LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

DEGREE EXAMINATION – **ADVANCED ZOOLOGY AND BIOTECHNOLOGY**

FOURTH SEMESTER - APRIL 2019

AZ 4505- ORGANIC EVOLUTION

Date: 11-04-2019	Dept. No.	Max. : 100 Marks

Time: 01:00-04:00

PART-A

Answer All the questions

(10x2=20Marks)

- 1. State the theory of abiogenesis.
- 2. What is the HMS Beagle?
- 3. What is Mullerian mimicry?
- 4. Comment on Lamarkism.
- 5. Define parallel evolution.
- 6. Comment on isolating mechanisms.
- 7. What is neoteny?
- 8. Comment on the age of mammals.
- 9. Write about euthenics.
- 10. What are homologous organs?

PART - B

Answer any FOUR questions:

(4x10=40Marks)

- 11. Describe Urey-Miller experiment with a suitable diagram.
- 12. Explain Lamarckian principles.
- 13. Describe the modern synthetic theory of natural selection.
- 14. Give an account on adaptive radiation in reptiles.
- 15. Explain the types of fossils and their significance.
- 16. Give an account on Human Genome Project.

PART - C

Answer any TWO questions:

(2x20=40Marks)

- 17. Describe Darwin's theory of Natural selection.
- 18. What is speciation? Explain different modes of speciation.
- 19. Trace evidences from embryology in favour of theory of organic evolution.
- 20. Write an account on the followings:
 - (i) Evolution and ethics (ii) Eugenics
