

## NAT-IM Medical Biology Hard Test

Sr	Questions	Answers Choice
1	Branch of biology which deals with structure of organisms the cells and their organelles at molecular level is	A. Biotechnology B. Microbiology C. Molecular biology D. Biochemistry
2	The number of naturally occurring chemical elements is	A. 126 B. 86 C. 92 D. 206
3	The Elements found in living organisms are known as	A. Bioelements B. Molecules C. Major elements D. None
4	How many of the Bio-elements constituent 99% of the total human body	A. 30 B. 8 C. 5 D. 6
5	The part of earth inhabited by living organisms and non-living components is called	A. Ecosystem B. Biosphere C. Habitat D. Niche
6	Which of the following is the structural and functional unit of life	A. Nucleus B. Cytoplasm C. Cell D. Protoplasm
7	Organisms which are very similar and have a tendency of inbreeding are called	A. Species B. Gene pool C. Community D. Niche
8	Which is not a macro molecule	A. Starch B. Glycogen C. Proteins D. $CO_2$
9	Which is an organic molecule	A. Glucose B. Amino acids C. Nucleotides D. All of above
10	Identify the disease which (till now) do not have vaccine	A. Polio B. Whooping cough C. Measles D. AIDs
11	Which of the following is not an organic compound	A. Carbohydrates B. Proteins C. Lipids D. $CO_2$
12	Large organic compounds such as cellulose fats and proteins are generally	A. Insoluble in $H_2O$ B. Soluble in water C. Insoluble ether D. All of above
13	The general formula of carbohydrate	A. $C_6H_{12}O_6$ B. $C_{22}H_{11}O_{12}$ C. $C_n(H_2O)_n$ D. $C_{18}H_{20}O_{18}$
14	Chemically carbohydrates are Polyhydroxy of	A. Aldehydes or ketons B. Benzene C. Alcohol D. Carboxylic acid

15	Primary source of carbohydrates are	A. Animals B. Plants C. Both a and b D. None
16	Carbohydrates in the cell combine with protein and a resultant compound is called	A. Glycolipids B. Glycoprotein C. Glycogenesis D. Glycolic acid
17	Carbohydrates are also called saccharides derived from	A. Greek word B. Italic word C. French word D. None of above
18	The sugar which is sweet in taste easily soluble in water and cannot hydrolyzed into simpler sugar is called	A. Disaccharides B. Trisaccharides C. Monosaccharide D. Polysaccharides
19	All carbons in a monosaccharide have a hydroxyl group except	A. One carbon B. 3-carbons C. 2-carbons D. 4-carbons
20	The general formula of monosaccharides is	A. $(CH_4O)_n$ B. $(CH_2O)_n$ C. $(CH_3O)_n$ D. $(CHO)_n$
21	Enzymes are composed of	A. Carbohydrates B. Lipids C. Amino acids D. All of above
22	The catalytic activity of enzymes restricted to a small protein of the structure known as	A. Inactive site B. Active site C. Reactant site D. Inhibitor site
23	In enzymatic reactions the reactant is called	A. Product B. Substrate C. Catalysis D. None
24	Non-protein part of amino acids is known as	A. Co-factor B. Activator C. Holoenzyme D. Co-enzyme
25	Which of the following are metal ions used as a co-factor	A. $Mg^{2+}$ B. $Fe^{2+}$ C. $Cu^{2+}$ D. All of above
26	In case of enzymes the detachable co-factor is called	A. Reactant B. Activator C. In activator D. None
27	If the non-protein part is covalently bonded it is known as	A. Co-enzyme B. Activator C. Prosthetic group D. Product
28	If non-protein part is loosely attached with the substrate then it is called	A. Co-enzyme B. Prosthetic group C. Activator
29	An activated enzyme consisted of a polypeptide chain and a co-factor is known as	A. Co-enzyme B. Apoenzyme C. Co-factor D. Holoenzyme
30	Enzymes involved in the synthesis of protein are integral part of	A. Mitochondria B. Ribosomes C. EPR D. Nucleus
31	The structural and functional unit of life is called	A. Cytoplasm B. Cell C. Tissues D. Nucleus
32	Who discovered the presence of nucleus in the cell	A. Schleiden B. Schwann C. Robert Brown D. Robert Hook

