Enrollment No:	Exam Seat No:

C.U.SHAH UNIVERSITY

Winter Examination - 2018

Subject Name: Bioinformatics and Biostatistics

Subject Code : 4SC04BIB1 Branch: B.Sc. (Microbiology)

Semester: 4 Date: 25/10/2018 Time: 10:30 To 01:30 Marks: 70

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:	(14)
	a)b)c)	Define : Bioinformatics. What is MSA? Define : Biostatistics.	(1) (1) (1)
	d) e) f)	Give full form of NCBI. PHYLIP is phylogenetic analysis tool. True/false. Give any two example of biological database.	(1) (1) (1)
	g) h)	Give full form of PDB. Define : variables.	(1) (1)
Attem	n)	Give any two example of protein database. Give full form of EMBL. RASMOL is molecular visualization tool. True/false. Give full form of BLAST. Define: hypothesis. DDBJ stands for? Four questions from Q-2 to Q-8	(1) (1) (1) (1) (1) (1)
Q-2	a) b)	Attempt all questions Write brief note on protein prediction tools. What are different statistical methods used for analysis? Write in brief.	(14) (7) (7)
Q-3	a)b)	Attempt all questions Write about applications of Bioinformatics. Write a note on biological databases.	(14) (7) (7)
Q-4	a) b)	Attempt all questions Write a note on BLAST. Write various applications of Biostatistics.	(14) (4) (7)



	c)	Enlist databases used as searching tools.	(3)
Q-5		Write various about Mean, Median, Mode and Geometric mean.	(14)
Q-6		Brief note on protein prediction and molecular visualization tools.	(14)
Q-7		Attempt all questions	(14)
	a)	Note on different variables in statistics.	(6)
	b)	Write about NCBI and its uses.	(4)
	c)	What are merits and demerits of Median and Mode?	(4)
Q-8		Attempt all questions	(14)
-	a)	Write a note on primary and secondary sequence database.	(7)
	b)	What are merits and demerits of mean?	(3)
	c)	Write about student t test and chi square test.	(4)

