B.Sc. DEGREE END SEMESTER EXAMINATION - OCTOBER 2024
SEMESTER 5: ZOOLOGY
COURSE: 19U5CRZ0007: EVOLUTION, ZOOGEOGRAPHY AND ETHOLOGY

(For Regular 2022 Admission and Supplementary 2021/2020/2019 Admissions)

Time : Three Hours   Max. Marks: 60

PART A
Answer All (1 mark each)

1. Who proposed the term Megagaea?

2. Which period is called the ' Age of fishes'?

3. What are vestigial organs?

4. What is a Mendelian population?

5. What is microevolution?

6. Differentiate between UR and CR in Pavlov's experiment

7. Comment on any 2 reasons for animal distribution.

8. What is a negative or purifying selection?

(1 x 8 = 8)

PART B
Answer any 6 (2 marks each)

9. Enlist the aspects of classification of animal distribution.

10. Name the periods within Mesozoic era.

11. List the 10 biogeographic zones in India.

12. Which are the Miocene horses?

13. Describe Industrial melanism?

14. Differentiate positive and negative reinforcer in Operant Conditioning citing suitable examples.

15. What is endosymbiosis?

16. Briefly describe Sewall-Wright effect. Mention the factors affecting it.

(2 x 6 = 12)

PART C
Answer any 4 (4 marks each)

17. What is the concept of RNA world? How it caters to the origin of primitive life forms?

18. Discuss the zoogeography of Galapagos Islands.

19. What is Neutral theory of Molecular Evolution?

20. Find out the similarity and disimilarity between bipolar and isolated distribution.

21. Describe the experiment conducted to demonstrate latent learning.

22. Reflect your ideas on how mutation, selection and non random mating affect the Hardy-Weinberg equilibrium in a population?

(4 x 4 = 16)

PART D
Answer any 2 (12 marks each)

23. Explain the mechanism of speciation? Brief on different types.

24. What do you mean by geological dating? Explain its uses and different methods employed.

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

26. Give a detailed account of Nearctic and Neotropical Realms.

(12 x 2 = 24)