

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – ZOOLOGY

FIRST SEMESTER – APRIL 2010

ZO 1813 - PHYLOGENY OF INVERTEBRATA AND CHORDATA

Date & Time: 24/04/2010 / 1:00 - 4:00

Dept. No.

Max. : 100 Marks

PART A

Answer **ALL** the Questions

10 X 2 = 20marks

1. Write the zoological names of pigeon, horse, tiger and man.
2. Give the dental formulae of: rabbit, man, camel and squirrel.
3. Write short notes on flame cells.
4. Define Cephalisation and Metamerism.
5. What is commensalism?
6. What are somatopleure and splanchnopleure?
7. What are (a) Apiculture (b) Osmosis.
8. Write a short note on inter and intraspecific relationship.
9. Define Hermaphroditism and Paedogenesis.
10. Mention Give any two economic importance of mollusks.

PART-B

Answer any **FOUR**

4 X 10 = 40marks

11. Give an account of adaptive radiation in amphibians.
12. Explain the affinities and systematic position of Rotifera.
13. Give a detailed account of oyster culture.
14. Give an account of exoskeleton of mammals.
15. Classify placenta based on histology.
16. Write an account on the pathogenicity of *Taenia solium*.

PART-C

Answer any **TWO**

2 X 20 = 40marks

17. (a) What are placoderms? (3 marks)
(b) Explain the origin, classification and evolution of Agnatha. (3+4+10 marks)
18. Give an account of larvae of echinoderms and crustaceans. (10+10 marks)
19. Explain the structural, functional modifications and pathogenicity of *Plasmodium* and *Trypanosoma*. (10+10 marks)
20. (a) What is phylogeny? (3 marks)
(b) Compare the urinogenital system of invertebrates and chordates and bring out the phylogenetic significance. (5+5+7Marks).
