PMC PRACTICE TEST 13

PHYSICS

Q.1 **Work done can be calculated by taking**
A. Dot product of force and displacement
B. Cross product of force and displacement
C. Both cross and dot product
D. None of these

Q.2 **The root mean square value of the alternating current is equal to**
A. Twice the peak value
B. Half the peak value
C. Equal to the peak value
D. $(1/\sqrt{2})$ times the peak value

Q.3 **Which rays cannot be produced by electronic transitions?**
A. Alpha
B. Beta
C. Gamma
D. All of these

Q.4 **Magnetic field along the axis of solenoid with n turns per unit length carrying current I is given by**
A. $B = \mu_o nI$
B. $B = \mu_o N / L$
C. $B = \mu_o IN$
D. $B = \mu_o INL$

Q.5 **The object oscillates due to:**
A. a restoring force
B. its weight
C. centripetal force
D. force of friction

Q.6 **Beta particle is actually a**
A. fast moving electron
B. slow moving electron
C. electron at rest
D. none of these

Q.7 **If the line frequency is 50 Hz, the output frequency of bridge rectifier is**
A. 50Hz
B. 100Hz
C. 200Hz
D. 150Hz

Q.8 **If alpha, beta, and gamma rays carry the same momentum, which has the longest wavelength?**
A. alpha rays
B. beta rays
C. gamma rays
D. all have same wavelength

Q.9 **A fraction of internal energy is due to the molecular vibration, which is different in different states of matter. Which of the following gives the correct order of fraction of internal energy due to molecular vibration?**
A. solid ≥ gas > liquid
B. gas > liquid > solid
C. solid > liquid > gas
D. gas > liquid > solid

Q.10 **If two point charges of charge q1 and q2 are placed at distance d. The force between them is proportional to:...**
A. $q_1 + q_2$
B. $q_1 - q_2$
C. q_1 / q_2
D. $q_1 \times q_2$

Q.11 **SI unit of resistivity is**
A. ohm
B. ohm meter
C. ohm/meter
D. meter/ohm

Q.12 **The magnitude of the displacement is:...**
A. Size of object A
B. Straight line distance between the initial position and the final position of the body
C. Size of object B
D. Any distance between the initial position and the final position of the body

Q.13 **Which of the following statements about wave motion is true:**
A. Waves transport energy and matter
B. Waves transport energy without transporting matter
C. Waves transport matter but not energy
D. Waves on a rope, radio waves, infra-red

Q.14 **The angular displacement is assigned positive sign when the rotation is**
A. Clockwise
B. Anti-clockwise
C. Perpendicular
D. Parallel

Q.15 **In simple harmonic motion, which two quantities are always in opposite direction?**

A. Kinetic energy and potential energy
B. Kinetic energy and velocity
C. Velocity and acceleration
D. Acceleration and displacement

Q.16 **The units of angular velocity are similar to**

A. Angular displacement
B. Angular acceleration
C. Angular frequency
D. None of these

Q.17 **Angle between radius vector and centripetal acceleration is**

A. 0°
B. π
C. 2π
D. None of these

Q.18 **Under what conditions of density and pressure does a real gas approximate to an ideal gas?**

A. density = high pressure = high
B. density = low pressure = high
C. density = high pressure = low
D. density = low pressure = low

Q.19 **Faraday's law explains how electric field will interact with**

A. Electric field
B. Magnetic field
C. Battery
D. None of these

Q.20 **A body of mass 10 kg is travelling with uniform speed of 5 m/s. Its kinetic energy is**

A. 125 J
B. 250 J
C. 500 J
D. 255 J

Q.21 **How many quarks in electron**

A. 0
B. 1
C. 2
D. 3

Q.22 **If we make the magnetic field stronger, the value of induced current is**

A. Decreased
B. Increased
C. Vanished
D. Kept constant

Q.23 **What is the de Broglie wavelength of a ball of mass 150g moving at a speed of 50 m/s?**

A. 8.8×10^{-34} m
B. 8.8×10^{-35} m
C. 8.8×10^{-20} m
D. 8.8×10^{-25} m

Q.24 **Which of the following statement is not true about heat engine?**

A. All real engines are less efficient than Carnot engine
B. All real engines are less efficient due to friction and heat losses
C. Efficiency of Carnot engine working between same two temperatures, depends on the nature of working substance
D. The larger the temperature difference of two reservoirs, the greater is the efficiency

