MDCAT Biology Online Test

Sr	Questions	Answers Choice
1	Lumen of the cristae is the part of	A. Inner membrane B. Outer membrane C. Inner compartment D. Outer compartment
2	In mitochondria, small knob like structure called FI particles are found in	A. Outer membrane B. Inner membrane C. Outer compartment D. Inner compartment
3	Which component of the cell is mainly concerned with production of cell secretions?	A. Ribosome B. Cytoskeleton C. Mitochondria D. Golgi
4	Chlorophyll molecules resemble with which part of hemoglobin?	A. Polypeptide chains B. Globin part C. Non-Protein D. All
5	Cells recycle their dead parts with the help of	A. Centrioles B. Vacuoles C. Lysosomes D. Golgi apparatus
6	On an average, there are 50 or more thylakoids piled to form one	A. Intergranum B. Crista C. Granum D. F_{_1}particle
7	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
8	All of the following are present in mitochondria, EXCEPT	A. Cristae B. Ribosomes C. DNA D. Thylakoids
9	Which one of the following always contains DNA?	A. Centriole B. Lysosome C. Golgi apparatus D. Mitochondrion
10	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
11	Which region of the nucleolus has DNA?	A. Central fibrillar region B. Central granular region C. Peripheral granular region D. Peripheral fibrillar region
12	A Crista is made of -------- membrane	A. Lipoprotein B. Glycoprotein C. Nucleoprotein D. Phospholipids
13	Methylation of proteins occur in	A. Transport vesicles of endoplasmic reticulum B. Lysosomes C. Golgi apparatus D. Transport vesicles of Golgi bodies
14	---------- and ---------- have same number of chromosome	A. Man, Chimpanzee B. Chimpanzee, Potato C. Man, Potato D. Potato, Tomato
15	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

16	The organelle that protect the cell from invading organisms is	A. Centriole B. Lysosome C. Mitochondrion D. Vacuole
17	Digestive vacuoles are also called as	A. Primary Lysosomes B. Secondary Lysosomes C. Phagocytic Vacuoles D. Pinocytic Vacuoles
18	Capability of extra nuclear inheritance is found in	A. Ribosomes B. Lysosomes C. Mitochondria D. Chromosomes
19	Traffic of substance between nucleoplasm and cytoplasm is controlled by	A. Nuclear Envelope B. Nuclear membrane C. Nuclear pores D. Endoplasmic reticulum
20	Which one of the following is associated with intracellular transport of material?	A. Golgi apparatus B. Centriole C. Endoplasmic reticulum D. Lysosome
21	--------- Develop the basic formwork of plasma membrane:	A. Phospholipids B. Glycoproteins C. Glycolipids
22	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
23	Endocytosis of an apoptotic body is termed as	A. Pinocytosis B. Exocytosis C. Phagocytosis D. Apoptosis
24	A Cell interacts with its external environment through	A. Cell Wall B. Nuclear membrane C. Plasma membrane D. Cytoplasm
25	Most of the plant cells lack following organelles EXCEPT	A. Flagellum B. Lysosome C. Centriole D. Mitochondria
26	Pick up the correct sequence of path followed by a testosterone molecule till its export	A. SER>RER>Transport vesicle>Golgi apparatus>secretory vesicle>cell membrane B. SER>Golgi apparatus>Transport 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
27	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
28	Eukaryotic ribosomes are composed of an almost equal amount of _____ and proteins	A. DNA B. RNA C. Carbohydrates D. Lipids
29	Substances cross the cell membrane more easily when they are	A. water soluble B. protein soluble C. alcohol soluble D. lipid soluble
30	Most unifying characteristics of all types of cells is	A. Cell membrane B. Nucleus C. Ribosomes D. S.E.R

