

DU MSc Bio Physics

Topic:- BIOPHY MSC

1) What will happen if human red blood cells are suspended in 5M glucose solution?[Question ID = 8482]

1. Will be lysed [Option ID = 33925]
2. Will shrink [Option ID = 33926]
3. Remain same [Option ID = 33927]
4. Will be swollen [Option ID = 33928]

2) The most abundant enzyme in the Biosphere is:[Question ID = 8483]

1. Hexokinase of bacteria [Option ID = 33929]
2. RuBisCo of plants [Option ID = 33930]
3. Glycogen phosphorylase of yeast [Option ID = 33931]
4. Trypsin of mammals [Option ID = 33932]

3) Which of the following is not an aliphatic amino acid?[Question ID = 8484]

1. Valine [Option ID = 33933]
2. Glycine [Option ID = 33934]
3. Serine [Option ID = 33935]
4. Alanine [Option ID = 33936]

4) Molarity of a solution is:[Question ID = 8485]

1. The number of molecules of solute per litre of solution [Option ID = 33937]
2. The number of moles of solute per litre of solution [Option ID = 33938]
3. The number of atoms in a molecule per litre of solution [Option ID = 33939]
4. One gram of solute per litre of solution [Option ID = 33940]

5) Different types of Human blood groups (A, B, and O) are determined by the presence of:[Question ID = 8486]

1. Cholesterol [Option ID = 33941]
2. Glycophorin [Option ID = 33942]
3. Glycosphingolipids [Option ID = 33943]
4. Phospholipids [Option ID = 33944]

6) Which type of proteins can be predicted by the number of hydrophobic amino acids in them[Question ID = 8487]

1. Enzymes [Option ID = 33945]
2. Membrane proteins [Option ID = 33946]
3. Globular proteins [Option ID = 33947]
4. Amino acids [Option ID = 33948]

7) Which metal ion is required for mammalian blood clotting?[Question ID = 8488]

1. Ca^{+2} [Option ID = 33949]
2. Mg^{+2} [Option ID = 33950]
3. Fe^{+3} [Option ID = 33951]
4. Mn^{+2} [Option ID = 33952]

8) Prof. H. Gobind Khorana is known for:[Question ID = 8489]

1. Discovering Polymerase Chain Reaction [Option ID = 33953]
2. Unfolding replication mechanism of DNA [Option ID = 33954]
3. Rapid and accurate synthesis of short oligonucleotides of known sequence [Option ID = 33955]
4. Chemical synthesis of shRNA [Option ID = 33956]

9) The largest organelle in the cytoplasm is (on the basis of molecular weight):[Question ID = 8490]

1. Lysosome [Option ID = 33957]
2. Mitochondria [Option ID = 33958]
3. Golgi apparatus [Option ID = 33959]
4. Ribosome [Option ID = 33960]

10) Which of the following is not a type of immunoglobulin?[Question ID = 8491]

1. IgA [Option ID = 33961]
2. IgD [Option ID = 33962]
3. IgP [Option ID = 33963]
4. IgG [Option ID = 33964]

11) Consumption of raw eggs can cause deficiency of[Question ID = 8492]

1. Biotin [Option ID = 33965]
2. Pantothenic acid [Option ID = 33966]
3. Riboflavin [Option ID = 33967]
4. Thiamin [Option ID = 33968]

12) The thermodynamic quantity that represents the quantitative expression of randomness or disorder in a system is:

[Question ID = 8493]

1. Free energy [Option ID = 33969]
2. Enthalpy [Option ID = 33970]
3. Kinetic energy [Option ID = 33971]
4. Entropy [Option ID = 33972]

13) The first production of live but non-virulent forms of chicken cholera bacillus was achieved by:[Question ID = 8494]

1. Pasteur [Option ID = 33973]
2. Salk [Option ID = 33974]
3. Jenner [Option ID = 33975]
4. Montague [Option ID = 33976]

14) The first immunoglobulin synthesized by the fetus is:[Question ID = 8495]

1. I_gA [Option ID = 33977]
2. I_gE [Option ID = 33978]
3. I_gG [Option ID = 33979]
4. I_gM [Option ID = 33980]

15) In gas chromatography, the basis of separation of the components of the volatile material is the difference in:[Question ID = 8496]

1. Partition coefficient [Option ID = 33981]
2. Conductivity [Option ID = 33982]
3. Molecular weight [Option ID = 33983]
4. Shape [Option ID = 33984]

