



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

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

**FOURTH SEMESTER – NOVEMBER 2016**

**AZ 4504 - EVOLUTION**

Date: 07-11-2016  
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

**PART A**

**ANSWER ALL the questions:**

**(10X2=20MARKS)**

1. Comment on Germplasm theory.
2. State the theory of Abiogenesis.
3. Define theory of Pangenesis.
4. What are homologous organs ?
5. Comment on Genetic drift.
6. What are allopatric species ?
7. Define Orthogenesis.
8. Write a note on biogenetic law.
9. Define the law of adaptive radiation.
10. Comment on the age of mammals.

**PART B**

**ANSWER ANY FOUR of the following :**

**(4X10=40MARKS)**

11. Describe Urey and Miller experiment.
12. Give an account of Batesian and Mullerian mimicry with examples.
13. Explain evolutionary convergence and parallelism.
14. Describe Uranium-lead method in dating fossils.
15. Write notes on biochemical recapitulation and biochemical metamorphosis.
16. Trace the embryological evidence for evolution.
17. Write short notes on human genome project

**PART C**

**ANSWER ANY TWO of the following:**

**(2X 20 = 40MARKS)**

18. Give a detailed account of Darwin's theory of Natural Selection.
19. Define Isolation. Describe various isolating mechanisms and their significance in speciation.
20. Describe the fossil record of man.
21. Write an essay on Eugenics.

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