LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

FIRST SEMESTER – NOVEMBER 2017

16PZO1MC01 - PHYLOGENY OF INVERTEBRATA AND CHORDATA

Date: 02-11-2017 Time: 01:00-04:00	Dept. No.	Max. : 100 Marks
	<u>Section – A</u>	
Answer ALL the questions		(10 x 2 = 20)
1. Distinguish between cilia	from flagella.	

- 2. Define ecdysis.
- 3. Comment on Protonephridia
- 4. What is Schizocoelom?
- 5. Define cephalization
- 6. Define Tagmatization.
- 7. Given an importance of Pinocytosis
- 8. Write the dental formulae of dog and horse.
- 9. Define radial symmetry with a suitable example.
- 10. Define Cladogram.

Section- B

Answer any FOUR questions

- 11. Discuss the cutaneous respiration in frog & earthworm and add its evolutionary significance.
- 12. Describe the evolutionary perspective of the triploblastic coelomate Organisation.
- 13. Explain the types of air sacs and the respiration process in birds.
- 14. Illustrate and explain theory, metamerism & evolutionary importance in annelids.
- 15. Explain types and mode of nutrition in animal with illustration.
- 16. Explain the physiology of digestion in amoeba.

Section – C

Answer any TWO questions

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

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 $(4 \times 10 = 40)$

 $(2 \times 20 = 40)$