16) The Shine-Dalgarno sequence of the mRNA base pairs with:[Question ID = 8497]

1. 5' AGG AGG ... -3' [Option ID = 33985]
2. 3' end of the 16S rRNA [Option ID = 33986]
3. 50S subunit of ribosomes [Option ID = 33987]
4. Trailer sequence of the mRNA [Option ID = 33988]

17) A stimulatory nerve impulse does not depolarize the membrane immediately behind it because:[Question ID = 8498]

1. It is hyperpolarized [Option ID = 33989]
2. It is in a refractory state. [Option ID = 33990]
3. It is not self propagating [Option ID = 33991]
4. The conduction is salutatory [Option ID = 33992]

18) Which one of the following represents the correct structure of sucrose?[Question ID = 8499]

1. 1- α -D glucosyl-4 fructose [Option ID = 33993]
2. 1-B-D glucosyl 2 -fructose [Option ID = 33994]
3. 1- α -D glucosyl-2 fructose [Option ID = 33995]
4. 1-B-D glucosyl 4 -fructose [Option ID = 33996]

19) Elevated levels of circulating glucagon are associated with which one of the following?[Question ID = 8500]

1. Decreased level of fructose 2,6-bisphosphate activity. [Option ID = 33997]
2. Increased activity of phosphofruktokinase-2 [Option ID = 33998]
3. Fasting [Option ID = 33999]
4. Ingestion of a carbohydrate rich diet. [Option ID = 34000]

20) The nerve centers which control the body temperature and the urge for eating are contained in[Question ID = 8501]

1. Hypothalamus [Option ID = 34001]
2. Cerebellum [Option ID = 34002]
3. Pons [Option ID = 34003]
4. Thalamus [Option ID = 34004]

21) Which of the following statements about water is false?[Question ID = 8502]

1. Water molecules are polar [Option ID = 34005]
2. It takes very little heat to change the temperature of water [Option ID = 34006]
3. All living organisms contain water [Option ID = 34007]
4. Ice is less dense than liquid water [Option ID = 34008]

22) RNA polymerases differ from DNA polymerases in[Question ID = 8503]

1. Primed synthesis [Option ID = 34009]
2. De novo polymer synthesis [Option ID = 34010]
3. Being multi-subunit [Option ID = 34011]
4. Being single stranded [Option ID = 34012]

23) Essential amino acids means:[Question ID = 8504]

1. They are more important [Option ID = 34013]
2. They cannot be synthesized in the body [Option ID = 34014]
3. They can be synthesized in the body [Option ID = 34015]
4. They are essential for all living organisms [Option ID = 34016]

24) Many biosynthetic pathways are regulated by end product(s) or near end product(s). This phenomenon is known as:

[Question ID = 8505]

1. Feedback inhibition [Option ID = 34017]
2. Competitive inhibition [Option ID = 34018]
3. Irreversible inhibition [Option ID = 34019]
4. Uncompetitive inhibition [Option ID = 34020]

25) You are working in a team that is designing a new drug. In order for this drug to work, it must enter the cytoplasm of specific target cells. Which of the following would be a factor that determines whether the molecule enters the cell?

[Question ID = 8506]

1. Blood or tissue type of the patient [Option ID = 34021]
2. Lack of charge on the drug molecule [Option ID = 34022]
3. Similarity of the drug molecule to other molecules transported by the target cells [Option ID = 34023]
4. Lipid composition of the target cells' plasma membrane [Option ID = 34024]

26) Which of the following amino acids do not contain sulfur?[Question ID = 8507]

1. Cysteine [Option ID = 34025]
2. Cystine [Option ID = 34026]
3. Methionine [Option ID = 34027]
4. Selenocysteine [Option ID = 34028]

27) Glucose and fructose have the same chemical formula: $C_6H_{12}O_6$. In the Fischer projections of these compounds four carbon atoms have the same structure, while two are different. The differences are in which of the carbon atoms?[Question ID = 8508]

1. First and third [Option ID = 34029]
2. First and second [Option ID = 34030]
3. Fourth and fifth [Option ID = 34031]
4. Third and sixth [Option ID = 34032]

28) The effect of pH and carbon monoxide concentration on the binding and release of oxygen by hemoglobin can be studied by:[Question ID = 8509]

1. Root effect [Option ID = 34033]
2. Bohr effect [Option ID = 34034]
3. Acid effect [Option ID = 34035]
4. Perutz effect [Option ID = 34036]

