22U542

B. Sc. DEGREE END SEMESTER EXAMINATION : OCTOBER 2022

SEMESTER 5 : ZOOLOGY

COURSE : 19U5CRZOO07 : EVOLUTION, ZOOGEOGRAPHY AND ETHOLOGY

(For Regular - 2020 Admission and Supplementary - 2019 Admission)

Time : Three Hours

Max. Marks: 60

PART A Answer All (1 mark each)

- 1. Define Mendelian population
- 2. Enlist the events occurred in Mesozoic era.
- 3. What does the term homology mean?
- 4. Explain how 'classical conditioning' got its name
- 5. Who initiated the experimental study of instrumental behaviour?
- 6. What is the geographical limit of Nearctic Realm?
- 7. Which are the various headings under which distribution of animals are discussed?
- 8. What is Cenozoic era?

 $(1 \times 8 = 8)$

PART B Answer any 6 (2 marks each)

- 9. Evaluate fore limb in vertebrate as an example of vestigial organs
- 10. Comment on the climatologic and geographic features of Ethiopian Realm
- 11. Differentiate between positive reinforcer and negative reinforcer in Operant Conditioning citing suitable examples
- 12. Point out the disimilarity between gene frequency and genotype frequency
- 13. Identify the defining features of megaevolution
- 14. Comment on continuous distribution
- 15. Compare variation and adaptation
- 16. Recognize the defining features of dawn horse

 $(2 \times 6 = 12)$

PART C Answer any 4 (4 marks each)

- 17. Evaluate Miller Urey experiment as an evidence for biochemical origin of life
- 18. Describe the means of animal distribution
- 19. Analyze the phylogenetic sequence of horse evolution. Add notes on its evolutionary trends
- 20. Differentiate microevolution and megaevolution
- 21. Give an account of human pheromones
- 22. Evaluate critically the lamarckism with examples

 $(4 \times 4 = 16)$

PART D Answer any 2 (12 marks each)

- 23. Prepare an essay on the different stages involved in the horse evolution. Add notes on the causes for its evolutionary trends
- 24. What are Darwin finches? Establish the Darwin finches as an example for adaptive radiation
- 25. Enumerate the factors affecting on Darwinism. Differentiate Darwinism and Lamarckism
- 26. Give a detailed account of Nearctic and Neotropical Realms

 $(12 \times 2 = 24)$