Q.25 **Many computer keyboard buttons are constructed using capacitors. When a key is pushed down, the soft insulator between the movable plate and the fixed plate is compressed. When the key is pressed, what happens to the capacitance?**

A. It increases
B. It decreases
C. It remains same
D. It changes in a way you cannot determine because of the complex circuit

Q.26 **When a man walks on a surface horizontally with constant velocity, work done by**

A. Friction is zero
B. Contact force is zero
C. Gravity is zero
D. All of these

Q.27 **If a photon is absorbed by a nucleus the energy of nucleus**

A. Remain same
B. Increase slightly
C. Decrease slightly
D. It will pass the nucleus

Q.28 **Planck constant is named after**

A. Einstein
B. Newton's
C. Maxwell
D. None of these

Q.29 **Four 100 W bulbs are connected in parallel across 200 V supply line. If one bulb gets fused**

A. No bulb will light
B. All the four bulbs will light
C. Rest of three bulbs will light
D. Above B and C

Q.30 **The internal energy change in system that has absorbed 2kcal of heat and done 500J of work is**

A. 8900J
B. 8800J
C. 7900J
D. 7500J

Q.31 **Nuclear force is :**

A. Spin independent
B. Both charge and spin independent
C. Spin dependent but charge independent
D. Charge dependent

Q.32 **The number of diodes in bridge rectifier is**

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

Q.33 **For a coil self-inductance L and current I then flux passing through it is**

A. LI
B. LI^2
C. L^2I
D. $(LI)^2$

Q.34 **Force on a moving charge in a uniform magnetic field will be maximum, when angle between v and B is**

A. 0
B. 30
C. 60
D. 90

Q.35 **Our system stability is least affected by**

A. Reactance of generator
B. Input torque
C. Losses
D. Reactants of transmission line

Q.36 **Electric potential energy per unit charge is:**

A. Electric flux
B. Electric field
C. Electric potential
D. Electric intensity

Q.37 **_____ is conserved in pair production**

A. Charge
B. Momentum
C. Both A & B
D. None of these

Q.38 **Microscope uses ___ wavelength to reduce diffraction**

A. Shorter
B. Longer
C. White
D. None of these

Q.39 **Find the electric field when the velocity of the field is 12m/s and the flux density is 8.75 units.**

A. 510
B. 105
C. 150
D. 165

Q.40 **Whenever the magnetic flux linked with an electric circuit changes, an emf is induced in the circuit. This is called**

A. Electromagnetic induction
B. Kirchoff's law
C. Hysteresis loss
D. Lenz's law

Q.41 **What is an optically active medium?**

A. Which absorbs light
B. Which absorbs polarized light
C. Which rotates plane of polarization
D. Which refract polarized light

Q.42 **In which rectifier ripple factor is less**

A. Full wave
B. Half wave
C. Both A and B
D. None of them

Q.43 **What is the half-time of a radioactive sample (in minutes), if its mean life is 200 s?**

A. 0.69 min
B. 2 min
C. 2.57 min
D. 2.31 min

Q.44 **Ripple factor is defined as**

A. Irms/Vrms
B. Idc/Irms
C. Irms/I dc
D. Irms + I dc

Q.45 **The value of triple point of water is:**

A. 1 K
B. 100 K
C. 273.16 K
D. 0 K

Q.46 **Maximum power delivered by battery is**

A. Pmax= $E^2/4r$
B. Pmax = 4rE^2
C. Pmax = VIT
D. Unlimited

Q.47 **Power transformers have maximum efficiency at**

A. No load
B. Full load
C. Half load
D. Double load

Q.48 **Two wires of copper are of the same length but'have different diameters. When they are connected in series across a battery, the heat generated is H1 When connected in parallel across the same battery, the heat generated during the same time is H2 Then:**

A. H1 = H2 B. H1 < H2
C. H1 > H2 D. H1 > H2

Q.49 **A monochromatic light is incident on a single slit, and a diffraction pattern forms on the screen. If a is the angle between central maximum and first minimum, then which of the following change will increase a?**

A. Increase the width of slit
B. Decrease the width of slit
C. Increase the distance between screen and slit
D. Decrease the distance between screen and slit

Q.50 **When white light is passed through cool gases the spectra we observed is called**

A. Line spectra B. Continuous spectra
C. Absorption line spectra D. Emission line spectra

Q.51 **The half life of U-238 against alpha decay is 4.5*10^9 years. Find the activity of 1 kg of U-238?**

