FIRST SEMESTER B.Sc. DEGREE EXAMINATION, JANUARY 2013

(CCSS)

Biotechnology—Core Course

BT 1B 01—INFORMATICS AND BIOINFORMATICS

Time : Three Hours   Maximum : **30** Weightage

I. Objective type questions. Answer all *twelve* **questions :**

A. Name the following :

1. Internet access method.

2. Protein structure database.

3. Data mining tool.

4. Nucleotide database.

5. Algorithm for local alignment.

6. Central dogma of molecular biology.

B. Expand the following :

7. EMBJ.

8. NCBI.

9. PHI-BLAS.

10. HTTP.

11. ORF.

12. BRNET.

(12 x ¼ = 3 weightage)

II. Short answer type questions (Answer all *nine* **questions) :**

Write short notes on :

13. Copy rights.

14. Phylip.

15. Unicode.

16. Wireless technology.

17. Algorithm.

18. Biological database.

19. www. (world wide web).

20. BLOSUM matrices.

21. Identity and similarity.

(9 x = 9 weightage)

Turn over

III. Short essay or paragraph questions. (Answer any *five* from seven) :

22. EST analysis.

23. Virtual Reality.

24. Green computing.

25. Artificial intelligence.

26. Cyber security.

27. PDB.

28. Genbank.

(5 x 2 = **10 weightage**)

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

29. What is homology search ? Mention the steps involved in **homology search. Explain** ie procedure with the help of an **appropriate example.**

30. **What is** Bioinformatics ? **Elaborate on the concept of** Bioinformatics. **Mention the tools of** Bioinformatics **and enlist its applications.**

31. **How biological databases are classified ?** **What are the most used databases for** molec biology ?

(**2 x 4 = 8 weight**