MDCAT Biology Online Test

Sr	Questions	Answers Choice
1	All living organisms supported by biosphere are called	A. Biotic components B. Abiotic components C. Autecology D. Synecology
2	Which of the following is not true about biotic components	A. Producers B. Consumers C. Decomposers D. Atmosphere
3	Which of the following is not true about abiotic components	A. Water B. Temperature C. Consumers D. Gravity
4	---------- are the autotrophs that capture and bring light energy into ecosystem	A. Decomposers B. Algae C. Producers D. None o these
5	Consumers	A. Are primarily animals that obtain energy directly or indirectly from producers B. Are primarily bacterial organisms that obtain energy directly or indirectly from producers C. Are secondary animals that obtain energy directly or indirectly from producers D. Are secondary plants that obtain energy directly or indirectly from producers
6	Bacterial and fungi are mainly included in the group of	A. Consumers B. Decomposers C. Producers D. None of these
7	Decomposers get their food from	A. Soil particles B. Dead organic matter C. Green plants D. Living organisms
8	After digestion, decomposers releases	A. Various organic substances from organic matter B. Nitrates, phosphates, and calcium C. Citric acid, tartaric acid and oxlic acid D. All of these
9	Food chain is an example of	A. Predation B. Mode of nutrition C. Trophic levels of food D. All of these
10	All food chains and food webs begin from	A. Consumers B. Green plants C. Fungi and bryophytes D. Dead organic matter
11	Food web maintains the stability of	A. Environment B. Biosphere C. Ecosystem D. Biotic components
12	Food web is the group of various	A. Food substances B. Food chains C. Trophic levels D. All of these
13	Community structures of an ecosystem is called	A. Biosphere B. Succession C. Progression D. Climax community
14	Plant and animals replace the earlier ones in a way of	A. Community relay B. Succession C. Predecessors D. All of these

15	In an ecosystem after succession, a new invaders are called	A. Pioneers B. Predecessors C. Climax community D. None of these
16	A new system is developed after an existing ecosystem is called	A. Primary ecosystem B. Secondary ecosystem C. Hydrosere D. Xerosere
17	---------- begins forged from bare rocks, sand for where no previous life was found	A. Secondary succession B. Primary succession C. Succession D. Climax period
18	Which of the following is an example of primary succession	A. Foliage stage B. Moss stage C. Hydrosere and xerosere D. None of these
19	Xerophytes can withstand with extreme conditions due to the presence of	A. Large parenchyma cells in the leaf B. Sunken stomata C. Thick cuticle and palisade layer D. All of these
20	Lichens have thick crust and live in extreme conditions is a successional stage of	A. Foliage lichen B. Crustose lichen C. Moss stage D. All of these
21	The establishment of woody plants that inhibits the growth of most plants other than mosses in succession is known as	A. Climax stage B. Shrub stage C. Tree stage D. All of these
22	Predation is a process of	A. Prey B. Predator C. Prey and predator D. None of these
23	Which of the following is not the true about predation	A. Prey increases by increasing the predation B. Predation increases by increasing the prey C. Prey decreases by increasing the predation D. Prey must follow the predation
24	Predation decreases by decreasing the prey due to	A. Decrease in food B. Decrease in water C. Decrease in consumers D. All of these
25	The association between a host and parasite is called	A. Symbiosis B. Mutualism C. Parasitism D. All of these
26	Parasites live outside of the body are	A. Ectoparasites B. Exoparasites C. Endoparasites D. All of these
27	Which one of a endoparasite of organisms	A. Fungi causes dandruff in hair B. Tapworms C. Earthworms D. Lices
28	Benefits brings about by both of the organisms is called	A. Mutualism B. Symbiosis C. Anabolism D. catabolism
29	Bacterial live and get food from roots of plants is an example of	A. Symbiosis B. Mutualism C. Parasitism D. Infestation
30	Mycorrhiza is an association of	A. Algae with roots of higher plants B. Bryophytes with roots of higher plants C. Fungi with roots of higher plants D. Bacteria with roots of higher plants
31	This is a ---------- relationship between algae and fungi	A. Symbiotic B. Mutualistic C. Parasitic D. Mycorrhizal
32	A process in which one organism get benefit from the relationship is known as	A. Grazing B. Commensalism C. Symbiosis

		C. Symbiosis D. Mutualism
33	Animals feed on green plants and grasses are called	A. Grazers B. Produces C. Consumers D. Predators
34	A process in which green plants are eaten by animals is called	A. Grazing B. Predation C. Commensalization D. None of these
35	Grazing is important	A. To maintain the population of competitors B. To maintain the population of grasses C. To maintain the vigor of grasses D. All of these
36	Overgrazing resulted in	A. Diminishing the grasses B. Desert C. Barren land D. All of these
37	bare rocks are the habitats of	A. Mosses B. Lichens C. Grasses D. Trees
38	Succession starting in pond is called	A. Hydrosere B. Xerosere C. Pioneers D. None of these
39	Identify correct trophic level of food chain	A. Fox >>> rabbit >>> beetle B. Dog >>> Rabbit >>> grass C. Owl >>> Rat >>> Rabbit D. Fox >>> beetle >>> Rabbit
40	The organisms of same species live in a same place is called	A. Community B. Population C. Consumers D. All of these
41	The term ecology comes from the Greek words Oikos, meaning "the family household" and logy (logos) meaning:	A. The study of B. Living C. Building D. Niche
42	The term ecology originally was used in 1866 by the German zoologist:	A. Charles Eton B. Ernst Haeckel C. Joseph Grinnell D. Carolus linnaeus
43	The major unit of ecology is the:	A. Physical component B. Biotic component C. Ecosystem D. Logos
44	The ecosystem consists of two basic interacting components:	A. Living and physical B. Biotic and abiotic C. Living and biotic D. Both a & b
45	A group of interbreeding individuals of same species occurring together in space and time is called:	A. Population B. Community C. Species D. Clan
46	All populations within an ecosystem are known as a:	A. Population B. Community C. Species D. Clan
47	Major regional ecological community of plants and animals forms:	A. Triomes B. Biosphere C. Biomes D. Biogeography
48	A thin layer (zone) of earth in which all living organisms exist is called:	A. Biosphere B. Biome C. Ozone D. Ecosphere
49	The actual location or place where an organism lives is called its:	A. Niche B. Habitat C. Abode D. Terrain
		A. Taxonomy

50	In 1917, Joseph Grinnell an American ornithologist first proposed the term niche in:	B. Neurology C. Ecology D. Embryology
51	Charles Eton defined the niche as the species:	A. Work B. Employment C. Job D. Occupation
52	The study of relationship of a single population to its environment is called:	A. Autecology B. Synecology C. Both a & b D. None
53	The study of relationship of different communities (grouping of population) to environment is called:	A. Synecology B. Community ecology C. Autoecology D. Both a & b
54	An ecosystem is made up of three main components:	A. The herbivores, carnivores and omnivores B. The produces, the consumers and the decomposers C. Primary, secondary and tertiary consumers D. Producers, herbivores and carnivoers
55	The green photosynthetic plants, which capture and bring light energy into the ecosystem are:	A. Decomposers B. Consumers C. Producers D. Scanvengers
56	All the organisms, primarily animals, which obtain energy directly or indirectly from the produces as ready-organic food are:	A. Decomposers B. Consumers C. Detritivores D. Scavengers
57	The fungi and bacteria, which obtain their energy from the dead and decaying plants and animals are:	A. Decomposers B. Consumers C. Producers D. Scanvengers
58	Basically, all animals depend on plants for their:	A. Living B. Food C. Life D. Respiration
59	A change in the community structure of an ecosystem over a period of time is:	A. Progression B. Sequence C. Succession D. String
60	Succession begins by a few hardy invaders called:	A. Founders B. Initiators C. Pioneers D. Leaders
61	Succession ends with a diverse and relatively stable:	A. Xerosere B. Derosere C. Pioneers D. Climax community
62	Primary succession that starts in a pond is called:	A. Hydrosere B. Derosere C. Xerosere D. Aquasure
63	Primary succession that starts on a dry soil or rock is called:	A. Hydrosere B. Derosere C. Xerosere D. Aquasere
64	Primary succession that starts on a dry habitat is called:	A. Hydrosere B. Derosere C. Xerosere D. Aquasere
65	Plants growing in xeric (dry) condition are called:	A. Hydrophytes B. Xerophytes C. Mesophytes D. Derophytes
66	Crustose refers to:	A. Aquatic lifeless structure B. Aquatic lively structure C. Land lively structure D. Land lifeless structure
67	An animal that preys other animals is called:	A. Predator B. Parasite C. Scavenger D. Detritivore

68	The animal that is caught and eaten is called:	A. Prey B. Host C. Victim D. Quarry
69	Predator-prey relationship has a significant influence on:	A. Distribution of organisms B. Abundance of organisms C. Both a & b D. Non-availability of organisms
70	Parasitism is an association between a host and a parasite, which ivolves providing the parasite with:	A. Food B. Protection C. Conditions for its survival D. All a, b, c
71	Diseases in living organisms caused by parasites are called:	A. Infestations B. Plaques C. Influxes D. Swarms
72	The parasites that live outside the body of the host are called:	A. Endoparasites B. Ectoparasites C. Heteroparasites D. Both a & c
73	Parasites that live inside the body of the host:	A. Endoparasites B. Ectoparasites C. Mesoparasites D. Both a & c
74	An association between two organisms, which brings benefit to both the organisms is called:	A. Parasitism B. Commensalisms C. Predation D. Symbiosis
75	The symbiotic relationship in which both the partners get benefit is:	A. Parasitism B. Commensalism C. Predation D. Mutualism
76	The legume plants, Pea and been are the hosts to symbiont bacteria which inhabit the roots forming root:	A. Galls B. Nodules C. Stones D. Papillae
77	An association between certain fungi and the roots of plants growing in acid soil is:	A. Lichens B. Predation C. Mycorrhiza D. Commensalism
78	Lichens are dual organisms composed of symbiotic association of algae living within a fungus:	A. Mycelium B. Sporangium C. Hyphae D. Rhizophore
79	The relationship in which only one organism benefit from the relationship. The other is not affected at all.	A. Parasitism B. Commensalism C. Predation D. Mutualism
80	The animals which feed on grasses are called:	A. Grassers B. Browsers C. Grazers D. Grazophytes
81	Over grazing may lead to:	A. Tundra B. Taiga C. Grassland D. Desert
82	The chemical elements essential for life in living organisms are called:	A. Biogenic elements B. Nutrient elements C. Both a & b D. Genetic elements
83	Nutrients required by organism in large amount like water, carbon, hydrogen, oxygen, nitrogen, phosphorus, sulphur and calcium are:	A. Macronutrients B. Micronutrients C. Mega Nutrients D. Both a & c
84	Nutrients required by organisms in small quantity or in trace amount like zinc, molybdenum, iron, iodine are:	A. Macronutrients B. Micronutrients C. Mega Nutrients D. Both a & c
85	The nutrient cycles are also called:	A. Biochemical cycles B. Geochemical cycles

	The nutrient cycles are also called:	C. Biogeochemical cycles D. Elemental cycles
86	Nitrogen makes up 78 percent of the gases in:	A. Biosphere B. Ecosphere C. Lithosphere D. Atmosphere
87	Three principal stages of nitrogen cycle are:	A. Ammonification, Nitrification, and Assimilation B. Ammonification, Acidification, and Assilimlation C. Esterification, Nitrification, and Assimilation D. Ammonification, Nitrification, and Denitrification
88	Several bacteria in soil are able to oxidize ammonia or ammonium ions, this oxidation is known as:	A. Ammonification B. Nitrification C. Denitrification D. Amino-oxidation
89	The amount of energy left after plants have met their respiratory needs is net primary production, which shows up as plant:	A. Respiration B. Photosynthesis C. Biomass D. Reserve
90	The total energy from the sun is trapped by the producers in an ecosystem is about:	A. 20% B. 10% C. 5% D. 1%
91	The solar energy used to evaporate water, heat up soil and then lost to the outer space is:	A. 99% B. 77% C. 55% D. 33%
92	The relationship between insects and flowering plants is the example of:	A. Commensalism B. Mutualism C. Predation D. Parasitism
93	A collection of related parts that function as a unit is called:	A. Organ B. Organism C. System D. Individual
94	Biosphere is spread out over the surface of planet earth extending about:	A. 2/4 km B. 4/6 km C. 6/8 km D. 8/10 km
95	A short food chain of two or three links supports a community:	A. Efficiently B. More efficiently C. Inefficiently D. Less efficiently
96	The term niche in ecolgy was first proposed by:	A. Charles Eton B. Ernst Haeckel C. Joseph Grinnell D. Carolus Linnaeus
97	Ecology is a _____ word.	A. German B. British C. French D. Greek
98	The term ecology was first used by a _____ zoologist.	A. American B. Canadian C. German D. Greece
99	The major unit of ecology is:	A. Biosphere B. Ecosystem C. Community D. Population
100	The study of the relationship of animals to environment is called:	A. Biology B. Ecology C. Microbiology D. Zoology
101	A group of interbreeding individual occurring in space and times is called:	A. Community B. Population C. Generation D. Kingdom
102	A thin layer of earth in which all living organisms live is called:	A. Biosphere B. Habitat C. Niche D. Hydrosphere

