

Enzymes

Sr	Questions	Answers Choice
1	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
2	The biochemical reactions in which larger molecules are broken down are called	A. Metabolism B. Catabolism C. anabolism D. Mutualism
3	Which of the following are not changed during the biochemical reactions.	A. Substrate B. Enzymes C. Products D. ES complex
4	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
5	Which does yield energy.	A. Anabolism B. Catabolism C. Metabolism D. None of these
6	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
7	The biochemical reactions in which larger molecules are synthesized are called.	A. Catabolism B. Metabolism C. Anabolism D. Digestive reactions
8	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
9	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
10	In the presence of enzymes, reactions proceed at a.	A. Slower rate B. Faster rate C. Very slow rate D. Medium rate
11	Enzymes convert the substrate into different molecules called.	A. Product B. Reactants C. Inhibitors D. Biomolecules
12	Changes in pH can alter the active site by affecting the	A. Shape of substrate B. Ionization of amino acids C. Ionization of cofactor D. Ionization of co enzyme
13	Prosthetic groups are.	A. Required by all enzymes B. Proteins in nature C. Tightly bound to enzyme D. Loosely attached with enzymes
14	Enzyme pepsin in the stomach has an optimum pH of about	A. 3 B. 2 C. 4 D. 5

15	The catalytic region on enzyme recognizes and binds the substrate and carries the reaction. This region is called as.	A. Cofactor B. Active sites C. Activator D. Inhibitor
16	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.
17	ionization of amino acids at the active site is affected by.	A. Change in pH B. Change in temperature C. Change in substrate concentration D. Change in temperature and substrate concentration
18	Pepsin enzyme works in.	A. Large intestine B. Small intestine C. Stomach D. Heart
19	What can happen if an enzyme is exposed to 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
20	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 catalyze reactions faster due to increased H ⁺ ions D. The active site will be modified reducing substrate binding
21	The biochemical reactions in which larger molecules are synthesized are called.	A. Anabolism B. Catabolism C. Metabolism D. Digestive reactions
22	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
23	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.
24	What is true about cofactors.	A. Help facilitate enzyme activity B. Are composed of proteins C. Break hydrogen bonds in proteins D. Increase activation energy
25	Which does consume energy	A. Catabolism B. Metabolism C. Anabolism D. Both a and b
26	Primarily, all enzymes are.	A. Proteins B. Nucleic acids C. Carbohydrates D. Lipids
27	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
28	Set of biochemical reactions that occur in living organisms in order to maintain life is called.	A. Catabolism B. anabolism C. Metabolism D. Mutualism
29	Which is true about enzyme.	A. All enzymes are not protein B. All enzymes are proteins C. All proteins are enzymes

C. All proteins are enzymes
D. All enzymes are vitamins

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

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