33	Which statement about prokaryotic cells is true	A. Prokaryotes have a definite nucleus B. They are modern type of cells C. Fungi and protista included in prokaryotes D. Their nuclear material is directly submerged in the cytoplasm
34	In animal cells, cell membranes helps to take in materials by in folding in the form of vacuole is called	A. Endocytosis B. Digestion C. Ingestion D. Lysosomes
35	Cell membrane helps to take in liquid material is called	A. Endocytosis B. Phagocytosis C. Pinocytosis D. Ingestion
36	The outer most boundary in most of the plant cells is	A. Cell wall B. Cell membrane C. Primary wall D. None
37	Cell wall of plant cells consists of	A. Middle lamella B. Primary wall C. Pri-wall secondary wall & middle ismella D. None
38	Primary wall is composed of	A. Cellulose B. Cutin C. Lignin D. Waxes
39	Prokaryotic cell wall lacks	A. Peptidoglycan B. Murein C. Cellulose D. None
40	Chemically 2ndary cell wall composed of	A. Inorganic salts B. Silica C. Waxes D. All of above
41	Each kingdom is divided in to smaller groups called	A. Orders B. Families C. Species D. Phyla
42	Phylum are divided in to	A. Families B. Classes C. Genera D. Orders
43	In Linnaeus's system each species has a scientific name comprising of	A. 3-words B. 4-words C. One words D. 2-words
44	Scientific name of Amaltas is	A. Allium cepa B. Homo sapiens C. Cassia distula D. Solanum tuberosum
45	Plants prepare their own food from simple inorganic material & stored energy there fore these are called	A. Heteropha B. Saprophytes C. Autotrophs D. All of above
46	Recent system of classification the five kingdom system was proposed was proposed by	A. Robert Hook B. Robert Brown C. Robert Whittaker D. Robert Koch
47	According to five kingdom system the prokaryotic unicellular organisms are placed in	A. Protista B. Monera C. Plantae D. None of above
48	The word virus is associated with	A. Living B. Dead C. Disease and death D. Normal
49	Viruses are recognized as a particles of nucleic often with a	A. Protein coat B. Lipid coat C. Carbohydrate coat D. None
50	The branch of science which deals with the study of virus is known as	A. Mycology B. Mammalogy C. Microbiology D. Bacteriology

D. virology

51	In Greek the word Karyo means	A. Cytoplasm B. Nucleoli C. Nucleus D. Protoplasm
52	Who formulated the "germ theory of disease"	A. Robert Brown B. Robert Hook C. Robert Whittaker D. Robert Koch
53	Which of the following points about the germ theory of disease is not true	A. A specific organism can always be found in association with a given disease B. The organism can be isolated & culture in laboratory C. It is not possible to recover the organism in pure culture D. The pure culture will produce the disease when inoculated in to susceptible animal
54	Which of the following is found in all bacteria	A. Granules B. Slime C. Flagella D. Ribosomes
55	Which of the following shapes of bacteria are present	A. Cocci B. Bacilli C. Spiral D. All of above
56	The Cocci are	A. Rod-shaped B. Spiral shaped C. Spherical or oval D. Triangular shape
57	When Cocci occur in pairs then arrangement is called	A. Diplococcus B. Staphylococcus C. Sarcina D. All of above
58	Example of rod shaped bacteria	A. Bacillus B. Staphylococcus C. Vibrio D. Hyphomicrobium
59	When rod shaped bacteria occur in pairs then arrangement of cells is known as	A. Diplococcus B. Staphylococcus C. Diplobacilli D. None
60	The thin hair like appendages in bacteria is made up of protein	A. Chitin B. Flagellum C. Pili D. Fibrogen
61	All protists evolved from	A. Eukaryotes B. Prokaryotes C. Fungi D. None
62	The eukaryotic kingdom arose from	A. Prokaryotes B. Protists C. Both a and B D. None
63	The protists are	A. Unicellular B. Colonial C. Simple multicellular D. All of above
64	During the evolutionary history organisms in the kingdom Protista has evolved diversity in their	A. Size and structure B. Locomotion C. Interaction with other organisms D. All of above
65	According to five kingdom system the Protists are	A. Unicellular eukaryotes B. Multicellular C. Without cells D. None
66	The Locomotory organs of zoo-flagellates are	A. Cilia B. Flagella C. Pseudopods D. None
67	Which of the following about amoeba is not true	A. It is a unicellular organisms B. The giant amoeba synthesize their own energy by their own machinery C. It is a heterotrophic organism D. It is a unicellular organism