103	The actual location of place where an organisms live is called its:	A. Ecosystem B. Habitat C. Niche D. Biome
104	Joseph Grinnell an American scientist was:	A. Paleontologist B. Embryologist C. Ornithologist D. All of these
105	When we study a single population relationship to its environment it will be called:	A. Mycology B. Synecology C. Autecology D. Ornithology
106	The study of different communities to environment is called	A. Autecology B. Synecology C. Microbiology D. Ornithology
107	Biosphere is spread over the surface of plant earth, extending upto:	A. 8 to 10 km B. 5 to 6 km C. 10 to 20 km D. 8 to 16 km
108	Biotic components includes all the	A. Nonliving components B. Living components C. Nonliving and living both D. None of these
109	A biotic components includes the components like:	A. Air, water, and animals B. Air, soil and plants C. Air, water and soil, D. air, soil, and, animals
110	Any ecosystem is made up of three components like:	A. Producers, consumers, and predators B. Producers, consumers and grazers C. Producers, consumers and decomposers D. Producers, grazers and composers
111	Green, plants are basically:	A. Producers B. Consumers C. Decomposers D. None of these
112	Heterotrophic organisms are basically:	A. Producers B. Consumers C. Producer and consumers D. None of these
113	Fungi and bacteria are:	A. Producers B. Consumers C. Decomposers D. Predators
114	All food chain and food web begin with:	A. Producers B. Consumers C. Decomposers D. Prey
115	The second trophic level includes the:	A. Producers B. Tertiary consumers C. Secondary consumers D. Primary consumers
116	The fourth trophic level includes the:	A. Producers B. Tertiary consumers C. Secondary consumers D. None of these
117	In each case succession begins with few hard invaders called:	A. Producers B. Consumers C. Pioneers D. Beginners
118	When succession starts on dry soil or rocks it is called:	A. Hydrosere B. Derosere C. Xerosere D. lithosere
119	Plants growing on dry habitat is called:	A. Hydrophytes B. Mesophytes C. Xerophytes D. None of these above
120	Plants like cacti store their water in large:	A. Collenchyma tissues B. Mesenchymal tissues C. Parenchyma tissues D. Epidermal tissues

		D. Epidermal tissues
121	Xerosere starts with _____ stage.	A. Crustose lichen B. Foliose lichen C. Mass D. Shrub
122	Herbaceous stage in xerosere is the _____:	A. First stage B. Third stage C. Fourth stage D. Last stage
123	As the number of the predators decreases the numbering of prey:	A. Decreases B. Increases C. Remain constant D. Sometime increases sometime decrease
124	Parasites which live inside the host body is called:	A. Ectoparasite B. Endoparasite C. Intestinal parasite D. Muscular parasite
125	In case of symbiosis _____ is benefited.	A. Host B. Parasite C. Both host and parasite D. None of these
126	The root nodules bacteria fix _____ in sil air:	A. Parasitism B. Carbon dioxide C. Nitrogen D. Hydrogen
127	The relationships between insects and flowering plants is an example of:	A. Parasitism B. Predation C. Mutualism D. None of these
128	The attachment of shark and small fish remoras is an example of:	A. Mutualism B. Parasitism C. Predation D. Commensalism
129	The land will be turned to barren land if there is:	A. Little grazing B. Moderate grazing C. Over grazing D. None grazing
130	Due to the trampling of the soil layer by the hooves of grazing animals the rain water will:	A. Penetrate deep into the soil B. Not penetrate this soil C. Stop on the soil D. Do not affect this layer of the soil
131	Macronutrients are required by the organisms in:	A. Small amount B. Large amount C. Traces D. Never required
132	Iron, iodine and zinc required by the organisms are said to the:	A. Macronutrients B. Micronutrients C. Moderate nutrients D. Assimilation
133	Much of nitrogen found in the soil is the result of:	A. Degeneration B. Decomposition C. Denitrification D. Assimilation
134	When bacteria in soil oxidize ammonia or ammonium ions this is called:	A. Oxidation B. Denitrification C. Ammonification D. Nitrification
135	Most nitrogen moves from the soil into the roots in the form of:	A. Nitrogen gas B. Nitrites C. Ammonia D. Nitrates
136	When bacteria break down nitrates and release nitrogen back into atmosphere this process is called:	A. Nitrification B. Denitrification C. Ammonification D. Deamination
137	We can strengthen the soil nitrogen resources by adding:	A. Liquid nitrogen to soil B. Ammonia gas to soil C. Nitrogen fertilizers to soil D. Nitrogen fixing bacteria to soil
138	The amount of energy left after plants have met their respiratory needs shows up the plant:	A. Not productivity B. Gross productivity C. Secondary productivity

	the plant:	C. Secondary productivity D. Bio energy
139	Life on earth is affected by both	A. Weather and water B. Weather and climate C. Climate and water D. Water and air
140	Salt water ocean and sea are the largest ecosystem which cover _____ of earth surfaces.	A. 70% B. 71% C. 80% D. 65%
141	In hydrospheric ecosystem the exchange material and transfer of energy takes place.	A. Within water and air B. Within water and land C. Within water D. Within land and air
142	Water changes its temperature:	A. Faster than air B. Same as air C. Slower than air D. Sometime slower and sometimes faster
143	A little light is left to power photosynthesis at the depth of:	A. 500 feet B. 700 feet C. 600 Feet D. 1000 Feet
144	The nutrients in aquatic ecosystem tends to be concentrated near the	A. Bottom B. Surface C. Center of total depth D. 10 feet below the surface
145	The essential requirement for life is:	A. Minerals B. Water C. Carbohydrates D. Proteins
146	Fresh water ecosystem cover the land only:	A. 2% B. 3% C. 4% D. 1%
147	The productivity can be indicated by:	A. Consumption of water and evolve of O₂ B. Consumption of CO₂ and water C. Consumption of CO₂ and evolve of O₂ D. Consumption of minerals and evolve of N₂
148	The productivity of aquatic ecosystem is basically determined by the:	A. Light and nutrients B. Light and carbohydrates C. Light and proteins D. Light and minerals
149	The lake ecosystem can be divided into _____ number of zones:	A. Two B. Three C. Four D. Five
150	In littoral zone, the water is:	A. Deeps B. Very deep C. Shallow D. Comes with wave only
151	In littoral zone, the zooplanktons are:	A. Protozoan and coelenterates B. Protozoan and porifers C. Protozoan and flatworms D. Protozoan and crustacean
152	In limnetic zone the phytoplankton are:	A. Cyanobacteria B. Protozoan C. Fungi D. Bacteria
153	The dead plants and animal bodies in lakes are decomposed by certain:	A. Cyanobacteria B. Bacteria C. Mold D. Protozoans
154	In lithospheric ecosystem the availability of water is:	A. Unlimited B. UniForm C. Limited D. Zero
155	One poles the average temperature is:	A. At freezing point B. Below freezing point C. Above freezing point

		C. Above freezing point D. More then 5◦C
156	One mechanism of temperature regulation was developed by land plans and animals by developing.	A. Brak and skin B. Vascular tissues and circulatory system C. Cambium and excretory system D. Vascular tissue and respiratory system
157	Terrestrial ecosystem have main types of ecosystem:	A. Five B. Four C. Three D. Two
158	Forest ecosystem is subdivided into ____ type of forests.	A. Two B. Four C. Five D. Three
159	In temperature deciduous forest the average rainfall is:	A. 650 -1500 mm B. 750 -1500 mm C. 800 - 1600 mm D. 700 - 1500 mm
160	In temperature deciduous forest the range of temperature is form:	A. 0◦C - 30◦C B. 4◦C - 30◦C C. 4◦C - 25◦C D. 4◦C - 40◦C
161	Mascara is a type of:	A. Lion B. Bird C. Monkey D. Bear
162	The soil of the deciduous forest is:	A. Yellow B. Grayish brown C. Grayish black D. Black
163	In coniferous alpine and boreal forests the winter is:	A. Longer and little B. Shorter and colder C. Longer and colder D. Shorter and little warmer
164	In coniferous alpine and boreal forest the temperature ranges from:	A. 0°C to 10°C B. Below freezing point up to 10°C C. Below freezing point up to 15°C D. 0°C to 15°C
165	Grassland which do not have woody plants are called:	A. Savana B. Tundra C. Prairies D. Boreal
166	Annual rainfall in grassland is about:	A. 250 to 650 mm B. 250 to 850 mm C. 250 to 450 mm D. 250 to 750 mm
167	In temperate grassland the rate primary production is about:	A. 700 - 1400 g/m² B. 700 - 1600 g/m² C. 700 -1800 g/m² D. 700 - 1500 g/m²
168	The desert ecosystem of western punjab is called:	A. Thar B. Thal C. Alpine D. Boreal
169	The average rainfall in desert ecosystem is:	A. 20 - 30 cm B. 20 - 40 cm C. 25 - 50 cm D. 14 - 35 cm
170	Tundra ecosystem is a vast treeless region bordering the:	A. Pacific ocean B. Atlantic ocean C. Arctic ocean D. Arabian sea
171	In tandra forests the willow tree with an age of 50 year have diameter of trunk only:	A. 5 cm B. 7 cm C. 8 cm D. 10 cm
172	The tundra vegetation supports the animals called:	A. lemmings B. Marchpolo sheeps C. Goats D. None of these
		A. Community

173	Group of interbreeding organisms residing together in space & times are	B. Population C. Genus D. Family
174	Regional ecological community of plants & animals primarily determined by climate	A. Biome B. Niche C. Habitat D. Both b & c
175	Layer of earth where life is present is called	A. Hydrosphere B. Lithosphere C. Biosphere D. Topography
176	The relationship of a single population towards its environment is called	A. Ecology B. Synecology C. Autoecology D. All of foregoing
177	"Litho" means	A. Air B. Earth / soil C. Water D. All of these
178	Fungi as well as bacteria are generally known as	A. Producers B. Consumers C. Decomposers D. None
179	Food chains combine to form	A. Large food chain B. Large organisms C. Trophic levels D. Food web
180	The major components of ecosystem are	A. 2 B. 3 C. 4 D. 6
181	The change in structure of community of an ecosystem during a time period is called	A. Succession B. Evolution C. Mutation D. Regression
182	The succession which occurs in dry soil or rock is	A. Hydrosere B. Xerosere C. Decrosere D. All of these
183	Climax in zerosere is the establishment fo	A. Woody forest B. Grasses C. Herbs D. Shrubs
184	Which include seral stages of a primary succession are	A. Lichen & algae B. Mosses and ferns C. Grasses & shrubs D. All of these
185	Consumers that prey other animals are known as	A. Predators B. Preys C. Parasites D. Competitors
186	A symbiotic relationship that benefits one species & neither helps nor harms the other is called	A. Mycorrihza B. Symbiosis C. Commensalism D. Mutualism
187	Which of these stages appears as a pioneer during succession on barren land?	A. Foliage lichens B. Mosses C. Crustose lichens D. Fruiticose lichens
188	Moss stage is represented by	A. Polytrichum B. Tortula C. Adiantum D. Both a and b
189	Infestations are the diseases which are caused by _____ in living organisms	A. Parasites B. Saprophytes C. Bacteria D. Viruses
190	Grazers feed mainly on which kind of plants	A. Tree leaves B. Shrubs C. Grasses D. Cereals