29) Which of the following statements about the structure of ATP is incorrect?[Question ID = 8510]

1. It contains two phosphoanhydride bonds [Option ID = 34037]
2. It contains one phosphate ester bonds [Option ID = 34038]
3. The nitrogenous base is called adenosine [Option ID = 34039]
4. The sugar moiety is linked to the triphosphate by a phosphate ester bond [Option ID = 34040]

30) Which of the following occurs during first meiotic prophase?[Question ID = 8511]

1. Sister chromatids separate [Option ID = 34041]
2. Sister chromatids are replicated [Option ID = 34042]
3. Homologous chromosomes separate [Option ID = 34043]
4. Homologous chromosomes undergo exchange [Option ID = 34044]

31) Given two polypeptide subunits a and b, how many different types of dimers are theoretically possible?[Question ID = 8512]

1. Only one type [Option ID = 34045]
2. Two types [Option ID = 34046]
3. Three types [Option ID = 34047]
4. Four types [Option ID = 34048]

32) If a reaction is spontaneous, it will have :[Question ID = 8513]

1. A negative E^0 , negative ΔG , and a large K [Option ID = 34049]
2. A positive E^0 , negative ΔG , and a large K [Option ID = 34050]
3. A positive E^0 , negative ΔG , and a small K [Option ID = 34051]
4. A negative E^0 , negative ΔG , and a small K [Option ID = 34052]

33) The volume of 36N H_2SO_4 required to make 36 ml of 1 N H_2SO_4 [Question ID = 8514]

1. 1.0 ml [Option ID = 34053]
2. 3.6 ml [Option ID = 34054]
3. 9.8 ml [Option ID = 34055]
4. 10.0 ml [Option ID = 34056]

34) Salts present in a protein precipitate can be removed by:[Question ID = 8515]

1. Electrophoresis [Option ID = 34057]
2. Anion exchange chromatography [Option ID = 34058]
3. Affinity chromatography [Option ID = 34059]
4. Dialysis [Option ID = 34060]

35) DNA-Protein interaction can be studied using:[Question ID = 8516]

1. DNA finger printing [Option ID = 34061]
2. Gel shift assay [Option ID = 34062]
3. Yeast two hybrid system [Option ID = 34063]
4. Gel filtration [Option ID = 34064]

36) Two sugars which differ from one another only in configuration around a single carbon atom are termed[Question ID = 8517]

1. Epimers [Option ID = 34065]
2. Anomers [Option ID = 34066]
3. Optical isomers [Option ID = 34067]
4. Stereoisomers [Option ID = 34068]

37) Which of following is not secreted in the liver[Question ID = 8518]

1. Renin [Option ID = 34069]
2. Insulin-like Growth Factor-1 (IGF-1) [Option ID = 34070]
3. Angiotensinogen [Option ID = 34071]
4. Thrombopoietin [Option ID = 34072]

38) What is the hydrogen ion concentration in moles/L, if pH of a solution is 3.0?[Question ID = 8519]

1. 1×10^{-3} [Option ID = 34073]
2. 4×10^{-3} [Option ID = 34074]
3. 3×10^{-3} [Option ID = 34075]
4. 2×10^{-3} [Option ID = 34076]

39) Use of microbes for the break down or removal of toxic wastes in water and soil is called as:[Question ID = 8520]

1. Putrefaction [Option ID = 34077]
2. Recycling [Option ID = 34078]
3. Bioremediation [Option ID = 34079]
4. Decomposition [Option ID = 34080]

40) Which of the following indicates that pK of an acid is numerically equal to pH of the solution when the molar concentration of acid and its conjugate base are equal?[Question ID = 8521]

1. Michaelis-Menten equation [Option ID = 34081]
2. Hardy Weinberg law [Option ID = 34082]
3. Henderson-Hasselbalch equation [Option ID = 34083]
4. Haldanes equation [Option ID = 34084]

41) Which one of the following statement about nitrogen fixation is correct?[Question ID = 8522]

1. Plants convert atmospheric nitrogen to ammonia [Option ID = 34085]
2. Mutant strains of rhizobium are able to secrete excess protein into the soil [Option ID = 34086]
3. The enzyme nitrogenase reduces N_2 to form ammonia [Option ID = 34087]
4. Ammonia is converted to N_2 , which is the form of nitrogen most easily absorbed by plants [Option ID = 34088]

