

S.#	Question	Answer Option (A)	Answer Option (B)	Answer Option (C)	Answer Option (D)
1	All are HIV symptoms except	sore throat, chills, fever, body aches	chills, fever, flu, muscle cramps	cardiac arrest, bloody stools, chills	rash, fatigue, mouth ulcers,
2	SIV is the abbreviation of	simian immunodeficiency virus	silurian immunodeficiency virus	siberian immunodeficiency virus	both a and c
3	Which of the following molecule facilitate the entry of HIV in human body	Glycoprotein	Liposomes	polysaccharides	lipopolysaccharides
4	The enzyme which plays important role in HIV pathogenesis	RNA polymerase I	DNA polymerase II	Reverse Transcriptase I	Reverse Transcriptase
5	All of the following are the current preventive methods of HIV infection, except?	safe and protected lifestyle	use of sterile injections and needles	use of available vaccines	safe blood transfusion methods
6	This locks the HIV genome into capsid	<i>gag</i> protein	<i>env</i> protein	<i>env</i> protein	all of these
7	Hans Krebs discovered ____	Glycolysis	fermentation	oxidation of pyruvate	the citric acid cycle
8	The stage of photosynthesis that actually produces sugar is ____	the calvin cycle	photosystem I	photosystem II	the light reaction
9	The G3P is end product of this process	Kreb's cycle	Calvin cycle	chemiosmosis	electron transport chain
10	Cooperation of the two photosystems of the chloroplast is required for ____	ATP synthesis	reduction of NADP	cyclic photophosphorylation	oxidation of the reaction center of photosystem I
11	Find out the correct sequence for movement of electrons during the light-dependent reaction	p68 , p7 , water, NADP	water, p7 , NADP, p68	p7 , p68 , NADP, water	water, p68 , p7 , NADP
12	Oxygen is important for aerobic cellular respiration, why?	It provides the hydrogen nuclei needed to create a proton gradient in the intermembrane space.	It is important in creating oxaloacetic acid in the Krebs cycle.	It is needed for glycolysis, which begins the process of respiration in cells.	It is the final electron acceptor in the electron transport chain.
13	The doubling of DNA material occurs in the process of	mitosis	meiosis	cytoplasm	nucleus
14	____ is the heaviest particulate of the cell?	Golgi apparatus	Cytoplasm	Mitochondria	Nucleus
15	Diffusion is opposite to ____	Osmosis	Effusion	Affusion	none of these
16	The 5-carbon sugar present in the heart muscle is	Lyxose	ribose	xylose	glucose
17	$\alpha(1\rightarrow4)$ glycosidic linkage is present in	Maltose	sucrose	cellulose	cellobiose
18	The lipoproteins are rich in cholesterol ____	Chylomicrons	VLDL	LDL	HDL
19	The structure of plasma membrane is mainly held together by:	Proteins	Carbohydrates	Phospholipids	All of the above.
20	Ions cannot cross which part of the plasma membrane?	Phospholipid bilayer	Channel proteins	Both A and B	None of the above
21	Which interactions are responsible for the formation of lipid bilayer in the watery environment of the body?	Hydrophobic interactions between fatty acid tails.	Hydrophobic interactions between phosphate heads.	Hydrophilic interactions between fatty acid tails.	Hydrogen bonding between fatty acid tails.
22	Who came up with the term "cell"?	Schwann	Schleiden	Robert Hooke	both a and b
23	Damage to one of the following immediately kills the cell whether its prokaryotic or eukaryotic?	nucleus	cell membrane	mitochondria	all of these
24	Which part of the nervous system controls actions like walking and running?	Somatic nervous system	Parasympathetic nervous system	Sympathetic nervous system	Peripheral nervous system
25	Which of the following do not form part of the Central Nervous System (CNS)?	Brain	Spinal cord	Brain stem	Spinal nerves
26	Hindbrain includes the ____.	Medulla, pons and cerebellum.	Medulla, cerebellum and hypothalamus.	Cerebellum, medulla and brainstem.	All of the above.
27	Terminal branches of axons end in ____.	Myelin sheath	Dendrites of the next neuron	Synaptic cleft	Postsynaptic membrane
28	One of the functions of the Neuroglial cells is to protect and support which of the following?	Nephrons	Myoid cells	Neurons	none of these
29	Stretch receptors are present in the ____ of tetrapods.	Hepatic arteries	Carotid arteries	Renal arteries	Pulmonary arteries
30	One similarity between annelids and arthropods:	Closed circulatory system.	Nitrogenous waste product is uric acid.	Ventral nerve cord.	None of the above.
