



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – CHEMISTRY, STATS, PHYSICS, PLANT BIO. & BIOTECH.

FOURTH SEMESTER – APRIL 2015

AZ 4200 - BIOINFORMATICS

Date : 25/04/2015

Dept. No.

Max. : 100 Marks

Time : 09:00-12:00

Part-A

Answer ALL the questions

(10×2=20 Marks)

1. What is DNA chip ?
2. Distinguish analog from digital computers.
3. Mention the application of Rasmol.
4. Comment on human genome.
5. What is the importance of PUBMED and KEGG?
6. Name any two tools and softwares used in drug designing.
7. Mention any four amino acids of proteomics.
8. What are the domain types or commands used in SQL?
9. Outline the basic structure of C-program.
10. Expand OMIM and DDL.

Part-B

Answer any FOUR questions

(4×10=40 Marks)

11. How do you sequence DNA ? Describe any one method
12. Examine the network protocol, architecture, topology and utility in exploring Bioinformatics.
13. Highlight the applications of Bioinformatics.
14. Explain the principle and applications behind DNA computing.
15. Propose a simple C-program for adding two numbers.
16. Illustrate the components of UNIX operating system and satellite communication net work.

Part-C

Answer any TWO questions

(2×20=40 Marks)

17. Elucidate the nucleotide and protein sequence data bases and their tools.
18. Propose a design for DNA nanomachine and add its applications.
19. How are proteins classified based on structure? Illustrate.
20. How do you design a drug using pharmainformatics?
