PMC PRACTICE TEST 06

BIOLOGY

Q.1 **The outermost layer in a typical plant cell would be _____ .**

A. Primary cell wall
B. Secondary cell wall
C. Middle lamellae
D. Cell surface membrane

Q.2 **Which of the following pigment is Blue- green in colour?**

A. Chlorophyll a
B. Chlorophyll b
C. Chlorophyll c
D. None of these

Q.3 **Cartilage is a form of:**

A. Cardiac tissue
B. Connective tissue
C. Epithelial tissue
D. Nervous tissue

Q.4 **What is the function of the fluid secreted by sertoli cells?**

A. Provides liquid medium
B. Provides protection to sperms
C. Provides nourishment to sperms
D. All A, B and C are correct

Q.5 **Monosynaptic reflex arc consists of:**

A. One sensory neuron only
B. One motor neuron only
C. Two neurons, one sensory neuron, and one motor neuron
D. None of these

Q.6 **Breathing rate in humans at rest is:**

A. 10 to 15 times per minute
B. 10 to 20 times per minute
C. 80 to 120 times per minute
D. 15 to 20 times per minute

Q.7 **Population growth is checked by which of the following?**

A. No competition
B. No polymorphism
C. Polymorphism
D. Competition

Q.8 **Reactions in which simple substances are combined to form complex substances are called?**

A. Metabolic reactions
B. Catabolic reactions
C. Anabolic reactions
D. None of these

Q.9 **Chromosomes that have different alleles of a given gene at locus is called?**

A. Homozygous
B. X chromosomes
C. Y chromosomes
D. Heterozygous

Q.10 **In what year was the first person vaccinated by Edward Jenner?**

A. 1876
B. 1796
C. 1696
D. 1850

Q.11 **The genetic change in a population caused by natural selection is called?**

A. Polymorphism
B. Specialization
C. Gene linkage
D. Adaptation

Q.12 **The large number of bundle fibers that joins the left and right cerebral hemispheres is called:**

A. Broca's area
B. Lateral sulcus
C. Corpus callosum
D. Thalamus

Q.13 **What is a Provirus?**

A. Free virus
B. Free DNA
C. Primitive virus
D. Integrated viral genome

Q.14 **Centrioles are composed of how many triplets of microtubules?**

A. 6
B. 9
C. 12
D. 15

Q.15 **In acidic medium, amino acids carry positive charge and act as**

A. Acid
B. Base
C. Neutral
D. None of these

Q.16 **A Dutch scientist firstly observed very small creatures in**

A. Vinegar
B. Saliva
C. Rain water
D. All of Above

Q.17 **What is the origin of the acoelomate gut?**

A. Ectodermal
B. Mesodermal
C. Endodermal
D. None of these

Q.18 **Umbilical cord contains which of the following?**

A. Pluripotent stem cells
B. Blood stem cells
C. Cord blood stem cells
D. Both A and B

Q.19 **Mantle in molluscs is present over which of the following regions?**

A. Head
B. Dorsal muscular foot
C. Dorsal visceral foot
D. Both A and B

Q.20 **What is the viral nucleocapsid made up of?**

A. Genome and capsid
B. Capsid and spikes
C. Envelope and capsid
D. Capsomere and genome

Q.21 **The resting potential membrane is determined by which of the following?**

A. Potassium ion gradient
B. Sodium ion gradient
C. Bicarbonate ion gradient
D. None of these

Q.22 **A hydrostatic skeleton is present in _____ .**

A. Arthropods
B. Fishes
C. Annelids
D. Nematodes

Q.23 **What type of viruses are the polioviruses?**

A. DNA enveloped virus
B. RNA enveloped virus
C. DNA naked virus
D. RNA naked virus

Q.24 **In which organism males are haploid?**

A. Aphids
B. Mosquito
C. Butterfly
D. Honey bee

Q.25 **Who developed a theory of natural selection essentially identical to Darwin's?**

A. Hardy-Weinberg
B. Malthus
C. Lamark
D. Alfred Wallace

Q.26 **When is sugar formed in photosynthesis?**

A. light independent reaction
B. light dependent reaction
C. Both a and b
D. None of these

Q.27 **The ultimate source of all the change is?**

A. Migration
B. Mutation
C. Genetic drift
D. Selection

Q.28 **Visible genetic traits include which of the following?**

A. Hair color
B. Eye color
C. Number of limbs
D. All of these

Q.29 **_____ is a competitive inhibitor of succinic dehydrogenase.**

A. Malonic acid
B. Malic acid
C. Fumaric acid
D. Acetic acid

Q.30 **An activated enzyme consisting of polypeptide chain and a cofactor is called?**

