QP CODE: 24026875

24026875

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, OCTOBER 2024

Third Semester

B.Sc Biotechnology Model III

CORE COURSE - BT3CRT07 - GENETICS

2017 Admission Onwards

D30F9B8F

Time: 3 Hours Max. Marks : 60

Part A

*Answer any **ten** questions.*

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

1. What is Mendels first law?
2. Define atavism.
3. What is Y-linked genes?
4. What is bleeders disease or royal disease?
5. Give examples of sex limited genes.
6. Write the significance of cytoplasmic inheritance.
7. Define aneuploidy.
8. What are the effects of mutation?
9. Give an example on constuction of tree using pedigree.
10. What are chromosome disordes?
11. Define gene flow.
12. What is allelic frequency?

(10×1=10)

Part B

*Answer any **six** questions.*

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

13. Asses the Rediscovery of mendels work.

14. Explain lethal genes with examples.

15. Explain the factors affecting Crossing over.

16. Explain Lyon hypothesis.

17. Explain the extrachromosomal inheritance in mitochondria.

18. What are the applications of karyotyping?

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 types of chromosomal mechanisms for sex determinations.

24. Summarize the two types of chromosomal aberrations.

25. Explain the genetic disorders caused in humans and its charecteristics.

(2×10=20)