23104200

QP CODE: 23104200

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, JANUARY 2023

Third Semester

B.Sc Biotechnology Model III

CORE COURSE - BT3CRT07 - GENETICS

2017 Admission Onwards

8CB25D2A

Time: 3 Hours Max. Marks : 60

core

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. What is Mendels first law?
2. Define lethal genes.
3. What is the chromosome theroy of linkage?
4. Difference between intersex & gynandromorph.
5. What is Y-linked genes?
6. How chloroplast DNA is inherited?
7. What are types of mutation based on causative factors?
8. What are the effects of mutation?
9. What is F banding?
10. Define pedigree chart.
11. What is genetic drift?
12. How does the allele frequencies are calculated?

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. What are the reasons behind mendels success?
14. Explain Epistasis.
15. Explain the factors affecting Crossing over.
16. Explain the sex limited genes with examples.
17. What are the variations in chromosome numbers?
18. Explain sex chromosomal anomalies with examples.
19. Explain types of Cancer genes?
20. What is the significance of random mating?
21. Explain Hardy weinberg law with example.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Explain multiple alleles with suitable examples.
23. Illustrate the sex linked inheritance with suitable examples.
24. Describe the classification of various types of mutations.
25. Explain chromosomal anomalies and human disorders.

(2×10=20)