THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS-PG)

(Regular/Supplementary/Improvement)

C19P BOT3 C09 - BIOTECHNOLOGY AND BIOINFORMATICS

(Botany)

(2019 Admission onwards)

Time: Three Hours   Maximum: 30 Weightage

I. Answer any *four* questions. Each question carries 2 weightage.

1. Northern Blotting.

2. Briefly explain HTTP, HTML and URLs.

3. Terminal deoxynucleotidyl transferase.

4. Write an account on PCR and its significance.

5. Write a note on DNA chip.

6. Write a short note on the types of secondary data bases?

7. Explain Cryopreservation.

(4 × 2 = 8 Weightage)

II. Answer any *four* questions. Each question carries 3 weightage.

8. Write a note on Restriction enzymes.

9. Explain Electroporation and microinjection.

10. Explain in detail: Protein structure Prediction:

11. Explain scope of bioinformatics along with its branches in detail.

12. Applications of plant tissue culture.

13. Explain Gen Bank and structure of Gen Bank entries.

14. What are scoring matrices and what are they used for?

(4 × 3 = 12 Weightage)

III. Answer any *two* questions. Each question carries 5 weightage.

15. Describe the various of DNA sequencing.

16. Explain Ti Plasmid Mediated cloning.

17. What is BLAST? Give the different categories into which BLAST tools can be categorised. What are the different parameters you observe after running any BLAST exercise? Define them.

18. Write an essay on the methods of multiple sequence alignment with special reference to the tools that you have studied.

(2 × 5 = 10 Weightage)

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