		C. Amoeba move with the help of pseudopodia D. Amoeba cause dysentery in human
68	Ciliates are unicellular organisms with a flexible outer covering called a	A. Chitin B. Epithelium C. Pellicle D. Cell membrane
69	Such ciliates that remain attached to a rock or other surface is called	A. Motile B. Sessile C. Both a & b D. None
70	Water regulation in fresh water ciliates is controlled by special organelle called	A. Food vacuole B. Contractile vacuole C. Cytoplasm D. Nucleus
71	Which of the following fungi used in bakeries	A. Mushrooms B. Penicillium C. Yeasts D. Morels
72	Common name of black mould is	A. Neurospora B. Penicillium C. Rizophus D. Amanita
73	Which of the following fungi used as antibiotics	A. Yeast B. Mushrooms C. Penicillium D. Rusts
74	Fungi resembles to plants have	A. Cell wall B. Large vacuole C. Chlorophyll D. Chloroplast
75	Which of the following lacks fungi & plants	A. Mitochondria B. Cell wall C. Endoplasmic reticulum D. Centrioles
76	Fungi resembles to animals due to presence of	A. Cellulose B. Lignin C. Chitin D. Centrioles
77	Which one of the following statement is not appropriate for fungi	A. They are heterotrophic B. Their cell wall is mostly of chitin C. Their plant body is termed Hyphae D. Their are autotrophic
78	Which of the following about fungi is true	A. Fungi included in plants B. Fungi included in animals C. Fungi characters are same to all organisms D. Fungi placed in a separate kingdom
79	Fungus body is called	A. Hyphae B. Mycelium C. Basal body D. Stalk
80	Which of the following is more resistance to decay	A. Cellulose B. Lignin C. Chitin D. Waxes
81	Which of the following include in Kingdom plantae	A. Eukaryotic B. Autotrophic C. Multicellular D. All of above
82	Which of the following is Non-vascular	A. Bryophyta B. Tracheophyta C. Gymnosperms D. Angiosperm
83	Bryophytes are mainly confined to	A. Damp shady places B. Dry places C. Aquatic D. None
84	The sporophyte generally consists of	A. Foot B. Seta C. Capsule D. All of above

85	Gametes in bryophytes are produced by	A. Meiosis B. Mitosis C. Binary fission D. Fragmentation
86	Fertilization in bryophytes takes place in	A. Air B. Water C. Soil D. None
87	Bryophytes belonging to hepaticopsida are also called	A. Liverworts B. Funaria C. Horn worts D. Marchantia
88	In all bryophytes liverworts are	A. Complex B. Simple C. Both a & b D. None
89	Which of the following phylum have animals which lack tissue organized into organs and have indeterminate shape and are symmetrical	A. Arthropoda B. Echinodermata C. Coelentrates D. Porifera
90	The animal which have a true coelome are	A. Acoelomates B. Coelomates C. Pseudo-coelomates D. None
91	The cylindrical body of sea-anemone can be cut in 2-equal halves vertically in	A. One plane B. 2-planes C. Any plane D. D-plane
92	Which of the following phylum have animals show bilateral symmetry	A. Annelida B. Mollusca C. Arthropoda D. All of above
93	The adult echinoderms have secondarily develop	A. Bilateral symmetry B. Radial symmetry C. Both A and B D. None
94	Diploblastic animals show	A. Higher degree of specialization B. Lesser degree of specialization C. Medium degree of specialization D. None
95	Which of the following phylum have animals show acoelomate	A. Platy helminthes B. Annelida C. Aschelminthes D. All of above
96	Animals from annelids to chordate are	A. Acoelomates B. Pseudocoelomates C. Coelomates D. None
97	Which of the following statement about Porifera is not true	A. There are respiratory and circulatory organs B. Pores are present in the body wall C. Water enters the body through ostia D. Water leaves the body through osculum
98	In porifera the food enters the spongocoel cavity through the	A. Osculum B. Outer wall C. Ostia D. None
99	The quantitative study of energy relationships and energy conversions in biological system is called	A. Bioenergetics B. Biotechnology C. Biochemistry D. Molecular biology
100	Which organelle of the plants capture light energy coming from sun	A. Mitochondria B. Cell wall C. Chloroplasts D. Ribosomes
101	The process in which energy-poor inorganic oxidized compounds of carbon and hydrogen are reduced to energy rich carbohydrates using the light energy is called	A. Evaporation B. Transpiration C. Respiration D. Photosynthesis
		A. $\text{CO}_2 + \text{O}_2 \xrightarrow{\text{light}} \text{CHO} + 6\text{O}_2 + 6\text{H}_2\text{O}$ B. $6\text{CO}_2 + 12\text{H}_2\text{O} \xrightarrow{\text{light}} \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$

