

MDCAT Biology Online Test

Sr	Questions	Answers Choice
1	Which of the following helps in recognition of substrate	A. Active site B. Catalytic site C. Binding site D. All
2	Slight change in pH can cause	A. Denaturation B. Crystallization C. Ionization D. All
3	Enzymes present in human body generally have	A. Same optimum temperature and optimum pH B. Same optimum temperature but different optimum pH C. Same optimum pH but different optimum temperature D. Different optimum temperature and optimum pH
4	Which of the following kind of inhibitors don't compete for active site of enzyme	A. Irreversible competitive B. Reversible competitive C. Reversible non competitive D. Both b and c
5	The specificity of enzymes is due to their	A. High molecular weight B. pH sensitivity C. Hydrogen bonding D. Surface configuration
6	Function of succinic dehydrogenase is aided by	A. Metal ion B. Vitamin C. NAD D. FAD
7	Prosthetic groups are	A. Radicals B. Inorganic molecules C. Organic molecules D. Metal ions
8	Phosphorylation of glucose molecule in glycolysis is carried out by	A. ATPase B. Kinase C. Isomerase D. Transferase
9	Allosteric enzymes have ____ major sites	A. 1 B. 2 C. 3 D. 4
10	Potentially damaging enzymes are produced in	A. Active form B. Inactive form C. Abundant quantity D. Minor quantity
11	Succinic acid differs from malonic acid by	A. OH B. CH_2 C. CH_3 D. CHO
12	Succinic acid is the ____ of succinic dehydrogenase which undergoes ____	A. Active site, reduction B. Prosthetic group, reduction C. Substrate, oxidation D. Substrate, reduction
13	Succinic acid dehydrogenase +succinic acid and high concentration of malonic acid?	A. Maleic acid B. Fumaric acid C. No reaction D. Oxalic acid
14	Catalase and chymotrypsin have similar	A. Substrate B. Product C. Optimum pH D. Metabolic impact

15	Which of the following is not affected by enzymes	A. Nature and properties of end products B. Nature and properties of reactants C. Speed of biochemical reaction D. Efficiency of biochemical reaction
16	Ribozyme is found in	A. Mitochondria B. Cytoplasm C. Lysosomes D. Ribosomes
17	The term enzyme was coined from a Greek word which means	A. In yeast B. In grapes C. In apple D. In bacteria
18	Following enzymes are indicating the specificity of their action in their names, except	A. Sucrase B. Amylase C. Pepsin D. Lipase
19	Which of the following is an example of ribozyme	A. Aminopeptidase B. Pancreatic lipase C. Peptidyl transferase D. Cytochrome oxidase
20	Flavin adenine dinucleotide is a	A. Prosthetic group B. Activator C. Coenzyme D. Inhibitor
21	By adding _____ in neutral pH, we get the optimum pH of pancreatic lipase	A. 1 B. 2 C. 3 D. 4
22	Which one of the following enzymes have slightly acidic pH as optimum pH?	A. Sucrase B. Enterokinase C. Pepsin D. Catalase
23	The inhibitor having structural similarity with substrate is	A. Irreversible inhibitor B. Reversible inhibitor C. Competitive inhibitor D. Noncompetitive inhibitor
24	_____ can be checked by increasing substrate concentration	A. Reversible inhibition B. Irreversible inhibition C. Noncompetitive inhibition D. Competitive inhibition
25	Optimum pH for digestive enzymes of stomach is	A. Highly acidic B. Highly alkaline C. slightly acidic D. slightly alkaline
26	Change in temperature from 30o C to 40o C in human body will cause _____ in rate of reaction	A. Increase B. Decrease C. First increase then decrease D. First increase then constant
27	If substrate concentration is unlimited, rate of enzyme action becomes	A. Inversely proportional to enzyme concentration B. Directly proportional to enzyme concentration C. Directly proportional to substrate Concentration D. Inversely proportional to substrate Concentration
28	At high substrate level, all the active sites of enzyme are	A. Destroyed B. Available C. Degenerated D. Occupied
29	Optimum pH of all human enzymes is	A. Variable B. Same C. Acidic D. Alkaline
30	Formation of ES complex activates the _____ site of an enzyme	A. Active B. Binding C. Catalytic D. Allosteric

