LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

DEGREE EXAMINATION - ADVANCED ZOOLOGY AND BIOTECHNOLOGY

FOURTHSEMESTER - APRIL 2017

AZ 4505- ORGANIC EVOLUTION

Date: 21-04-2017 Dept. No. Max.: 100 Marks

Time: 09:00-12:00

Part - A

Answer all the questions:

 $(10 \times 2 = 20)$

Define / Explain the following:

- 1. Differentiate Organic and inorganic evolution.
- 2. What is the HMS Beagle?
- 3. What is Batesian mimicry?
- 4. Define isolating mechanisms.
- 5. What are allopatric species?
- 6. What are vestigial organs?
- 7. Define convergent evolution.
- 8. What are homologous organs?
- 9. Comment on Australopithecus.
- 10. What is neoteny?

Part - B

Answer any four questions:

(4 X10 = 40)

- 11. Describe Urey-Miller experiment.
- 12. Give an account of Lamarckism.
- 13. Give an account on adaptive radiation in reptiles.
- 14. Tabulate the geological time scale.
- 15. Comment on eugenics.
- 16. Write an account on evolution and ethics.

Part - C

Answer any two questions:

 $(2 \times 20 = 40)$

- 17. Describe in detail Darwin's theory of Natural Selection.
- 18. What is speciation? Explain the different modes of speciation.
- 19. Enumerate the physiological and biochemical evidences in support of theory of organic evolution.
- 20. Write an essay on Human Genome Project.
