FIRST SEMESTER B.Sc. DEGREE EXAMINATION, JULY 2013

(CCSS)

Biotechnology

BT 1B 01—INFORMATICS AND BIOINFORMATICS

Time : Three Hours   Maximum : 30 Weightage

I. Objective Type Questions. Answer all *twelve* questions :

A. State true *or* false :

    1 Smith-Waterman algorithm is used for global alignment.

    2 PIR is protein database.

    3 Sangers method is the chain termination method for DMA sequencing.

    4 Firewall is a search engine.

    5 GenBank is a non-redundant DNA database.

    6 Basmati is a geographical indication.

    7 Automatic teller machine is used for cash withdrawal.

    8 cDNA is total DNA isolated from cells.

    9 Flybase is the database for Drosophila melanogaster.

   10 Craig Venter founded Celera genomics.

   11 BITS and bytes are the same.

   12 PAM matrix is used for evolutionary distance in proteins.

                                           (12 x   = 3 weightage)

II. Short Answer type questions. Answer all *nine* questions :

Write short notes on :

   13 BRNET.

   14 ORF.

   15 WWW.

   16 Internet.

   17 Motherboard.

   18 Patents.

19 ExPASy.

20 EMBL.

21 BLAST.

(9 x 1 = 9 weightage)

III. Short essay *or* Paragraph questions. Answer any *five* from seven :

22 What is your understanding of warranty and Guarantee ?

23 Write an account on ATM.

24 What is meant by open access publishing model ?

25 Give an account on bio-computing.

26 What are the privacy issues related to the cyber world ?

27 Explain the significance of e-governance today.

28 What is gene hunting ?

(5 x 2 = 10 weightage)

IV. Essay questions. Answer any *two* from three :

29 Write briefly on the DNA and protein databases.

30 Give an overview of IT application in communication, publication and commerce.

31 Write briefly on futuristic IT-artificial intelligence and virtual reality.

(2 x 4 = 8 weightage)