42) Monozygotic twin studies in humans are useful because:[Question ID = 8523]

1. twins have a greater likelihood of being heterozygous for a given trait [Option ID = 34089]
2. more refined estimates can be made regarding location of the genes on chromosomes [Option ID = 34090]
3. they allow a true estimate of the environmental influences on phenotypic variation [Option ID = 34091]
4. they allow a true estimate of the genetic influence on phenotypic variation [Option ID = 34092]

43) When water is sprinkled on a red-hot iron plate, the drops become spherical and do not vaporize at once because:[Question ID = 8524]

1. A layer of water vapour is formed between the plate and the drops which prevent heat conduction [Option ID = 34093]
2. At this place the temperature of the hot plate falls [Option ID = 34094]
3. Water molecules aggregate into drops [Option ID = 34095]
4. Boiling point of water rises [Option ID = 34096]

44) According to the classical taxonomical system, order the following from the most general taxonomic group to the most specific group is: [Question ID = 8525]

1. Phylum, Kingdom, Order, Family, Class, Genus, Species [Option ID = 34097]
2. Phylum, Kingdom, Class, Family, Order, Genus, Species [Option ID = 34098]
3. Kingdom, Phylum, Class, Order, Family, Genus, Species [Option ID = 34099]
4. Kingdom, Order, Class, Phylum, Family, Genus, Species [Option ID = 34100]

45) In bacteria, the membrane invaginations that initiate DNA replication are[Question ID = 8526]

1. Nucleosomes [Option ID = 34101]
2. Mesosomes [Option ID = 34102]
3. Magnetosomes [Option ID = 34103]
4. Carboxysomes [Option ID = 34104]

46) Binary fission in bacteria involves all of the following except[Question ID = 8527]

1. DNA duplication [Option ID = 34105]

2. Spindle formation [Option ID = 34106]
3. Cell elongation [Option ID = 34107]
4. Cytokinesis [Option ID = 34108]

47) Which of the following biogeochemical element is NOT a nutrient?[Question ID = 8528]

1. Nitrogen [Option ID = 34109]
2. Phosphorus [Option ID = 34110]
3. Sulphur [Option ID = 34111]
4. Carbon [Option ID = 34112]

48) Which one of the following is an achiral amino acid?[Question ID = 8529]

1. Leucine [Option ID = 34113]
2. Glycine [Option ID = 34114]
3. Alanine [Option ID = 34115]
4. Valine [Option ID = 34116]

49) Which one of the following statements is NOT true?[Question ID = 8530]

1. Triacylglycerols are the major lipids stored in seeds. [Option ID = 34117]
2. Complete oxidation of 1 gm lipid would produce more energy than oxidation of 1 gm of carbohydrate. [Option ID = 34118]
3. Lipids are a more reduced form of carbon than carbohydrates. [Option ID = 34119]
4. Waxes are not lipids. [Option ID = 34120]

50) The genetic material of Tobacco Mosaic Virus is a[Question ID = 8531]

1. dsDNA [Option ID = 34121]
2. ssRNA [Option ID = 34122]
3. ssDNA [Option ID = 34123]
4. dsRNA [Option ID = 34124]

51) In mammals, carbohydrates are stored in the form of[Question ID = 8532]

1. glycogen in liver and muscles [Option ID = 34125]
2. lactic acid in muscles [Option ID = 34126]
3. glycogen in muscles only [Option ID = 34127]
4. glucose in liver [Option ID = 34128]

52) Name the mosquito-borne disease caused by an invertebrate :[Question ID = 8533]

1. Tick Borne Encephalitis [Option ID = 34129]
2. Typhus [Option ID = 34130]
3. Plague [Option ID = 34131]
4. Filariasis [Option ID = 34132]

53) Which one of the following statements is correct regarding 'Blood group antigens?'[Question ID = 8534]

1. Present in fetal blood also and may elicit immune responses if it enters the maternal circulation [Option ID = 34133]
2. Beta globulins in nature. [Option ID = 34134]
3. Carried on the haemoglobin molecule. [Option ID = 34135]
4. Equally immunogenic. [Option ID = 34136]

54) Homeodomain, present in the DNA binding proteins, contains _____ motifs.[Question ID = 8535]

1. Leucine zipper [Option ID = 34137]
2. Zinc finger [Option ID = 34138]
3. Helix-loop-helix [Option ID = 34139]
4. Helix-turn-helix [Option ID = 34140]

