QP CODE: 26017297

26017297

Reg No : .....

Name : .....

**B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE / MERCY CHANCE EXAMINATIONS, MARCH 2026**

**Sixth Semester**

**CORE COURSE - ZY6CRT11 - BIOTECHNOLOGY, BIOINFORMATICS AND MOLECULAR BIOLOGY**

Common for B.Sc Zoology Model I, B.Sc Zoology Model II Aquaculture, B.Sc Zoology and Industrial Microbiology Model III Double Main, B.Sc Zoology Model II Food Microbiology, B.Sc Zoology Model II Medical Microbiology & B.Sc Biological Techniques and Specimen Preparation Model III

2017 Admission Onwards

CCB4324F

Time: 3 Hours Max. Marks : 60

**Part A**

*Answer any **ten** questions.*

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

1. What is green biotechnology?
2. List out any two applications of PCR.
3. What is Zoo blotting?
4. What are microsatellites.
5. What is GM crops.
6. What is Biological warfare.
7. Differentiate between Bioinformatics and Computational biology.
8. Name two variants of BLAST.
9. What is primosome?
10. Who discovered Split genes?
11. How is the sequence of flow of information in central dogma?
12. Define reverse transcription.

(10×1=10)

**Part B**

*Answer any **six** questions.*

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

13. Explain te major steps involved in recombinant DNA technology.
14. Comment on insitu hybridization technique.
15. What are stem cells? Explain the different types of stem cells with egs?
16. Comment on phylogenetic tree and add a note on its significance.
17. Give an account on Human Genome Project.
18. Explain Griffith's transformation experiments.
19. Distinguish between Eukaryotic and Prokaryotic genome.
20. Describe the characteristics of genetic code.
21. Discuss about catabolite repression of lac operon.

(6×5=30)

**Part C**

*Answer any **two** questions.*

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

22. Explain the different vectors used gene cloning.
23. Write an Essay on Biological Databases and its management.
24. Explain in detail the composition of DNA and its function.
25. Explain about different levels of eukaryotic gene regulation.

(2×10=20)