A. Activator
B. Apoenzyme

31	An activated enzyme consisting of polypeptide and cofactor is called as	<p>A. Apoenzyme</p> <p>C. Holoenzyme</p> <p>D. Coenzyme</p>
32	Many enzymes are simply dissolved in the	<p>A. Nucleoplasm</p> <p>B. Stroma of chloroplast</p> <p>C. Cytoplasm</p> <p>D. Matrix of mitochondria</p>
33	_____ form the raw material for coenzyme	<p>A. Nucleic acid</p> <p>B. Lipids</p> <p>C. Vitamins</p> <p>D. Proteins</p>
34	Which of the following acts as a bridge between enzyme and substrate?	<p>A. Activator</p> <p>B. Cofactor</p> <p>C. Prosthetic group</p> <p>D. Apo-enzyme</p>
35	Nicotinamide adenine dinucleotide is an example of	<p>A. Cofactor</p> <p>B. Coenzyme</p> <p>C. Prosthetic group</p> <p>D. Nucleotide</p>
36	The rate of enzyme action will be minimum at	<p>A. Optimum pH</p> <p>B. Optimum temperature</p> <p>C. Optimum conditions</p> <p>D. Maximum temperature</p>
37	The competitive inhibitor competes with the	<p>A. Enzyme</p> <p>B. Cofactor</p> <p>C. Substrate</p> <p>D. Coenzyme</p>
38	The enzyme that works best at intermediate pH is	<p>A. Pepsin</p> <p>B. Chymotrypsin</p> <p>C. Sucrase</p> <p>D. Pancreatic lipase</p>
39	Following substances can act as inhibitors, except	<p>A. Cyanide</p> <p>B. Antimetabolites</p> <p>C. Antibodies</p> <p>D. Poisons</p>
40	The optimum temperature for most of the enzymes in human body is	<p>A. 37 °C</p> <p>B. 35 °C</p> <p>C. 37 °F</p> <p>D. 98.6 °C</p>
41	Enzyme works to its maximum capacity	<p>A. At high temperature</p> <p>B. At low temperature</p> <p>C. At moderate temperature</p> <p>D. At optimum temperature</p>
42	Which of the following is Koshland model	<p>A. Active site is rigid</p> <p>B. Active site may be molded to precise shape</p> <p>C. Position of active site is moveable</p> <p>D. None</p>
43	Pick up the correct statement according to induced fit model of enzyme action	<p>A. Enzyme induces changes in substrate structure</p> <p>B. Substrate induces changes in enzyme structure</p> <p>C. Active site of enzyme is a rigid structure</p> <p>D. Active site of enzyme is used as a template +</p>
44	Enzymes cannot work in which of the following	<p>A. Aqueous medium</p> <p>B. Dry medium</p> <p>C. Acidic medium</p> <p>D. Alkaline medium</p>
45	If non protein part is covalently bonded to the protein part of enzyme, it is known as	<p>A. Coenzyme</p> <p>B. Prosthetic group</p> <p>C. Activator</p> <p>D. Cofactor</p>
46	Inorganic ions can play a role of _____ in enzyme catalysis	<p>A. Coenzyme</p> <p>B. Inhibitor</p> <p>C. Apo enzyme</p> <p>D. Cofactor</p>
47	Both _____ and _____ are detachable cofactors	<p>A. Apoenzyme, holoenzyme</p> <p>B. Activator, coenzyme</p> <p>C. Coenzyme, prosthetic group</p> <p>D. Prosthetic group, activator</p>