A. 2.4×10^{-4} Ci B. 3.34×10^{-4} Ci
C. 4.34×10^{-4} Ci D. 2.4×10^{-5} Ci

Q.52 **What is the energy stored in a capacitor of capacitance 2 μF and potential difference between the plates is 12V?**

A. 12 J B. 24 J
C. 6 J D. 1/6 J

Q.53 **A circular loop of area 200 cm^2 sites in x-z plane, then a uniform magnetic field B = (0.3i + 0.4j) is applied on it, find the magnetic flux through the loop**

A. 0.8 wb B. 8 wb
C. 0.008 wb D. 0.08 wb

Q.54 **The photon when scattered from mirror its momentum becomes**

A. Double B. Half
C. Remain same D. Zero

Q.55 **A car travels 30 m toward east, then it takes turn and travels 40 m towards west. It takes 50 seconds. Its average velocity is:**

A. -10 m/s B. -1/5 m/s
C. 7/5 m/s D. -5 m/s

Q.56 **When momentum of body increased by 200 %, its kinetic energy increases by**

A. 200 % B. 300 %
C. 400 % D. 800 %

CHEMISTRY

Q.57 **Rate determining step of a chemical reaction which occur in more than one step depends upon the**

A. Fastest step B. Slowest Step
C. Catalyst used D. Temperature of reaction

Q.58 **How many isomers of C_4H_{10} are possible?**

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

Q.59 **The formation of coordination complex compounds formed by transition metals is explained by**

A. Ligand field theory B. Crystal field theory
C. Molecular orbital theory D. Both A & B

Q.60 **The vapor pressure of water at 8°C is**

A. 4.579 torr B. 23 torr
C. 8.1 torr D. 17.54 torr

Q.61 **Conversion of Electrical energy into chemical energy is**

A. Mechanical Energy B. Electromechanical Energy
C. Electrochemistry D. Chemical Energy

Q.62 **Alcohol having 5% water is called as_____?**

A. Absolute alcohol
B. Methylated alcohol
C. Rectified spirit
D. Pure spirit

Q.63 **A reaction which does not occur in nature are**

A. Spontaneous Reactions
B. Exothermic Reactions
C. Endothermic Reactions
D. Nonspontaneous Reactions

Q.64 **Which of the following is weaker acid?**

A. HCl
B. H_2SO_4
C. CH_3COOH
D. H_3PO_4

Q.65 **SN_1 reaction is a _____?**

A. Multistep reaction
B. Two step reaction
C. Concerted reaction
D. 3 step reaction

Q.66 **Transition elements for complexes because_____?**

A. They have empty d orbitals
B. They show variable oxidation states
C. Both a and b
D. They have strong bonding

Q.67 **Albumin is present in____?**

A. Milk
B. Eggs
C. Beans
D. Muscles

Q.68 **With which of the following Grignard reagents react to form Alkanes?**

A. Ammonia
B. Water
C. Methanol
D. All of these

Q.69 **Voltaic Cell can be converted into a Reverse galvanic Cell by**

A. Changing positions of electrodes
B. Replacing Salt Bridge with a Wire
C. Providing an External Source of electricity
D. All of these

Q.70 **On Hydrolysis with dilute HCl, ethanenitrile gives acetic acid through;**

A. Formamide
B. Acetamide
C. Benzoic acid
D. Acetaldehyde

Q.71 **Aldehydes are obtained by the oxidation of which of the following?**

A. Secondary alcohols
B. Tertiary alcohols
C. Dihydric alcohol
D. Primary alcohols

Q.72 **The geometrical isomers in which similar groups on double bond carbon atoms are present on opposite sides are called as___?**

A. Trans isomers
B. Alkanes
C. Cis isomer
D. Positional isomers

Q.73 **Benzene is extra stable because of_____?**

A. Cyclic structure
B. Three alternating double and single bonds
C. Delocalization of pi-electrons
D. All of these

Q.74 **The rate of diffusion or effusion is ___-proportional to square root of its density at constant T and P**

A. directly
B. inversely
C. equally
D. highly

Q.75 **Rate equation for the hydrolysis of Tertiary Butyl Bromide is independent of concentration of water as a reactant because**

A. It's in excess
B. A solvent
C. Solute
D. Both A and B

Q.76 **Which of the following reaction takes place when acetone reacts with HCN?**

A. Electrophilic addition
B. Nucleophilic elimination
C. Nucleophilic addition
D. Electrophilic addition

Q.77 **The value of Principal quantum number is _integers up to infinity**

A. zero, positive
B. non zero, positive
C. non zero, negative
D. positive

Q.78 25 cm3 of the sample of H2 gas effuses four times as rapidly as 25 cm3 of an unknown gas what will be the molar mass of unknown gas?

