

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 - 2023

SEMESTER - V

16UPBCT5A09 - 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. Explain Polygenic inheritance with an example.
2. Describe Male sterility in corn.
3. Prepare a Chromosome map and explain its significance.
4. Explain DNA finger printing.
5. Describe Mutation breeding.
6. Solve simple cross following Mendelian genetics.
7. Explain Plastic inheritance in *Mirabilis*.
8. Distinguish Mutagenic agents and its significance.

Section C

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

9. Interpret gene interactions with an appropriate example.
10. Relate sex linked inheritance with special reference to Haemophilia.
11. Distinguish the chromosome conditions and the traits of Klinefelter's, Down's and Turner's syndromes.
12. Application of Hardy Weinberg theory for population genetics – Discuss in detail.
13. Compare various methods of plant breeding and its applications.
