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**(FOR THE CANDIDATES ADMITTED DURING THE ACADEMIC YEAR 2022 ONLY)**

**22UBY509**

**REG.NO. :**

**N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI**
**END-OF-SEMESTER EXAMINATIONS : NOVEMBER-2024**
**COURSE NAME: B.Sc.-BOTANY** **MAXIMUM MARKS: 50**
**SEMESTER: V** **TIME : 3 HOURS**

## PART - III
## BIOINFORMATICS

**SECTION – A (10 X 1 = 10 MARKS)**

**ANSWER THE FOLLOWING QUESTIONS.**
**MULTIPLE CHOICE QUESTIONS. (K1)**

1. Which device is used to store large amounts of data permanently?
   a) RAM b) Hard Disk c) Cache Memory d) CPU
2. The <img> tag in HTML is used for:_____
   a) Inserting a table b) Creating a form c) Embedding an image d) Inserting a video
3. Which of the following is a generalized biological database?
   a) GenBank b) Protein Data Bank (PDB) c) PubMed d) FlyBase
4. In a phylogenetic tree, the common ancestor of all sequences is found at:
   a) The nodes b) The leaves c) The branches d) The root
5. RASMOL can be used to view structures obtained from which database?
   a) PubMed b) PDB (Protein Data Bank) c) GenBank d) ENTREZ

**ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES. (K2)**

6. Write any three High-Level Languages.
7. ____ are reserved words in C that have special meanings and cannot be used as variable names
8. What does WAN stand for?
9. Write the usage of Phylogenetic Analysis?
10. How does Computer-Aided Drug Design (CAD) contribute to the efficiency and cost-effectiveness of drug discovery?

**SECTION – B (5 X 3 = 15 MARKS)**

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)**

11. a) Explain about operating system of computer.
    **(OR)**
    b) Classify the various types of computer languages.
12. a) Write heading tags in HTML
    **(OR)**
    b) Write a short note on C - language.

**(CONTD……2)**

13. a) Define local area network.

**(OR)**

b) What are Genome specific databases?

14. a) Define Sequence alignment.

**(OR)**

b) How will you evaluate phylogenetic tools?

15. a) Explain various tools used for structure visualization.

**(OR)**

b) List out Importance of Drug Discovery.

**SECTION – C (5 X 5 = 25 MARKS)**

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.**

**(K4 (Or) K5)**

16. a) Discuss the input and output devices.

**(OR)**

b) Briefly describe about translators and compilers.

17.a) Explain briefly about Types of Hyperlink

**(OR)**

b) Explain the structure of C program.

18. a) Write an essay on protein data base.

**(OR)**

b) Describe the nucleic acid database structure.

19.a) Explain various approaches used in pairwise sequence alignment.

**(OR)**

b) Explain various methods of tree analysis.

20.a) What are the goal and applications of primary structure prediction.

**(OR)**

b) Briefly describe about computer Aided Drug designing.

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