31	Animals like starfish have small groups of neurons in each arm connected to a ring of neurons in the centre. This type of nervous system is called ____.	Centralized nervous system	Partially centralized nervous system	Diffuse nervous system	Partially diffuse nervous system
32	Subkingdom parazoa includes:	Annelida	Cnidaria	Porifera	Protozoa
33	Flame cells in Planaria constitute the:	Digestive system	Reproductive system	Respiratory system	Excretory system
34	In the lock and key model of enzyme activity, the substrate acts as the ____.	Key	Lock	Both A and B	None of the above
35	Which type of bonds are never formed when a substrate fits into the active site of an enzyme?	Hydrogen bonds	Ionic interactions	Hydrophobic interactions	Covalent linkages
36	The number of models that represent enzyme-substrate model are?	1	2	3	4
37	Ligases help in which of the following reactions?	splitting of two molecules	oxidation of molecules	joining of molecules	both a and b
38	The energy required to start a reaction is called?	startup energy	initial energy	point energy	activation energy
39	Darwin was greatly influenced by	essay on population by Malthus	Lamarck's theory	L-Miller's evidence for origin of life	Mendel's paper on inheritance
40	Mating with non-relatives is known as?	inbreeding	outbreeding	breeding	none of these
41	The structures of the front flipper of a whale and the forearm of a wolf have similar bone structure and derive from a common ancestor. This is an example of which of the following?	convergent evolution	analogous structures	homologous structures	bottleneck effect
42	Darwin's Theory of evolution by natural selection is based on all of the following postulates except ?	some individuals are more successful in surviving and reproduction than others	individuals within a population are variable	the survival and reproduction of individuals is not random	the survival and reproduction of individuals is random
43	A population of birds encounters a dramatic event that results in a severe decrease in population size. As a result of the newly-decreased population, what type of genetic drift does this population now exhibit?	Artificial selection	Founder effect	Bottleneck effect	both a and b
44	The osmotic pressure of blood is maintained by	Membrane proteins	Fibrous proteins	Plasma proteins	Myosin
45	The number of stages involved in heart beat is	2	3	4	5
46	a fluid in transit between interstitial fluid and the blood	Synovial fluid	Semen	Amniotic fluid	Lymph
47	Which of the following is the key function of pleural cavity?	Reduces friction between membranes	Slide easily on one another	allows membrane to adhere on one another	all of these are correct
48	The pair of salivary glands located behind the jaws is called:	Sublingual gland	Submaxillary glands	parotid glands	adrenal glands
49	Which of following is not considered as basic shape of a bacterium	cocci	filamentous	spiral	bacilli
50	Streptobacillus is basically a	single cell	chain of bacilli	pairs of bacilli	All of Above
51	The arrangement of cocci is basically due to their	shapes	planes of division	binary fission	chain formation
52	The animals which involves development of embryo inside female body are called	internal fertilization	viviparous	oviparous	both a & b
53	The discharge of ovum from ovary is called	lactation	ovulation	placenta formation	menstruation
54	The highly complex duct system in male is called:	Scrotum	seminiferous tubules	Prepuce	Epididymis
55	The cells that secrete testosterone	Nerve cells	fat cells	muscle cells	interstitial cells
56	Which cells produce oögonia in ovary?	Stromal cells	Epithelial cells	Germ cells	theca cells
57	A placenta is established between the uterine and ---	foetal tissues	Bone tissues	Lymph tissues	Cardiac muscle tissue
58	The sexually transmitted disease caused by Treponema pallidum is:	Gonorrhoea	Syphilis	Genital Herpes	AIDS
59	Cartilage is a form of:	Cardiac tissue	connective tissue	epithelial tissue	nervous tissue
60	Which type of cartilage is the most abundant in human body?	Hyaline cartilage	elastic cartilage	fibrocartilage	None of these
61	The functional unit of contractile system in striated muscle is:	myofibril	cross bridges	Z band	sarcomere
62	The contractile protein of skeletal muscle involving ATPase activity is:	actin	myosin	tropoin	tropomyosin
63	Inflammation of the joint is known as	Sciatica	Arthritis	Spondylosis	Disc-slip
64	In female grasshoppers, the number of chromosomes are:	11	24	12	19
65	A woman receives his X chromosome from:	His mother only	Both her mother and her father	His father only	Extra nuclear DNA in her mother's egg

66	The number of gene is greater than_____:	Allele	Chromosomes	Loci	None of them
67	Which of the following determines sex in human beings?	Sperm	Egg	Somatic cell	None of them
68	The Mendel factors which control the inheritance of characters are called:	Chromosomes	RNA	Genes	Centrosome