191	Elements required in large amount are called	A. Micronutrient B. Macronutrient C. Organic elements D. Inorganic elements
192	The study of relationship of an organisms to their environment is known is	A. Biology B. Ecology C. Zoology D. Mycology
193	A community is	A. A collection of plants and animals B. Autotrophs and heterotrops C. Population of different species living together in the same area D. Food chain
194	Producers are	A. Heterophs B. Green plants C. Carnivores D. Herbivores
195	The biotic components of the ecosystem are the	A. Producers B. Consumers C. Producers,consumers and the decomposers D. Decomposers
196	The example of decomposers of the ecosystem are the	A. Fungi B. Fungi and bacteria C. Bacteria D. Viruses
197	Which one of the following is true	A. Population is a larger unit than a community B. Bioshpere is a smaller unit than a biome C. Biome and community are equal units D. Biome is a larger unit than population
198	A lichen is the symbiotic association between a	A. Fungus and a bryophyte B. Roots of higher plants and an alga C. Fungus and an alga D. Roots of a higher plants and a fungus
199	An animal which captures and readily kills living animals for its food is known as	A. Parasite B. Predator C. Scavenger D. Consumer
200	In an ecosystem sheep and rabbits are examples of	A. Producers B. Predators C. Grazers D. Saprophytes
201	Which of the following is always an intracellular parasite	A. Zooparasite B. Viral parasite C. Phyto parasite D. Microbial parasite
202	Which one of the following does not refer to mutialism	A. Mycorrhiza B. Parasitism C. Lichen D. Bacteria in the gut of cow
203	The correct sequence in a food chain is	A. Mice - green plants - snake - hawke B. Green plants - mice - snake - hawk C. Mice - snake - green plants - hawk D. Green plants - hawk - snake - mice
204	A symbiotic association between a fungus and the roots of higher plants is known as	A. Lichen B. Parasitism C. Mycorrhiza D. Commensalism
205	Which one of the following is an example of commensalism	A. Nodulated roots B. Remoras attached to sharks C. Mycorrhiza D. Commensalism
206	The organisms found in the gut of the termites which help it digest wood are the	A. Bacteria B. Fungi C. Flagellates D. Viruses
207	The oxygen concentration in the air is maintained by the green plants which release it during	A. Fermentation B. Respiration C. Photosynthesis D. Chemosynthesis
208	The gross production of an ecosystem is its total	A. Photosynthesis B. Net production C. Photosvnthate

		D. Biomass
209	A relationship that harms one of the partners is called	A. Parasitism B. Symbiosis C. Commensalism D. None
210	Infestations are the diseases which are caused by _____ in living organisms	A. Worms B. Saprophytes C. Bacteria D. Virus
211	The ecosystem present on land or soil is called	A. Terrestrial ecosystem B. Lithospheric ecosystem C. A and B D. None
212	Which are pioneers of terrestrial ecosystem	A. Dermatocarpons B. Parmelia C. Polytrichum D. None of these
213	Ornithology is the sudy of	A. Mammals B. Reptiles C. Insects D. Birds
214	What is trampling	A. Eating grasses to roots B. Nipping leaves C. Overgrazing D. Putting pressure on soil to make it compact
215	Overgrazing	A. Promotes salinity B. Promotes erosion C. Promotes grasses D. Inhibits dicot competitors
216	The oxidation of ammonia is	A. Ammonification B. Nitrogen fixation C. Nitrification D. Denitrification
217	Which is not a seral stage	A. Climax forest B. Moss C. Shrub D. None
218	Leech is preferably a	A. Host B. Parasite C. Predator D. Mutualist
219	Omnivores are described by how many trophic levels	A. Any 2 B. Any 3 C. Any 1 D. Primary & any higher
220	Which eat consumers	A. Predators B. Carnivores C. Omnivores D. All
221	Which can't increase their weight in inorganic medium	A. Producer B. Consumer C. Decomposer D. Both b & c
222	It is community relay	A. Niche B. Evolution C. Speciation D. Succession
223	Nutrient elements become the part of protoplasm during	A. Photosynthesis B. Decomposition C. Fixation D. Assimilation
224	Pyramid always starts at	A. T₁ B. T₂ C. T₃ D. T₄
225	Global warming is due to	A. CFC's B. SO₂ C. O₃depletion D. CO₂
		A. SO₂

226	Acid rain is mainly due to	B. NO₂ C. Lead components D. Both a and b
227	Ozone is present at about _____ km above earth	A. 5 -10 B. 10 - 20 C. 10 - 40 D. 10 - 50
228	The purest form of global warming is in the shape of	A. Disease B. Flood C. Acid rain D. All of these
229	Taj Mahal's marble has been affected by	A. CFC's B. Lead pollution C. Acid rain D. None
230	Enrichment of water bodies by organic nutrients is called	A. Organic pollution B. Eutrophication C. Sewage pollution D. Dtergents pollution
231	Which disease is due to nutritional deficiency	A. Scurvy B. Diabetes C. Herpes D. Diphtheria
232	Establishment of new forest at places where no forests existed previously is called	A. Reforestation B. Afforestration C. Deforestration D. Both a and b
233	What are the environmental buffers?	A. Trees B. Animals C. Factories D. Microbes
234	Cloud cover is reduced due to	A. Reforestation B. Afforestration C. Deforestration D. Air pollution
235	Monoculture is	A. One organism B. A lab culture C. A pure culture D. Both b and c
236	Hemophilia is a _____ disease	A. Heritable B. Genetic C. Nutritional deficiency D. Both a and b
237	The study of human population and factor affecting it is called	A. Population census B. Population dynamics C. Demography D. Etymology
238	About 20 years ago what was the rate at which human population was increasing	A. 1% B. 2% C. 3% D. 5%
239	Excessive ploughing of lands in arid regions results in the development of	A. Forest B. Deserts C. Grassland D. Fields
240	Dams and canal networks developed for irrigation purpose in Pakistan and many other countries create the problems of	A. Salinity and soil erosion B. Salinity and water logging C. Soil depletion and water erosion D. Soil erosion and depletion
241	Man depends foams are potential sources of	A. Carbon monoxide B. Sulphur dioxide C. Chlorofluorocarbons (CFCs) D. Lead compounds
242	Aerosol spray foams are potential sources of	A. Carbon monoxide B. Sulphur dioxide C. Chlorofluorocarbons (CFCs) D. Lead compounds
243	The deficiency of which one of the following is cause of goiter	A. Iodine B. Calcium C. Potassium D. Iron

244	Topography is study of?	A. Population B. Individula C. Earth D. birds
245	Population of Pakistan was _____ in 1947	A. 23.5 million B. 30 million C. 32.5 million D. 40 million
246	Oxides of nitrogen are produced by burning of	A. Carbonate B. Leaded patrol C. Fossil fuels D. All of above
247	Global warming is the result of	A. Ozone layer depletion B. Acid rain C. Green house gases D. All of them
248	Which element is the most potent source for the depletion of ozone layer	A. Chlorine B. Fluorine C. Carbon D. All of them
249	Air conditioners are the source of	A. Effluents B. SO₂,NO₂ C. Heavy metals D. CFCs
250	Which of these diseases is not infectious?	A. Measles B. Influenza C. Pneumonia D. Tetany
251	One atom of chlorine can destroy up to _____ ozone molecules?	A. One million B. One billion C. One thousand D. Two million
252	Some _____ years ago human population and conversion of land to agricultural production began	A. 10,000 B. 40,000 C. 5000 D. None
253	Green house effect, acid rain headaches and coughs are related to which of the followings?	A. Oxides of nitrogen B. Oxides of sulphur C. CO D. CFCs
254	What is cause of Eutrophication	A. Excreta B. Phosphate C. Nitrates D. All
255	How plants are deprived of nutrients by acid rain	A. Due to teaching B. Due to fall in pH C. Acid creates a barrier to absorption D. Unknown cause
256	Which oxides causes headache and brain damage	A. Nitrogen B. Lead C. CO₂ D. CO
257	Chlorofluorocarbons are	A. Organic B. Inorganic C. Intermediate D. Solid
258	We are reducing natural 'carbon dioxide's	A. Sources B. Sinks C. Both D. None
259	Modern man has been on this planet for about	A. 4000 years B. 400,000 year C. 40,000 years D. 50,000 years
260	The chances of which hemophilia is equal in males & females	A. A B. B C. C D. All
261	Man has _____ linkage group	A. 23 B. 21 C. 25 D. 46

262	The two linked genes A and B with a 30% recombination frequency must be	A. 15 units apart B. 30 units apart C. 60 units apart D. 90 units apart
263	SRY in located at the tip of	A. Short arm of X-chromosome B. Short arm of Y-chromosome C. Long arm of Y-chromosome D. Long arm of X-chromosome
264	Pseudo-autosomal genes are present on	A. X-chromosome B. Y-chromosome C. Both a & b D. Autosomes
265	Diabetes is the leading cause of	A. Kidney failure B. Adult blindness C. Heart disease D. All of these
266	Blood pressure is also an example of _____ trait	A. Multifactorial B. Qualitative C. Single genic D. Both a & b
267	A carrier mother for colour blindness does not have	A. A normal boy B. A carrier boy C. A colour blind boy D. A normal daughter
268	How many kinds of rhodopsins, a blue cone monochromate will have	A. 3 B. 2 C. 1 D. No rhodopsins
269	Degenerated testes are present in abdomen in which of these cases	A. Down's syndrome B. Klinefelter's sysndrome C. Turner's syndrome D. Testicular ferminization
270	Insulin receptors are present in	A. Cytoplasm of muscle cells B. Cell membrane of liver cells C. Cell membrane of muscles and liver cells D. Cell membrane of all body cells
271	A blue cone monochormate	A. Can perceivetwo colours B. Can't perceiveany colour C. Can perceive only blue colour D. Can perceive only red colour
272	Which can convert glucose to glucose 6 phosphate	A. Hexokinase B. Glucokinase C. Phospho fructokinase D. Both a & b
273	What will be the risk of heamophilia in sons if father is haemophilic and mother is normal	A. 0% B. 20% C. 25% D. 50%
274	Queen victoria was having which kind of haemophilia	A. A B. B C. C D. None
275	Genes can be mapped on chromosomes on the basis of	A. Sex linkage B. Assortment C. Recombination frequency D. Gene sequencing
276	If six cells out of 10, do crossing over what will be percentage of cross over gametes	A. 60% B. 30% C. 40% D. 50%
277	If the distance of 20 map units is found among two linked loci what would be the percentage of cross gametes	A. 40% B. 60% C. 20% D. 10%
278	Color blindness, haemophilia and gout form linkage group onj	A. Chromosome 9 B. Chromosome 19 C. x-chromosome D. y-chromosome
		A. During first few months B. During last months

279	Anti-Rh antibodies appear in plasma	C. Only when stimulated D. If Rh⁺individual mistakenly receives Rh⁻blood
280	There are _____ total possible genotypes of blood group ABO system	A. 3 B. 4 C. 6 D. 7
281	Bilirubin	A. Turns skin Yellow B. Damages brain cells C. Causes jaundice D. All of these
282	What are chances for having Rh-ve baby if one parent is Rh+ve and (homozygous) and other is Rh-ve	A. 25% B. 50% C. 100% D. 0%
283	Rh factor is encoded by	A. 2 genes which occupy 3 loci B. 3 genes which occupy 2 loci C. 2 genes which occupy 2 loci D. 3 genes which occupy 3 loci
284	What is the probability of having albino child if father and mother both are carrier(Aa)	A. 25% B. 30% C. 50% D. 75%
285	Two parents of blood group A had a child of blood group O, what will be percentage chances of having such child again	A. 25% B. 50% C. 75% D. None
286	Interaction of two loci	A. Pleiotropy B. Epistasis C. Dominance D. Differentiation
287	A phenotype which can't be expressed in heterozygous state but can only be expressed other in homo or hemi form, would be	A. Dominant B. Bombay C. Recessive D. Ordinary
288	In case of sickle cell anemia, in place of glutamic acid, _____ is found	A. Histidine B. Valine C. Proline D. Leucine
289	Mutatuons are inherited only if they occur in the	A. Gland cells B. Gametes C. Muscle cells D. Somatic cells
290	A change in one or more bases of DNA, which results in the formation of an abnormal protein is	A. Moulting B. Transformation C. Mutation D. Fission
291	Homogenetistic acid is oxidized rapidly when exposed to air, turning the urine	A. White B. Purple C. Blue D. Black
292	Point mutation occurs in	A. Sickle cell anemia B. Phenylketonuria C. Alkaptonuria D. All
293	Which enzyme deficiency leads to phenylketonuria	A. Phenylalanine oxidase B. Phenylalanine hydroxylase C. Phenylalanine synthase D. Phenylalanine carboxylase
294	Mutation of one or two N-bases is	A. Inversion B. Point mutation C. Deletion D. Chromosomal aberrations
295	Mutation may be caused by	A. Chemicals B. Radiations C. Mutagens D. All of these
296	Sickle cell mutation affects	A. One beta chain B. Both beta chains C. Only alpha chain D. None of the alpha or beta chain

