



QP CODE: 25024514



25024514

Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, APRIL 2025

Fourth Semester

M Sc BIOINFORMATICS

ELECTIVE - BT800401 - GENETIC ENGINEERING & IPR

2019 ADMISSION ONWARDS

73028947

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. What is rDNA ?
2. Short note on PAGE.
3. Polymerases.
4. Double digestion by bacteria
5. pGEM3Z.
6. Differential gene expression.
7. Selectable marker
8. Monoclonal antibody.
9. Define IPR?
10. Ethical issues in Human Cloning.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. What are liposomes. significance ?
12. Write the steps involved in the joining of a DNA into vector.
13. Why was the discovery of a thermostable DNA polymerase so important for the development of PCR?





14. Give an account on clonning of interracting genes.
15. What are linker? How it is used in cloning strategies?
16. Write about various methods for analysis of a protein.
17. Briefly explain about antibody production.
18. Describe various steps involved in patent filing.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. Give detailed account on applications of genetic engineering.
20. Give detailed account on cell based cloning.
21. Explain in detail a)Colony hybridization b) Blue White screeining
22. Explain in detail on a) detection tags b) radiolabelling of probes c) fluorescence labelling

(2×5=10 weightage)

