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

Part-A

Answer ALL the questions

- 1. Comment on westeron blot.
- 2. Define active transport.
- 3. Write the functions of lysosome.
- 4. What is transcription?
- 5. Differentiate immortalization and metastasis.

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- 6. What are tumor -suppressor genes?
- 7. Define carcinogen.
- 8. Comment on pedigree analysis.
- 9. Explain apoptosis.
- 10. What is hetero chromatin?

Part-B

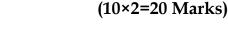
Answer any FOUR questions

- 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 p⁵³ gene.
- 15. Describe the structure of mitochondria.
- 16. Give an account on genetic code.

Part-C

Answer any TWO questions

- 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.



Max.: 100 Marks

(2×20=40 Marks)

(4×10=40 Marks)