# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034



#### M.Sc. DEGREE EXAMINATION - ZOOLOGY

#### FIRST SEMESTER - NOVEMBER 2019

#### PZO 1501 – PHYLOGENY OF INVERTEBRATA AND CHORDATA

Date: 30-10-2019	Dept. No.	Max. : 100 Marks

Time: 01:00-04:00

#### **Section - A**

### Answer ALL the questions

 $(10 \times 2 = 20)$ 

- 1. Define Holotrichous.
- 2. Enumerate the canal system in porifera.
- 3. Define Haemocoel.
- 4. Comment on Triploblastic Organisation in human.
- 5. Define Cephalization.
- 6. Differentiate between the effective strock and recovery strock.
- 7. What is flame cell?
- 8. Define Tagmatization.
- 9. Given an importance of Pinocytosis.
- 10. Distingiush aphasmida from phasmida.

#### Section-B

## Answer any FOUR questions

 $(4 \times 10 = 40)$ 

- 11. Describe the evolutionary perspective of the triploblastic coelomate Organisation.
- 12. Explain and illustrate the process of respiration in birds.
- 13. Explain the theories of metamerism and analyse its evolutionary importance in annelids.
- 14. Explain types and mode of nutrition in animal with illustration.
- 15. Draw Phylogenetic tree of body planes of modern invertebrates and chordates.
- 16. Explain the physiology of digestion in amoeba.

### Section - C

## Answer any TWO questions

 $(2 \times 20 = 40)$ 

- 17. Explain the classification of phylum protozoa with suitable examples with illustration.
- 18. Elaborate on the comparative anatomy of heart and evolution of aortic arches in vertebrates
- 19. Discuss the cellular mechanism, external and internal respiration process in human.
- 20. Explain the diversity of animal kingdom with illustration.

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