



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

**M.Sc. DEGREE EXAMINATION – ZOOLOGY**

**SECOND SEMESTER – APRIL 2016**

**ZO 2817 - MOLECULAR CELL BIOLOGY**

Date: 20-04-2016  
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

**Part A**

**Answer ALL the questions**

**(10×2=20 Marks)**

1. What are proto oncogenes?
2. Differentiate lymphoma and sarcoma.
3. Comment on Burkitt's lymphoma.
4. Define receptor activation.
5. Write the significance of osmosis.
6. What are the chemical agents cause DNA damage?
7. Distinguish endocrine action with autocrine action.
8. List out the functions of cell wall.
9. What is DNA ladder?
10. Mention about dispersive replication of DNA.

**Part B**

**Answer any FOUR questions**

**(4×10=40 Marks)**

11. Write notes on naming and mutational nature of cancer.
12. Explain P<sup>53</sup> gene.
13. Give an account on various factors in the occurrence of diseases.
14. Discuss the different steps involved in DNA finger printing technology.
15. Describe the structure and function of endoplasmic reticulum.
16. Discuss the ethical implication of modern genetics.

**Part C**

**Answer any TWO questions**

**(2×20=40 Marks)**

17. Give an account of the life cycle of Rous sarcoma virus and explain oncogenes.
18. Explain cell division and cell cycle.
19. Describe the structure and functions of different types of RNA.
20. Write an essay on cell adhesion and role of cell adhesion molecules.

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