55) The gene encoding a protein of 66kDa should be composed of :[Question ID = 8536]

1. - 1800 bases [Option ID = 34141]
2. - 180 bases [Option ID = 34142]
3. - 6600 bases [Option ID = 34143]
4. - 600 bases [Option ID = 34144]

56) A substance is paramagnetic if it possesses[Question ID = 8537]

1. Filled electronic orbitals [Option ID = 34145]
2. paired electrons [Option ID = 34146]
3. Unpaired electrons [Option ID = 34147]
4. None of these [Option ID = 34148]

57) Which of the following cell component is found in both eukaryotic and prokaryotic cells: [Question ID = 8538]

1. mitochondria [Option ID = 34149]
2. ribosomes [Option ID = 34150]
3. peroxisomes [Option ID = 34151]
4. nucleus [Option ID = 34152]

58) Which of the thermodynamic parameters determines if a chemical reaction will take place or not?[Question ID = 8539]

1. Heat absorbed. [Option ID = 34153]
2. Internal Energy. [Option ID = 34154]

3. Gibb's Free energy. [Option ID = 34155]
4. Enthalpy. [Option ID = 34156]

59) The two helical strands of DNA are held together by[Question ID = 8540]

1. Phospho-diester bonds [Option ID = 34157]
2. Covalent bonds [Option ID = 34158]
3. Hydrogen bonds [Option ID = 34159]
4. Disulphide bonds [Option ID = 34160]

60) The primary transcript is much longer than mature mRNA because of the presence of[Question ID = 8541]

1. Non coding RNA [Option ID = 34161]
2. Introns [Option ID = 34162]
3. Secondary structures between the bases [Option ID = 34163]
4. All of these [Option ID = 34164]

61) Majority of the enzymes are inactive[Question ID = 8542]

1. at 25 °C [Option ID = 34165]
2. between 25-30 °C [Option ID = 34166]
3. at 15 °C [Option ID = 34167]
4. above 75 °C [Option ID = 34168]

62) Which of the following is a small RNA?[Question ID = 8543]

1. mRNA [Option ID = 34169]
2. hnRNA [Option ID = 34170]
3. rRNA [Option ID = 34171]
4. miRNA [Option ID = 34172]

63) If half-life of a radioactive material is 15 minutes, how much of a 1mg sample would be left after 45 minutes?[Question ID = 8544]

1. 0.50 mg [Option ID = 34173]
2. 0.0625 mg [Option ID = 34174]
3. 0.125mg [Option ID = 34175]
4. 0.250 mg [Option ID = 34176]

64) _ is a property of matter by which it continues in its existing state of rest or uniform motion in a straight line, unless that state is changed by an external force[Question ID = 8545]

1. Inertia [Option ID = 34177]
2. Potential [Option ID = 34178]
3. Friction [Option ID = 34179]
4. Reaction [Option ID = 34180]

65) The energy possessed by a physical body by virtue of its position or its configuration is referred to as _ energy[Question ID = 8546]

1. Kinetic [Option ID = 34181]
2. Sound [Option ID = 34182]
3. Thermal [Option ID = 34183]
4. Potential [Option ID = 34184]

66) The units of distances used typically for describing separation of atoms and separation of the astronomical bodies such as stars are - and - respectively[Question ID = 8547]

1. Nanometer and light years [Option ID = 34185]
2. Meters and kilometers [Option ID = 34186]
3. Light years and nanometers [Option ID = 34187]
4. Nanometers and kilometers [Option ID = 34188]

67) In a lamp oil rises up in the wick due to[Question ID = 8548]

1. The viscosity of the oil [Option ID = 34189]
2. Capillary effect [Option ID = 34190]
3. Hydrophobic nature of the oil [Option ID = 34191]
4. Volatile nature of the oil [Option ID = 34192]

68) The colors exhibited by thin oil layer formed on a water when a bright light is flashed is due to[Question ID = 8549]

1. Diffraction [Option ID = 34193]
2. Interference [Option ID = 34194]
3. Dispersion [Option ID = 34195]
4. Polaxization [Option ID = 34196]

69) A mammalian cell double stranded DNA of 2.4 meters duplicates in 4 hrs. If it duplicates at the rate of 10 micrometer/min, how many origins of replication are there in that DNA?[Question ID = 8550]

1. 1000 [Option ID = 34197]
2. 100 [Option ID = 34198]
3. 10 [Option ID = 34199]
4. 1 [Option ID = 34200]