A. Apoenzyme
B. Holoenzyme
C. Activated enzyme
D. Both B and C

Q.31 **Cell wall is only absent in following group of bacteria**

A. Staphylococci
B. Pseudomunas
C. Diplococcus pneumonia
D. Mycoplasmas

Q.32 **A researcher is studying a population of insects and notices that 60% have red eyes, 30% have apricot eyes, 5% have white eyes, and 5% have pink eyes. Which of these eye colors would be designated the wild type?**

A. Red
B. White
C. Pink
D. All of these

Q.33 **Calcium, during muscle contraction binds with:**

A. Tropomyosin
B. Troponin C
C. Troponin I
D. Troponin T

Q.34 **What are the distinguishing features of fibrous proteins?**

A. Non-crystalline
B. Elastic
C. Disorganized
D. Both A and B

Q.35 **Who was the first to propose an objective definition of instincts in terms of animal behaviour?**

A. Wallace
B. Lamark
C. Lyell
D. Darwin

Q.36 **A muscular passage that is common to both food and air is known as**

A. Bronchi
B. Bronchioles
C. Larynx
D. Pharynx

Q.37 **Photosystem 2 absorbs maximum wavelength of light?**

A. 750
B. 650
C. 680
D. 670

Q.38 **The response of the sympathetic nervous system is known as which of the following?**

A. Autonomic response
B. Flight response
C. Somatic response
D. Reflex response

Q.39 **SIV is the abbreviation of**

A. Simian immunodeficiency virus
B. Silurian immunodeficiency virus
C. Siberian immunodeficiency virus
D. Both A and C

Q.40 **According to the fluid mosaic model, the plasma membrane is composed of which of the following?**

A. Phospholipid
B. Extrinsic proteins
C. Intrinsic proteins
D. All of these

Q.41 **How many molecules of Carbon dioxide enter the calvin cycle to produce one molecule of carbohydrate?**

A. 2
B. 3
C. 4
D. 1

Q.42 **The 23rd pair of chromosomes in man is:**

A. Polymorphic
B. Heteromorphic
C. Homomorphic
D. Automorphic

Q.43 **High fever, cold, and cough with sputum production are symptoms of**

A. Emphysema
B. Asthma
C. Pneumonia
D. Bronchitis

Q.44 **This is a example of glycoprotein**

A. Starch
B. Haemoglobin
C. Lecithin
D. Mucin

Q.45 **The thick and thin filaments of myofibrils are arranged in units called:**

A. Z-line
B. Aactin
C. Sarcomere
D. Sarcolemma

Q.46 ATP is used when___

A. To synthesize the macromolecules
B. To transport of molecules and ions
C. To perform mechanical work
D. All of above

Q.47 The rise in blood glucose concentration occurs due to which hormone?

A. Glucagon
B. Glucose
C. Insulin
D. All of these

Q.48 A group of populations that have the potential to interbreed in nature is known as which of the following?

A. Genus
B. Family
C. Specie
D. Community

Q.49 Animal cells are interconnected by which of the following?

A. Plasma membrane
B. Cell wall
C. Desmosomes
D. Plasmodesmata

Q.50 The part of chlorophyll molecule is embedded in the core of thylakoid membrane which is?

A. Hydrophilic
B. Hydrophobic
C. Both of these
D. None of these

Q.51 What is reduced in photosynthesis?

A. Oxygen
B. Carbon dioxide
C. Water
D. Light

Q.52 What's the difference between homologous and analogous structures?

A. Homologous structures result from a common ancestor; analogous structures result from repetitive usage by the individual
B. Homologous structures result from convergent evolution; analogous structures result from a common ancestor
C. There is no difference between homologous and analogous structures
D. Homologous structures result from a common ancestor; analogous structures result from convergent evolution

Q.53 Storage form of lipids is

A. Esterified cholesterol
B. Glycerophospholipids
C. Triglycerides
D. Sphingolipids

Q.54 Which of the following is an ovoviviparous animal?

A. Basking shark
B. Humans
C. Blue shark
D. All of these

Q.55 A defective virus that needs the unrelated help of virus ti infect the same host cell in order to provide essential functions

A. Satellite virus
B. HAV
C. HCV
D. HIV

Q.56 Which is not the characteristic of triploblastic?

