


RAN-2203000206026006
T.Y.B.Sc. (Non NEP) (Sem. VI) Examination March - 2026
Microbiology - MB-606 : Genomics, Proteomics And Bioinformatics (Old) (Set-A)
Time: 2 Hours]
[Total Marks:50

સૂચના : / Instructions (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fill up strictly the above details on your answer book (2) Figures to the right indicate full marks of the question. (3) Draw neat and labelled diagrams whenever necessary.	Seat No.: <table border="1"> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table> Student's Signature						

- Q. 1. Give Specific answers :** **08**
- Which sequencing method is also called the chain termination method?
 - Name the first organism whose genome was completely sequenced.
 - What is sequence alignment ?
 - Give full form of CDS and ORF.
 - Define specialized database.
 - Enlist the aim of bioinformatics.
 - Mention any two tools used for multiple sequence alignment,
 - State the different types of BLAST.
- Q. 2. Explain/ comment any two of the following:** **14**
- Explain the chain termination method of DNA sequencing.
 - 2D gel electrophoresis coupled with MS and electrophoretic mobility Shift Assay are used to study proteomics.
 - Biological databases can be classified into various categories.
- Q. 3. Explain any TWO of the following:** **14**
- Discuss the differences between global and local alignment.
 - Describe the important features of biological databases.
 - Explain whole genome shotgun sequencing as a revolutionary technology in modern science.
- Q. 4. Explain any TWO of the following:** **14**
- DNA microarray
 - Data retrieval tools
 - Branches of bioinformatics