

Roll.No.

20UPBCT5009

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)

Chromepet, Chennai - 600 044.

B.Sc PBPB - END SEMESTER EXAMINATIONS - NOVEMBER 2025

SEMESTER - V

20UPBCT5009 - Genetics and Plant Breeding

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Define the laws of Mendelian inheritance and explain the Monohybrid cross.
2. Briefly explain the chromosome theory of linkage.
3. Write short notes on Polyploidy.
4. Explain the DNA finger printing.
5. Explain the plant Introduction method of plant breeding.
6. Briefly describe the ABO blood grouping in humans.
7. Explain Klinefelter's, Down's and Turner's syndrome.
8. Explain the role of mutation in plant breeding.

Section C

Answer any **THREE** questions ($3 \times 10 = 30$ Marks)

9. Explain the Complementary factor with suitable examples.
10. Describe the mapping of genes on chromosomes in detail.
11. Write an essay on structural of chromosomes and its changes.
12. Give an account on Hardy Weinberg principle in population genetics.
13. Explain the steps involved in hybridization technique used in plant breeding.