297	Genes for alpha and beta chains of hemoglobin are found on which chromosomes?	A. Chromosome 16 alpha; chromosome 11 beta B. Chromosome 11 alpha; chromosome 16 beta C. Chromosome 11 D. Chromosome 16
298	In sickle cell beta chain glutamic acid is replaced by valine which is sixth amino acid from	A. N-Terminal B. C-Terminal C. R-Terminal D. H-Terminal
299	What is the 5th amino acid in sickle cell beta chain	A. Histidine B. Proline C. Leucine D. Valine
300	It is the study of the relationship of animals (organisms) to their environment	A. Ecology B. Ecosystem C. Physiology D. Mycology
301	The term ecology comes form the _____ words oikos, meaning "The family household"	A. Greek B. Latin C. English D. French
302	The term originally was coined by the German zoologist Ernst Haeckel in	A. 1666 B. 1766 C. 1966 D. 1866
303	The ecosystem consists of interacting components,	A. Biotic B. Abiotic C. Bioic and Abiotic D. None of these
304	The abiotic components are also termed as	A. Chemical factors B. Physical factors C. Biological factors D. A and B
305	_____ is a group of interbreeding individuals occurring together in space and time	A. Population B. Species C. Community D. All of above
306	Each biome consists of a combination of plants and animals in the fully developed	A. Climax community B. Community C. Population D. None of above
307	There are _____ major terrestrial biomes	A. 2 B. 4 C. 6 D. 8
308	Biosphere is a thin layer of _____ in which all living organism exist	A. Earth B. Air C. Space D. None of above
309	In 1917, Jpseph Grinnel an American ornithologist first proposed the term _____ in ecology	A. Habitat B. Niche C. Area D. Space
310	The basic role of an organism in the community is called	A. Niche B. Factor C. Ability D. None of above
311	The study of a single population's relationship to its environment will be called as	A. Autecology B. Synecology C. Ecology D. Biogeopraphy
312	The study of different communities (grouping of population) in relation to their environment is called	A. Autecology B. Synecology C. Ecology D. Biogeopraphy
313	The synecology is also termed as	A. Community ecology B. Population ecology C. Specie ecology D. All of above
314	_____ components include all living organisms including plants and animals supported by biosphere	A. Biotic B. Abiotic C. Physical

		D. Both a and b
315	Biosphere is spread out over the surface of planet earth extending about _____ kilometers in the upper reaches of atmosphere and also in same distance into the depths of oceans	A. 8 - 10 B. 8 - 12 C. 8 - 14 D. 8 - 16
316	Which of the following is not an abiotic component	A. Atmosphere B. Hydrosphere C. Lithosphere D. Producers
317	Which of the following is not a biotic component	A. Producers B. Consumers C. Decomposers D. Water
318	Green photosynthetic plants are	A. Producers B. Consumers C. Decomposers D. None of the above
319	Animals are	A. Producers B. Consumers C. Decomposers D. Non of the above
320	Fungi are	A. Producers B. Consumers C. Decomposers D. None of the above
321	Algae are	A. Microproducers B. Macroproducers C. Both A and B D. None of above
322	Loins are	A. Primary consumers B. Secondary consumers C. Tertiary consumer D. All of above
323	Man is	A. Primary consumers B. Secondary consumers C. Tertiary consumers D. All of above
324	Consumers are _____ organisms	A. Autotrophic B. Heterotrophic C. Decomposers D. None of above
325	Which one of the following is not the main ionic nutrient	A. Ca B. Na C. K D. U
326	Consumers are the all the organisms, primarily animals. They obtain energy directly or indirectly from	A. Producers B. Consumers C. Decomposers D. All of the above
327	_____ are autotrophic organisms	A. Producers B. Consumers C. Decomposers D. All of the above
328	Eagle may eat blue bird, but blue bird eats insects like caterpillar and caterpillar feeds on grass or green leaves. This is a _____	A. Food chain B. Food web C. Both A and B D. None of above
329	The combination of many food chains is termed as	A. Food chain B. Food web C. Trophic level D. None of above
330	Green plants are _____ trophic level	A. First B. Second C. Third D. Forth
331	Primary consumers form _____ trophic level	A. First B. Second C. Third D. Forth
332	Secondary consumes form _____ trophic level	A. First B. Second

332	Secondary consumes form _____ trophic level	C. Third D. None of above
333	Decomposers form _____ trophic level	A. First B. Second C. Third D. All
334	_____ is a change in the community structure of an ecosystem over a period of time	A. Succession B. Primary succession C. Secondary succession D. None of above
335	The first comers in an area are termed as	A. Consumers B. Producers C. Pioneers D. All of above
336	The succession started on bare area is called as	A. Primary succession B. Secondary succession C. Tertiary succession D. Quartnary succession
337	The succession started after destruction of an area is called as	A. Primary succession B. Secondary succession C. Tertiary succession D. Quartnary succession
338	The establishment of stable vegetation on an area is termed as	A. Plant succession B. Animal succession C. Succession D. All of the above
339	The sucessions started on water is called as	A. Hydrosere B. Xerosere C. Derosere D. None of the above
340	The succession started on rocks is termed as	A. Hydrosere B. Xerosere C. Serosere D. None of the above
341	The succession started on deserts is termed as	A. Hydrosere B. Xerosere C. Derosere D. None of the above
342	Plants growing in xeric condition are called	A. Xerophytes B. Mesophytes C. Hydrophytes D. Schizophytes
343	Succulent plants are	A. Xerophytes B. Mesophytes C. Hydrophytes D. None of above
344	_____ lichens are the examples of foliose lichens	A. Dermatocarpon B. Permellia C. Both a and b D. None of above
345	Polytrichum is a	A. Lichen B. Algae C. Liver worts D. Moss
346	The last stage of plant succession is	A. Pioneer B. Climax C. Community D. None of above
347	An animal that preys other animals is a	A. Predator B. Carnivore C. Consumer D. All
348	The animal that is caught and eaten is the	A. Predator B. Prey C. Consumer D. Both a and c
349	The predeter and prey relationship is called as	A. Predation B. Animes C. Parasitism D. None of above
		A. Predation

350	This is an association between a host and a parasite	B. Anemies C. Parasitism D. None of above
351	Diseases in living organisms which are caused by parasites are called	A. Infestations B. Infection C. Fusion D. All of above
352	The parasite that live outside the body of the host is called as	A. Endoparasite B. Ectoparasite C. Outer parasite D. All of above
353	The parasite that lives inside the body of the host is called as	A. Endoparasite B. Ectoparasite C. Outer parasite D. All of above
354	Dandruff is the example of	A. Endoparadite B. Ectoparasite C. Outer parasite D. All of above
355	Tape worm is the example of	A. Endoparasite B. Ectoparasite C. Outer parasite D. All of above
356	Lices and mosquitoes are the examples of	A. Endoparasite B. Ectoparasite C. Outer parasite D. All of above
357	There is an association between two organisms, which brings benefits to both the organisms	A. Predation B. Symbiosis C. Parasitism D. None of above
358	Root Nodules are the example of	A. Predation B. Symbiosis C. Parasitism D. None of above
359	_____ symbiont the root nodules of legume plants	A. Virus B. Fungi C. Bacteria D. Nematods
360	The bacteria in the root nodules fix _____ in soil air, converting it to amino acids	A. Nitrogen B. Phosphorus C. Sulphur D. Iron
361	Mycorrhiza is an association between the roots of plants growing in acid soil and certain	A. Virus B. Fungi C. Bacteria D. Nematods
362	Both organisms benefit from the _____ relationship	A. Mutualism B. Commensalism C. Parasitism D. All of above
363	Lichen is the example of	A. Mutualism B. Commenaslim C. Parasitism D. All of above
364	Insect and flower relationship is the example of	A. Mutualism B. Commensalism C. Parasitism D. All of above
365	In this type of relationship only one organism benefits from the relationship. The other is not affected at all	A. Mutualism B. Commensalism C. Parasitism D. All of above
366	The eating of grasses is termed as	A. Grassing B. Browsing C. Eating D. None of above
367	The chemical elements essential for life in living organisms are called _____ elements	A. Biogenic B. Abiogenic C. Nutrient D. Both A and C

368	The nutrient cycles are also called as	A. Biogeochemical cycles B. Biochemical cycles C. Geo-cycles D. All of above
369	The process by which the limited amount of nitrogen is circulated and recirculated throughout the world of living organisms is known as the	A. Nitrogen cycle B. Nitrogen path way C. Nitrogen depletion D. None of above
370	The chief reservoir of nitrogen is the	A. Atmosphere B. Water C. Soil D. Rain
371	Nitrogen makes up _____ percent of the gases in atmosphere	A. 76 B. 77 C. 78 D. 98
372	The principal stages of this cycle are	A. Ammonification B. Nitrification C. Assimilation D. All of above
373	These micro-organisms use the proteins and amino acids and release excess of ammonia (NH_3) or ammonium ions (NH_4). This process is known as	A. Ammonification B. Nitrification C. Assimilation D. All of above
374	Several bacteria in soil oxidize ammonia or ammonium ions this oxidation is known as	A. Ammonification B. Nitrification C. Assimilation D. All of above
375	_____ incorporate gaseous nitrogen from air into organic nitrogen containing compounds	A. Nitrogen fixing bacteria B. Nitrogen degrading bacteria C. Both A and B D. None of above
376	Soil nitrogen resources are also strengthened by the addition of _____ by the man himself	A. Nitrogen fertilizers B. Nitrogen C. Fertilizers D. None of above
377	The total amount of energy fixed by plants is _____ productions	A. Gross primary B. Net primary C. Secondary D. All of the above
378	About _____% if the total energy from the sun is trapped by the producers in an ecosystem	A. 0.5 B. 1.0 C. 1.5 D. 2.0
379	About _____% of solar energy is used to evaporate water, heat up soil and then lost to the outer space	A. 95 B. 97 C. 98 D. 99
380	Between 80 to 90% of the original energy is lost as heat as a byproduct of	A. Photosyntheis B. Urine C. Respiration D. All of the above
381	A _____of energy can be constructed showing energy transfer in a community of organisms	A. Pyramid B. Triangle C. Rectangular D. None of above
382	Dandruff is caused by	A. Algae B. Bacteria C. Fungi D. Virus
383	The amount of energy left after plant have met their respiratory need is net primary production called as	A. Mass B. Gross production C. Biomass D. None
384	Fresh water ecosystem covers less than _____% of the hydrospheric ecosystems	A. 2 B. 3 C. 1 D. 4
385	The ecosystem present on land or soil is called	A. Terrestrial ecosystem B. Lithospheric ecosystem C. A and B

		D. none
386	On poles, the average temperature is	A. Zero°C B. 5°C C. Below freezing point D. None
387	The dominance relations of a 4 O'clock plant can be described in terms of	A. Complete dominance B. Incomplete dominance C. Partial dominance D. Both B and C
388	Which of the following cross is carried to check the genotype of an individual showing a dominant phenotype	A. Check cross B. Test Cross C. Criss cross D. Self cross
389	Rh factor or antigen was first studied in	A. Man B. Owl C. Monkey D. Fish
390	An exchange of segments between non-sister chromatids of homologous chromosomes during meiosis is termed as	A. Crossing over B. Hopping C. Taking over D. Segregation
391	All chromosomes other than sex chromosomes are called	A. Linked Chromosomes B. Autosomes C. Autophagosommes D. Dictyosomes
392	X and Y linked genes are also called as	A. Sex genes B. Dominant genes C. Autosomal genes D. Pseudoautosomal genes
393	Tritanopia is blindness of	A. Red Colour B. Green Colour C. Blue Colour D. Pink Colour
394	Normal fruit flies have	A. White eyes B. Bright red eyes C. Light red eyes D. Black eyes
395	Allele for whiteness in Drosophilla is	A. Recessive B. Codominant C. Dominant D. Partially dominant
396	The processes that have transformed life on earth from its earliest forms to the vast diversity that we observe today, are collectively referred as	A. Evolution B. Succession C. Revolution D. All of above
397	The first person who argued from evidence that species were not created in their present form rather they had evolved from ancestral species was	A. Aristotle B. Lamarck C. Darwin D. Mendel
398	Darwin proposed a mechanism for evolution, which he termed	A. Natural selection B. Special reaction C. Adaptation D. Descent with modification
399	The concept that all living things came into existence in their present forms especially created by Nature is called as	A. Theory of special creation B. Theory of special selection C. Theory of natural creation D. Theory of natural selection
400	Among the scientists who believed in divine creation as	A. Darwin B. Carolous Linnaeous C. Lamarck D. Wallace
401	Essay on "Principle of population" was published by	A. Cuvier B. Mendel C. Malthus D. Darwin
402	Essay on "Principles of geology" was published by	A. Wallace B. Malthus C. Lyell D. Cuvier
		A. 420 million years ago

