

MDCAT Chemistry Online Test

Sr	Questions	Answers Choice
1	Based on the physico-chemical properties, proteins may be classified into the following types	A. Simple proteins B. Compound proteins C. Derived proteins D. All of the above
2	Which of the following bond is responsible for joining the amino acids in proteins?	A. Metallic Bond B. Di sulfide bond C. Peptide Bond D. Peptide Bond
3	The enzyme which is found in saliva, accelerates the conversion of starch into sugar is	A. Pepsin B. Thrombin C. Ptyalin D. Fumarase
4	The proteins which give an amino acid and non-protein group on hydrolysis are known as	A. Derived protein B. Albumins C. Conjugated simple protein D. Conjugated protein
5	Glucose is converted into ethanol by the enzyme present in the yeast	A. Urease B. Zymase C. Invertase D. Sucrase
6	The type of isomerism shown by alkyl halides is	A. geometric B. functional C. positional D. metamerism
7	For a particular halogen, the reactivity of alkyl halides	A. remains same with C-increase B. decreases with C-increase C. increases with C-increase D. decreases with C-decrease
8	An example of regulatory protein is	A. nucleoprotein B. hemoglobin C. lactoglobulin D. thyroxine
9	UV rays inactivate enzymes because they	A. change sequence of amino acids of enzymes B. They add prosthetic group to them C. They increase their specificity D. affect structure of enzymes
10	Simplest Structure of a protein that has only covalent bonding between amino acids is	A. 2° structure B. 3° structure C. 1° structure D. 4° structure
11	Dehydrogenase is an example of	A. ligase B. oxidoreductase C. lyase D. hydrolase
12	Proteins have linkage between amino acids	A. imide B. amide C. ester D. ether
13	Amino acids react together to form the primary structure of proteins which is accompanied by	A. addition of water B. addition of ammonia C. removal of ammonia D. removal of water
14	An element that is not an essential part of proteins is	A. O B. N C. H D. S
15	The most complex structure a single polypeptide can assume is	A. 1° structure B. 2° structure C. 3° structure D. 4° structure

		D. 4 ⁺ structure
16	Proteins loose their ability to work	A. by slight heating B. by change in structure C. by slight cooling D. when inside the body
17	Enzymes consist of	A. proteins only B. proteins and non-protein parts C. fats only D. futs and non-fatty components
18	Which of the following is not a property of enzymes?	A. extraordinary specifcity B. reversibility of reactions C. high efficiency D. minimum activity at optimum T
19	Alpha helix and beta pleated sheath are secondary structures of protein which are maintained by	A. dipole forces B. non-polar interactions C. ionic bonds D. Hydrogen bonds
20	The enzymes that catalyse the addition or removal of ammonia are:	A. Lyases B. Ligases C. Transferases D. Kinses
21	L-asparaginase is helpful in treatment of	A. skin disease B. blood cancer C. heart failure D. obstructive jaundice
22	Increased concentration of enzyme alkaline phosphatase is a sign of	A. hemophilia B. heart disease C. thrombosis D. rickets
23	All are examples of different classes of enzymes except	A. Hydrolases B. Isomerases C. Oxido-reductases D. Mutases
24	Succinic thiokinase is an enzyme of the type	A. mutase B. peroxidase C. ligase D. lyase
25	An example of bydrolase is	A. Amylase B. Lipase C. Fumarase D. A, C
26	Phosphoprotein comes under the type of proteins	A. Simple protein B. Derived protein C. Conjugated D. Both A & B
27	The specifie substance (metabolite) that fits on the enzyme surface and is converted to products is called	A. Co-factor B. Isoenzyme C. Prosthetic group D. Substrate
28	Collagen is a fibrous protein present most abundantly in	A. heart B. nucleus C. connective tissues D. Arteries
29	The enzymes that bring about exchange of functional groups like phosphate are called	A. Ligases B. Lyases C. Isomerases D. Transferases
30	Dehydrogenase is an erample of	A. Transferase B. Hydrolase C. Lyase D. Oxido-reductase
31	Enzymes have been classified on the basis of	A. protein structure B. prosthetic groups C. type of reaction they catalyse D. bonding in them
32	Fe+2 is the co-factor for	A. Chrome oxidase B. Glucose-6-phosphatase C. Carbonic anhydrase D. Hydrolase
33		A. apoenzyme B. proenzyme