70) Range of correlation coefficient is[Question ID = 8551]

1. 0 to +1 [Option ID = 34201]
2. -1 to +1 [Option ID = 34202]
3. -1 to 0 [Option ID = 34203]
4. None of these [Option ID = 34204]

71) Given the four letters alphabet of DNA (i.e., the four nucleotides A, T, C and G). If you are asked to generate oligomers of size five, how many oligomers would you get?[Question ID = 8552]

1. 1024 [Option ID = 34205]
2. 20 [Option ID = 34206]
3. 625 [Option ID = 34207]
4. 120 [Option ID = 34208]

72) The principle force underlying separation of cell components by an ultracentrifuge is[Question ID = 8553]

1. Gravitational force [Option ID = 34209]
2. Electrostatic force [Option ID = 34210]
3. Centrifugal force [Option ID = 34211]
4. Centripetal force [Option ID = 34212]

73) Compounds having same structural formula but differing in spatial configuration are known as[Question ID = 8554]

1. Anomers [Option ID = 34213]
2. Epimers [Option ID = 34214]
3. Optical isomers [Option ID = 34215]
4. Stereoisomers [Option ID = 34216]

74) What kind of hybrid orbitals are utilized by the carbon atom in CF₄ molecules?[Question ID = 8555]

1. sp [Option ID = 34217]
2. sp² [Option ID = 34218]
3. sp³ [Option ID = 34219]
4. sp³d [Option ID = 34220]

75) A cell increases in size when placed in an external solution, which is[Question ID = 8556]

1. Hypotonic [Option ID = 34221]
2. Hypertonic [Option ID = 34222]
3. Isotonic [Option ID = 34223]
4. Higher solute concentrated solution [Option ID = 34224]

76) Specialized animal cell that secretes a hormone into the blood[Question ID = 8557]

1. Epithelial [Option ID = 34225]
2. Neuronal [Option ID = 34226]
3. Endocrine [Option ID = 34227]
4. Muscle [Option ID = 34228]

77) Which human protein is responsible for interacting with the spike glycoprotein of human SARS-CoV-2, the causative agent for recent pandemic coronavirus disease?[Question ID = 8558]

1. ACE [Option ID = 34229]
2. ACE-1 [Option ID = 34230]
3. ACE-2 [Option ID = 34231]
4. ACE-3 [Option ID = 34232]

78) Hydrogen bonds are - and, essentially - interactions[Question ID = 8559]

1. weak, electrostatic [Option ID = 34233]
2. strong, electrostatic [Option ID = 34234]
3. weak, covalent [Option ID = 34235]
4. strong, covalent [Option ID = 34236]

79) How many grams of NaCl are required to prepare 200 mL of 1 M NaCl?[Question ID = 8560]

1. 5.844 [Option ID = 34237]
2. 11.688 [Option ID = 34238]
3. 1.168 [Option ID = 34239]
4. 58.44 [Option ID = 34240]

80) The motion of the pendulum in a working clock is an example of ... motion[Question ID = 8561]

1. Circular [Option ID = 34241]
2. Harmonic [Option ID = 34242]
3. Unharmonic [Option ID = 34243]
4. Linear [Option ID = 34244]

81) When you make ice cubes, what happens to the entropy of water?[Question ID = 8562]

1. Increases [Option ID = 34245]
2. Decreases [Option ID = 34246]
3. Does not change [Option ID = 34247]
4. May increase or decrease depending on process used [Option ID = 34248]

82) Low complexity regions in a genome comprised of:[Question ID = 8563]

1. non-coding sequences [Option ID = 34249]
2. sequence repeats [Option ID = 34250]
3. genes without introns [Option ID = 34251]
4. genes with splice sites [Option ID = 34252]

83) Metagenomics is study of[Question ID = 8564]

1. Genomes available in public databases [Option ID = 34253]
2. Genomes of a mixed community [Option ID = 34254]
3. Genomes for discovery of metabolites [Option ID = 34255]
4. Variation in genomes across a population [Option ID = 34256]

84) The alternative forms of a gene are known as[Question ID = 8565]

1. Isomers [Option ID = 34257]
2. translocations [Option ID = 34258]
3. Crossovers [Option ID = 34259]
4. Alleles [Option ID = 34260]

85) BLAST stands for[Question ID = 8566]

