Day: Tuesday
Date: 16/04/2019   **S-2019-1391**   Time: 10.00 AM TO 01.00 PM
Max. Marks: 60

N.B.:

1) Q1 and Q5 are compulsory.
2) Answer ANY TWO questions from Q 2, 3, 4 in Section I.
3) Answer ANY TWO questions from Q 6, 7, 8 in Section II.
4) Answers to Both the sections to be written in $\therefore$ SAME $\vdots$ answer books.
5) Draw a labeled diagram WHEREVER necessary.

SECTION - 01

Q.1) Answer the following: (ANY FIVE) (2 Marks X 5 = 10)

  a) UCSC stands for _____.
  b) What is INSCD?
  c) NCBI was founded in _____.
  d) Who is father of Bioinformatics?
  e) Prosite database began in _____.
  f) Which is first preotein sequence database?

Q.2) Answer the following: (5 Marks X 2 = 10)

  a) What is Biological database?
  b) Explain Scope of Bioinformatics.

Q.3) Explain the following: (5 Marks X 2 = 10)

  a) Explain Medline and PMC database features with their respective applications.
  b) Enlist five comands of RASMOL.

Q.4) Write short notes on the following: (5 Marks X 2 = 10)

  a) EMBL
  b) GenBank flat file

SECTION - 02

Q.5) Answer the following: (ANY FIVE) (2 Marks X 5 = 10)

  a) Define Family.
  b) PIR stands for _____.
  c) BLOSUM metrices used for _____.
  d) What is sequence alignment?
  e) Define Homology.
  f) Define sequence similarity.

Q.6) Answer the following: (5 Marks X 2 = 10)

  a) What is proteomics? Explain its applications.
  b) Explain Scoring matrices for Nucleic acids.

Q.7) Explain the following: (5 Marks X 2 = 10)

  a) Explain Smith-Waterman algorithm.
  b) Explain in brief Multiple sequence alignment.

Q.8) Write short notes on the following: (5 Marks X 2 = 10)

  a) Protein sequencing techniques.
  b) FASTA

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