102	The process of photosynthesis in green plants in	$6\text{CO}_2 + 12\text{H}_2\text{O} \xrightarrow{\text{light}} \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$ $6\text{CO}_2 + 12\text{H}_2\text{O} \xrightarrow{\text{light}} \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$
103	During the photosynthetic reactions what are the products	A. Water and light B. Carbon-dioxide & light C. Glucose and oxygen D. All of above
104	Respiration in plants occurs only	A. Day B. Night C. Day and night D. Day & evening
105	Photosynthesis occurs only during	A. Day B. Night C. Day and night D. Evening
106	Chloroplasts are present mainly in	A. Epidermis B. Mesophyll tissues C. Stoma D. Vascular bundle
107	Chloroplasts is a	A. Single membrane structure B. Double membrane structure C. Triple membrane structure D. None
108	The instrument that is used to measure the relative abilities of different pigments to absorb different wavelengths of light is	A. Viscometer B. Thermometer C. Spectrophotometer D. Electrometer
109	Any substance that supplies the body with elements necessary for metabolism is called	A. Nutrition B. Excretion C. Respiratory substance D. Circulatory substance
110	Which of the following substances provide energy to the body	A. Carbohydrates B. Fats C. Amino acids D. All of above
111	Chlorophyll contains a very important compound	A. Iron B. Phosphorus C. Magnesium D. Sulphur
112	Cytochromes contain a pigment	A. Magnesium B. Sulphur C. Phosphorus D. Iron
113	Feeding on dead and decaying matter such as dead leaves in the soil or rooting tree trunks is called	A. Symbiotic nutrition B. Parasitic nutrition C. Saprophytic nutrition D. All of above
114	Feeding by living in or on other organism belonging to different species is called	A. Saprophytic nutrition B. Parasitic nutrition C. Symbiotic nutrition D. All of above
115	An association between a fungus and roots of higher plants is called	A. Mycorrhizae B. Lichen C. Fungus D. None
116	Leguminous plants have nodules on their roots which contains	A. Saprophytic bacteria B. Parasitic bacteria C. Nitrogen fixing bacteria D. None
117	All the insectivores plants are true	A. Heterotrophic B. Autotrophs C. Parasitic D. Saprophytic
118	All the animal which feed on detritus is called	A. Omnivores B. Carnivores C. Herbivores D. Detritivores

