

C.U.SHAH UNIVERSITY

Summer Examination-2016

Subject Name: Bioinformatics/Biostatistics

Subject Code: 4LS04BOT1/4SC04BIB1

Branch: B.Sc.(Micro,Biotech)

Semester: 4

Date: 05/05/2016

Time: 02:30 To 05:30

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.
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Q-1 Attempt the following questions: (14)

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|---|---|
| a) Define Bioinformatics. | 1 |
| b) What is MIPS? | 1 |
| c) What are different forms of secondary structure? | 1 |
| d) What is use of Pfam in Protein structure prediction? | 1 |
| e) What is line graph? | 1 |
| f) What are types of Variables? | 1 |
| g) Define Biostatistics. | 1 |
| h) In which year human genome was sequenced? | 1 |
| i) What is Central dogma of life? | 1 |
| j) What are stop codons? | 1 |
| k) What is alignment? | 1 |
| l) What is dendogram? | 1 |
| m) In which form of protein structure is superimposed? | 1 |
| n) Define BLAST. | 1 |

Attempt any four questions from Q-2 to Q-8

Q-2 Attempt all questions (14)

- a) What is bioinformatics? Write about Areas, scope and applications of bioinformatics.
- b) Enlist various databases of proteins and describe.

Q-3 Attempt all questions (14)

Write a note on Secondary databases.

Q-4 Attempt all questions (14)

- a) Explain in detail about Primary, Secondary and tertiary structure of proteins with diagram.



