



QP CODE: 23104630



23104630

Reg No :

Name :

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

First Semester

B.Sc Bioinformatics Model III

Complementary Course - BI1CMT02 - FUNDAMENTALS OF GENETICS

2017 Admission Onwards

3F39B71D

Time: 3 Hours

Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. Comment on Allelomorphs.
2. Comment on mendel's work with garden pea.
3. Comment on non allelic interaction.
4. Define supplementary gene.
5. Comment on inter allelic interaction.
6. What is duplication?
7. What is replica plating?
8. What is complete linkage?
9. Mention about somatic or mitotic crossing over.
10. What is color blindness?
11. Mention the differences between haemophilia A and haemophilia B.
12. Define chromosomal theory of inheritance.

(10×2=20)

Part B

*Answer any **six** questions.*

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





13. Comment on incomplete dominance with examples.
14. Write briefly on gene interaction.
15. What are lethal gene? mention its types with suitable example.
16. Write about euploidy and aneuploidy.
17. Write examples for Physical mutagens.
18. Write about incomplete linkage with suitable example.
19. Define genetic mapping of chromosome.
20. Write about Y-linked and XY-linked inheritance.
21. What are the features of shell coiling in Limnaea?

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Explain Mendel's law with two example from both plant and animal.
23. Explain Multiple allele with suitable examples.
24. Mention about inversion and translocation.
25. Explain crossing over with features.

(2×15=30)

