



QP CODE: 26019247



Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, MARCH 2026

Fourth Semester

M Sc BIOINFORMATICS

ELECTIVE - BT800401 - GENETIC ENGINEERING & IPR

2019 Admission Onwards

183C2542

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. What are plasmids ?
2. What is PEG ?
3. Molecular scissors.
4. Steps involved in Cloning?
5. MCS in vector.
6. Colony hybridization
7. Rnase protection Assay
8. DNA fingerprinting
9. According to Indian Patent Act1970, what are the rights to the patentee?
10. Copyright

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Differentiate between therapeutic cloning and reproductive cloning.
12. Briefly explain various modification enzymes used in genetic engineering.





13. Explain about double digestion with Restriction enzyme.
14. Short note on DNA microarrays.
15. How can be adaptors used in inserting DNA? explain with example?
16. Write about nucleic acid hybridization assays.
17. How RT PCR can be used for the analysis of translation?
18. How to protect your inventions?

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Give detailed account on isolation and purification of chromosomal and plasmid DNA.
20. Elaborate in detail on PCR, types and application.
21. Explain about protein-protein interaction and cloning strategies for studying PPIs.
22. Describe in detail on various blotting techniques.

(2×5=10 weightage)

