

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

**B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY & BIOTECH.**

**FIFTH SEMESTER – NOVEMBER 2009**

**Z 525 - CELL BIOLOGY**

Date & Time: 13/11/2009 / 9:00 - 12:00 Dept. No.

Max. : 100 Marks

**PART A**

**Answer ALL questions**

**10X2=20marks**

1. Comment on the theory of abiogenesis.
2. Explain germplasm theory.
3. Mention the contributions of De Vries.
4. What are allopatric species?
5. Define the term “fossil”.
6. What are homologous organs?
7. What is evolutionary constancy?
8. Comment on Mesozoic era.
9. Explain orthogenesis.
10. Distinguish prokaryotes from eukaryotes.

**PART B**

**Answer any FOUR**

**4X10=40marks**

11. Enumerate Darwinian theory of Natural Selection.
12. Categorize animal colouration.
13. Write notes on evolutionary convergence.
14. Describe nature of fossils.
15. Elaborate the impact of point mutations on survival and reproduction.
16. Explain Urey and Miller’s experiment.

**PART C**

**Answer any TWO**

**2X20=40marks**

17. Write an essay on Lamarckism and Neo Lamarckism.
18. Describe isolating mechanisms.
19. Trace evidences from physiology and biochemistry in favour of organic evolution.
20. Discuss the available fossil records of man.

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