403	The prokaryotes may have arisen more than	B. 42 billion years ago C. 3.5 billion years ago D. 1.5 billion years ago
404	Endosymbiont hypothesis was first proposed by	A. Lynn Margulis B. Malthus C. Cuvier D. Darwin
405	According to endosymbiont hypothesis the aerobic bacteria developed into	A. Lysosomes B. Mitachondria C. Chloroplast D. Nucleus
406	Which of the following hypothesis involved the evolution of eukaryotic cell from a prokaryotic cell	A. Endosymbiont hypothesis B. Membrane invagination hypothesis C. Vent hypothesis D. Both A and B
407	Lamarck was incharge of invertebrate collection at Natural History Museum is	A. Berlin B. Paris C. California D. Brun
408	Lamarck published his theory of evolution in	A. 1822 B. 1812 C. 1817 D. 1809
409	The idea of inheritance of acquired characteristics was presented by	A. Margulis B. Lamarck C. Linnaeus D. Cuvier
410	Charles Darwin was born in Shrewsbury, in Western England in	A. 1854 B. 1807 C. 1809 D. 1866
411	Which of the following things were not collected by Darwin?	A. Specimens of diverse faunas and floras of south America B. South American fossils C. 13 types of finches D. Turtles
412	Darwin published " The Origin of Species" in	A. 1840 B. 1844 C. 1858 D. 1859
413	Wallace developed a Theory of Natural Selection similar to that of	A. Lamarck B. Linnaeus C. Darwin D. Lyell
414	According to Darwin descent with modification means	A. Same ancestor B. Same characters C. Different ancestors D. Different characters
415	Soyabeans have been made resistant to a common	A. Insecticide B. Herbicide C. Fungicide D. Pesticide
416	About three billion base pairs are present in the genome of a	A. Horse B. Dog C. Man D. Monkey
417	Urine is preferably used as a vehicle for biotechnology product than:	A. Blood B. Milk C. Plasma D. Tissue fluid
418	The study of relationship of an organism to their environment is knows as:	A. biology B. ecology C. zoology D. mycology
419	Similar groups of individuals who can interbreed and produce organisms of their own kind form a:	A. population B. community C. species D. succession
420	When living and non-living interact to produce a stable system in which exchange of materiel with flow of energy takes place, it forms a/an:	A. environment B. ecosystem C. stable community D. ecological succession

		B. ecological succession
421	The living organism which can prepare their own food are:	A. predators B. parasites C. producers D. prey
422	The living organisms, which cannot prepare their own food but obtain ready-made food form others, are:	A. primary and secondary consumers B. secondary and tertiaryconsumers C. only primary consumers D. consumers
423	Coniferous forests of high altitude are known as:	A. tundra B. Boreal C. Alpine D. Arctic
424	Limnetic phytoplanktons include:	A. Mossses B. Algea C. Bacteria D. Cyanobacteria
425	A dominant plant of temperate deciduous forests is the :	A. Euphorbia B. Taxus baccata C. cactus D. Acacia
426	A common animal of temperate deciduous forests is the:	A. Kangaroo B. Cat C. Leopard D. Rhesus Monkey
427	Coniferous forests located at high latitude are called	A. Boreal B. Taiga C. Tundra D. Alpine
428	Sahara Desert i found in :	A. Europe B. America C. Africa D. Australia
429	Dominant species of mammals in grassland are the:	A. Omnivores B. Herbivores C. Carnivores D. Insectivores
430	Dominant plant species in grassland are:	A. Graminoids B. Trees C. Climbers D. Herbs
431	Grasslands of tropic climate have woody trees and are called:	A. Alpine B. Boreal C. Biome D. Savanna
432	Shallow water zone of the lake near the shore is called:	A. Intertidal zone B. Littoral zone C. profundal zone D. Limnetic zone
433	Major unit of ecology is :	A. Ecosystem B. Community C. Biosphere D. Population
434	Actual place or location where an organism lives is called us:	A. Niche B. Terrain C. Habitat D. Domain
435	The animal that is caught and eaten away is called	A. Victim B. Prey C. Predators D. Host
436	The type of association between two organisms, which brings benefit to both the organisms is called	A. Commensalism B. Predation C. Mutualism D. Parasitism
437	Over-grazing may lead to:	A. Desert B. Tundra C. Taiga D. Grassland
438	Nutrient cycle are also called us:	A. Biogeochemical cycles B. Elemental cycles C. Geochemical cycles

		C. Geochemical cycles D. Biochemical cycles
439	_____is the study of interaction between living organism and their environment	A. Evolation B. Genetics C. Ecology D. Sociology
440	Two main types of environment factors are:	A. Geotropism and phototropism B. Abiotic and biotic C. Land aquatic D. None of these
441	Tick the biotic (intra-specific) factors:	A. Wave action, humidity, light B. Colonization,aggregation,parental care C. Neutralism,mutualism,predation D. Mineral elements, mutualism,parasitism
442	Abiotic factors include:	A. Geomagnetism B. Gravity C. Water D. All these
443	Many cold=blooded animals remain inactive during winter season; it is called:	A. Hibernation B. Condensation C. Morphosis D. Proto-operation
444	Dormancy in animals through a drought or dry season is called:	A. Eurythermal B. Diapause C. Aestivation D. None of these
445	Which rule depicts its correct statement regarding temperature variation?	A. <u>Allen's Rule:</u> Birds and mammals have greater size in cold region B. <u>Bergman's Rule:</u> The tail snout and ears are smaller in colder region. C. <u>Jordan's Rule:</u> Birds in cold regions are with narrow wings. D. All are false.
446	Plants growing in extreme cold soil are called:	A. Sciophytes B. Psychrophytes C. Heliophytes D. Cyanophytes
447	In which types of soil does water logging occur?	A. Silt B. Clay C. Gravel D. Sand
448	A mixture of sand and clay in:	A. Silt B. Kaolin C. Humus D. Loam
449	The gill pouches present in embryos of mammals :	A. support that ontogeny recapitulates phylogeny B. homologous structures C. used by embryos to breathe D. evidence for the degeneration
450	When a single gene has multiple phenotypic effects, the phenomenon is called:	A. condominance B. epistasis C. pleiotropy D. sex-linkage
451	What happens when both alleles of a gene pair independently express in a heterozygote?	A. dominance B. incomplete dominance C. over dominance D. codominance
452	A heterrozygote offspring quantitatively exceeds the phenotypic expression of both the homozygote parents due to:	A. dominance B. incomplete dominance C. over dominance D. codominance
453	How may gene pairs contribute to the wheat grain colour?	A. one B. two C. three D. four
454	Who for the first time found white eye mutant in drosophila ?	A. Morgan B. Bridges C. Correns D. De Varies
455	Which of the following traist is transmitted directly from an affected to only its sons?	A. autosomal B. X-linked C. Y-linked

	sons?	C. Y-linked D. X and Y linked
456	Which phenomenon reduces the chances of genetic recombination and variations among offspring ?	A. linkage B. crossing over C. independent assortment D. dominance
457	Which of the following traits is not sex-linked recessive ?	A. haemophilia B. colour blindness C. hypophosphatemic ricket D. tfm syndrome
458	Which of these traits zigzags from meternal grand father through a carrier daughter to a grandson ?	A. autosomal B. X-linked C. Y-linked D. X and Y linked
459	When a haemophilic carrier woman marries a normal man, who among her offspring may be affected	A. all her children B. all her daughter C. half of her daughter D. half of her sons
460	What is the risk of a colour blind child in a family when mother is colour-blind but father is normal?	A. 100% B. 75% C. 50% D. 25%
461	Population is a localized group of individuals belonging to :	A. same species B. different species C. same community D. same stand
462	Darwin collected 13 types of birds of :	A. Robins B. Sparrows C. Kingfishers D. Finches
463	Archaeobacteria could tolerate temperatures up to :	A. 140°C B. 120°C C. 95°C D. 70°C
464	Endangered plant species have been recorded to more than:	A. 600 B. 400 C. 500 D. 300
465	Eukaryotes are thought to hve evolved firstly about:	A. 1.3 billion year ago B. 1.5 billion year ago C. 1.7 billion year ago D. 1.2 billion year ago
466	Gene pool consists of all alleles at all gene loci in all individuals of the:	A. community B. species C. population D. family
467	The change in frequency of alleles at a locus that occurs by chance is called :	A. genetic drift B. genetic change C. gene mutation D. gene frequency
468	The idea of endosymbiont hypothesis was first proposed by:	A. Lynn marguils B. Wallace C. Karlene Schwartz D. Lamarck
469	Ultimate source of all changes is :	A. Mutation B. Genetic drift C. Evolution D. Migration
470	Armadillos, the armoured mammals live only in :	A. Asia B. Europe C. America D. Africa
471	Genetic basis of ABO blood group system was explained by:	A. Landsteiner B. Levine C. Bernstein D. Carl Correns
472	The dominance relations of 4 O'clock plant can be described in terms of :	A. Complete Dominance B. Incomplete Dominance C. Partial Dominance D. Both b and c
		A. Check cross

473	Which of the following cross is carried to check the genotype fo an individuals showing a dominant phenotype ?	A. Check cross B. Test Cross C. Criss Cross D. Self Cross
474	Rh factor or antigen was first studied in :	A. Man B. Owl C. Monkey D. Fish
475	An exchange of segments between non-sister chromatids of homologous chromosomes during meiosis is termed as :	A. Crossing over B. Hopping C. Taking over D. Segregation
476	All chromosomes other than sex chromosomes are called :	A. Linked chromosomes B. Atusomes C. Autophagosommes D. Dictyosomes
477	X and Y linked genes are also called as :	A. Sex genes B. Dominant genes C. Autosomal genes D. Pseudoautosomal genes
478	Tritanopia is blindness of :	A. Red Colour B. Green Colour C. Blue Colour D. Pink Colour
479	Normal fruit flies have :	A. White eyes B. Bright red eyes C. Light red eyes D. Black eyes
480	Allele for whiteness in Drosophila is :	A. Recessive B. Codominant C. Dominant D. Partially Dominant
481	The processes that have transformed life an earth form its earliest forms to the vast diversity that we observe today, are collectively referred as :	A. Evolution B. Succession C. Revolution D. All of above
482	Virus without envelope is	A. HIV B. Hepatitis B C. Polio virus D. Hepatatis C
483	Vaccine for___ is under trial administration	A. Hep A B. Polio C. Measles D. AIDS
484	Isosahedral viruses usually have ___	A. 10 faces B. 20 faces C. 15 faces D. 5 faces
485	Viruses reproduce through a process	A. Binary fission B. Replication C. Both a and b D. Transformation
486	The particles which do not contain any nucleic acid are	A. Viruses B. Prions C. Viroids D. All
487	Example of a virus having tadpole shape consisted of head and tail	A. Bacteriophage B. Polio virus C. HIV D. HV
488	Which of the following virus is DNA enveloped	A. Polio virus B. Hepatitis B virus C. HIV D. Measles virus
489	Genome of the acellular particle mainly comprised of	A. Protein B. Sugars C. Lipid D. Nucleic acid
490	Which type of nucleic acid is found in the capsid of HIV	A. RNA B. DNA

