# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

B.Sc. DEGREE EXAMINATION - ZOOLOGY

## FOURTH SEMESTER - APRIL 2016

## **ZO 4500 - EMBRYOLOGY AND EVOLUTION**

Date: 20-04-2016 Time: 09:00-12:00 Dept. No.

Max.: 100 Marks

## Part-A

# Answer ALL the questions

 $(10\times2=20 \text{ Marks})$ 

- 1. Explain any one theory of fertilization.
- 2. What is a primordial germ cell?
- 3. Give any two anti Lamarkian views.
- 4. What is a geological time scale?
- 5. Write a short note on eohippus.
- 6. Define living fossil with a suitable example.
- 7. Elaborate the special adaptive feature of chameleon.
- 8. Distinguish gene mutation and chromosomal mutations.
- 9. Differentiate somatopleure form splanchnopleure.
- 10. Explain artificial insemination.

#### Part-B

## Answer any FOUR questions

 $(4\times10=40 \text{ Marks})$ 

- 11. Classify placenta based on the histology.
- 12. Explain the various morphogenetic movements observed in frog.
- 13. Write a paragraph on the different type of chordate eggs.
- 14. Explain the theory of inheritance of acquired characters by Lamarck with suitable examples.
- 15. Give an account on morphological evidences.
- 16. Write about convergence and parallelism.

### Part-C

## **Answer any TWO questions**

 $(2\times20=40 \text{ Marks})$ 

- 17. Write an essay on animal coloration and mimicry.
- 18. Explain Darwinism and elaborate Neo-Darwinism concept.
- 19. Write an essay on the development of starfish.
- 20. Explain the process of fertilization.

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