119	Organismic respiration is also known as	A. Energy production B. Energy released C. Breathing or ventilation D. None
120	In plants which of the cells directly involved in gaseous exchange	A. Xylem B. Phloem C. Mesophyll cells D. Air spaces of hemoglobin cells
121	the lack of hemoglobin in R.B.C will result in	A. Rapid transportation of oxygen B. No transportation of oxygen C. Blood clotting D. Hemophilia
122	In older stems the cork tissues have a special cells which are involved in gaseous exchange	A. Guard cells B. Xylem cells C. Lenticels D. Phloem cells
123	Respiratory activity which occur in plants during daytime is called	A. Photosynthesis B. Photorespiration C. Photoperiodism D. Vernalization
124	Oxygen combines with hemoglobin to form	A. Per hemoglobin B. Bioxyhemoglobin C. Oxyhaemoglobin D. None
125	In cockroach trachea is lined by a	A. Lignin B. Chitin C. Membrane D. Tissues
126	The main tracheae divide and subdivide forming very fine thin walled tubule called	A. Spiracles B. Tracheoles C. Tracheal end cells D. Air spaces
127	In frog the exchange of gases takes place through	A. Lungs B. Skin C. Buccal chamber D. All of above
128	Gaseous exchange through the lungs is called	A. Cellular respiration B. Pulmonary respiration C. Inhalation D. Expiration
129	The fungal associations with roots of higher plants help_____uptake by the plants	A. Water B. Minerals C. Both a & b D. None
130	The shrinkage of protoplast due to exosmosis of water is called	A. Plasmolysis B. Cytoplasmic strand C. Plasmolysis D. Protoplast
131	In case of hydra ectodermal cells get food from endodermal cells by	A. Osmosis B. Diffusion C. Facilitated diffusion D. None
132	In planarians the exchange of materials takes place by	A. Blood circulatory system B. Flame cells C. No special transport system D. None
133	The circulatory system accounts for the rapid mass flow of materials from one part of the body to the other is_____than diffusion	A. Rapid B. Slow C. Very low D. None
134	Phylum arthropods have	A. Open circulatory system B. Closed circulatory system C. Both a & b D. None
135	All vertebrates have	A. Open circulatory system B. Closed circulatory system C. No transportation system D. Transportation occurs through skin
136	The heart of fish have	A. Sinus venosus B. An atrium & ventricle C. Bulbs arteriosus or conus arteriosus D. All of above

D. All of above

137	Sinus venosus in case of fishes receives from the body	A. Oxygenated blood B. Deoxygenated blood C. Both a & b D. None
138	Which of the following method of reproduction is asexual	A. Parthenogenesis B. Budding C. Vegetative propagation D. All of above
139	Sporogenesis is the formation of	A. Egg B. Sperms C. Spores D. Embryo
140	Which of the following is a artificial asexual reproduction in plants	A. Multiple fission B. Binary &nbsp;Fission C. Grafting D. All of above
141	If two generation are vegetatively similar such alternation of generation is referred to as	A. Isomorphic B. Heteromorphic C. Saprophytic life cycle D. None
142	Seed plants are predominantly present all around us due to their better	A. Establishment B. Reproduction C. Availability of H <sub>2</sub> O D. None
143	Fruit development without fertilization and no seed formation is called	A. Parthenocarpy B. Regeneration C. Gymnosperm D. Abnormality
144	Developing seeds are rich source of	A. Auxins B. Gibberellins C. Cytokinins D. All of above
145	Short day plants are really	A. Short-night plants B. Long-night plants C. Day neutral plants D. All of above
146	Plants that are stimulated to flower by exposure to low temp is called	A. Biennial B. Perennial C. Vernalization D. Parthenocarpy
147	Which of the following method of asexual reproduction found in plants	A. Multiple fission B. Binary fission C. Both A and B D. Parthenocarpy and grafting
148	The permanent and irreversible increase in size that occurs as an organism mature.	A. Embryonic development B. Growth C. Aging D. Just a change
149	A programmed series of stages from a simpler of more complex forms is	A. Development B. Growth C. All above D. None
150	Growth occurs though the activity of meristem	A. In vascular plants B. In coniferous plants C. In bryophytes D. In pterodophytes
151	Perpetual growth zones found at the apices of roots and stems and plant role for primary growth are	A. Apical meristem B. Lateral meristem C. Intercalary meristem D. All above
152	Temporary natured meristems are	A. Intercalary meristem B. Lateral meristem C. Apical meristem D. All of above
153	Vascular and cork cambiums are examples of	A. Lateral meristem B. Intercalary meristem C. Apical meristem D. None of above
154	Which one is not of the four phases of growth of multicellular plants	A. Cell division B. Zone of elongation C. Maturation

