



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION - ZOOLOGY

SECOND SEMESTER – APRIL 2013

ZO 2814 - CELL AND MOLECULAR BIOLOGY

Date : 26/04/2013
Time : 9:00 - 12:00

Dept. No.

Max. : 100 Marks

Part A

Answer All the questions

(10×2=20 Marks)

1. List out the functions of plasmamembrane.
2. Differentiate mitosis from meiosis.
3. Comment on telomerase.
4. Define transduction.
5. What are oncogenes?
6. Comment on DNA fingerprinting.
7. Define mutagen.
8. Explain mitochondrial DNA.
9. What is the initiation codon?
10. Comment on carcinoma.

Part B

Answer any FOUR questions

(4×10=40 Marks)

11. Write an account on lysosomes.
12. Explain karyotyping.
13. Describe polytene chromosomes.
14. Give an account on bacterial transformation.
15. Write notes on human genome project.
16. Explain pedigree analysis.

Part C

Answer any TWO questions

(2×20=40 Marks)

17. Compare the characteristics of Prokaryotic and Eukaryotic cells.
18. Describe DNA replication and its enzymes.
19. Give an account on operon hypothesis.
20. Write an essay on genetics of aging.
