

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI 600 086
(For candidates admitted during the academic year 2015 – 2016 & thereafter)

SUBJECT CODE: 15BI/PE/FB34

M.Sc. DEGREE EXAMINATION NOVEMBER 2017
BIOINFORMATICS
THIRD SEMESTER

COURSE : ELECTIVE
PAPER : FUNDAMENTALS OF BIOINFORMATICS
TIME : 3 HOURS

MAX. MARKS: 100

SECTION A

(20x1=20)

Answer ALL questions.

1. Entrez
2. File format
3. BLAST
4. Sequence Alignment
5. FASTA
6. Repeat sequence
7. PAUP
8. Dendrogram
9. UNIGENE
10. Primary database
11. Microarray
12. Introns
13. Restriction Endonuclease
14. Unrooted phylogenetic tree
15. Hybridization
16. Bootstrapping
17. EST
18. E value
19. Similarity and Identity
20. Conserved Regions

SECTION-B

Answer any FOUR questions in 200 words

(4x10=40)

21. Biological Data Formats.
22. Phylogenetic Analysis.
23. Scoring Matrices.
24. Local and Global Alignment.
25. Multiple sequence alignment
26. Classification of Biological Databases.
27. Application of Bioinformatics in various fields.

SECTION-C

Answer any TWO questions in 1000 words

(2x20=40)

28. Explain in detail about the data retrieval systems in Bioinformatics.
29. Analysis and Prediction of Gene Regulatory regions.
30. Discuss the concept of BLAST sequence alignment tool.
31. What are Microarrays? Explain its Types and application.