A. 16g mol^{-1} B. 32g mol^{-1}
C. 72g mol^{-1} D. 48 $gmol^{-1}$

Q.79 Non-stoichiometric compounds of transition elements are called

A. Hydrates B. Hydrides
C. Interstitial compounds D. Binary compounds

Q.80 Which of the following causes the inactivation of enzymes _____?

A. Concentration of substrate B. Optimum temperature
C. Beta radiation D. Optimum Ph

Q.81 Metals have ionization energy value

A. Low B. High
C. Intermediate D. Neutral

Q.82 When we move from left to right in transition elements, the decrease is ___due to intervening electrons

A. large B. very large
C. small D. very small

Q.83 Which of the following is an example of Nucleophile?

A. Br^- B. CH_3^-
C. NH_3 D. CH_4

Q.84 Fruity smell of organic compounds is because of _____?

A. Alcohols B. Carboxylic acid
C. Ester D. Acid halids

Q.85 The coefficients of balanced equation are a part of Equilibrium constant value as

A. Denominator . Numerator
C. Powers of concentration D. All of these

Q.86 The distillation which is carried out under reduced pressure is called as?

A. Pressure distillation B. Reduced distillation
C. Vacuum distillation D. Low boiling distillation

Q.87 Which of the substance has the highest melting point?

A. CO_2 B. H_2O
C. NaCl D. MgO

Q.88 What will be the product at cathode during the electrolysis of brine in Nelson cell?

A. H_2 B. Na
C. CO_2 D. O_2

Q.89 Which one of the following is correct about heat energy?

A. Path function B. State function
C. Move from cold to hot body D. Property of a system

Q.90 Which of the following is most reactive of all?

A. Alkanes B. Alkenes
C. Alkynes D. Benzene

Q.91 When an atom shares more than one electron, the bond formed is

A. Single bond B. Double bond
C. Triple bond D. Both B & C

Q.92 Sulphate ion is

A. Triangular Planner B. Cubic
C. Cubic Face Centred D. Tetrahedral

Q.93 At higher altitudes water boils at _____ Boiling point?

A. Higher B. Lower
C. 100°C D. 0°C

Q.94 The volume at S.T.P occupied by .8 g of N_2

A. 2.24 dm^3 B. 6.44 dm^3
C. 1.12 dm^3 D. 112 dm^3

Q.95 The strength of H-bond is less than covalent bond

A. 1 times B. 2 times
C. 3 times D. 5 times

Q.96 Proteins are _____in structure?

A. Two-dimensional
B. Three dimensional
C. Uni-dimensional
D. None of these

Q.97 Coordination number of Na in NaCl is

A. 4
B. 6
C. 8
D. 3

Q.98 According to coulomb's law, the electrostatic forces of attraction between electron and nucleus are _____ to its square of radius

A. directly proportional
B. inversely proportional
C. equal
D. none of these

Q.99 Ketones can be oxidized by _____?

A. Dil. HNO_3
B. Tollen's reagent
C. Benedict reagent
D. Fehling's reagent

Q.100 Which one of the following is a Cyano group?

A. $-SH$
B. $-COOH$
C. $-CN$
D. $-COOR$

Q.101 Which one of the following is the correct value for the enthalpy of formation of CO?

A. -110kJ/mol
B. -210kJ/mol
C. -111kJ/mol
D. None of these

Q.102 Which of the following has more evaporation rate at same temperature?

A. Gasoline
B. Water
C. Honey
D. Ethanol

Q.103 Which of the following evolve Carbon Dioxide with sodium bicarbonate?

A. CH_3COOCH_3
B. CH_3CH_2OH
C. CH_3CH_2COOH
D. $CH_3COOOCH_3$

Q.104 Organic compounds are soluble in

A. Polar solvents
B. Water
C. Ammonium cyanate
D. Non-polar solvents

Q.105 In which of the following reaction C—O bond of alcohol breaks?

A. Reaction with $SOCl_2$
B. Dehydration
C. Esterification
D. All of these

Q.106 Which one is not a state function?

A. Internal Energy
B. Enthalpy
C. Work
D. None of these

Q.107 One of them is not an alkali metal, Mark it

A. Francium
B. Caesium
C. Rubidium
D. Radium

Q.108 Condensation involves which of the following reactions?