A. They may be coelomate pseudocoelomate or acoelomate
B. They are included in grade bilateria
C. All of them have a digestive system
D. All of them have blood vascular system

Q.57 The envelope of an enveloped virus is derived from?

A. The mitochondrion of the cell
B. Cell membrane of host cell
C. Endoplasmic reticulum of the cell
D. None of these

Q.58 **The end product of an enzymatic reaction inhibits formation of product in an earlier step. This type of enzymatic regulation is known as?**

A. Allosteric regulation
B. Negative regulation
C. Metabolic pathway loop
D. Feedback inhibition

Q.59 **The process of self-digestion of selective nonfunctional organelle by cells through the actions of enzymes originating from the cell is called?**

A. Pinocytosis
B. Endocytosis
C. Autophagy
D. Cytotoxicity

Q.60 **The composition of the white matter of spinal cord is:**

A. Myelinated dendrite
B. Non-myelinated dendrite
C. Non-myelinated axon
D. Myelinated axon

Q.61 **The stomata are closed at which of the following temperature? (In centigrade)**

A. 45
B. 35
C. 15
D. 25

Q.62 **What contributes to genetic variation during human reproduction?**

A. Random fertilization
B. Nonrandom mating
C. Independent assortment
D. All of these

Q.63 **Which of the following best describes the impact of purifying selection?**

A. It increases frequency of an allele
B. It is the same as disruptive selection
C. It increases genetic diversity
D. It removes variation from the population

Q.64 **Which of the following characters is not typical to class Mammalia?**

A. Alveolar lungs
B. Seven cervical vertebrae
C. Thecodont dentition
D. Ten pairs of cranial nerves

Q.65 **What is the approximate diameter of the peroxisome?**

A. 0.5 micrometer
B. 1.5 micrometer
C. 2 micrometer
D. 1 micrometer

Q.66 **The follicle cells, after release of the egg, are modified to form a special structure called:**

A. Endometrium
B. Perimetrium
C. Corpus luteum
D. None of these

Q.67 **Which hormone is involved in opening and closing of stomata?**

A. Citric acid
B. Oxaloacetic acid
C. Abscisic acid
D. None of these

Q.68 **Which of these functions will be affected if the medulla oblongata is damaged?**

A. Thermoregulation
B. Vision
C. Memory
D. Tactile sensation-response when pricked with a needle

PHYSICS

Q.69 **Magnetic induction is also called**

A. Flux
B. Magnetization
C. Magnetic intensity
D. Flux intensity

Q.70 **Consider a capacitor has vacuum in the space between the conductors. If we double the amount of charge on each conductor, what happens to the capacitance?**

A. it increases
B. it decreases
C. it remains same
D. it depends on the size or shape of the conductors

Q.71 **The speed of sound in a metal is approximately:**

A. 1500 m/s
B. 5000 m/s
C. 330 m/s
D. 50 m/s

Q.72 **The acceleration is a:....**

A. Vector quantity
B. Scalar quantity
C. Dimensionless quantity
D. None of these

Q.73 **_____ are such nuclei of an element that have the same atomic number Z, but have different mass number**

A. Isotopes
B. Isobars
C. Isomers
D. Isotherms

Q.74 **Which of the following is equivalent to a temperature 350K?**

A. 77 °C
B. -77 °C
C. 623 °C
D. -623 °C

Q.75 **A body is travelling in a circle of radius r at a speed v. Its centripetal acceleration will be:**

A. $a = r^2 / v$
B. $a = r / v$
C. $a = v^2 / r$
D. $a = v / r$

Q.76 **Principle of transformer is**

A. Mutual inductance
B. Self-induction
C. Motional emf
D. None of these

Q.77 **Two objects, with different sizes, masses, and temperatures, are placed in thermal contact. In which direction does the energy travel?**

A. Energy travels from the larger object to the smaller object
B. Energy travels from the object with more mass to the one with less mass
C. Energy travels from the object at higher temperature to the object at lower temperature
D. Energy does not travel

Q.78 **A diode works in _____ bias for rectification**

A. Forward
B. Reverse
C. Mid
D. Positive

Q.79 **Ohm's law is applicable to**

A. Semiconductors
B. Vacuum tubes
C. Carbon resistors
D. None of these

Q.80 **Platinum wire becomes yellow at a temperature of _____ degree C.**

A. 900
B. 500
C. 1300
D. 1600

Q.81 **Under the action of the restoring force:**

A. The speed of the body always increases
B. The body moves at constant speed
C. The body always slows down
D. The body accelerates

