



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

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

SECOND SEMESTER – NOVEMBER 2016

**ZO 2817 - MOLECULAR CELL BIOLOGY**

Date: 08-11-2016  
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

**Part-A**

**Answer ALL the questions**

**(10×2=20 Marks)**

1. Comment on western blot.
2. Define active transport.
3. Write the functions of lysosome.
4. What is transcription?
5. Differentiate immortalization and metastasis.
6. What are tumor -suppressor genes?
7. Define carcinogen.
8. Comment on pedigree analysis.
9. Explain apoptosis.
10. What is hetero chromatin?

**Part-B**

**Answer any FOUR questions**

**(4×10=40 Marks)**

11. Write notes on naming and nature of cancers.
12. Give an account on electrophoresis.
13. Explain the process of DNA replication.
14. Discuss the p<sup>53</sup> gene.
15. Describe the structure of mitochondria.
16. Give an account on genetic code.

**Part-C**

**Answer any TWO questions**

**(2×20=40 Marks)**

17. Explain gene regulation using LAC operon as an example.
18. Discuss DNA finger printing and its significance.
19. Write an essay on viral nature of cancer in relation to the life cycle of Rous sarcoma virus.
20. Enumerate various DNA repair mechanism.

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