		D. S.E.R
31	Animal cells differ from plant cells in having	A. 80 S ribosome B. Chloroplasts C. Mitochondria D. Centrioles
32	Which of the following features is not shared by prokaryotic and eukaryotic cells	A. Ribosome B. Cytoplasm C. Cell membrane D. Nuclear membrane
33	The intake of liquid material across the cell membrane is called as	A. Phagocytosis B. Pinocytosis C. Endocytosis D. Exocytosis
34	Peptidoglycan or murine is a special or distinctive feature of cell wall in	A. Algae B. Bacteria C. Fungi D. Plants
35	In deoxyribose, oxygen is removed from carbon number	A. 1 B. 2 C. 3 D. 4
36	Which of the following bond is not present in tertiary structure of proteins	A. Peptide B. Hydrogen C. Ionic D. Ester
37	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
38	Which of the following nitrogenous base have methyl group	A. Adenine B. Guanine C. Uracil D. Thymine
39	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
40	Monosaccharides are major component of	A. DNA, ATP, RuBP, Lecithin B. DNA, NAD, Insulin C. DNA, NAD, ATP, RuBP D. DNA, RNA, Myosin
41	Which of the following is dimer of glucose	A. Sucrose B. Fructose C. Maltose D. Cellulose
42	Most of the proteins are composed of _____ types of amino acids	A. 170 B. 150 C. 25 D. 20
43	When Fructose form ring structure, It is	A. 6 Cornered B. 5 cornered C. 4 cornered D. 3 cornered
44	Nucleotide is to ___ as amino acid is to ___	A. Nucleic acids, Lipids B. Nucleic acids, Proteins C. Proteins, Lipids D. Lipids, proteins
45	Chemical formula of pentose sugar present in DNA	A. C₅H₉O₅ B. C₅H₁₀O₅ C. C₅H₁₀O₄ D. None
46	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
47	Which of the following does not contain peptide bond	A. Hemoglobin B. Myoglobin C. Insulin D. Cutin

48	How many nitrogen atoms are found in lecithin	A. 1 B. 2 C. 3 D. 4
49	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
50	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
51	Pick up the example of a dinucleotide:	A. ATP B. GTP C. ADP D. NAD
52	All carbon atoms in a monosaccharide ____ have hydroxyl group	A. Except one B. Except Two C. Without Exception D. Except last
53	In free state Glucose is present in:	A. Grapes B. Dates C. Figs D. All Fruits
54	The compound formed by the combination of a base and a pentose sugar is called:	A. Nucleoside B. Nucleic acid C. Nucleotide D. Nuclein
55	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
56	Which of the following sugar is abundant in muscle fibres	A. Myoglobin B. Starch C. Glycogen D. Oxygen
57	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
58	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
59	Which level of protein structure is responsible for maintenance of helix shape of an enzyme	A. Primary B. Secondary C. Tertiary D. Quaternary
60	Pick out the phospholipid from the following	A. Phosphatidylserine B. Lecithin C. Phosphatidylcholine D. All
61	F. Sanger was the first scientist who determined the ___ structure of a protein molecule	A. Primary B. Secondary C. Tertiary D. Quaternary
62	Both Glycoprotein and glycolipids are components of	A. Plant Cell walls B. Algal Cell Walls C. Fungal Cell Wall D. Biological Membranes
63	Highest number of carbons are present in	A. Butyric acid B. Acetic acid C. Palmitic acid D. Oleic acid
64	Which part of amino acid give its physical and chemical properties	A. Amino group B. Carboxylic group C. Alpha carbon D. Alkyl group
65	Insulin is a/an:	A. Osmotic Protein B. Transport Protein C. Regulatory Protein

		C. Regulatory Protein D. Catalytic Protein
66	The next to simplest amino acid is	A. Alanine B. Glycine C. Serine D. Glutamine
67	Secondary structure is the ultimate structural level of which of the following proteins?	A. Trypsin B. Insulin C. Keratin D. Glucose
68	In a phospholipid molecule, fatty acid is attached to the carbon number_____ of glycerol.	A. 1 B. 2 C. Both D. 3
69	_____ are important components of brain and plasma membrane:	A. Nucleoproteins B. Glycolipids C. Lipoproteins D. Phospholipids
70	Glycerol, fatty acids and phosphoric acid give rise to:	A. Phospholipid B. Phosphatidic acid C. Phosphatidyl choline D. Phosphatidylethnoline
71	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
72	Pick up ester bond present in nucleotide	A. P-O-C B. C-O-C C. N-O-C D. S-O-C
73	Pick the odd one	A. Cellulose B. Galactose C. Agar D. Pectin
74	RNA and Proteins are components of	A. Chromosomes B. Receptors C. Secretions D. Ribosome
75	Which of the following is not a homopolysccharide?	A. Starch B. Chitin C. Pectin D. Glycogen
76	Which of the following sugar does not form a ring structure in a solution	A. Glyceraldehyde B. Ribose C. Glucose D. Fructose
77	___ gives blue color with iodine	A. Glycogen B. Dextrin C. Cellulose D. Starches
78	Which of the following reaction is reverse of others	A. Hydrolysis B. Decondensation C. Decomposition D. Condensation
79	Pick a non-reducing sugar	A. Lactose B. Sucrose C. Glucose D. Fructose
80	The simplest mono saccharide containing keto group is:	A. Glyceraldehyde B. Glucose C. Dihydroxyacetone D. Ribose