



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY

FIFTH SEMESTER – NOVEMBER 2022

UAZ 5502 – GENETICS

Date: 25-11-2022

Dept. No.

Max. : 100 Marks

Time: 09:00 AM - 12:00 NOON

PART - A

ANSWER ALL THE QUESTIONS

(10 x 2= 20 Marks)

1. Comment on holandric gene.
2. What is simple inheritance?
3. Define incomplete linkage
4. What is crossing over?
5. Comment on inversion
6. What is a mutagen?
7. Comment on Patau's syndrome.
8. Define transduction
9. Define operon model.
10. Comment on feedback inhibition.

PART – B

ANSWER ANY FOUR QUESTIONS

(4x10=40 Marks)

11. Describe the monohybrid cross in detail.
12. Give short notes on crossing over.
13. Write short notes on induced mutation.
14. Elaborate the structural changes in chromosomes.
15. Briefly explain the notes on transposons.
16. Enlist the characteristics of polygenic inheritance.

PART – C

ANSWER ANY TWO QUESTIONS

(2 x20 =40 Marks)

17. Elaborate the law of independent assortment.
18. Explain the chromosome map with diagram.
19. Give brief notes on numerical changes in chromosomes.
20. Write an essay on pedigree analysis.

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