

Biology Fsc Part 1 Chapter 7 Online Test

| Sr | Questions | Answers Choice |
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| 1 | Orthologs are. | A. Genes in same species B. Human histone H1,1 and H1,2 C. Sequences in different species D. Arise from same ancestral gene |
| 2 | Mapping the entire set of protein produced by an organism and to understand their interactions and role in cellular process, is achieved in. | A. Genomics B. Proteomics C. Bioinformatics D. Biodynamics |
| 3 | the biologist compare protein structures to unknown genes. | A. To assign possible functions B. To study novel proteins C. To discover drugs D. To make an act |
| 4 | The active site of enzyme is important in designing a drug, because. | A. It determines enzyme physiology B. It is where a substrate binds C. It provides information about drug D. It is made up of lipids |
| 5 | Human histone H1,1 and Chimpanzee histone H1,1 are. | A. Ortholog B. Paralog C. Metalog D. Algorithm |
| 6 | Protein misfolding is associated with which of the following diseases. | A. Hypertension B. Gout C. Alzheimer's D. Influenza |
| 7 | The database of nucleotide sequences and supporting bibliographic annotations is. | A. Gen Bank B. FASTA C. BLAST D. PDB |
| 8 | Which bioinformatics tool acts like a Google Search for DNA sequences. | A. Photoshop B. BLAST C. PDB D. Excel |
| 9 | What is the primary role of computational biology? | A. Using computer algorithms to analyze data B. Identifying genetic mutations C. Studying protein functions D. Analyzing the expression patterns |
| 10 | Generally, the function of a protein depends on its | A. One-dimensional structure B. Two-dimensional structure C. Three-dimensional structure D. Four-dimensional structure |
| 11 | The first step in x-ray crystallography experiment is. | A. Compute an electron density B. Build a model of your molecule C. Measure a diffraction pattern D. Grow a crystal |
| 12 | Which computational approach is used to predict protein structure based on amino acid sequence. | A. Multiple sequence alignment B. Homology modelling C. Clustering analysis D. BLAST Searches |
| 13 | Which of the following is not the area in computational biology. | A. Genomics B. Ergonomics C. Proteomics D. Bioinformatics |
| 14 | EMBL is a link for. | A. GenBank B. EMBL C. PDB D. DDBJ |
| 15 | How does structural homology help in drug design? | A. By identifying similar protein structures for targeted drug binding. B. By identifying homologous genes |

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| | | <p>C. By providing aninsight into evolutionary relationships of genes</p> <p>D. By gene sequencing</p> |
| 16 | Whcih data base stores 3D strutures of macromolecules. | <p>A. PDB</p> <p>B. Ensembl</p> <p>C. GenBank</p> <p>D. BLAST</p> |
| 17 | Which techniuqe is used to determine the 3D-struture of proteins. | <p>A. Electron microscopy</p> <p>B. Mass spectrometry</p> <p>C. X-ray crystallography</p> <p>D. spectromery</p> |
| 18 | In x-ray diffraction technique, the diffraction pattern is used to. | <p>A. Make good quality crystal</p> <p>B. Create a density map</p> <p>C. Make density gradient</p> <p>D. Diagnose disease</p> |
| 19 | The tool used for sequene salignemnt in bioinformatics | <p>A. FASTA</p> <p>B. PDB</p> <p>C. Gen Bank</p> <p>D. Ensembl</p> |
| 20 | What is the primary focus of strutrual biology | <p>A. Styding metabloic pathwayys</p> <p>B. Determining 3D atomic level strutures of macromolecules</p> <p>C. Gene seuecing</p> <p>D. Gene expression</p> |