

Reg. No .....

Name .....

18P107

**M.Sc DEGREE END SEMESTER EXAMINATION - NOVEMBER 2018**

**SEMESTER 1 : ZOOLOGY**

**COURSE : 16P1ZOOT01 : BIOSYSTEMATICS AND ANIMAL DIVERSITY**

*(For Regular - 2018 Admission & Supplementary - 2016 / 2017 Admissions)*

Time : Three Hours

Max. Marks: 75

**Section A**

**Answer any 8 (2 marks each)**

1. What is Alpha Taxonomy?
2. Define Race.
3. What is Phenetics?
4. How is a scientific name written?
5. What is Phylocode? Comment on its significance.
6. Write briefly on *Asiatic Society of Bengal*.
7. What are endangered animals? Give examples.
8. Brief on the commercial prawns of India.
9. Comment on Ediacaran fauna.
10. Comment on foraminifers and radiolarians.
11. Why hemichordates are called so?
12. Brief on lung fishes.

**(2 x 8 = 16)**

**Section B**

**Answer any 7 (5 marks each)**

13. Critically evaluate the five kingdom and six kingdom classifications.
14. Critically evaluate the biological and evolutionary species concepts.
15. Write briefly on ICZN. Explain important rules in ICZN.
16. Briefly explain the concept 'Tree of Life'.
17. Comment on ZSI and its role in conservation of Indian fauna.
18. Distinguish between placozoa and mesozoa.
19. Comment on different types of coelom. Add a note on the origin of coelom.
20. Distinguish between Agnatha and Gnathostomata.
21. Briefly explain the characteristics of subphylum vertebrata.
22. Give an account of the classification of modern amphibians.

**(5 x 7 = 35)**

**Section C**

**Answer any 2 (12 marks each)**

23. Write an essay on various taxonomic keys. Add a critical note on the merits and demerits of keys.
24. List out the characteristics of Arthropoda. Highlight why arthropods have achieved great diversity and abundance.
25. Impact of adaptive radiation in evolutionary studies. Importance of trochophore larva in evolutionary studies.
26. List out and explain the adaptations of bird structure and function for flight.

**(12 x 2 = 24)**