Code: 9A23701

R09

B.Tech IV Year I Semester (R09) Supplementary Examinations, May 2013
BIOINFORMATICS
(Biotechnology)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks
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1   (a)   Describe the elementary commands and protocol in ftp and telnet.
    (b)   Explain about the basics of information theory.

2   (a)   Describe the Charles Darwin contribution to evolutionary theory.
    (b)   What are the differences between orthologs and paralogs?

3   Enumerate the physical and genetic mapping of DNA.

4   What is sequence alignment? Explain about tuple methods used by programs FASTA
          and BLAST.

5   Explain biological databases. Describe the features and file formats used in biological
          databases.

6   What are secondary databases? Mention about SCOP and CATH.

7   Describe in brief about the comprehensive enzyme information system BRENDA.

8   Present a flowchart of different evolutionary tree building methods. Explain in detail the
          distance based and character based methods.

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