

TM241688T

Reg. No :

Name :

MASTER'S DEGREE (C.S.S) EXAMINATION, NOVEMBER 2024

2024 ADMISSIONS REGULAR

SEMESTER I - CORE COURSE ZOOLOGY

ZO1C01TM20 - Animal Diversity: Phylogenetic and Taxonomic Approaches

Time : 3 Hours

Maximum Weight : 30

Part A

I. Answer any Eight questions. Each question carries 1 weight

(8x1=8)

1. Comment on stromatolites.
2. State the two pathways that substantiate the origin of Eukaryotes.
3. Name four hallmarks shared by all Chordates.
4. What are Cyclostomes?
5. Comment on osteolepiforms.
6. "Marsupials are considered as more advanced group of organism than prototherians". Substantiate the statement.
7. Define DNA taxonomy. Discuss the constraints of DNA taxonomy.
8. Assess the significance of taxonomy and biosystematics.
9. Elaborate the steps involved in barcoding.
10. Write an account on any two taxonomic publications.

Part B

II. Answer any Six questions. Each question carries 2 weight

(6x2=12)

11. Enumerate the salient features of phylum cnidaria.
12. Give an account on Phylum placozoa.
13. Four distinctive characteristics set chordates apart from all other Phyla. Justify this statement.
14. List four adaptations that guided vertebrate evolution and explain how each has contributed to the success of vertebrates.
15. Comment on the evidence for the origin of birds from reptiles.
16. Identify the major characteristics which distinguish reptiles from extant amphibians.
17. Comment on "Barcoding of life". List its applications.
18. List out the major features of Zoological records.

Part C

III. Answer any Two questions. Each question carries 5 weight

(2x5=10)

19. Discuss elaborately the different classes under arthropoda. Analyse the reasons for their success.
20. Write a detailed account on subgroups of jawless fish. Add a note on their evolution.
21. Elaborate the significance of skulls in reptilian classification.
22. Elaborate on the features, principles and rules of ICZN. Comment on its significance.