



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – ZOOLOGY

FIRST SEMESTER – APRIL 2016

ZO 1819 - PHYLOGENY OF INVERTEBRATA & CHORDATA

Date: 28-04-2016
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

Part-A

Answer ALL the questions

(10×2=20 Marks)

1. Give the dental formulae of (a) Dog (b) Human.
2. Differentiate between true and false metamerism with suitable examples.
3. Define polymorphism giving a suitable example.
4. State the scientific names of (a) Pigeon (b) Rat.
5. What are the features of *Taenia solium* pathogenesis?
6. Comment on the paleontological question mark.
7. Describe the exoskeletal structures seen in (a) Sepia (b) Starfish.
8. Explain the function of air sacs in birds.
9. Why is anaemia a pathogenic feature of the malarial parasite?
10. Describe cotyledonary placenta giving an example.

Part-B

Answer any FOUR questions

(4×10=40 Marks)

11. Explain adaptive radiation in birds.
12. Describe the origin, ancestry and evolution of chordates with respect to geological time scale.
13. What are ostracoderms? Classify with examples.
14. Discuss the pathogenicity and parasitic adaptations of *Fasciola hepatica*.
15. Write a note on exoskeleton in vertebrates.
16. Give a comparative account on the respiratory system in invertebrates.

Part-C

Answer any TWO questions

(2×20=40 Marks)

17. What is adaptive radiation? And describe adaptive radiation in reptiles.
18. Write notes on (a) features of phylum Rotifera (b) examples of phylum Rotifera
19. Discuss the various types of locomotory organelles in invertebrates.
20. Give an account of (a) pathogenesis (b) parasitic adaptations of *Ascaris lumbricoides*.
