LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION - ADVANCED ZOOLOGY & BIOTECH.

FIFTH SEMESTER - NOVEMBER 2009

Z 501 - BIOLOGY - III

Date & Time: 13/11/2009 / 9:00 - 12:00 Dept. No. Max. : 100 Marks

PART A

Answer ALL questions

10 X 2 = 20 marks

- 1. Define Genetics.
- 2. What is cistron?
- 3. What are multiple alleles?
- 4. Differentiate autosomes from allosomes.
- 5. Define the term excretion.
- 6. What are osmoregulators?
- 7. Comment on xerophthalmia.
- 8. What are homologous organs?
- 9. Mention any 4 vestigial organs in man.
- 10. Comment on Oenothera lamarckiana.

PART B

Answer any FOUR

4 X 10 = 40 marks

- 11. Explain monohybrid cross.
- 12. Elucidate the ultrastructure of SAT-Chromosome.
- 13. Describe ABO blood group.
- 14. Explain osmoregulation in freshwater teleosts.
- 15. Write notes on water soluble vitamins.
- 16. Elaborate precipitin tests.

PART C

Answer any TWO

2 X 20 = 40 marks

- 17. Write an essay on Darwinism.
- 18. Trace evidences from biochemistry in favour of theory of organic evolution.
- 19. Discuss sex determination in man.
- 20. Explain pituitary hormones and their role.
