

CS/2051

972/MH

C-14-GENOMICS & PROTEOMICS- CODE: BHB29

Sem-VI

Time Allowed 3 Hours

Max. Marks: 74

NOTE: Attempt any two questions from each Section A and Section B respectively. Questions of Section A and B each carries 11 marks. Section C is compulsory

SECTION A

- Q1 Give a complete overview of Sanger's method of gene sequencing
- Q2. Explain Clone Contig method in detail.
- Q3 Elaborate different types of genome assembly software
- Q4 Discuss ENSEMBL in detail, write down how it can be used.

SECTION B

- Q5 Describe various types of physical interactions that determine properties of proteins.
- Q6 Write a note on NATIVE PAGE
- Q7. Write down the 2D PAGE for Proteomics analysis
- Q8 Explain with help of suitable examples, the application of Proteomics.

Section C

- Q Short answer type questions
 - a. What are gene families?
 - b. Write down principle of Chemical degradation method of sequencing
 - c. What are application of Mass Spectroscopy
 - d. Draw peptide bond
 - e. Give Principle of gel filtration
 - f. What are Van der waal interactions
 - g. Write a short note on proteomics and drug development
 - h. Define toxicocogenomics
 - i. What are different types of amino acids
 - j. Write down principle of SDS PAGE
 - k. Explain Gene Annotation
 - l. How covalent structure can be studied by Edman Degradation .
 - m. What is the role of NCBI genome analysis tool
 - n. Give names of computer tools used for Sequencing projects
 - o. How resolution of 2D PAGE determined

15 x 2= 30