	Which type of nucleic acid is found in the capsid of HIV	C. ssDNA D. None
491	Viruses are not resistant to	A. Interferons B. Penicillin C. Streptomycin D. Any antibiotic
492	They are Tumor causing viruses and are usually host specific	A. Polio viruses B. Retroviruses C. Oncoviruses D. Both b and c
493	Provirus is	A. Genome of bacteriophage B. Genome of HIV uncoiled in Host cell C. Genome of HIV incorporated in Host genome D. Genome of a host
494	In HIV infection cycle, uncoating of virus takes place	A. Outside the T-cell B. Inside the cytoplasm of T-cell C. Inside the nucleus of T-cell D. Inside the mitochondria of T-cell
495	Viral core always contain __ among the following	A. DNA B. RNA C. Both A and B D. Any of A or B
496	If you are studying the structure of HIV , you will observe spikes associated with the	A. Core B. Capsid C. Envelope D. Genome
497	Patient of AIDS is susceptible to many infections due to	A. Severe pneumonia B. Swollen lymph nodes C. Loss of immune system D. All of these
498	Choose the correct option about the following figure:	A. A is showing Envelope B. B is not showing envelope C. C is showing RT D. D is showing RNA
499	Which of the following is a living character of virus	A. Formation of Crystals B. Production of new viral particles C. Coordination D. Metabolism
500	Major cells infected by HIV are	A. Monocytes B. B lymphocytes C. T lymphocytes D. RBC
501	Which of the following acts as template strand for reverse transcription	A. Viral DNA B. Viral RNA C. Host DNA D. Host RNA
502	The best known phages are T phages that infect	A. Pseudomonas B. Mycoplasma C. Escherichia Coli D. Salmonella
503	Head of T4 bacteriophage contain	A. Single stranded DNA B. Double stranded DNA C. Single stranded RNA D. Both RNA and DNA
504	Viruses containing RNA rather than DNA are called	A. Riboviruses B. Bacteriophages C. Rotaviruses D. Retroviruses
505	In lytic cycle, the relationship between bacterium and bacteriophages is	A. Symbiotic B. Master-slave C. Husband wife D. Host-guest
	Retroviruses cause tumors in	A. Rodents B. Fowls

506	Retroviruses cause tumors in	C. Cats D. All
507	The smallest known virus is	A. HIV virus B. HBV virus C. Influenza virus D. Polio virus
508	The persistent symptoms of small pox are	A. Raised fluid filled vesicles B. The pocks C. Pustules D. Vascular lesions
509	The phage is called temperate when it causes	A. Virulence B. Lysis C. Lysogeny D. Bursting of host cell
510	Pick up the false statement regarding HIV	A. Lipoprotein envelope B. Two RNA molecules C. Two molecules of RT enzyme D. Round shaped capsid
511	In life cycle of bacteriophage, _____ occurs followed by_____.	A. Assembly. Penetration B. Multiplication, landing C. Tail contractio, Penetration D. Penetration, Assembly
512	Which type of hepatitis is called serum hepatitis	A. Hepatitis A B. Hepatitis B C. Hepatitis C D. Hepatitis D
513	Mad cow infection is caused by ____	A. Viroid B. Virion C. Prion D. Bacteria
514	An isolated virus is not considered living, since it	A. Separates into two inert parts B. Cannot metabolize C. Rapidly loses its genome D. It coated with an air tight shield
515	Which type of hepatitis leads to chronic liver disease?	A. Hepatitis D B. Hepatitis A C. Hepatitis B D. Hepatitis C
516	Which of the following disease is not caused by virus?	A. Cholera B. Hepatitis C. Influenza D. Polio
517	Which is irrelevant?	A. Genome to virus structure B. Capsomeres to Capsid C. Tumors to retroviruses D. Envelope to all viruses
518	Chemical nature of spikes present on HIV	A. Protein B. Carbohydrate C. Glycolipid D. Glycoprotein
519	DNA of non-virulent phage is	A. Provirus B. Prophage C. Both D. None
520	Crystallization of viruses was done by _____ for the first time	A. Ivanowsky B. Twort C. Stanley D. Robert Koch
521	HIV attaches on cell membrane of T cell at _____ receptor site	A. Cd2 B. Cd4 C. Cd8

		D. Gp120
522	Which of the following is a common feature of all viruses	A. DNA replication in cytoplasm B. RNA synthesis in nucleus C. Protein synthesis in cytoplasm D. Reverse transcription in cytoplasm
523	Causative agent of mysterious brain infection is composed of	A. DNA+Protein B. RNA+Protein C. RNA only D. Protein only
524	Which of the following part of virus does not enter into host cell	A. Envelope B. Spikes C. Both D. Capsid
525	Herpes type-1 virus causes	A. Pitted scars B. Swollen neck C. Rashes on genitals D. Vascular lesions
526	Joining of viral DNA with host DNA is carried out by	A. Integerase B. Ligase C. Both D. Polymerse
527	Newly synthesized Large proteins are digested into small viral proteins by	A. Host protease B. Viral protease C. Viral RT D. Host pepsin
528	Which of the following is not an enzyme of HIV	A. Reverse transcriptase B. Integerase C. Protease D. Ligase
529	Structural proteins of HIV are	A. Encoded by virus genes B. Synthesized by host ribosomes C. Digested by viral enzymes D. All of these
530	It is not a symptom of AIDS	A. Swollen lymph nodes B. Loss of immunity C. Swollen neck D. Pneumonia
531	What is done to monkeys by HIV	A. Multiplication and disease B. Infection and multiplication C. Infection and disease D. None
532	Glyosidic bond is formed by the	A. Removal of Oxygen B. Addition of Water C. Addition of Oxygen D. Removal of Water
533	The Organic biomolecule which is widespread in bacterial animal and plant cells is	A. Wax B. Glucose C. Acyl glycerol D. Phospholipids
534	In a phospholipid molecule, phosphoric acid is attached to the carbon number_____ of glycerol.	A. 1 B. 2 C. 3 D. 4
535	The simplest mono saccharide containing keto group is:	A. Glyceraldehyde B. Glucose C. Dihydroxyacetone D. Ribose
536	Pick a non-reducing sugar	A. Lactose B. Sucrose C. Glucose D. Fructose
537	Which of the following reaction is reverse of others	A. Hydrolysis B. Decondensation C. Decomposition D. Condensation
		A. Glycogen

538	___ gives blue color with iodine	B. Dextrin C. Cellulose D. Starches
539	Which of the following sugar does not form a ring structure in a solution	A. Glyceraldehyde B. Ribose C. Glucose D. Fructose
540	Which of the following is not a homopolysccharide?	A. Starch B. Chitin C. Pectin D. Glycogen
541	RNA and Proteins are components of	A. Chromosomes B. Receptors C. Secretions D. Ribosome
542	Pick the odd one	A. Cellulose B. Galactose C. Agar D. Pectin
543	Pick up ester bond present in nucleotide	A. P-O-C B. C-O-C C. N-O-C D. S-O-C
544	Which of the following is correct option	A. Nucleoside does not contain phosphate B. Nucleotide has three sub-units C. Ester bond is present in acylglycerols D. All
545	Glycerol, fatty acids and phosphoric acid give rise to:	A. Phospholipid B. Phosphatidic acid C. Phosphatidyl choline D. Phosphatidylethnoline
546	_____ are important components of brain and plasma membrane:	A. Nucleoproteins B. Glycolipids C. Lipoproteins D. Phospholipids
547	In a phospholipid molecule, fatty acid is attached to the carbon number_____ of glycerol.	A. 1 B. 2 C. Both D. 3
548	Secondary structure is the ultimate structural level of which of the following proteins?	A. Trypsin B. Insulin C. Keratin D. Glucose
549	The next to simplest amino acid is	A. Alanine B. Glycine C. Serine D. Glutamine
550	Insulin is a/an:	A. Osmotic Protein B. Transport Protein C. Regulatory Protein D. Catalytic Protein
551	Which part of amino acid give its physical and chemical properties	A. Amino group B. Carboxylic group C. Alpha carbon D. Alkyl group
552	Highest number of carbons are present in	A. Butyric acid B. Acetic acid C. Palmitic acid D. Oleic acid
553	Both Glycoprotein and glycolipids are components of	A. Plant Cell walls B. Algal Cell Walls C. Fungal Cell Wall D. Biological Membranes
554	F. Sanger was the first scientist who determined the ___ structure of a protein molecule	A. Primary B. Secondary C. Tertiary D. Quaternary
555	Pick out the phospholipid from the following	A. Phosphatidylserine B. Lecithin C. Phosphatidylcholine D. All

556	Which level of protein structure is responsible for maintenance of helix shape of an enzyme	A. Primary B. Secondary C. Tertiary D. Quaternary
557	Lipids store double amount of energy as compared to same amount of carbohydrates, because of	A. Higher proportion of C-H bonds B. Higher proportion of C-N bonds C. Higher proportion of C-O bonds D. Lower proportion of C-O-P bonds
558	In a DNA duplex , what will be distance in between two consecutive base pairs:	A. 3.4 Angstrom B. 34 Angstrom C. 0.34 Angstrom D. 340 Angstrom
559	Which of the following sugar is abundant in muscle fibres	A. Myoglobin B. Starch C. Glycogen D. Oxygen
560	The amount of DNA in _____ is one half to that of_____:	A. Somatic cells, Germ cells B. Osteocytes, Somatic cells C. Germ cells, Somatic cells D. Somatic cells, Gametocytes
561	The compound formed by the combination of a base and a pentose sugar is called:	A. Nucleoside B. Nucleic acid C. Nucleotide D. Nuclein
562	In free state Glucose is present in:	A. Grapes B. Dates C. Figs D. All Fruits
563	All carbon atoms in a monosaccharide ____ have hydroxyl group	A. Except one B. Except Two C. Without Exception D. Except last
564	Pick up the example of a dinucleotide:	A. ATP B. GTP C. ADP D. NAD
565	Pick up the wrong statement from the following	A. Oils are lighter than water B. Animal fats are solid at room temperature C. Specific gravity of fats is higher than water D. Fats containing saturated fatty acids are solid
566	The bond formed between glucose and fructose to form sucrose	A. α 1 , 4 Glycosidic bond B. β 1 , 4 Glycosidic bond C. α 1 , 2 Glycosidic bond D. β 1 , 2 Glycosidic bond
567	How many nitrogen atoms are found in lecithin	A. 1 B. 2 C. 3 D. 4
568	Which of the following does not contain peptide bond	A. Hemoglobin B. Myoglobin C. Insulin D. Cutin
569	In tertiary structure, presence of hydrophilic amino acids at the surface of proteins and hydrophobic amino acids buried inside, indicate	A. Nature of bonding B. Function of protein C. Nature of medium D. Shape of protein
570	Chemical formula of pentose sugar present in DNA	A. C₅H₉O₅ B. C₅H₁₀O₅ C. C₅H₁₀O₄ D. None
571	Nucleotide is to ___ as amino acid is to ___	A. Nucleic acids, Lipids B. Nucleic acids, Proteins C. Proteins, Lipids D. Lipids, proteins
572	When Fructose form ring structure, It is	A. 6 Cornered B. 5 cornered C. 4 cornered D. 3 cornered

573	Most of the proteins are composed of _____ types of amino acids	A. 170 B. 150 C. 25 D. 20
574	Which of the following is dimer of glucose	A. Sucrose B. Fructose C. Maltose D. Cellulose
575	Monosaccharides are major component of	A. DNA, ATP, RuBP, Lecithin B. DNA, NAD, Insulin C. DNA, NAD, ATP, RuBP D. DNA, RNA, Myosin
576	What is the theoretical number of chemically different dipeptide that can be made from 2 different amino acids	A. 1 B. 2 C. 4 D. 8
577	Which of the following nitrogenous base have methyl group	A. Adenine B. Guanine C. Uracil D. Thymine
578	Glycine can be converted to alanine by	A. Addition of carbon and 2 hydrogens B. Removal of carbon and 2 hydrogens C. Addition of Methyl group D. Removal of hydrogen and 2 carbons
579	Which of the following bond is not present in tertiary structure of proteins	A. Peptide B. Hydrogen C. Ionic D. Ester
580	In deoxyribose, oxygen is removed from carbon number	A. 1 B. 2 C. 3 D. 4
581	Peptidoglycan or murine is a special or distinctive feature of cell wall in	A. Algae B. Bacteria C. Fungi D. Plants
582	The intake of liquid material across the cell membrane is called as	A. Phagocytosis B. Pinocytosis C. Endocytosis D. Exocytosis
583	Which of the following features is not shared by prokaryotic and eukaryotic cells	A. Ribosome B. Cytoplasm C. Cell membrane D. Nuclear membrane
584	Animal cells differ from plant cells in having	A. 80 S ribosome B. Chloroplasts C. Mitochondria D. Centrioles
585	Most unifying characteristics of all types of cells is	A. Cell membrane B. Nucleus C. Ribosomes D. S.E.R
586	Substances cross the cell membrane more easily when they are	A. water soluble B. protein soluble C. alcohol soluble D. lipid soluble
587	Eukaryotic ribosomes are composed of an almost equal amount of _____ and proteins	A. DNA B. RNA C. Carbohydrates D. Lipids
588	According to fluid mosaic model of cell membrane	A. The most common type of molecules in the membrane are proteins B. Basic membrane structure results from how proteins interact with water C. The membrane is highly mobile mixture of phospholipids and proteins D. The unique properties of cell types are determined by their phospholipids
		A. SER>RER>Transport vesicle>Golgi apparatus>secretory vesicle>cell membrane B. SER>Golgi apparatus>Transport