Q.82 **What is the relationship between Power, Current and voltage?**

A. P=V/I
B. P=VI
C. 2P=I+V
D. All of them

Q.83 **If a force of 2 N is applied on charge of Coulomb, the electric field becomes**

A. 3/2 N/C
B. 2/3 N/C
C. 1/2 N/C
D. None of these

Q.84 **When an object moves on a circular path and come back to its initial position, then:**

A. Only its distance is zero

B. Only its displacement is zero

C. Neither distance nor displacement is zero

D. Both distance and displacement is zero

Q.85 Average velocity is defined as

A. Displacement/time

B. Distance/time

C. Distance × time

D. Displacement × time

Q.86 Planck's constant is analogous to :

A. Inertia

B. Wave nature

C. Angular momentum

D. Linear momentum

Q.87 If a horse pulls a cart, work done by horse is

A. Negative

B. Zero

C. Positive

D. None of these

Q.88 Find the probability that the nucleus of $^{87}Ra_{221}$ undergoes decay after three half-lives, if its a radioactive substance which has a half-life of 6 days.

A. 1/6

B. 3/2

C. 5/6

D. ½

Q.89 Coulomb's law is true for

A. Atomic distance

B. Nuclear distance

C. Charge as well as uncharged particle

D. All the distances

Q.90 $\frac{1}{Cequ} = \frac{1}{C1} + \frac{1}{C2} + \frac{1}{C3} + \ldots\ldots + \frac{1}{Cn}$ **is the combination in**

A. Series

B. Parallel

C. Both of them

D. None of them

Q.91 Which of the given motion is a type of 2D motion?

A. Circular

B. Pendulum motion

C. Projectile motion

D. All of these

Q.92 Which of the following has a negative temperature coefficient of resistance?

A. Tungsten

B. Carbon

C. Nichrome

D. Platinum

Q.93 The radiation reached on earth by sun is

A. Alpha

B. Beta

C. Gamma

D. All of these

Q.94 The temperature coefficient of resistance is expressed in:

A. °C

B. $°C^{-1}$

C. $m°C^{-1}$

D. None of these

Q.95 A nucleus emits an α- particle, followed by two β- particles. The final nucleus will be:

A. An isotone of the original one

B. An isotope of the original one.

C. An isobar of the original one.

D. None of these

Q.96 Which of the following is an assumption of the kinetic model of an ideal gas?

A. Gas is at high pressure

B. Collision between particles are elastic

C. There are weak forces of attraction between particles in gas

D. Total energy of particles is proportional to the temperature

Q.97 Calculate the frequency if the number of revolutions is 300 and the paired poles are 50.

A. 15 kHz

B. 150 kHz

C. 1500 kHz

D. 150 Hz

Q.98 If a transverse wave travelling in a rarer medium is incident on a denser medium, it is reflected such that...

A. It undergoes a phase change of 90 deg

B. It undergoes a phase change of 180 deg

C. It undergoes a phase change of 270 deg

D. It undergoes a phase change of 0 deg

Q.99 One radian means

A. Arc length of unit radius is half

B. Arc length of unit radius is unity

C. One degree

D. All of these

Q.100 Man moves a roller through a distance of 20 m. 10 N of applied force is inclined at 60° of direction of motion what will be the work done by the man

A. 100 J

B. 50 J

C. -100 J

D. -50 J

Q.101 Four wires of same material, the same cross-sectional area and the same length when connected in parallel give a resistance of 0.25 ohms. If the same four wires are connected is series the effective resistance will be

A. 1 ohm

B. 2 ohm

C. 3 ohm

D. 4 ohm

Q.102 A stationary wave is set up in a pipe of length L, which is is open from one end. There are three nodes. How many antinodes are there in the stationary wave?

A. 2

B. 3

C. 4

D. 6

Q.103 Which of the following is not an assumption of the kinetic model of an ideal gas?

A. Particles collide elastically

B. Kinetic energy of a given particle is same

C. The duration of collision between molecules is very short

D. Intermolecular potential energy of the molecules is zero

Q.104 A stationary wave is set up in a pipe of length L, which is open from both ends. There are three nodes. How many antinodes are there in the stationary wave?

A. 2

B. 3

C. 4

D. 6

Q.105 The force between two charges Q and q, separated by a distance d is F. What will be the force between them when distance between them is d/2?

