



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

**B.Sc. DEGREE EXAMINATION – ZOOLOGY**

**FIFTH SEMESTER – APRIL 2016**

**ZO 5501 - GENETICS**

Date: 29-04-2016  
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

**Part A**

**Answer ALL the questions**

**(10×2=20 Marks)**

1. Define linkage.
2. Comment on mitochondrial DNA.
3. What is cistron?
4. Define mutagen.
5. Comment on bacteriophage.
6. What is transduction?
7. Comment on inbreeding.
8. What is chiasma?
9. Define gene.
10. Comment on genetic drift.

**Part B**

**Answer any FOUR questions**

**(4×10=40 Marks)**

11. Define the law of independent assortment. Explain with example.
12. Discuss DNA is the genetic material.
13. Write notes on conjugation.
14. Give an account on out breeding.
15. Explain amniocentesis.
16. Discuss inherited genetic disorders in man.

**Part C**

**Answer any TWO questions**

**(2×20=40 Marks)**

17. Write an essay on blood groups in man.
18. Give an account on Lac operon system.
19. Discuss hardy –Weinberg law and Hardy–Weinberg equilibrium.
20. Explain human genome project.

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