

Enzymes

Sr	Questions	Answers Choice
1	How does competitive inhibitor affect enzyme action	A. attaches with the substrate B. Changes enzyme shape C. Attaches and blocks the active site D. Blocks the cofactors
2	Lock and key hypothesis of enzyme action supports that	A. Active sites are rigid B. Active sites are flexible C. Active site efficiency increases D. Active site can change its shape
3	Which best defines an enzyme.	A. A chemical that breaks down food B. A hormone that regulates metabolism C. A protein that speeds up reactions D. A molecule that stores energy
4	Enzyme are specific in their action because.	A. Their active sites fit specific substrates B. They are always proteins C. They are consumed in reactions D. They work only at high temperatures
5	Enzyme pepsin in the stomach has an optimum pH of about	A. 3 B. 2 C. 4 D. 5
6	The biochemical reactions in which larger molecules are synthesized are called.	A. Anabolism B. Catabolism C. Metabolism D. Digestive reactions
7	Increase or decrease in temperature beyond the optimum temperature will	A. Increase the rate of reaction B. Not affect the rate of reaction C. Denature the enzyme D. Decrease the rate of reactions
8	What is true about cofactors.	A. Help facilitate enzymes activity B. Are composed of proteins C. Break hydrogen bond in proteins D. Increase activation energy
9	The active site of an enzyme	A. Never changes B. Forms no chemical bond with substrate C. Determines by its structure the specificity of the enzyme D. Looks like a lump projecting from the surface of an enzyme.
10	Which does consume energy	A. Catabolism B. Metabolism C. Anabolism D. Both a and b
11	What is true about the optimum pH values of the following enzymes of digestive system.	A. Both work at high pH B. Both work at low pH C. Pepsin works at low pH while trypsin works at high pH D. Pepsin works at high pH while trypsin works at low pH
12	Primarily, all enzymes are.	A. Proteins B. Nucleic acids C. Carbohydrates D. Lipids
13	What is TRUE according to the induced fit model of enzyme action.	A. Enzyme's active site changes shape to bind the substrate. B. Substrate must fit the enzyme perfectly before binding C. No shape changes occur during binding D. Enzyme is inactivated during the

process.

14 How does increasing temperature affect enzyme activity.

A. Increase activity to a point
B. Always decreases activity
C. Makes enzymes non functional
D. No effect on enzyme

15 Which of the following are not changed during the biochemical reactions.

A. Substrate
B. Enzymes
C. Products
D. ES complex

16 The biochemical reactions in which larger molecules are synthesized are called.

A. Catabolism
B. Metabolism
C. Anabolism
D. Digestive reactions

17 If you add more substrate to an already occurring enzymatic reaction and it has no effect on the rate of reaction. What is the term given to this situation.

A. Denaturation
B. Saturation
C. Desaturation
D. Inhibition

18 What can happen if an enzyme is exposed to a temperature that is higher than its optimal temperature.

A. Enzyme activity rate will increase
B. Enzyme's shape will change potentially reducing its activity
C. Enzyme will speed up the reaction and remain stable
D. Enzyme will become a substrate itself

19 An enzyme works best at a pH of 7.4. It is placed in an acidic solution with a pH of 4.0. How will this affect the enzyme.

A. The substrate will become inactive in an acidic environment
B. The enzyme will gain additional active sites
C. The enzyme will catalyse reactions faster due to increased H⁺ ions
D. The active site will be modified reducing substrate binding

20 Pepsin enzyme works in.

A. Large intestine
B. Small intestine
C. Stomach
D. Heart
