



Class 11 Biology | Biomolecules

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. Which is a polysaccharide stored in animal liver?

- A. Sucrose B. Ribose C. Glycogen D. Cellulose

2. The main structural polysaccharide of plant cell walls is

- A. Inulin B. Cellulose C. Starch D. Glycogen

3. Which nitrogenous base occurs in RNA but normally not DNA?

- A. Guanine B. Cytosine C. Uracil D. Thymine

4. A nucleotide differs from a nucleoside by the presence of a

- A. Carbon atom B. Phosphate group
C. Nitrogenous base D. Pentose sugar

5. Amino acids differ from each other chiefly in their

- A. Amino groups being absent
B. Universal lack of nitrogen
C. Side chains
D. Absence of carboxyl groups

6. An amino acid with both positive and negative charges is a

- A. Steroid B. Triglyceride
C. Nucleosome D. Zwitterion

7. Which level of protein structure describes its amino-acid sequence?

- A. Quaternary B. Secondary C. Primary D. Tertiary

8. Heating an enzyme excessively usually reduces activity by changing its

- A. Atomic number
B. Three-dimensional conformation
C. Genetic code
D. Substrate mass permanently

9. An enzyme speeds a reaction by lowering its

- A. Substrate concentration to zero
B. Equilibrium constant
C. Product energy to zero
D. Activation energy

10. After catalysing a reaction, an enzyme is usually

- A. Permanently used as product
B. Consumed as a reactant
C. Available for reuse
D. Converted into DNA

11. At high substrate concentration, enzyme rate plateaus because

- A. Temperature must reach zero
B. Active sites become saturated
C. Products cease to exist
D. All enzyme molecules become DNA

12. A competitive inhibitor commonly resembles the

- A. Final enzyme chromosome
B. Solvent molecule only
C. Substrate
D. Cell wall

13. Which change can often reduce competitive inhibition?

- A. Removing all substrate
B. Destroying the enzyme
C. Increasing substrate concentration
D. Cooling to absolute zero

14. The protein part of an enzyme requiring a cofactor is called the

- A. Substrate B. Prosthetic group
C. Apoenzyme D. Coenzyme

15. Which statement about lipids in a tissue extract is correct?

- A. All are proteins
B. They occur in the acid-insoluble fraction despite low molecular mass
C. All dissolve freely in water
D. All are DNA polymers

ANSWER KEY — check after completing all 15 questions

1.C 2.B 3.C 4.B 5.C 6.D 7.C 8.B 9.D 10.C 11.B 12.C 13.C 14.C 15.B