What is animal distribution and why is it important in ecology?
10. Assess the concept 'inheritance of acquired characters''?
11. What is endosymbiosis?
12. What is a duplication mutation?
13. Comment on Islands Biogeographic Zone
14. What is eusociality?
15. List out main causes for orthogenesis?
16. What do you mean by carbon dating?

(2 x 6 = 12)

PART C

Answer any 4 (4 marks each)

17. Reflect your ideas on how mutation, selection and non random mating affect the Hardy-Weinberg equilibrium in a population?
18. What are the major evidences for evolution from the field of biogeography?
19. Describe the experiment conducted by Thorndike to demonstrate Operant Conditioning.
20. Discuss the zoogeography of Madagascar.
21. What do you mean by 'Fittest' on the basis of Darwinian theory? Explain.
22. Discuss on the barriers of dispersal of animals.

(4 x 4 = 16)

PART D

Answer any 2 (12 marks each)

23. Give an account of insular fauna.
24. What is Hardy - Weinberg equilibrium? Explain the factors affecting the equilibrium.

25. Explain adaptive radaiation with the help of Darwin's finches and limb structure of mammmals.

26. Animals are distributed in widely separated areas. Discuss the statement focusing on animal distribution.

(12 x 2 = 24)