

B.Sc. DEGREE EXAMINATION, NOVEMBER 2019
III Year V Semester
Genetics and Plant Breeding

Time : 3 Hours

Max.marks :75

Section A ($10 \times 2 = 20$) Marks

Answer any **TEN** questions

1. Lethal genes.
2. Pseudo alleles
3. Hypertrichosis
4. Criss cross inheritance.
5. Mutagen
6. Polyploidy
7. DNA probe
8. Genomic library.
9. Transposons
10. Heterosis
11. Colour blindness.
12. Germplasm storage.

Section B ($5 \times 5 = 25$) Marks

Answer any **FIVE** questions

13. Give an account on polygenic inheritance.
14. Explain extra nuclear inheritance.
15. What is chromosome theory of inheritance? Explain.
16. List out the steps of DNA finger printing.
17. Differentiate between mass selection and pure line selection.
18. What is the difference between back cross and test cross?
19. Write notes on Down's syndrome.

Section C ($3 \times 10 = 30$) Marks

Answer any **THREE** questions

20. Write a detailed account on epistasis with an example.
21. Discuss in detail about sex determination in plants.
22. Explain the linkage and crossing over.
23. How one can determine whether or not a population is in Hardy - Weinberg equilibrium?
24. What is male sterility? Explain the types and uses of male sterility in plant breeding.

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