19002618

19002618

Reg. No.....

Name.....

M.Sc. DEGREE (C.S.S.) EXAMINATION, OCTOBER 2019

First Semester

Faculty of Science

Branch VIII : Zoology

ZY 1C T01—BIOSYSTEMATICS AND ANIMAL DIVERSITY

(2012—2018 Admissions)

Time : Three Hours

Maximum Weight : 30

Section I (Short Answer Type Questions)

Answer any **ten** *out of twelve.*
Weight 1 *each.*

1. What is meant by curetting ?
2. What is phylocode ?
3. What is the difference between a cladogram and a phylogenetic tree ?
4. Briefly classify arthropoda upto classes.
5. Name the larval forms of echinodermata.
6. Differentiate between agnatha and gnathostomata.
7. Write notes on Bar-coding of Life.
8. What is Red queen principle ?
9. What is meant by Burgess Shale fauna ?
10. What is meant by typological species concept ?
11. Differentiate between radial and bilateral symmetry.
12. Describe numerical taxonomy.

(10 × 1 = 10)

Section II (Short Essay Type Questions)

Answer any **five** *out of eight.*
Weight 2 *each.*

13. Write notes on phylogenetic trees.
14. Explain the evolutionary advantages of coelom and metamerism.

Turn over

15. Comment on the five kingdom and six kingdom classification. Add a note on its merits and demerits.

16. Give an account on the phylogeny of mammalian orders.

17. Comment on the phylogeny of Onychophora and Chaetognatha.

18. Comment on the reasons for the success of arthropods.

19. Comment on the diversity, distribution and status of modern amphibians.

20. Comment on the Mesozoic world of reptiles and their extinction.

(5 × 2 = 10)

Section III (Long Essay Type Questions)

Answer any **two** *out of three.*
Weight 5 each.

21. Explain the concept of species, its merits and demerits. Comment on the taxonomic diversity within species.

22. Comment on the structural and functional adaptations of fishes for its mode of life.

23. Give an account on the phylogeny and evolutionary significance of hemichordata.

(2 × 5 = 10)