

**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**



**M.Sc. DEGREE EXAMINATION – ZOOLOGY**

**FIRST SEMESTER – NOVEMBER 2018**

**18PZO1MC01– PHYLOGENY OF INVERTEBRATA AND CHORDATA**

Date: 25-10-2018

Dept. No.

Max. : 100 Marks

Time: 01:00-04:00

**Section – A**

**Answer ALL the questions**

**(10 x 2 = 20)**

1. Define Haemocoel
2. Distinguish Protonephridia from Metanephridia.
3. Comment on ecdysis.
4. What are cnidoblasts?
5. Differentiate open and closed circulation
6. What is paedomorphosis?
7. Define radial symmetry with a suitable example.
8. Comment on the importance of spiracles.
9. Define Cladogram.
10. Write the dental formulae of pig and man.

**Section- B**

**Answer any FOUR questions**

**(4 x 10 = 40)**

11. Differentiate pseudocoelomate and coelomates with suitable examples and illustrations.
12. Respiration cycle in the birds with illustration – Explain.
13. Illustrate and explain theory, metamerism & evolutionary importance in annelids.
14. Explain types and mode of nutrition in animals with illustration.
15. Draw Phylogenetic tree of body parts of modern invertebrates and chordates.
16. Comment on physiology of digestion in amoeba (OR) Open and closed circulatory system.

**Section – C**

**Answer any TWO questions**

**(2 x 20 = 40)**

17. How does cell differentiation lead to the organization within a multicellular organism?
18. Explain the classification of phylum protozoa with suitable examples and illustrations.
19. Discuss the comparative anatomy of heart and evolution of aortic arches in vertebrates.
20. Discuss the cellular mechanism, external and internal respiration process in humans.

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