589	Pick up the correct sequence of path followed by a testosterone molecule till its export	vesicle> secretory vesicle>cell membrane C. SER>RER>Golgi apparatus> Transport vesicle>secretory vesicle>cell membrane D. SER>Transport vesicle>Golgi apparatus>secretory vesicle>cell membrane
590	Most of the plant cells lack following organelles EXCEPT	A. Flagellum B. Lysosome C. Centriole D. Mitochondria
591	A Cell interacts with its external environment through	A. Cell Wall B. Nuclear membrane C. Plasma membrane D. Cytoplasm
592	Endocytosis of an apoptotic body is termed as	A. Pinocytosis B. Exocytosis C. Phagocytosis D. Apoptosis
593	Pick up the correct statement about the following figure:	A. 2.Nucleolus, 4.Golgi apparatus, 10.cytoplasm, 7.Mitochondria B. 2.Nucleolus, 7.cell membrane, 9.cytoplasm, 7.Mitochondria C. 2.Nucleolus, 4.Golgi apparatus, 5.cytoplasm, 7.Mitochondria D. 2.Nucleolus, 4.Golgi apparatus, 10.cytoplasm, 7.Centriole
594	--------- Develop the basic formwork of plasma membrane:	A. Phospholipids B. Glycoproteins C. Glycolipids
595	Which one of the following is associated with intracellular transport of material?	A. Golgi apparatus B. Centriole C. Endoplasmic reticulum D. Lysosome
596	Traffic of substance between nucleoplasm and cytoplasm is controlled by	A. Nuclear Envelope B. Nuclear membrane C. Nuclear pores D. Endoplasmic reticulum
597	Capability of extra nuclear inheritance is found in	A. Ribosomes B. Lysosomes C. Mitochondria D. Chromosomes
598	Digestive vacuoles are also called as	A. Primary Lysosomes B. Secondary Lysosomes C. Phagocytic Vacuoles D. Pinocytic Vacuoles
599	The organelle that protect the cell from invading organisms is	A. Centriole B. Lysosome C. Mitochondrion D. Vacuole
600	A group of ribosomes attached with same mRNA form polysome for	A. Better expression of Gene B. Rapid production of protein C. Increased production of protein D. Protein export
601	---------- and ---------- have same number of chromosome	A. Man, Chimpanzee B. Chimpanzee, Potato C. Man, Potato D. Potato, Tomato
602	Methylation of proteins occur in	A. Transport vesicles of endoplasmic reticulum B. Lysosomes C. Golgi apparatus D. Transport vesicles of Golgi bodies
603	A Crista is made of -------- membrane	A. Lipoprotein B. Glycoprotein C. Nucleoprotein D. Phospholipids
604	Which region of the nucleolus has DNA?	A. Central fibrillar region B. Central granular region C. Peripheral granular region D. Peripheral fibrillar region
605	The rough endoplasmic reticulum is involved in	A. Synthesis of proteins B. Storage Of Ca+₂ ions C. Synthesis of lipids

		D. Detoxification of drugs
606	Which one of the following always contains DNA?	A. Centriole B. Lysosome C. Golgi apparatus D. Mitochondrion
607	All of the following are present in mitochondria, EXCEPT	A. Cristae B. Ribosomes C. DNA D. Thylakoids
608	Which one of the following acts as a site for storage of water and cells products or metabolic Intermediates?	A. Chloroplast B. Mitochondrion C. Vacuole D. Endoplasmic reticulum
609	On an average, there are 50 or more thylakoids piled to form one	A. Intergranum B. Crista C. Granum D. F_{_1}particle
610	Cells recycle their dead parts with the help of	A. Centrioles B. Vacuoles C. Lysosomes D. Golgi apparatus
611	Chlorophyll molecules resemble with which part of hemoglobin?	A. Polypeptide chains B. Globin part C. Non-Protein D. All
612	Which component of the cell is mainly concerned with production of cell secretions?	A. Ribosome B. Cytoskeleton C. Mitochondria D. Golgi
613	In mitochondria, small knob like structure called FI particles are found in	A. Outer membrane B. Inner membrane C. Outer compartment D. Inner compartment
614	Lumen of the cristae is the part of	A. Inner membrane B. Outer membrane C. Inner compartment D. Outer compartment
615	Which one of the following is site of oxidative Phosphorylation in mitochondria	A. Cristae B. Outer membrane C. Matric D. Ribosome
616	The synthesis of Golgi bodies is initiated by	A. Ribosomes B. R.E.R C. S.E.R D. Lysosome
617	Which of the following statement is wrong?	A. Fungi have mitochondria B. Mitochondria have DNA and ribosomes C. Mitochondrial ribosomes resemble more to eukaryotic ribosomes D. Mitochondria are self-replicating organelles
618	Oxidative metabolism is carried out ____ of mitochondria	A. In the intramembrane space B. On the surface of inner membrane C. In the inside of outer membrane D. In the matrix
619	Chloroplasts and mitochondria differ from one another because	A. Both are membranous organelles B. Both are non-membranous organelles C. Both are not present in all cells D. Both do not contain proteins
620	The semicircular channels and system of tubes found in cytoplasm are known as	A. Ribosomes B. Glyoxisomes C. E.R D. Vacuoles
621	Which of the following properties is incorrect for both mitochondria and chloroplast?	A. Both have an electron transport system B. ATP synthesis C. Both are present in all cells D. Both have double membrane structures
622	Passage through the pores in nuclear envelope is restricted preliminary to	A. Proteins, RNA and protein-RNA complexes B. Lipids and Glycolipids C. DNA and RNA D. Glycoproteins
		A. Non-dividing

623	Nucleus is visible when the cell is in ____ stage	B. Dividing C. active D. Both a and b
624	An organelle having no nucleic acid in its chemical composition is	A. Lysosomes B. Ribosomes C. Centriole D. Mitochondria
625	Give an example of transport across cell membrane using energy	A. Endocytosis and exocytosis B. Reabsorption of Na+ from ascending loop of Henle C. Reabsorption of water from collecting duct D. All
626	Pick up non-membranous organelle	A. Lysosomes B. Ribosomes C. Centriole D. B and C
627	F1 particles contain enzyme complex for:	A. Protein synthesis B. ATP synthesis C. DNA replication D. Respiration
628	Which of the following cannot cross the phospholipid bilayer easily	A. Ions B. Gas molecules C. Ethanol D. Steroids
629	Which of the following are suicidal bags	A. Lysosomes B. Ribosomes C. Centriole D. Mitochondria
630	How many number of autosomal chromosome pairs are present in human	A. 22 B. 33 C. 44 D. 46
631	The receptors which are 27 times more abundant than cold receptors	A. Pressure receptors B. Pain receptors C. Heat receptors D. Light receptors
632	Both meissner's and pacinian corpuscles have____ nerve endings	A. Spiral B. Encapsulated C. Free D. Deep
633	These are the receptors which respond to the mechanical condition of internal organs	A. Nocireceptors B. Receptors of skin C. Receptors of stomach wall D. Receptors of eye
634	Non-neural cells which encapsule the axon of neurons are	A. Microglial B. Microbodies C. Schwann cells D. Companion cells
635	Which is correct about myelin sheath	A. It speeds up conduction B. It is found in all axons C. It is found in all dendrites D. It is proteinaceous only
636	It lacks a true dendron	A. Sensory neuron B. Motor neuron C. Associative neuron D. Relay neuron
637	The neuron which has central and peripheral branches is	A. Sensory neuron B. Motor neuron C. Associative neuron D. Relay neuron
638	This is not the part of neuron	A. Axon B. Dendron C. Nissl' granules D. Synapse
639	Motor neurons are	A. Multipolar B. Bipolar C. Unipolar D. Tripolar
640	The simplest reflex circuit includes___ elements	A. 1 B. 2 C. 3 D. 4

		D. 4
641	Resting membrane potential of a neuron is	A. 50mV B. -70mv C. -80mV D. 90mV
642	Which is incorrect about resting membrane potential	A. Na+ ions are ten folds higher outside B. 2 Na+ move out for 3 K+ move in C. K+ ions are twenty folds higher inside D. Some k+ ions leak out
643	Which is responsible for hyperpolarization across membrane	A. Disturbing of charge B. Late closing of K+ gates C. Influx of Na+ D. Efflux of Na+
644	Depolarization of neural membrane is due to	A. Influx of K+ B. Efflux of Na+ C. Influx of Na+ D. None
645	Synaptic vesicles are present in synaptic knob that is part of	A. Post synaptic neuron B. Pre synaptic neuron C. Both neurons D. Second neuron
646	Which of the following organelle is not present in the synaptic knob	A. Mitochondria B. Vesicles C. Ribosomes D. Nucleus
647	Which of the following is a messenger of both chemical and nervous coordination	A. Acetylcholine B. Dopamine C. Epinephrine D. Serotonin
648	Primary sensory areas are present in	A. Cerebral cortex B. Cerebral medulla C. Cerebellum D. Medulla oblamgata
649	Regulation of hunger and menstrual cycle is controlled by	A. Cerebrum B. Thalamus C. Hypothalamus D. Pons
650	Part of brain that is involved in learning	A. Cerebrum B. Thalamus C. Cerebellum D. Pons
651	Tiny shaped structure located deep between cerebral hemispheres	A. Thyroid gland B. Pitutary gland C. Pineal Gland D. Corpus callosum
652	Nerve which carries impulses from CNS to effectors	A. Sensory B. Inter C. Motor D. Associative
653	Ventral root of the spinal nerve contains	A. Sensory nerve fibres B. Motor nerve fibres C. Mixed nerve fibres D. All
654	Which is incorrect statement about spinal cord	A. White matter contains myelinated axons B. Grey matter contains non myelinated axons C. Grey matter contains cell bodies of sensory neurons D. Location of Peripheral nerve is near to spinal cord
655	Myelin is made up of	A. Nucleoprotein B. Lipoprotein C. Glycolipids D. Glycoproteins
656	It is incorrect statement about hormones	A. Endocrine secretion B. Initiate metabolism C. Organic D. Transported by blood
657	It is not a steroid hormone	A. Epinephrine B. Estrogen C. Progesterone D. 17 β hydoxy Testosterone

658	They may also control some long term changes	A. Enzymes B. Neurons C. Hormones D. CNS
659	The hormone which is not secreted by anterior lobe of pituitary is	A. GH B. ICSH C. Prolactin D. TRF
660	The hormones which share common hypothalamic factor are	A. FSH and LH / ICSH B. ACTH and GH C. ICSH and LTH D. Prolactin and FSH
661	Melanin pigment is produced under the hormone	A. ADH B. MSH C. STH D. TSH
662	It does not produce any hormone	A. Anterior pituitary B. Posterior pituitary C. Pancreas D. None
663	STH promotes_____ after puberty	A. Protein synthesis B. Cell differentiation C. Metabolism D. Cell division
664	Diabetes insipidus is caused by	A. Lack of aldosterone B. Overproduction of ADH C. Lack of ADH D. Lack of insulin
665	In rats whose adrenal medulla has been removed surgically, the ability to with stand any stress situation such as cold	A. Is Enhanced B. Is diminished C. Remains unaffected D. Is finished
666	A hormone which regulates glucose and minerals	A. Aldosterone B. Cortisol C. Insulin D. Corticosterone
667	It has duality in its functioning	A. Pituitary gland B. Pancreas C. Gonads D. Gut
668	Which is not the function of glucagon	A. Glycogen hydrolysis B. Lipolysis C. Gluconeogenesis D. Protein synthesis
669	It brings about an increase in blood glucose level mainly by its production from glycogen	A. Insulin B. Glucagon C. Cortisol D. Aldosterone
670	Which of the following is correct about insulin	A. Inhibit glycogen hydrolysis B. Increase protein synthesis C. Increase glycolysis D. All
671	Which hormone require 2nd messenger	A. Insulin B. Estrogen C. Progesterone D. Testosterone
672	Puffiness of hands is the character of	A. Graves disease B. Addinsons disease C. Myxedema D. Cretinism
673	High calcium concentration in blood causes the stimulation of	A. Parathormone B. Calcitonin C. T₃ D. T₄
674	Osteoporosis is caused by lack of	A. ADH B. Melanin C. Estrogen D. STH
		A. Insulin B. Glucagon