33	The protein component of enzyme is called	<p>B. proenzyme</p> <p>C. holoenzyme</p> <p>D. co-enzyme</p>
34	The structure of protein helps protein to	<p>A. be in proper shape</p> <p>B. attach substrate</p> <p>C. perform its function</p> <p>D. All of these</p>
35	An example of simple protein is	<p>A. lipoprotein</p> <p>B. Cholesterol</p> <p>C. lecithin</p> <p>D. globulin</p>
36	Lactoglobulin is found in	<p>A. nucleus</p> <p>B. nerve cells</p> <p>C. Plants only</p> <p>D. muscles and in plants</p>
37	Prosthetic groups are	<p>A. helical structures in protein</p> <p>B. sulphur containing parts of protein</p> <p>C. non-protein parts in compound proteins</p> <p>D. sites for hydrogen bonding</p>
38	Enzymes are	<p>A. simple proteins</p> <p>B. derived proteins</p> <p>C. compound proteins</p> <p>D. conjugated proteins</p>
39	Helical structure of proteins is stabilized by	<p>A. Peptide bond</p> <p>B. Dipeptide bond</p> <p>C. Van der Waals forces</p> <p>D. Hydrogen bonding</p>
40	Which of the following is the element not present in all proteins?	<p>A. Carbon</p> <p>B. Hydrogen</p> <p>C. Nitrogen</p> <p>D. Sulphur</p>
41	Which of the following is not a category of proteins based upon their function?	<p>A. genetic</p> <p>B. Regulatory</p> <p>C. nucleic</p> <p>D. structural</p>
42	Denaturation of proteins is often characterised by	<p>A. Loss of biological activity</p> <p>B. Always being irreversible</p> <p>C. Being greater the lower the temperature</p> <p>D. Changes in primary structure</p>
43	The most abundant protein in the human body is	<p>A. Collagen</p> <p>B. Keratin</p> <p>C. Myosin</p> <p>D. Albumin</p>
44	In proteins, the alpha-helix and Beta-pleated sheet are examples of	<p>A. Primary Structure</p> <p>B. Secondary Structure</p> <p>C. Tertiary Structure</p> <p>D. Quaternary Structure</p>
45	Albumins and globulins are defined as	<p>A. Derived protein</p> <p>B. Conjugated protein</p> <p>C. Fibrous protein</p> <p>D. Simple Protein</p>
46	Third order of protein structure refers to	<p>A. Bending of protein chain</p> <p>B. Three-dimensional structure of protein</p> <p>C. Number and sequence of amino acids</p> <p>D. Site of disulphide bonds</p>
47	Primary structure of proteins refers to	<p>A. Coiling and folding in form of specific structure</p> <p>B. 3d structure</p> <p>C. Number of amino acids in a chain</p> <p>D. Alpha and Beta sheets</p>
48	When ethyl magnesium bromide is treated with carbon dioxide and the product hydrolyzed we get	<p>A. formic acid</p> <p>B. propionic acid</p> <p>C. oxalic acid</p> <p>D. acetic acid</p>
49	Molar mass of formic acid in benzene comes out to be	<p>A. 64</p> <p>B. 46</p> <p>C. 32</p> <p>D. 92</p>

50	Carboxylic acid is more acidic than phenol because of the greater stability of	A. Carboxylic acid B. Phenoxide ion C. proton D. Carboxylate ion
51	The formation of acetic anhydride from acetic acid follows the mechanism	A. SN B. AN C. SE D. AE
52	In esterification, the OH of carboxylic acid is replaced by	A. OR+ B. R+ C. OR D. R
53	solubility of carboxylic acids decreases in water with increase in molar mass because	A. Bigger molecules are more polar B. bigger molecules have bigger non-polar groups C. bigger molecules make more hydrogen bonds D. bigger molecules can form lesser hydrogen bonds/molecule
54	Which compound shows the highest melting point	A. water B. Propanoic acid C. Methanoic acid D. Ethanoic acid
55	Propanoic acid is functional group isomer of	A. Methyl acetate B. Ethyl acetate C. Propanal D. Proparone
56	Ethane nitrile can be converted into ethanoic acid through.....intermediate	A. Ethyl alcohol B. Acetyl chloride C. Acetamide D. Methyl cyanide
57	The highest melting point is observed by	A. Butanoic acid B. Propanoic acid C. Pentanoie acid D. HCl
58	Final product of hydrolysis of nitrile is	A. Ketone B. Alcohol C. Aldehyde D. Carboxylic acid
59	Which one of the following reaction of carboxylic acid is reversible?	A. Esterification B. Salt formation C. Reaction with PCl_5 D. Reaction with SOCl_2
60	Formamide is formed by the reaction of which acid with ammonia	A. Oualic acid B. Formic acid C. Ethanoic acid D. Propanoic acid