A. 4F

B. 2F

C. F

D. F ------- 2

Q.106 A radioactive source has a half-life of 80 s. How long will it take for 7/8 of the source to decay?

A. 10s

B. 70s

C. 240s

D. 640s

Q.107 In full wave rectifier with input frequency 50 Hz the ripple in the output is mainly of frequency

A. 25 Hz

B. 50Hz

C. 100Hz

D. zero

Q.108 In order to enhance magnetic flux, the primary and secondary coils of the transformer are wound on

A. Soft iron core

B. Iron core

C. Hard iron core

D. Steel core

Q.109 Magnetic field will not produce in case of

A. Charged positive particles

B. Charged negative particles

C. Neutral particles D. All of these

Q.110 An ideal reversible heat engine is 1 efficient only if:

A. Hot reservoir is at 0K B. Hot reservoir is at 0C

C. Cold reservoir is at 0C D. Cold reservoir is at 0K

Q.111 Diffraction is prominent when the wavelength of light is:

A. Five time small as compared with the size of the obstacle

B. Large as compared with the mass of the obstacle

C. Large as compared with the size of the obstacle

D. One half as compared with the size of the obstacle

Q.112 A 18.0 V battery is connected to a capacitor, resulting in 27.0 μC of charge stored on the capacitor. How much energy is stored in the capacitor?

A. 2.43×10^{-4} J B. 4.86×10^{-4} J

C. 2.43×10^{-2} J D. 4.86×10^{-2} J

Q.113 Which light photon has the least momentum

A. Red B. Green

C. Yellow D. Blue

Q.114 The angular acceleration becomes four times when

A. Alpha=2,r=2 B. Alpha=4,r=4

C. Alpha=3, r=0 D. r=0, alpha =0

Q.115 Acceleration due to gravity near earth is

A. Nonuniform B. Uniform

C. Decreasing with distance D. Increasing with time

Q.116 The length and radius of an electric resistance of a certain wire are doubled simultaneously, then the:

A. Resistance will be doubled and specific resistance will be halved

B. Resistance will be halved and specific resistance will remain uncharged

C. Resistance will be halved and the specific resistance will be doubled

D. Resistance and specific resistance will both remain uncharged

Q.117 The two points of a medium are separated through a distance of 10 cm. What is the phase angle between these two points if the wavelength of the wave is 0.1m.

A. π B. 2π

C. 3π D. $3\pi/4$

Q.118 If a charged particle is at rest but we are seeing it from a train then we observe

A. Electric field B. Magnetic field

C. Both fields D. None of these

Q.119 If the wavelength of a wave is 20 cm and its time period is T. What is the distance travelled by a crest on the wave in 1.25T?

A. 30 cm B. 25 cm

C. 15 cm D. 40 cm

Q.120 When gamma photon is entered in nucleus it_____

A. De-excite the atom B. Excite the atom

C. Scatter by atom D. None of these

Q.121 A resistance of 40 Ohms is attached to a circuit having current of 300 Amp, Find its voltage.

A. 12000 volts B. 15000 volts

C. 20000 volts D. 300 volts

Q.122 The number of neutrons emerged out in a single nucleus during fission reaction are

A. Infinite B. Zero

C. 3 D. None of these

Q.123 During an adiabatic process the pressure of the gas is found to be proportional to fourth power of temperature. The ideal gas would be

A. H_2 B. He

C. CH_4 D. Mixture of H_2 and He

Q.124 A container is filled with oxygen and helium at the same temperature. The molar mass of oxygen is 32 g/mol and that of helium is 4 g/mol. What is the ratio: average speed of oxygen molecules ---------- average speed of helium molecules?

A. 1 ----- √8 B. √8

C. 1 ------ 8 D. 8

CHEMISTRY

Q.125 In Charles's Law, volume of gas is directly related to which factor?

A. Pressure B. Temperature

C. Volume D. Number of moles

Q.126 The e/m value is maximum for _____gas because of _____value of "m" for positive rays obtained from it.

A. Oxygen gas, lowest B. Hydrogen gas, highest

C. Hydrogen gas, lowest D. Helium gas, highest

Q.127 Which type of movement is shown by the atoms of the solid?

A. Translational motion B. Vibrational motion

C. Rotational motion D. Linear motion

Q.128 Following are example of Intramolecular forces except?