1. Basic Logical Alignment Search Tool [Option ID = 34261]
2. Basic Local Assessment Search Tool [Option ID = 34262]
3. Basic Local Alignment Search Tool [Option ID = 34263]
4. Biological Alignment Search Tool [Option ID = 34264]

86) In competitive inhibition, an inhibitor[Question ID = 8567]

1. binds covalently to the enzyme. [Option ID = 34265]
2. binds at several sites on an enzyme. [Option ID = 34266]
3. binds at the active site. [Option ID = 34267]
4. binds only to the enzyme-substrate complex. [Option ID = 34268]

87) A substance that enhances the body's immune response is termed as[Question ID = 8568]

1. Allergen [Option ID = 34269]
2. Adjuvant [Option ID = 34270]
3. Vaccine [Option ID = 34271]
4. Immunogen [Option ID = 34272]

88) The number of introns in cDNA having 7 exons are[Question ID = 8569]

1. 0 [Option ID = 34273]
2. 6 [Option ID = 34274]
3. 8 [Option ID = 34275]
4. 7 [Option ID = 34276]

89) Number of amino acids and nitrogenous bases are:[Question ID = 8570]

1. 20, 4 [Option ID = 34277]
2. 20, 2 [Option ID = 34278]
3. 10, 4 [Option ID = 34279]
4. 10, 2 [Option ID = 34280]

90) Which of the following condition is caused by trinucleotide (triplet) repeat expansion?[Question ID = 8571]

1. Cystic fibrosis [Option ID = 34281]
2. Huntington disease [Option ID = 34282]
3. Osteogenesis imperfecta [Option ID = 34283]
4. Duchenne muscular Dystrophy [Option ID = 34284]

91) "Gout" is a disease of the joints caused by elevated blood level of:

[Question ID = 8572]

1. Uric acid
[Option ID = 34285]
2. Bile Juice
[Option ID = 34286]
3. Cholesterol
[Option ID = 34287]
4. Xanthine oxidase
[Option ID = 34288]

92) PSI-BLAST stands for[Question ID = 8573]

1. Pattern Specific iterative BLAST [Option ID = 34289]
2. Position Specific Iterative BLAST [Option ID = 34290]
3. Partial Score Iterative BLAST [Option ID = 34291]
4. Position Scoring Iterative BLAST [Option ID = 34292]

93) Xylem conducts[Question ID = 8574]

1. Water in plants [Option ID = 34293]
2. Water in animals and plants [Option ID = 34294]
3. Food in plants [Option ID = 34295]
4. Food in animals and plants [Option ID = 34296]

94) Forensic analysts use DNA fingerprinting, a technique based on[Question ID = 8575]

1. RAPD [Option ID = 34297]
2. DNA sequencing [Option ID = 34298]
3. RFLP [Option ID = 34299]
4. RACE, [Option ID = 34300]

95) The normal distribution is the one in which the value o[Question ID = 8576]

1. Variance and standard deviation are same [Option ID = 34301]
2. Mode and median are same [Option ID = 34302]
3. Mean, median and mode are same [Option ID = 34303]
4. Mean and Median are same [Option ID = 34304]

96) Which of the following is best used for long term storage of microbial samples[Question ID = 8577]

1. lyophilization of samples [Option ID = 34305]
2. storage in a refrigerator in an agar plate [Option ID = 34306]
3. storage on a petriplate at room temperature [Option ID = 34307]
4. Storage in a freezer at -10degC [Option ID = 34308]

97) Which part of cell acts as a capacitor?[Question ID = 8578]

1. Golgi body [Option ID = 34309]
2. Nucleus [Option ID = 34310]
3. Lipid bilayer of cell membrane [Option ID = 34311]
4. Proteins of cell membrane [Option ID = 34312]

98) Final common pathway for oxidation of carbohydrates, lipids and proteins is[Question ID = 8579]

1. Krebs cycle [Option ID = 34313]
2. Glycolysis [Option ID = 34314]
3. Pentose phosphate pathway [Option ID = 34315]
4. Electron transport chain [Option ID = 34316]

99) The total number of codons in human beings is[Question ID = 8580]

1. 66 [Option ID = 34317]
2. 65 [Option ID = 34318]
3. 64 [Option ID = 34319]
4. 63 [Option ID = 34320]

100) The molecule discovered by Alexander Fleming was[Question ID = 8581]

1. Aspirin [Option ID = 34321]
2. Benzene [Option ID = 34322]
3. Penicillin [Option ID = 34323]
4. Benzoic Acid [Option ID = 34324]