675	It acts on smooth muscles	C. Cortisol D. Oxytocin
676	Deficiency of sex hormones in adults results in	A. Sexual immaturity B. Mortality C. UTI D. sterility
677	Hormones secreted by follicles in female	A. Estrogen B. Progesterone C. FSH D. Both a and b
678	Which of the following hormone affects the supply of testosterone	A. LH B. GH C. FSH D. Aldosterone
679	Decrease in progesterone level in blood stimulates the secretion of	A. Estrogen B. FSH C. Cortisol D. Oxytocin
680	Sharp rise in LH output due to estrogens is an example of	A. Negative feedback B. Positive feedback C. Primary feedback D. None
681	In deuterostomes mesoderm is derived from wall of developing	A. Coelom B. Heart C. Archenteron D. Blastopore
682	An organism of the lineage of animals in which the blastopore of the developing embryo becomes the anus, while a second opening becomes the mouth called:	A. Triploblastic B. Protostome C. Diploblastic D. Deuterostome
683	Protostomes and deuterostomes do not differ in	A. Type of cleavage B. Origin of mouth and anus C. Number of germ layers D. Mode of coelom formation
684	The body of a Hydra can be divided in two equal halves vertically in	A. One plane only B. Two planes C. Three planes D. Any plane
685	It is not a germ layer	A. Ectoderm B. Endoderm C. Blastoderm D. Mesoderm
686	Which one of following structures is formed from mesoderm?	A. Intestinal lining B. Muscles C. Skin D. Brain
687	Which of the following is not triploblastic	A. Cnidaria B. Arthropoda C. Platyhelminthes D. Aschelminthes
688	Features of most complex animals are	A. Triploblastic with true coelom B. Triploblastic with pseudocoelom C. Triploblastic with bilateral symmetry D. Triploblastic with radial symmetry
689	Which one of the following phylum is the example of coelomates	A. Flatworms B. Round worms C. Segmented worms D. Unsegmented worms
690	In earthworm, the surface responsible for the gaseous exchange is	A. Skin B. Gills C. Body surface D. Trachea
691	The only phylum included in Grade Radiata is:	A. Porifera B. Aschelminthes C. Platyhelminthes D. Cnidaria
692	The cells absent in sponges are	A. Chondrocytes B. Pinacocytes C. Choanocytes D. Archeocytes

693	The pore by which the water leaves the body of sponges is called	A. Ostia B. Osculum C. Spicules D. Medreporite
694	Animals devoid of respiratory, excretory and circulatory organs are	A. Tapeworms B. Sponges C. Earthworm D. Live fluke
695	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
696	Which of the following is a distinguishing character of sponges	A. Tentacles B. Ceoleteron C. Choanocytes D. Calcareous skeleton
697	Phylum of asymmetrical animals is	A. Nematoda B. Platyhelminthes C. Cnidaria D. Porifera
698	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
699	A group of animals with distinct germinal layers in adult stage are grouped in	A. Cnidaria B. Arthropoda C. Aschelminthes D. Platyhelminthes
700	Which of the following is true about mesoglea	A. Acellular B. Mesodermal C. Cellular D. Multicellular
701	Animals involved in the construction of corals are	A. Polyps B. Medusae C. Gonozooids D. None
702	First invertebrate to develop a nervous system is	A. Sponges B. Cnidarians C. Flat worms D. Round worms
703	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
704	Animals that have their body cavity filled with parenchyma are	A. Acoelomates B. Coelomates C. Pseudocoelomates D. Tunicates
705	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
706	Platyhelminthes have	A. Asymmetrical body B. Radial symmetry C. Bilateral symmetry D. Diploblastic organization
707	The most common animal of phylum Aschelminthes is:	A. Enterobuis vermicularis B. Ascaris lumbricoides C. Ancylostoma duodenale D. Rhabditis
708	_____ is a good example of polymorphism	A. Hydra B. Obelia C. Starfish D. Euplectella
709	Body of _____ consists of segments called proglottids which contains mainly sex organ	A. Planaria B. Fasciola C. Ascaris D. Tapeworm
		A. Fasciola hepatica B. Schistoma

710	Snails are the intermediate hosts of	B. Schistoma C. Taenia solium D. Ancyclosoma duodenale
711	The larva formed during the life cycle of Annelida is	A. Glochidium larva B. Bipinnaria larva C. Trochophore larva D. Tornaria larva
712	Which of the following has chitinous cuticle in the exoskeleton	A. Arthropoda B. Porifera C. Echinodermata D. Annelida
713	Vector for spread of African sleeping sickness is	A. Anopheles B. Commonhouse fly C. Tse-tse fly D. Honey bee
714	Common housefly is involved in spread of all diseases except	A. Hepatitis B. Malaria C. Dysentery D. Cholera
715	Parapodia are organs of locomotion in ……	A. Leech B. Planaria C. Earthworm D. Neries
716	Most of the vectors for spreading important human diseases belong to:	A. Radiata B. Acoelomates C. Pseudocoelomates D. Coelomates
717	Skeleton of echinoderms is originated from	A. Ectoderm B. Endoderm C. Mesoderm D. Epidermis
718	Radial symmetry is present in	A. Adults of annelida B. Adults of echinodermata C. Adults of Cnidaria D. Both B and C
719	Pre-chordates is another name used for	A. Echinoderms B. Protochordates C. Cephalochordates D. Hemichordates
720	Pick up the most developed coelomates	A. Echinoderms B. Annelids C. Chordates D. Insects
721	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
722	Circulatory system is open type in all of the following, EXCEPT	A. Arthropoda B. Bivalvia C. Gastropoda D. Cephalopoda
723	Notochord is present throughout life in	A. Urochordates B. Chordates C. Cephalochordates D. Vertebrates
724	The pairs of gills present in cyclostomata are	A. 5-7 B. 10-12 C. 6-14 D. 4-5
725	The cartilaginous fishes contain scales ….	A. Placoid B. Cycloid C. Ganoid D. Ctenoid
726	Which of the following group of animals is a link between aquatic and terrestrial animals?	A. Fish B. Amphibians C. Reptiles D. Birds
727	Is is universally accepted by biologists that mammals have evolved from reptilian ancestors called ……	A. Cotylosaurs B. Dinosaurs C. Cotylostomata D. Amphibians

728	Both ____ and ____ are detachable cofactors	A. Apoenzyme, holoenzyme B. Activator, coenzyme C. Coenzyme, prosthetic group D. Prosthetic group, activator
729	Inorganic ions can play a role of ררררררר_____ in enzyme catalysis	A. Coenzyme B. Inhibitor C. Apo enzyme D. Cofactor
730	If non protein part is covalently bonded to the protein part of enzyme, it is known as	A. Coenzyme B. Prosthetic group C. Activator D. Cofactor
731	Enzymes cannot work in which of the following	A. Aqueous medium B. Dry medium C. Acidic medium D. Alkaline medium
732	Pick up the correct statement according to induced fit model of enzyme action	A. Enzyme induces changes in substrate structure B. Substrate induces changes in enzyme structure C. Active site of enzyme is a rigid structure D. Active site of enzyme is used as a template +
733	Which of the following is Koshland model	A. Active site is rigid B. Active site may be molded to précised shape C. Position of active site is moveable D. None
734	Enzyme works to its maximum capacity	A. At high temperature B. At low temperature C. At moderate temperature D. At optimum temperature
735	The optimum temperature for most of the enzymes in human body is	A. 37 ^oC B. 35^oC C. 37 ^oF D. 98.6^oC
736	Following substances can act as inhibitors, except	A. Cyanide B. Antimetabolites C. Antibodies D. Poisons
737	The enzyme that works best at intermediate pH is	A. Pepsin B. Chymotrypsin C. Sucrase D. Pancreatic lipase
738	The competitive inhibitor competes with the	A. Enzyme B. Cofactor C. Substrate D. Coenzyme
739	The rate of enzyme action will be minimum at	A. Optimum pH B. Optimum temperature C. Optimum conditions D. Maximum temperature
740	Nicotinamide adenine dinucleotide is an example of	A. Cofactor B. Coenzyme C. Prosthetic group D. Nucleotide
741	Which of the following acts as a bridge between enzyme and substrate?	A. Activator B. Cofactor C. Prosthetic group D. Apo-enzyme
742	_____form the raw material for coenzyme	A. Nucleic acid B. Lipids C. Vitamins D. Proteins
743	Many enzymes are simply dissolved in the	A. Nucleoplasm B. Stroma of chloroplast C. Cytoplasm D. Matrix of mitochondria
744	An activated enzyme consisting of polypeptide and cofactor is called as	A. Activator B. Apoenzyme C. Holoenzyme D. Coenzyme
		A. Active

745	Formation of ES complex activates the_____ site of an enzyme	B. Binding C. Catalytic D. Allosteric
746	Optimum pH of all human enzymes is	A. Variable B. Same C. Acidic D. Alkaline
747	At high substrate level, all the active sites of enzyme are	A. Destroyed B. Available C. Degenerated D. Occupied
748	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
749	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
750	Optimum pH for digestive enzymes of stomach is	A. Highly acidic B. Highly alkaline C. slightly acidic D. slightly alkaline
751	____can be checked by increasing substrate concentration	A. Reversible inhibition B. Irreversible inhibition C. Noncompetitive inhibition D. Competitive inhibition
752	The inhibitor having structural similarity with substrate is	A. Irreversible inhibitor B. Reversible inhibitor C. Competitive inhibitor D. Noncompetitive inhibitor
753	Which one of the following enzymes have slightly acidic pH as optimum pH?	A. Sucrase B. Enterokinase C. Pepsin D. Catalase
754	By adding _____in neutral pH, we get the optimum pH of pancreatic lipase	A. 1 B. 2 C. 3 D. 4
755	Flavin adenine dinucleotide is a	A. Prosthetic group B. Activator C. Coenzyme D. Inhibitor
756	Which of the following is an example of ribozyme	A. Aminopeptidase B. Pancreatic lipase C. Peptidyl transferase D. Cytochrome oxidase
757	Following enzymes are indicating the specificity of their action in their names, except	A. Sucrase B. Amylase C. Pepsin D. Lipase
758	The term enzyme was coined from a Greek word which means	A. In yeast B. In grapes C. In apple D. In bacteria
759	Ribozyme is found in	A. Mitochondria B. Cytoplasm C. Lysosomes D. Ribosomes
760	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
761	Catalase and chymotrypsin have similar	A. Substrate B. Product C. Optimum pH D. Metabolic impact
	Succinic acid dehydrogenase +succinic acid and high concentration of malonic	A. Maleic acid B. Fumaric acid

762	Succinic acid dehydrogenase +succinic acid and high concentration of malonic acid?	B. Fumaric acid C. No reaction D. Oxalic acid
763	Succinic acid is the ____ of succinic dehydrogenase which undergoes____	A. Active site, reduction B. Prosthetic group, reduction C. Substrate, oxidation D. Substrate, reduction
764	Succinic acid differs from malonic acid by	A. OH B. CH₂ C. CH₃ D. CHO
765	Potentially damaging enzymes are produced in	A. Active form B. Inactive form C. Abundant quantity D. Minor quantity
766	Allosteric enzymes have ___ major sites	A. 1 B. 2 C. 3 D. 4
767	Phosphorylation of glucose molecule in glycolysis is carried out by	A. ATPase B. Kinase C. Isomerase D. Transferase
768	Prosthetic groups are	A. Radicals B. Inorganic molecules C. Organic molecules D. Metal ions
769	Function of succinic dehydrogenase is aided by	A. Metal ion B. Vitamin C. NAD D. FAD
770	The specificity of enzymes is due to their	A. High molecular weight B. pH sensitivity C. Hydrogen bonding D. Surface configuration
771	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
772	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
773	Slight change in pH can cause	A. Denaturation B. Crystallization C. Ionization D. All
774	Which of the following helps in recognition of substrate	A. Active site B. Catalytic site C. Binding site D. All