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Reg. No.....

Name.....

M.Sc. DEGREE (C.S.S.) EXAMINATION, FEBRUARY 2018

First Semester

Faculty of Science

Branch VIII—Zoology

ZY1CT01—BIOSYSTEMATICS AND ANIMAL DIVERSITY

(2012 Admission onwards)

Time : Three Hours

Maximum Weight : 30

Section I (Short Answer Type Questions)

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

1. What is meant by typification ?
2. Differentiate between phenetics and cladistics.
3. Differentiate between homonym and synonym.
4. Comment on veliger larva.
5. Differentiate between chondichthyes rid osteichthyes .
6. What is meant by polymorphism ?
7. What is pesudocoelom. Explain with an example.
8. Briefly classify arthropoda to classes.
9. Differentiate between schizocoelic and enterocoelic coelom.
10. What is meant by Burgess Shale fauna ?
11. What is the difference between a cladogram and a phylogenetic tree ?
12. Comment on Placozoa.

(10 × 1 = 10)

Section II (Short Essay Type Questions)

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

13. Explain the different types of taxonomic keys.
14. Discuss the differences of cladistics and typological approach in systematics.
15. Briefly explain adaptive radiation in mammals.

Turn over

16. Comment on the phylogeny of Phoronida and Brachiopoda.
17. Comment on the reasons for the success of arthropods.
18. Comment on the Mesozoic world of reptiles and their extinction.
19. Comment on the adaptive radiation in reptiles.
20. Explain the evolutionary advantages of coelom and metamerism.

(5 × 2 = 10)

Section III (Long Essay Type Questions)

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

21. Write an essay on ethics in taxonomy.
22. Explain the importance of reptilian skull in biosystematics.
23. Explain the structural and functional modifications of birds for aerial life.

(2 × 5 = 10)