48	Is is universally accepted by biologists that mammals have evolved from reptilian ancestors called	A. Cotylosaurs B. Dinosaurs C. Cotylostomata D. Amphibians
49	Which of the following group of animals is a link between aquatic and terrestrial animals?	A. Fish B. Amphibians C. Reptiles D. Birds
50	The cartilaginous fishes contain scales	A. Placoid B. Cycloid C. Ganoid D. Ctenoid
51	The pairs of gills present in cyclostomata are	A. 5-7 B. 10-12 C. 6-14 D. 4-5
52	Notochord is present throughout life in	A. Urochordates B. Chordates C. Cephalochordates D. Vertebrates
53	Circulatory system is open type in all of the following, EXCEPT	A. Arthropoda B. Bivalvia C. Gastropoda D. Cephalopoda
54	Syrinx produces voice in birds. It is located	A. In voice box B. Near origin of bronchi C. At the upper end of trachea D. Inside lungs
55	Pick up the most developed coelomates	A. Echinoderms B. Annelids C. Chordates D. Insects
56	Pre-chordates is another name used for	A. Echinoderms B. Protochordates C. Cephalochordates D. Hemichordates
57	Radial symmetry is present in	A. Adults of annelida B. Adults of echinodermata C. Adults of Cnidaria D. Both B and C
58	Skeleton of echinoderms is originated from	A. Ectoderm B. Endoderm C. Mesoderm D. Epidermis
59	Most of the vectors for spreading important human diseases belong to:	A. Radiata B. Acoelomates C. Pseudocoelomates D. Coelomates
60	Parapodia are organs of locomotion in	A. Leech B. Planaria C. Earthworm D. Neries
61	Common housefly is involved in spread of all diseases except	A. Hepatitis B. Malaria C. Dysentery D. Cholera
62	Vector for spread of African sleeping sickness is	A. Anopheles B. Commonhouse fly C. Tse-tse fly D. Honey bee
63	Which of the following has chitinous cuticle in the exoskeleton	A. Arthropoda B. Porifera C. Echinodermata D. Annelida
64	The larva formed during the life cycle of Annelida is	A. Glochidium larva B. Bipinnaria larva C. Trochophore larva D. Tornaria larva
65	Snails are the intermediate hosts of	A. Fasciola hepatica B. Schistoma C. Taenia solium

		D. <i>Ancylosoma duodenale</i>
66	Body of _____ consists of segments called proglottids which contains mainly sex organ	A. Planaria B. Fasciola C. Ascaris D. Tapeworm
67	_____ is a good example of polymorphism	A. Hydra B. Obelia C. Starfish D. Euplectella
68	The most common animal of phylum Aschelminthes is:	A. Enterobius vermicularis B. Ascaris lumbricoides C. Ancylostoma duodenale D. Rhabditis
69	Platyhelminthes have	A. Asymmetrical body B. Radial symmetry C. Bilateral symmetry D. Diploblastic organization
70	Triploblastic, unsegmented, acoelomates exhibiting bilateral symmetry and reproducing both asexually and sexually, with some parasitic forms are included in	A. Annelida B. Arthropoda C. Platyhelminthes D. Cnidaria
71	Animals that have their body cavity filled with parenchyma are	A. Acoelomates B. Coelomates C. Pseudocoelomates D. Tunicates
72	Which characteristic is common in both cnidarians and flatworms	A. Digestive system with a single opening B. Dorsoventrally flattened bodies C. Radial symmetry D. Flame cells
73	First invertebrate to develop a nervous system is	A. Sponges B. Cnidarians C. Flat worms D. Round worms
74	Animals involved in the construction of corals are	A. Polyps B. Medusae C. Gonozooids D. None
75	Which of the following is true about mesoglea	A. Acellular B. Mesodermal C. Cellular D. Multicellular
76	A group of animals with distinct germinal layers in adult stage are grouped in	A. Cnidaria B. Arthropoda C. Aschelminthes D. Platyhelminthes
77	It is an animal, but it does not have nerve or muscle tissue. It is neither diploblastic nor triploblastic. It is probably a	A. Flatworm B. Nematode C. Cnidarian D. Sponge
78	Phylum of asymmetrical animals is	A. Nematoda B. Platyhelminthes C. Cnidaria D. Porifera
79	Which of the following is a distinguishing character of sponges	A. Tentacles B. Coelenteron C. Choanocytes D. Calcareous skeleton
80	Highest degree of regeneration is present in sponges because of	A. Undifferentiated cells B. Simplest organization C. Ability to reproduce D. Absence of germ layers