		<p>C. Maturation</p> <p>D. Differentiation</p>
155	For maximum growth the optimum temperature is	<p>A. 0 - 35<sup>o</sup>C</p> <p>B. 5- 10<sup>o</sup>C</p> <p>C. 25-30<sup>o</sup>C</p> <p>D. 0- 45<sup>o</sup>C</p>
156	Cell division number is increased by increasing the	<p>A. Intensity of light</p> <p>B. Quality of light</p> <p>C. Quantity of light</p> <p>D. Colours of light</p>
157	Growth effected by many factors	<p>A. Ultraviolet rays</p> <p>B. Cathode rays</p> <p>C. Anode ray</p> <p>D. Gamma rays</p>
158	Chromosomes are thread like structure that appear inside the_____at the time of cell division	<p>A. Cytoplasm</p> <p>B. Nucleus</p> <p>C. Mitochondria</p> <p>D. None</p>
159	Penicillium a fungus has only_____pair of chromosomes	<p>A. 1</p> <p>B. 14</p> <p>C. 23</p> <p>D. 3</p>
160	The frog has number of chromosomes	<p>A. 46</p> <p>B. 13</p> <p>C. 26</p> <p>D. 40</p>
161	The % of protein in case of chromosomes is	<p>A. 100%</p> <p>B. 80%</p> <p>C. 60%</p> <p>D. 20%</p>
162	The chromosomes are made up of	<p>A. DNA + protein</p> <p>B. RNA + lipid</p> <p>C. DNA + carbohydrate</p> <p>D. RNA + protein</p>
163	Every 200 nucleotide the DNA duplex is coiled around a core of eight histones proteins forming a complex known as	<p>A. Nucleoside</p> <p>B. Nucleosome</p> <p>C. Ecdysone</p> <p>D. Globulin</p>
164	Highly condensed portion of chromatin is called	<p>A. Euchromatin</p> <p>B. Heterochromatin</p> <p>C. Chromatin</p> <p>D. All of above</p>
165	Which of the following component DNA contains	<p>A. Nitrogen Group</p> <p>B. Five-carbon sugar</p> <p>C. Nitrogen containing bases</p> <p>D. All of above</p>
166	DNA and RNA molecules are made up of repeating unites called	<p>A. Nucleosides</p> <p>B. Nucleotides</p> <p>C. Phosphate group</p> <p>D. Nitrogenous bases</p>
167	In a nucleotide nitrogen base is attached to carbon no-----of pentose sugar	<p>A. 1</p> <p>B. 2</p> <p>C. 3</p> <p>D. 4</p>
168	The of life cycle of cell b/w two consecutive divisions is termed as the	<p>A. Prophase</p> <p>B. Inter phase</p> <p>C. Amaphase</p> <p>D. Telophase</p>
169	Division of nucleus is called	<p>A. Nuclear division</p> <p>B. Karyokinesis</p> <p>C. Cytokinesis</p> <p>D. All of above</p>
170	The division of the cytoplasm or whole cell is called	<p>A. Cytoplasmic division</p> <p>B. Karyokinesis</p> <p>C. Cytokinesis</p> <p>D. Whole cell division</p>
171	The specialized microtubule structure called mitotic apparatus including	<p>A. Aster</p> <p>B. Spindle</p> <p>C. Both A and B</p> <p>D. None</p> <p>A. Prospphase</p>