A. Ionic bond B. Covalent bond

C. Metallic bond D. Dipole Dipole forces

Q.129 High molecular mass organic compounds, upon hydrolysis yield amino acids are called_____.

A. Carbohydrates B. Lipids

C. Proteins D. DNA

Q.130 Nitrogen N_2 molecule has 3 unpaired electron on each atom therefore it shows three bond that are

A. 2 sigma & 1 pi bond B. 1 sigma & 2 pi bond

C. 3 sigma D. 3 pi bond

Q.131 Two compartments of a galvanic cell are connected by

A. A battery B. Electrical Wires

C. A pipe D. Salt Bridge

Q.132 Which of the following is an example of free radical?

A. Br^+ B. Br

C. Br D. Cl_2

Q.133 Fossil fuels are produced due to_____?

A. Fast decomposition of organic matter

B. Decomposition of plants

C. Decomposition of animals

D. Biochemical decomposition of dead organic matter

Q.134 Buffer solutions resist change in their

A. Temperature B. Solubility

C. Volatility D. Ph

Q.135 The slope of the curve obtained by plotting concentration change with time is actually

A. Reaction time B. Reaction Speed

C. Rate of reaction
D. All of these

Q.136 Which of the following properties are associated with transition metals?

A. Color
B. Complex formation
C. Use as catalyst
D. All of these

Q.137 According to Bohr's theory Electron should move _____nearer to nucleus in an orbit of _____radii

A. Slower, smaller
B. Faster, smaller
C. Faster, bigger
D. Slower, bigger

Q.138 Which one of the following is a state function that describe both the internal energy and product of pressure and volume?

A. Entropy
B. Heat
C. Enthalpy
D. Temperature

Q.139 Which of the following reaction takes place when alkyl halide react with KOH in water?

A. Substitution reaction
B. Elimination reaction
C. Addition reaction
D. None of these

Q.140 The number of atoms present in a molecule determines its

A. shape
B. size
C. molecularity
D. atomicity

Q.141 The atoms of hemoglobin is heavier than H-atoms

A. 67,000 times
B. 68,000 times
C. 65,000 times
D. 69,000 times

Q.142 To avoid long reaction time and to get equilibrium mixture quickly we add

A. More reactants
B. Catalyst
C. Inhibitors
D. Enzymes

Q.143 A _____ is the force, which holds together two or more atoms or ions to form a large variety of compounds

A. Ionic bond
B. Chemical bond
C. Covalent bond
D. Metallic bond

Q.144 Steam causes more severe burns than boiling water because it has

A. Latent heat of fusion
B. Latent heat of vaporization
C. Latent heat of sublimation
D. All of these

Q.145 Carboxylic acids turn?

A. Red litmus blue
B. Blue litmus red
C. Neutral to litmus
D. No effect

Q.146 London dispersion forces are the only forces present among

A. Atoms of helium in gaseous state at high temperature
B. Molecules of water
C. Molecules of solid iodine
D. Molecules of HCl gas

Q.147 What is the other name of 2,4,6-trinitrophenol?

A. Picric acid
B. Nitrophenol
C. TNT
D. Benzophenone

Q.148 The first ionization potential of alkaline earth metal is greater than alkali metals because

A. They are more reactive
B. They have greater atomic radii
C. They have smaller atomic sizes
D. All

Q.149 Which of the following has lower vapor pressure?

A. Glycerol
B. Isopentane
C. Ethanol
D. Both A and C

Q.150 The elements of which group show abnormally very low values of electron affinity in every period of periodic table

A. Group 2A
B. Group 5A
C. Both A & B
D. None of these

Q.151 The shape of crystal in which it usually grows is called its

A. Size
B. Capacity
C. Habit
D. Property

Q.152 Dehydration of alcohols at low temperature and high acid concentration results in?

A. Alkene
B. Ether
C. Carboxylic acid
D. Aldehydes

Q.153 When we react an active metal like Al with less active element like Cu, it will form

A. Dry cell
B. Galvanic cell
C. Electrolytic cell
D. A and B

Q.154 Which of the following is not a derivative of carboxylic acid?

A. Alkyl Halide
B. Acetamide
C. Ester
D. Anhydride

Q.155 In which direction Cathode rays deflected in the presence of magnetic field?

