K23U 3564

Reg. No. : .....

Name : .....

III Semester B.Sc. Degree (CBCSS – OBE – Regular/Supplementary/ Improvement) Examination, November 2023
(2020 to 2022 Admissions)
GENERAL AWARENESS COURSE IN LIFE SCIENCES (ZOOLOGY) AND COMPUTATIONAL BIOLOGY
3A12ZCB : Algorithms and Statistical Methods in Bioinformatics

Time : 3 Hours Max. Marks : 40

PART – A

Answer **all** questions. **Each** question carries **1** mark. **(6×1=6)**

1. What is Computational Biology ?
2. List any three NCBI C++ Toolkit.
3. Define MatLab.
4. What is R Language ?
5. Define Histogram in Biostatistics.
6. What is Bi – variate Distribution ?

PART – B

Answer **any 6** questions. **Each** question carries **2** marks. **(6×2=12)**

7. Seq. With Quality.
8. What are the two types of T-tests ?
9. Define non-linear regression.

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10. Define scale diagram.
11. R data structures.
12. Implementation objects in PERL.
13. Define arrays and matrices in MatLab.
14. NCBI Tool Kits.

PART – C

Answer **any 4** questions. **Each** question carries **3** marks. **(4×3=12)**

15. Discuss the significance of Python.
16. Define Primary Seq. in Perl.
17. What is reserved words in MatLab ?
18. Write a note on Probability Sampling in Biostatistics.
19. Discuss the Data Frames in R Language.
20. Define comparison of means with example.

PART – D

Answer **any 2** questions. **Each** question carries **5** marks. **(2×5=10)**

21. Explain F distribution and its applications.
22. When will you apply comparison of Means and explain why ?
23. Explain the need and applications of Harmonic Mean.
24. Explain the data sets included in R.
