



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – ZOOLOGY

FOURTH SEMESTER – APRIL 2015

ZO 4812 - BIOTECHNOLOGY

Date : 17/04/2015
Time : 09:00-12:00

Dept. No.

Max. : 100 Marks

Part A

Answer ALL the questions

(10×2=20 Marks)

1. Name the environmental factors that affect biodegradation of pesticides.
2. Define gene frequency.
3. Comment on volatilization.
4. Explain wet preservation.
5. What is lysogenic cycle?
6. Comment on non-allelic gene interaction.
7. Comment on blotting techniques.
8. What are jumping genes?
9. Differentiate lag phase from log phase.
10. Define animal cell culture.

Part B

Answer any FOUR questions

(4×10=40 Marks)

11. Give an account on population genetics.
12. Write notes on hybridoma technology and monoclonal antibodies.
13. Explain southern blotting.
14. Elucidate the applications and uses of animal cloning.
15. Write notes on the process involved in production of hairy roots *in vivo*.
16. Explain DNA sequencing.

Part C

Answer any TWO questions

(2×20=40 Marks)

17. Give an account on bioremediation.
18. Write an essay on production and purification of recombinant proteins.
19. Explain animal cell preservation.
20. Discuss genomic cDNA libraries.
