



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

**B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY**

**FOURTH SEMESTER – APRIL 2015**

**AZ 4505 - ORGANIC EVOLUTION**

Date : 16/04/2015  
Time : 09:00-12:00

Dept. No.

Max. : 100 Marks

**PART A**

**Answer ALL the questions:**

(10x2= 20 Marks)

1. What are vestigial organs? Give two examples.
2. Define Pangenesis.
3. What are sympatric species?
4. What are analogous organs? Give an example.
5. State the theory of Abiogenesis.
6. What is Mullerian mimicry?
7. What is HMS Beagle?
8. Comment on evolutionary genomics.
9. What are living fossils?
10. Distinguish Eugenics from Euphenics.

**PART – B**

**Answer any FOUR of the following:**

(4 x 10 = 40 Marks)

11. With a diagram, explain Urey-Miller's experiment.
12. Write a brief account on contributions of Lamarck.
13. Give an account of evolutionary convergence and parallelism.
14. Tabulate Geological time scale.
15. Write an account on Evolution and ethics.
16. Explain the concept of animal colouration.

**PART – C**

**Answer any TWO of the following:**

(2 x 20 =40 Marks)

17. Give a detailed account on contributions of Charles Darwin.
18. Write an essay on Human Genome project.
19. Write in detail morphological, embryological and physiological evidences in support of organic evolution.
20. What is isolation? Describe various isolating mechanisms and their importance in speciation.

\$\$\$\$\$\$