21BTH3C9L

Sl. No.

M.Sc. III Semester Degree Examination, April/May - 2024
BIOTECHNOLOGY
Biostatistics and Bioinformatics
(NEP)

Time : 3 Hours Maximum Marks : 70

Note : *(i) Answer **any five** of the following questions with Question No.* ***1 (Q 1) Compulsory****,*
*each question carries **equal** marks.*

(ii) Draw neat diagrams wherever necessary.

1. Analyze the following observations using One-way ANOVA. **14**

Observation	A	B	C	D
1	08	12	18	13
2	10	11	12	09
3	12	09	16	12
4	08	14	06	16
5	07	04	08	15

2. Describe the different types of data representations. **14**

3. Give an account protein sequence database. **14**

4. Write a detailed account on different of the sequence submission tools. **14**

5. Give an account of BLAST and its types. **14**

6. (a) Discuss on the importance of Randomization and replications in biological data analysis. **7**
   (b) Give an account of OMIM and mention its importance. **7**

7. (a) Give an account of molecular phylogeny. **7**
   (b) Discuss on the molecular viewers. **7**

8. (a) Discuss on PROSITE and PRINTS. **5**

(b) Discuss on Bootstrapping method. **5**

(c) Give an account on Pairwise alignment methods. **4**

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