A. Moves upward
B. Moves downward
C. Move randomly
D. Moves in straight line

Q.156 An exothermic reaction is allowed to reach equilibrium, if heat energy is then removed, the equilibrium will shift

A. To the product side
B. To reactant side
C. Toward the middle
D. None of these

Q.157 An exothermic reaction is allowed to reach equilibrium, if heat energy is then removed, the equilibrium will shift

A. To the product side
B. To reactant side
C. Toward the middle
D. None of these

Q.158 $NaBH_4$ causes reduction of aldehyde and ketones into_____?

A. Alcohols
B. Alkenes
C. Phenols
D. Alkanes

Q.159 When an electrophilic reagent attack on alcohol

A. O – H bond formed
B. O – H bond breaks
C. C – O bond breaks
D. Rise in boiling point

Q.160 Compounds having benzene ring are called as_____?

A. Alicyclic
B. Aliphatic compounds
C. Aromatic compounds
D. Acyclic compounds

Q.161 The reaction in Galvanic Cell is

A. Spontaneous
B. Nonspontaneous
C. Irreversible
D. Endothermic

Q.162 Structure of ice is similar to which of the following?

A. Liquid water
B. Diamond
C. Graphite
D. Sucrose

Q.163 Hardness of transition metals is due to_____?

A. More melting point
B. More electrons
C. Variable oxidation state
D. Higher binding energies

Q.164 Which of the following solids is isotropic?

A. Ionic solids
B. Molecular solids
C. Amorphous solids
D. Metallic solids

Q.165 The mechanism of reaction can be understood by

A. Experimental details
B. Balanced chemical equation
C. Molar Ratio
D. All of these

Q.166 Which of the following compound is formed when NACl reacts with CH_3MgBr

A. CH_3CN
B. CH_3Cl
C. $CH_3CH_2NH_2$
D. None of these

Q.167 Which one of the following shows that iodoform test for a compound is positive?

A. Formation of carboxylate salt
B. Brick red precipitate formation
C. Yellow crystals
D. Formation of water

Q.168 LDH-1 is raised in which disease:

A. Rickets
B. Anemia
C. Heart disorders
D. Stroke

Q.169 Hydroxide Ions are combine to give

A. Alcohols
B. Aldehydes
C. Oxygen
D. Hydrogen

Q.170 The transition elements belongs to Group VIB are

A. Zn, Cd, Hg
B. Fe, Ru, Os
C. Mn, Te, Re
D. Cr, Mo, W

Q.171 Benzene molecule contains:

A. Three triple bonds
B. Two double bonds
C. Three double bonds
D. No multiband

Q.172 When an electron jumps from n = 5 to n = 2 having wavenumber equal to $2.3 \times 16\ m^{-1}$. In which spectral series will it fall?

A. Layman
B. Balmer
C. Visible
D. Infrared

Q.173 The electrical conductivity of metal sometimes decreases with the

A. Increase in pressure
B. Increase in temperature
C. Decrease in temperature
D. Decrease in pressure

Q.174 Which unit of pressure is commonly used by meteorologist?

A. atm
B. pascal
C. mm of Hg
D. millibar

Q.175 Liquid hydrocarbons is converted into gaseous hydrocarbon by

A. Cracking
B. Hydrolysis
C. Oxidation
D. Distillation

Q.176 The total number of bond angles in methane are

A. 2
B. 3
C. 5
D. 4

Q.177 A molecule of water has two bond, so 1 mole of water will contain ____moles of bonds

A. 1
B. 2
C. 3
D. 4

Q.178 During preparation of Acetaldehyde from ethanol in laboratory, why acetaldehyde is distilled off quickly after formation?

A. To avoid decomposition of product
B. To avoid reduction
C. To avoid further oxidation to acetic acid
D. None of these

Q.179 Which of the following bond has highest bond energy value?

A. C−I
B. C−H
C. C−Cl
D. C−F

Q.180 In a vacuum distillation the boiling point of glycerin is reduced to_____?

A. 290°C
B. 110°C
C. 156°C
D. 210°C

ENGLISH

Q.181 Choose the correct spelling of the word

A. Fual
B. Fuel
C. Fule
D. Fuil

Q.182 I _____ him for a long time.

A. know
B. have known
C. am knowing
D. knew

Q.183 _____ ink in my pen is red.

A. A
B. An
C. The
D. No article

Q.184 Our neighbors have _____cat and _____ dog.

A. a... an
B. a...a
C. a....the
D. an...an

Q.185 Most big cities have _____ university.

A. a
B. an
C. the
D. no article

Q.186 Choose the correct spelling of the word

A. Anothar
B. Another
C. Anuther
D. Anothere

Q.187 The _____ chosen for the construction of the building is in the heart of the city.

