C. U. SHAH UNIVERSITY
Summer Examination-2022

Subject Name: Basics of Bioinformatics and Biostatistics
Subject Code: 4SC04BBB1   **Branch: B.Sc. (Microbiology)**
Semester: 4   **Date: 05/05/2022**   **Time: 11:00 To 12:30**   **Marks: 35**
Instructions:
 (1) Use of Programmable calculator & any other electronic instrument is prohibited.
 (2) Instructions written on main answer book are strictly to be obeyed.
 (3) Draw neat diagrams and figures (if necessary) at right places.
 (4) Assume suitable data if needed.

Q-1		**Attempt the following questions:**	**(07)**
	a)	What is the difference between Data and Information?	(1)
	b)	What is Histogram?	(1)
	c)	Define:- Database	(1)
	d)	Give the full form of DDBJ.	(1)
	e)	What are uses of Biostatistics?	(1)
	f)	What is Bioinformatics?	(1)
	g)	Give the full form of BLASTA	(1)

Attempt any two questions from Q-2 to Q-5

Q-2		**Attempt all questions**	**(14)**
	a)	Briefly write a note on methods of Pair wise Alignment.	**(07)**
	b)	Write down the difference between BLASTA & FASTA.(Any 7 Points)	**(07)**
Q-3		**Attempt all questions**	**(14)**
	a)	Write a detailed note on any two Bioinformatics Center.	**(05)**
	b)	Find the Mean , Mode & Median of given data 1,2,3,4,5,5,5,1,3,1	**(05)**
	c)	Write down the difference between Global and Local alignment.(Any 4 Points)	**(04)**
Q-4		**Attempt all questions**	**(14)**
	a)	Find out the mean deviation for given data value 5, 3, 7, 8,4,9.	**(07)**
	b)	Write down a brief note on applications of Bioinformatics.	**(05)**
	C)	What are the limitations of biostatistics? (any 3)	**(02)**
Q-5		**Attempt all questions**	**(14)**
	a)	Write a detail note on Nucleotide Database.	**(07)**
	b)	The following are the numbers of jobs a sample of 6 peoples applied for: 17,15,23,7,9,13 Calculate the mean, variance, and standard deviation for these values.	**(07)**