

2062
B.Sc. (Hons.) Bio-Informatics
Second Semester
BIN-2006: Introduction to Bioinformatics

Time allowed: 3 Hours

Max. Marks: 60

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

x-x-x

I. Answer the following:-

- a) What significance of flat file?
- b) Why we do pairwise alignment?
- c) What is ASN.2?
- d) What is SP sum pair score?
- e) What is amino acid ionization?
- f) Discuss the role of studying MSA to understand biology of a cell.
- g) What is sequence domain?
- h) What is Motif?

(8x1½)

UNIT - I

II. a) Write a note on PDB.

b) Discuss PIR.

(6+6)

III. a) Discuss the role of NCBI resources.

b) Write a note on central dogma of molecular biology.

(6+6)

IV. a) Write a note on SCOP & its significance.

b) Differentiate between Swissport and Uniport.

(6+6)

UNIT - II

V. a) What are FASTA and its significance?

b) Differentiate Gap affine and opening penalty.

(6+6)

VI. a) Discuss different level of Motifs and Profile.

b) What is scoring functions?

(6+6)

P.T.O.

(2)

VII. a) Discuss PAM & their applications.

b) Discuss classification of amino acids.

(6+6)

x-x-x