A. Elimination + addition
B. Elimination + Substitution
C. Addition + substitution
D. None of these

Q.109 A sample so .7 mol of metal M reacts completely with excess of fluorine to form 45 g of MF_2, how many moles of F are present in it.

A. 1.4 moles
B. 2.4 moles
C. 2 moles
D. 1.2 moles

Q.110 It is not possible for us to measure exact position and exact momentum of electron simultaneously is the statement of

A. de-Broglie
B. Mosley
C. Heisenberg
D. Neil Bohr

Q.111 The bond b/w the two atoms is non polar, if the E.N difference is

A. 1.7
B. Zero
C. 1
D. 2

Q.112 What is the correct order of reactivity of alkyl halides?

A. $R-Cl > R-Br > R-F > R-I$
B. $R-I > R-Br > R-Cl > R-F$
C. $R-I > R-Cl > R-Br > R-F$
D. None of these

Q.113 Mating between relatives is called which of the following?
A. Ex breeding
B. Breeding
C. Inbreeding
D. Outbreeding

Q.114 Function of Smooth Endoplasmic Reticulum (SER) is _____ .
A. Synthesis of intracellular proteins.
B. Synthesis of extracellular proteins.
C. Synthesis of extracellular enzymes.
D. Synthesis of lipids.

Q.115 What type of enzyme is myosin?
A. ATP synthase
B. ADP synthase
C. ADP hydrolase
D. ATP hydrolase

Q.116 Which statement is correct?
A. In heteromorphic generations are vegetatively dissimilar
B. In isomorphic generations are vegetatively similar
C. In isomorphic generations are vegetatively dissimilar
D. Both a and b

Q.117 If more oxygen is present, the rubisco starts:
A. Respiration
B. Photorespiration
C. Carboxylase
D. None of these

Q.118 Specific heat of vaporization of water is?
A. 674 Kcal/kg
B. 774 Kcal/kg
C. 874 Kcal/kg
D. 574 Kcal/kg

Q.119 Cellular respiration is essentially what type of process?
A. Oxidation
B. Reduction
C. Redox
D. None of the above

Q.120 In non-competitive inhibition, the extent of inhibition depends only on?
A. Concentration of enzyme
B. Concentration of substrate
C. Concentration of ES complex
D. Concentration of inhibitor

Q.121 In most triploblasts after embryonic development the three layers are represented as?
A. Separate layers of cells
B. Structures associated with them
C. Their functions in body
D. Structures formed from them

Q.122 Which of these cells is not present in phloem?
A. Companion cell
B. Sieve tube members
C. Vessels
D. Parenchyma

Q.123 The end or complete stop of the menstrual cycle is called:
A. Ovulation
B. Menstruation
C. Fertilization
D. Menopause

Q.124 Viruses that attack bacteria are called?
A. Virophage
B. Lysophage
C. Bacteriophage
D. None of the above

Q.125 One of the actions of the parasympathetic nervous system is?
A. Inhibits peristalsis
B. Dilates Bronchioles
C. Constriction of Pupils
D. Sweat secretion

Q.126 Which enzyme is found in saliva?
A. Pepsin
B. Lipase
C. Ptyalin
D. Lactase

Q.127 What type of protein is Fibrin?
A. Functional
B. Structural
C. Enzymatic
D. All of these

Q.128 What is the copper containing protein involved in the ETC in plants?
A. pq
B. pc
C. pt
D. po

Q.129 2nd meiotic division in oocyte is completed during?
A. When ovum is discharged from the ovary
B. Just before fertilization
C. Before the onset of menstruation
D. When oocyte is fertilized by sperm

Q.130 Golgi complex is responsible for the formation of secretory granules in _____ cell.

A. Stomach
B. Liver
C. Pancreatic
D. Muscle

Q.131 When the glucose level in blood comes down, glucose is synthesized from___

A. Fats
B. Glycogen
C. Amino acids
D. DNA

Q.132 Which is most likely to extend the entire length of a muscle fibre?

A. Sarcomere
B. Myofibril
C. Myosin filament
D. M-line

Q.133 In humans gill pouches have evolved into which of the following organs?

A. Nose
B. Ear
C. Pharynx
D. Eustachian tubes

Q.134 The cell wall is not present in which of the following bacteria?

A. Cocci
B. Bacilli
C. Mycobacterium
D. Mycoplasma

Q.135 In what category of bacteria does Neisseria most likely fall?

A. Cocci
B. Bacilli
C. Spirochete
D. None of these

Q.136 Second largest phylum of invertebrates is which of the following?

