

**C 43528**

(Pages 2)

Name.....

Reg. No.....

**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.

Turn over

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)