

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY

SIXTH SEMESTER – APRIL 2018

AZ 6604– BIOINFORMATICS

Date: 19-04-2018
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

PART A

Answer **ALL** the questions

(10X 2= 20 Marks)

1. What is Bioinformatics?
2. Define HTML.
3. Expand FASTA
4. Expand PAM
5. What is DNA sequencing?
6. Comment on Shotgun.
7. What is Pass?
8. What is String?
9. Local alignment gaps- Justify.
10. Give an account on biological databases.

PART B

Answer any **FOUR** questions

(4X 10= 40 Marks)

11. Write a note on history of internet.
12. Explain the algorithms issues in databases search
13. What is large scale sequencing and alignment
14. Write notes on molecular prediction with DNA strings
15. Explain the connection between multiple alignment and tree construction
16. How will you edit distance between two strings?

PART C

Answer any **TWO** questions

(2X 20= 40 Marks)

17. Write an essay on database management system?
18. Write short notes on (I) BLAST
(II) Amino acid substitution matrices PAM and Blossum
19. Discuss perfect phylogeny and phylogenetic alignment
20. Explain parametric sequence alignment and multiple alignment.