172	The division karyokinesis included	B. Metaphase & anaphase C. Telophase D. All of above
173	In which of the phase chromosomes are not visible	A. Prophase B. Metaphase C. Anaphase D. Teleophase
174	A net work of very fine threads of chromosomes can be visualized & this network is called	A. DNA network B. Chromatin C. Nucleosome D. Nucleoside
175	In which of the phase chromosome is duplicated structure which consists of 2-sister chromatids	A. Hna phase B. Prophase C. Metaphase D. Telophase
176	In which of the division genetic information remains unchanged generation after generation	A. Karyokinesis B. Cytokinesis C. Mitosis D. Meiosis
177	Which of the following is small and Localized tumor	A. Undividing cells B. Benign C. Malignant D. All of above
178	The basic unit of biological information is	A. Alleles B. Nucleus C. Cytoplasm D. Genes
179	The genetic complement of a trait is	A. Phenotype B. Genotype C. Alleles D. Monohybrid
180	When two contrasting pairs of traits are followed together in the same cross alleles in each pair are inherited or assorted independently into gamete's is Mendel's principal of	A. Law of segregation B. Law of independent assortment C. Law of dominance D. Law of unit character
181	Mendel cross-fertilized a true breeding rounded seed male plant with a true breeding wrinkled seeded female plant he called it a	A. First parental generation B. First filial generation C. 2nd filial generation D. All of above
182	Which of the following fail to express them selves in the heterozygous state	A. Dominant alleles B. Recessive alleles C. Homozygous phenotype D. Heterozygous phenotype
183	Rounded and wrinkled of seeds and all tall or dwarf plants represents	A. Genotype B. Genes C. Phenotype D. Homozygous genotype
184	Mendel choose a pea plants for genetical purpose because of the	A. Easily cultivation B. Numerous varieties C. Generation time is reasonably short D. All of above
185	Abino is a _____ trait in humans	A. Dominant B. Recessive C. Both a and b D. None
186	Different alleles of a gene that are both expressed in a heterozygous condition are called	A. Co dominance B. Incomplete dominance C. Over dominane D. Complete dominance
187	Altered alternative forms of a gene whose number is more than two are known as	A. Incomplete dominance B. Multiple alleles C. Double alleles D. None
188	Which of the genes can be synthesized in the laboratory	A. Large genes B. Very small C. Medium sized genes D. Both A and B
189	Enzyme used for the cutting of chromosome is	A. Ligase B. Kinase C. Polymerase D. Restriction endonuclease

190	Gene can be synthesized in the laboratory from messenger RNA, using reverse transcriptase this synthesized molecule is called	A. Complementary RNA B. Complementary DNA C. Both A and B D. None
191	The enzyme cuts the DNA fragment with two ends	A. Sticky ends B. Blunt ends C. Both A and B D. None
192	Molecular carrier or vector on which gene of interest could be placed is	A. RNA B. C DNA C. Plasmids D. DNA
193	Plasmids were discovered by studying the sex life of the intestinal bacterium	A. Entamoeba histolytica B. Escherichia coli C. Anabena D. Plasmodium
194	Plasmids are extra circular DNA molecules having genes for	A. Antibiotic resistance B. Fertility C. Both A and B D. None
195	Plasmid pSC 101 has antibiotic resistance gene for	A. Tetracycline B. Penciline C. Ampicillin D. Streptomycin
196	Plasmid pBR 322 has antibiotic resistance for	A. Tetracycline + Ampicillin B. Penciline C. Neuomycin D. Tetracycline + Penciline
197	Gene of interest is joined with sticky ends with the help of enzyme	A. DNA helicase B. DNA polymerase C. DNA ligase D. RNA polymerase
198	A group of bacteria called archaebacteria that tolerate temperature up to	A. 110 C <sup>&lt;sup&gt;o&lt;/sup&gt;</sup> B. 120 C <sup>&lt;sup&gt;o&lt;/sup&gt;</sup> C. 50 C <sup>&lt;sup&gt;o&lt;/sup&gt;</sup> D. 40 C <sup>&lt;sup&gt;o&lt;/sup&gt;</sup>
199	Photosynthetic organisms probably used----- as a source of hydrogen for reducing CO <sub>2</sub> to sugar	A. Hydrogen sulphide B. Hydrogen peroxide C. Hydrochloric acid D. Sulphuric acid
200	Charles Darwin observed and collected thousands of specimens of diverse faunas and floras of	A. South America B. Asia C. Western America D. Europe
201	Which of the following statement about fossils is wrong	A. Fossils are the actual remains of organisms B. Fossils may be traces of organisms that lived in ancient geological times C. Organisms that are embedded in sand resins or ice can not be considered in fossils D. Most fossils are found in sedimentary rocks
202	Which of the following are example of divergent evolution	A. Wings of bat B. Wings of birds C. Forelimbs of man D. Wings of insects
203	The oldest homologous structures are	A. Respiratory organ B. Circulatory organ C. Vestigial organ D. Excretory organ
204	Who hypothesized that the organisms involved through the inheritance of acquired character	A. Larmark B. Darwin C. Hutton D. Maltus
205	Which of the following mean that the organisms living today have changed from the ones that lives in the past	A. Fossils B. Evolution C. Ecosystem D. Behavior
206	Respiratory protein found in all aerobic species is	A. Cytochrome a B. Cytochrome b C. Cytochrome C D. All of above

