



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

U.G. DEGREE EXAMINATION – ALLIED

FOURTH SEMESTER – APRIL 2022

16/17/18UZ04AL01 – BIOINFORMATICS

Date: 27-06-2022

Dept. No.

Max. : 100 Marks

Time: 09:00 AM - 12:00 NOON

Section-A

Answer ALL the questions

(10 × 2=20)

1. What is biological database?
2. Mention any two sequence similarity search tools used in biological analysis.
3. Write a note on cheminformatics.
4. Mention the use of machine code in computer system.
5. Comment on Phylogenetic tree.
6. Expand: NIH, NCBI
7. Comment on medical informatics.
8. Write down the complementary sequence for the following nucleic acid sequences.
ATCGATCGGAATTGGAACC
AUCCGGUAAAGCAAUAGG
9. Define 'Bioinformatics' according to NIH.
10. Mention the importance of BLAST

Section-B

Answer any FOUR questions

(4 × 10 =40)

11. Explain the elements of a computer system.
12. Write an essay on Internet including its advantages and disadvantages.
13. Write down the advantages of human genome project and its ethical implications.
14. Elaborate any four major influenced areas in the field of bioinformatics.
15. Comment on data mining and its steps involved in knowledge discovery in databases.
16. Explain in detail the database similarity searching.

Section-C

Answer any TWO questions

(2 × 20 =40)

17. Form an essay on overview of bioinformatics.
18. Form an essay on database similarity searching with special reference to BLAST.
19. Write an essay on the applications of bioinformatic tools and techniques.
20. Explain the various types of biological databases and their applications.

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