A. Cite
B. Slight
C. Sight
D. Site

Q.188 My brother and sister _____ basketball every evening.

A. Practises
B. Practise
C. Practising
D. Are practicing

Q.189 Please be seated.

A. Declarative
B. Imperative
C. Interrogative
D. Exclamatory

Q.190 should have

A. Shouldh've
B. Should've
C. Shouldv'e
D. Should'ave

Q.191 The ebb and flow of the tides _____ explained by Newton.

A. are
B. was
C. were
D. is

Q.192 What is the tense of this question? Will Tom be able to mend that broken window?

A. Present
B. Past
C. Future
D. None of these

Q.193 Jack is six years old, but he _____ French and Spanish.

A. Speaking
B. is speaking
C. Speaks
D. Speak

Q.194 The information provided to you _____ wrong.

A. Were
B. Was
C. Are
D. Have been

Q.195 juxtaposition

A. Contrast
B. Wit
C. Image
D. freedom

Q.196 We are trying to locate the historical city for the past two years.

A B C D

A. We were trying
B. To locate the
C. Historical city for
D. The past two years.

Q.197 Sentiment

A. Practical
B. Emotion
C. Dispassionate
D. Realistic

Q.198 It needed the collective genius of mankind to ..... the wheel.

A. Discover
B. Find
C. Perform
D. Invent

Q.199 Choose the correct spelling of the word

A. Possesion
B. Possession
C. Posesion
D. Posession

Q.200 _____ man is mortal.

A. A
B. An
C. The
D. No article

LOGICAL REASONING

Q.201 Statements

(I) The childrens are being aggressive today.

(II) There is no specific limit for childrens to use mobile screens

A. Statement 1 is the cause and 2 is the effect

B. Both of the statements 1 and 2 are independent.

C. Statement 2 is the cause and 1 is the effect

D. Both statements 1 and 2 are effects of some common cause

Q.202 Which one does not belong to others?

A. Apple
B. Mango
C. Cucumber
D. Orange

Q.203 Statement

Should children be prevented completely from watching television?

Arguments

(I) No. We get vital information regarding education through television.

(II) Yes. It hampers the study of children.

(III) Yes. Young children are misguided by certain programmes featuring violence

A. Only I, II and III are strong
B. Only I is strong
C. Only I and II are strong
D. Only I and II are strong

Q.204 What is the multiplicative inverse of 1/2?

A. -2
B. 2
C. -1/2
D. Both A and B

Q.205 Statement:

The Management of School M has decided to give free breakfast from next academic year to all the students in its primary section through its canteen even though they will not get any government grant.

Courses of Action

(I) The school will have to admit many poor students who will seek admission for the next academic year.

(II) The canteen facilities and utensils have to be checked and new purchases to be made to equip it properly.
(III) Funds will have to be raised to support the scheme for years to come.

A. Only II and III follows
B. Only III and I follow
C. Only I and II follow
D. Only I follows

Q.206 Statement:
The availability of imported fruits has increased in the indigenous market and so the demand for indigenous fruits has been decreased.
I. To help the indigenous producers of fruits, the Government should impose high import duty on these fruits, even if these are not of good quality.
II. The fruit vendors should stop selling imported fruits. So that the demand for indigenous fruits would be increased.

A. Both of them follows
B. None of them follows
C. Only I follows
D. Only II follows

Q.207 In which year Pakistan and China joint Venture of JF7 Thunder Aircraft started?

A. 1997
B. 2003
C. 1999
D. Both A and B

Q.208 Statement:
I. The university authority has instructed all the colleges under its jurisdiction to ban use of all phones inside the college premises.
II. Majority of the teachers of the colleges signed a joint petition to the university complaining the disturbances caused by cell phone ringtones inside the classrooms.

A. Statement I is the cause and statement II is its effect.
B. Statement II is the cause and statement I is its effect
C. Both the statements I and II are independent causes
D. Both the statements I and II are effects of some common cause

Q.209 Quote and Poet have _____ number of same letters

A. 5
B. 4
C. 3
D. 2

Q.210 Fact 1: Pictures can tell a story
Fact 2: All storybooks have a picture
Fact 3: Some story books have words
If the above three statements are facts than which of the following statement will also be a fact
I. Pictures can tell a story better than words can
II. The stories in storybooks are simple
III. Some story books have both pictures and words

A. Only I
B. Only II
C. Only III
D. None of them is a fact