(NO. OF PAGES: 1)

(FOR THE CANDIDATES ADMITTED
DURING THE ACADEMIC YEAR 2020 & 2021 ONLY)

21UBY4N4

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS): POLLACHI

END-OF-SEMESTER EXAMINATIONS: MAY-2023

COURSE NAME: ALL UG DEGREE COURSES **MAXIMUM MARKS: 50**

SEMESTER: IV **TIME: 2 HOURS**

PART - IV

BIOINFORMATICS

SECTION – A (10 X 1 = 10 MARKS)

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

1. Adenine and guanine are _____.
   a) pyrimidines b) purines c) aminoacids d) sugars
2. Protein coding sequences of a DNA are called ----------.
   a) proteome b) genome c) exons d) introns
3. Multiple sequence alignment tool is ----------.
   a) CLUSTAL X b) BLAST c) RASMOL d) GENMARK
4. RASMOL predicts the---------- of protein
   a) molecular weight b) atomic number c) tertiary structure d) All the above
5. Biomolecues are _____ compounds.
   a) inorganic b) organic c) aromatic d) aliphatic

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

6. What are nucleotides?
7. What are databases?
8. Expand BLAST.
9. Define genomics.
10. What is a phylogenetic tree?

SECTION – B (5 X 8 = 40 MARKS)

ANSWER ANY FIVE OUT OF EIGHT QUESTIONS. (K3), (K4 (Or) K5)

11. Describe the structure of DNA.
12. Write an essay on applications of Bioinformatics.
13. Discuss the role of NCBI in Bioinformatics.
14. Explain similarity searching technique in detail.
15. Discuss in detail on gene finding techniques.
16. Write an essay on Biomolecular visualization.
17. Briefly explain the steps involved in the construction of a phylogenetic tree.
18. Describe protein structure prediction with examples.

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