



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY

FIFTH SEMESTER – APRIL 2019

16UZO5MC02– MOLECULAR GENETICS

Date: 16-04-2019
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

Part - A

ANSWER ALL QUESTIONS

(10*2=20)

Explain the Following:

1. Linkage
2. Inheritance
3. Euploidy
4. Types of cancer
5. Transduction
6. Mutagenesis
7. Operon
8. Promoters
9. Receptors
10. Monoclonal Antibodies

Part - B

ANSWER ANY FOUR QUESTIONS

(4*10=40)

11. What is extra nuclear inheritance patterns?
12. Explain haploid and diploid mapping.
13. Write short notes on Oncogenes.
14. Differentiate generalized transduction from specialized transduction.
15. Explain (a) Galactose Operon (b) Arabinose Operon.
16. Comment on Passive and active transport across cell membranes.

Part - C

ANSWER ANY TWO QUESTIONS

(2*20=40)

17. Write an essay on application of Genetics and Evolution.
18. Explain the development causes of cancer.
19. What are the types of mutation and explain the biochemical basis of mutants.
20. Explain in detail about the gene regulation mechanism.

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