LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

**M.Sc.** DEGREE EXAMINATION – **ADV. ZOOLOGY & BIO TECH.**

FIRST SEMESTER – NOVEMBER 2010

# ZO 1813 - PHYLOGENY OF INVERTEBRATA AND CHORDATA

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

Time : 1:00 - 4:00

**PART-A**

(Answer **All** the questions) (10x2 = 20 Marks)

1.Write notes on

(a) Ductus caroticus (b) Tricuspid valve.

2.Write the Dental Formulae of the following:

(a) Camel (b) Rabbit (c) Rat (d) Lion.

3.Give any four Economic Importance of Chordates.

4.Explain the Pathogenecity of the following:

(a) *Plasmodium* *vivax* (b) *Trypanosoma gambiense*.

5.Give the Zoological names of the following:

(a) Frog (b) Man (c) Pigeon (d) Tiger

6.Define the following:

(a) Mutualism (b) Commensalism

7.Distinguish Immigration from Emigration.

8.Write short notes on:

(a) Synsacrum (b) Electric organs.

9.Define:

(a) Symmetry (b) Coelom.

10.Mention any four Affinities of Hemichordates.

**PART-B**

(Answer any **Four** questions) (4x10 = 40 Marks)

11.Write an account on the Larval Forms of Crustaceans.

12.Give an account of the Origin , Ancestry and Evolution of Chordates with reference to

Geological Time Scale.

13.Explain in detail the Minorphyla-Chaetognatha.

14.Compare and bring out the Phylogenetic significance of brain of Chordates.

15.Briefly explain the Adaptive Radiation of Fishes.

16.Discuss in detail the Life Cycle of *Taenia* *solium*.

**PART-C**

(Answer any **Two** questions) (2x20 = 40 Marks)

17.Compare and contrast the exoskeleton of Chordates and elaborate its phylogenetic significance.

18.What are Ostracoderms? Classify and explain the Origin and Evolution of Ostracoderms.

19.Give an account of Sericulture.

20.Describe the following:

(a)Nemertinea (b)Affinities of Cephalochordates (c)Adaptive Radiation of Birds.

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