A. Greek

207	The term ecology comes from the word oikos which is a word	B. Italic C. Latin D. French
208	The major unit of ecology is	A. Evolution B. Biosphere C. Niche D. Ecosystem
209	In word ecosystem eco word is related to	A. System B. Collection C. Environment D. Habitat
210	Biotic components of ecosystem are	A. Animal and plants B. Micro-organisms C. Fungi D. All of above
211	A group of inter breeding individuals occurring together in space and time	A. Species B. Population C. Biosphere D. None
212	All populations within a ecosystem is called	A. Habitat B. Niche C. Biosphere D. Community
213	Ecosystem that occupy broad geographical regions are	A. Biosphere B. Biomes C. Community D. All of above
214	The actual location of place where an organism lives is	A. Ecology B. Habitat C. Biome D. None
215	Life on earth is affected by	A. Weather B. Climate C. Temperature D. Both A and B
216	System in water in which living and nonliving things exchange materials and energy is	A. Hydrospheric ecosystem B. Aquatic ecosystem C. Major ecosystem D. None of these
217	Which one is not the unique property of water	A. Temperature B. Absorption of energy C. Abundant water with appropriate Temperature D. None of these
218	The productivity can be indicated by	A. Consumption of CO <sub>2</sub> B. Evolution of CO <sub>2</sub> C. Both A and B D. None of these
219	Littoral zone is	A. Beyond the shore B. Near the shore C. Mid the shore D. Bottom zone
220	The greatest diversity is found in which zone	A. Limnetic zone B. Profundal zone C. Littoral zone D. None of these
221	Littoral zone is divided into two main regions	A. Limnetic zone B. Profundal zone C. None D. Both
222	Lithospheric ecosystem is	A. Terrestrial B. Aquatic C. Aerial D. Desert
223	Terrestrial ecosystem is divided into main types	A. Forest B. Tropical rain forest C. Temperate deciduous forest D. Coniferous alpine and boreal forests
224	In Pakistan temperate moist conditions are in	A. Neelum valley and Shogran B. Swat and Kalam C. Murree D. All above

		D. All above
225	The direct or indirect source for food shelter, clothing,fuel for humans is	A. Water B. Land C. Air D. Environment
226	Air,water,food,land,forests and wild life are	A. Renewable resources B. None renewable resources C. Both A and B D. None of these
227	Metals,non metallic minerals and fossil fuels,(coil oil and Natural gas) are what type of resources	A. Renewable B. Non renewable C. Both A and B D. None of these
228	Which one is not involved for upset of nutrient cycle	A. Not enough food is produced B. Too much consumed C. Land is less D. Decayed nutrients are not returned to the ground
229	For reuse of renewable resources there are	A. Natural cycle B. Nutrient cycle C. Nitrogen cycle D. CO <sub>2</sub> cycle
230	Which one is not true about the presence of gases in air	A. It consists of 79% N B. It consists of 20% O <sub>2</sub> C. It consists of 0.03% CO <sub>2</sub> D. It consists of 80% inert gases
231	Air is polluted due to industrialization and automobiles polluted air does not contain which one of them	A. CO B. Hydrocarbons C. Oxides of N & sulphur D. CO <sub>2</sub>
232	In living organisms,water quantity is	A. 70 → 90% B. 80 → 70% C. 60 → 70% D. 50 → 50%
233	Use of water in Domestic : Industrial	A. 10% : 90% B. 20% : 80% C. 30% : 70% D. 50% : 50%
234	Soil can be defined as	A. The upper layer of earth's crust B. Lower layer of earth's crust C. Collection of natural resources D. All above
235	Question Image	
236	Question Image	