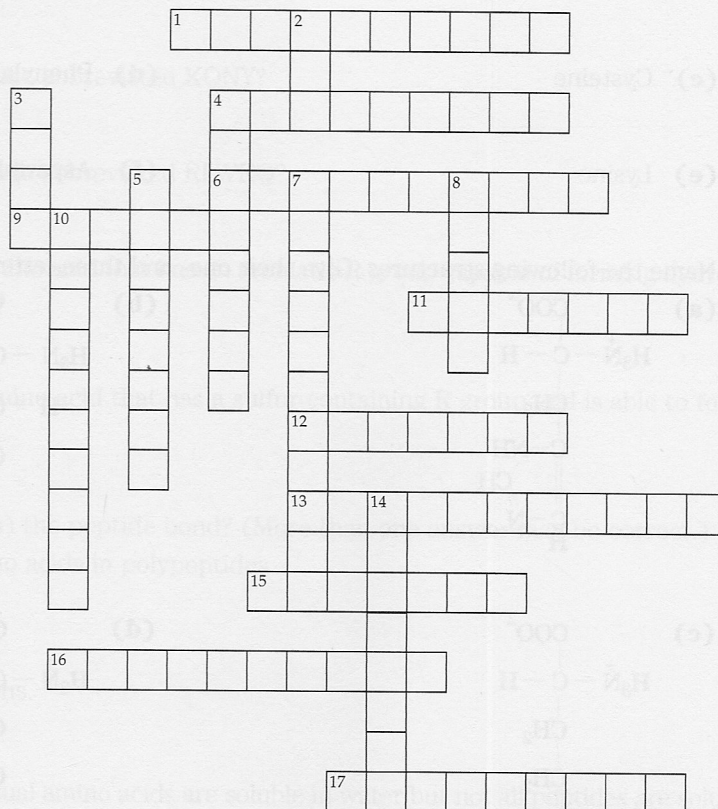


## SELF-TEST

## Do You Know the Terms?

## ACROSS

- The zinc ion in a zinc finger protein is an example of a \_\_\_\_\_ group.
- A covalent bond between two nonadjacent cysteines in a polypeptide chain is a \_\_\_\_\_ bond.
- An example of a(n) \_\_\_\_\_ amino acid is histidine, which can either accept protons or donate them at a pH that is close to physiological pH values.
- All stereoisomers must have at least one \_\_\_\_\_ center.
- \_\_\_\_\_ out is a technique that selectively precipitates some proteins, while others remain in solution. Ammonium sulfate  $((\text{NH}_4)_2\text{SO}_4)$  is often used for this purpose.
- The bond type that forms the primary structure.
- The pH at which the numbers of positive and negative charges on an amino acid are equal is referred to as the \_\_\_\_\_ point or pI.
- A single unit within a polymer: for example, lysine in a protein molecule.
- At pH 7, any amino acid with an uncharged R group is a \_\_\_\_\_.
- Proteins from different species that have similar amino acid sequences and functions are referred to as \_\_\_\_\_.



## DOWN

- A reagent used in electrophoresis to separate polypeptides on the basis of mass. (abbr.)
- Many types of separation can be done using this chromatographic technique; its advantage lies in the reduction of transit time on the column, limiting diffusional spreading of protein bands and improving resolution. (abbr.)
- After "salting out" proteins, removal of excess ammonium sulfate can be accomplished by \_\_\_\_\_ of the protein-salt solution overnight against large volumes of buffer.
- The whole assortment of proteins in an organism; analogous to the genome.
- A linear chain of amino acid residues that usually has a molecular weight less than 10,000 daltons.
- The \_\_\_\_\_ degradation procedure provides information about a protein's primary structure.
- Insulin obtained from sheep can be used to treat human diabetics because sheep and human insulin are \_\_\_\_\_ proteins.
- Hemoglobin, which contains two sets of identical subunits, is often referred to as a(n) \_\_\_\_\_.