

L-19/2050
INTRODUCTION TO BIOINFORMATICS-XVI
(Semester-IV)

Time : Two Hours]

[Maximum Marks : 75

Note : Attempt any *four* questions. All questions carry equal marks.

- I. Give brief description of present bioinformatics scenario in India ?
- II. Describe characteristics and categories of biological data bases.
- III. Write about composition, organisation and structure of data entries ?
- IV. Write a note on the following data bases :
 - (a) KEGG.
 - (b) BRENDA.
 - (c) PMC.
- V. What is the difference between PAM and BLOSUM substitution matrices algorithms.
- VI. Write down types and applications of BLAST and FASTA.
- VII. What do you know about gene identification methods.

VIII. Write a note on prediction of protein 3D-Structure.

IX. Define the following :

- (a) Bioinformatics.
 - (b) Research.
 - (c) Data base.
 - (d) Protein sequence.
 - (e) Protein database.
 - (f) ORF.
 - (g) Web resources.
 - (h) Phylogenetic analysis.
 - (i) Modeling.
 - (j) Genome analysis.
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