

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

M.Sc. DEGREE EXAMINATION – ZOOLOGY

FIRST SEMESTER – NOVEMBER 2009

**ZO 1813 - PHYLOGENY OF INVERTEBRATA AND CHORDATA**

Date & Time: 04/11/2009 / 1:00 - 4:00 Dept. No.

Max. : 100 Marks

**PART - A**

Answer **ALL** the Questions

**10X2=20marks**

1. Write the scientific names of the following: camel, rat, peacock and tiger.
2. Give the dental formulae of: elephant, dog, rat and man.
3. Write a note on *Trypanosoma*.
4. Define Epimorphosis.
5. What is mutualism?
6. Planaria is immortal under the edge of the knife-Justify.
7. What are tricuspid and bicuspid valves?
8. Write a short note on the significance of geological time scale.
9. Comment on ductus caroticus and ductus cuvierii.
10. Limulus is a living fossil-Justify.

**PART-B**

Answer any **FOUR**

**4X10=40marks**

11. Give an account of adaptive radiation of marsupials
12. Explain the affinities and systematic position of hemichordates.
13. Give a detailed account of pearl formation
14. What is adaptive radiation?
15. Explain the types of regeneration with suitable examples.
16. Write an account on apiculture.

**PART-C**

Answer any **TWO**

**2X20=40marks**

17. What are placoderms? (3marks)  
Explain the origin, classification and evolution of Agnatha. (17 marks)
18. Give an account of the economic importance of invertebrates.
19. Explain the structural, functional modifications and pathogenicity of: *Plasmodium*, *Fasciola*, *Ascaris* and *Taenia solium*.
20. (a) What is phylogeny? (3marks)  
(b) Give a comparative account respiratory system of invertebrates and chordates and bring out its phylogenetic significance. (17marks)

\*\*\*\*\*