



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – ZOOLOGY

SECOND SEMESTER – APRIL 2014

ZO 2817 - MOLECULAR CELL BIOLOGY

Date : 28/03/2014

Dept. No.

Max. : 100 Marks

Time : 09:00-12:00

Part A

Answer All the questions

(10×2=20 Marks)

1. Comment on fluorescence microscope.
2. Write about power crystal diffraction method.
3. Differentiate immortalization from metastasis.
4. What are the types of known protein products of oncogenes?
5. Comment on cystic fibrosis.
6. Give information's about cell cycle.
7. What are prions?
8. List out the chemical classes of hormones.
9. Differentiate hydrostatic pressure and osmotic pressure.
10. What are the functions of mRNA?

Part B

Answer any FOUR questions

(4×10=40 Marks)

11. Write an account on Tumor-suppressor genes.
12. Explain the applications of DNA finger printing.
13. Describe transfer RNA.
14. Discuss genetics of aging.
15. What are the four stages involved in gene manipulations?
16. Write notes on Rabies.

Part C

Answer any TWO questions

(2×20=40 Marks)

17. Write an essay on the life cycle of Rous sarcoma virus, oncogenes and induction of protooncogenes.
18. Give an account on genetic code.
19. Explain the gene expression in eukaryotes.
20. Discuss pedigree analysis.
