

1. Which of the following factors is not responsible for the denaturation of proteins?

- (a) Heat
- (b) Charge
- (c) pH change
- (d) Organic solvents

Sol: (b) Charge

2. Which of the following is responsible for specifying the 3D shape of a protein?

- (a) The peptide bond
- (b) The amino acid sequence
- (c) Interaction with other polypeptides
- (d) Interaction with molecular chaperons

Sol: (b) The amino acid sequence

3. _____ is not a classified form of conjugated proteins.

- (a) Lipoproteins
- (b) Glycoproteins
- (c) Metalloproteins
- (d) Complete proteins

Sol: (d) Complete proteins

4. What is the average molecular weight of an amino acid residue in a protein?

- (a) 120
- (b) 110
- (c) 130
- (d) 140

Sol: (b) 110

5. Which of the following proteins was first sequenced by Frederick Sanger?

- (a) Myosin
- (b) Insulin
- (c) Myoglobin
- (d) Haemoglobin

Sol: (b) Insulin

6. Which of the following statements is true about proteins?

- (a) Proteins are made up of amino acids.
- (b) Proteins are essential for the development of skin, teeth and bones.
- (c) Protein is the only nutrient that can build, repair and maintain body tissues.
- (d) All of the above

Sol: (d) All of the above

7. How many amino acids make up a protein?

- (a) 10
- (b) 20
- (c) 30
- (d) 50

Sol: (b) 20

8. What is a bond between amino acids called?

- (a) Ionic bond
- (b) Acidic bond
- (c) Peptide bond
- (d) Hydrogen bond

Sol: (c) Peptide bond

9. Which of the following statements is true about proteins?

- (a) Proteins are polymers of glucose
- (b) Proteins are polymers of amino acids
- (c) Proteins are polymers of peptide bonds
- (d) Proteins are polymers of disulfide bridges

Sol: (b) Proteins are polymers of amino acids

10. Which of the following food products are high in protein content?

- (a) Tofu and eggs
- (b) Grains and legumes
- (c) Milk and milk products
- (d) All of the above

Sol: (d) All of the above

11. Which of the following statements is true about the complete proteins?

- (a) High-protein foods that stabilize body weight
- (b) Food that has a balanced amount of fat and protein
- (c) Foods that provide all the amino acids that the body needs
- (d) All of the above

Sol: (d) All of the above

12. Which of the following techniques is used to determine the protein structures?

- (a) X-ray crystallography
- (b) Kryptonics X-ray vision
- (c) Magnetic resonance imaging (MRI)
- (d) None of the above

Sol: (a) X-ray crystallography

13. Which of the following disorders is caused by the deficiency of proteins?

- (a) Weight loss
- (b) Muscle fatigue
- (c) Loss in muscle strength
- (d) All of the above

Sol: (d) All of the above

14. Which of the following cell organelles is involved in the process of protein synthesis?

- (a) Vesicles
- (b) Ribosomes
- (c) Synchrotrons
- (d) Mitochondria

Sol: (b) Ribosomes

15. Which of the following is not the function of proteins?

- (a) Helps in digesting food
- (b) Carries genetic information
- (c) Fights against the invading pathogens
- (d) Helps in transporting oxygen in the blood

Sol: (b) Carries genetic information

16. The 3-D structure of proteins can be determined by_____.

- (a) Spectroscopy
- (b) X-ray crystallography
- (c) Nuclear magnetic resonance
- (d) Both (b) and (c)

Sol: (d) Both (b) and (c)

17. Which of the following is true about enzymes?

- (a) Proteins
- (b) Nucleic acids
- (c) Carbohydrates
- (d) DNA molecule

Sol: (a) Proteins

18. Which of the following statements is true about the (primary) 1° structure of proteins?

- (a) The helical structure of the protein
- (b) Subunit structure of the protein
- (c) Three-dimensional structure of the protein
- (d) The sequence of amino acids joined by a peptide bond

Sol: (d) The sequence of amino acids joined by a peptide bond

19. Which of the following diseases is caused by protein deficiency?

- (a) Anaemia
- (b) Kwashiorkor
- (c) Hypothyroidism
- (d) All of the above

Sol: (b) Kwashiorkor

20. The process of protein synthesis takes place in which of the following cell organelles?

- (a) Nucleus
- (b) Vacuoles
- (c) Cytoplasm
- (d) Mitochondria

Sol: (c) Cytoplasm