A. Porifera
B. Arthropoda
C. Chordata
D. Mollusca

Q.137 ATP molecules are consumed during which process?

A. Glycolysis
B. Krebs cycle
C. Light dependent phase
D. None

Q.138 When HIV becomes AIDS?

A. When it attacks the T cells
B. When it replicates at maximum level
C. When it destroys the body cells
D. All of these

Q.139 The union of meiotically produced specialized sex cells from each parents produce?

A. Fertilized egg
B. Unfertilized egg
C. Zygote
D. None of these

Q.140 During inspiration, the area of the thoracic cavity will

A. Contracts
B. Increase
C. Decrease
D. Damage

Q.141 A series of C shaped cartilage rings are found in the wall of:

A. Epiglottis
B. Trachea
C. Bronchi
D. None of these

Q.142 60S and 40S subunit combine to form what size particle?

A. 80S
B. 90S
C. 100S
D. 110S

Q.143 In icosahedral, in which the capsomers are arranged in _____ triangles

A. 1
B. 20
C. 3
D. 4

Q.144 Chemical substances used on living tissues that inhibit the growth of microorganism are called?

A. Disinfectant
B. Sanitizer
C. Antibiotic
D. Antiseptics

Q.145 Which chemical reactions occur during the process of photosynthesis?

A. Oxidation
B. Reduction
C. Both A and B
D. None of these

Q.146 According to Hardy-Weinberg theorem, frequencies of alleles and genotypes in a population's gene pool remain?

A. Mobile in gene pool
B. Constant
C. Stationary in gene pool
D. Constant unless acted upon by agents other than sexual recombination

Q.147 Which of the following organism has a eel like body?

A. Chondrichthyes
B. Osteichthyes
C. Cyclostomata
D. Both A and B

Q.148 If the concentration of enzyme is kept constant and amount of substrate is increased a point is reached where increase in substrates concentration does not affect the reaction rate because of?

A. Enzymes get denatured at higher substrate conc.
B. Rate of reaction is indirectly proportional to substrate concentration at this point.
C. All the active sites on enzyme molecule are occupied
D. All of these

Q.149 Which of the following organelles are found in both plant and animal cells?

A. Central vacuole
B. Tonoplast
C. Cell wall
D. Peroxisomes

Q.150 Which combination of class and its description is correct?

A. Osteichthyes - a bony endoskeleton & gills covered by operculum.
B. Reptilia - left aortic arch & internal fertilization.
C. Nematoda - triploblastic & acoelomates.
D. Cephalopods - dorsal nerve cord & bilateral symmetry.

Q.151 In mammalian male, the reproductive and excretory system share the same:

A. Vas deferens
B. Ureter
C. Urinary bladder
D. Urethra

Q.152 Which disease is represented by excess MSH secretion?

A. Addison's
B. Alzheimer's
C. Parkinson's
D. Crohn's

Q.153 Enzymes which control cellular respiration are present in?

A. Mitochondria
B. Nucleus
C. Ribosomes
D. Chloroplast

Q.154 What gives the definite shape to a virion?

A. Envelope
B. Capsid
C. Capsomeres
D. Prions

Q.155 In females, the progesterone and estrogen hormone is secreted by?

A. Ovaries
B. Testes
C. Egg
D. Kidneys

Q.156 Inbreeding reduces the fitness of a population. This is the result of which increased genetic affect of inbreeding?

A. Rate of spontaneous mutation
B. Levels of aggression
C. Genetic diversity
D. Expression of deleterious recessive traits

Q.157 The following enzymes are regulated by calcium ions___

A. DNA polymerase
B. Adenylate cyclase
C. Phosphoprotein phosphatase
D. Nitric oxide synthetase

Q.158 In a dihybrid cross, what fraction of offspring will be homozygous for both traits?

A. 1/2
B. 1/4
C. 1/8
D. 1/16

Q.159 In which of these reflexes, a skeletal muscle contraction causes the agonist muscle to simultaneously lengthen and relax?

A. Stretch reflex
B. Spinal reflex
C. Golgi tendon reflex
D. Crossed Extensor Reflex

Q.160 The sarcoplasmic reticulum is a special type of endoplasmic reticulum. Based on this information, which of the following is associated with a sarcoplasmic reticulum?

A. Network of tubules
B. Vesicles
C. Digestive enzymes
D. Both A and B

Q.161 What is reduced during sugar production in photosynthesis?

A. ATP
B. NADH
C. Carbon dioxide
D. Oxygen

Q.162 Skeletal muscle is composed of cells collectively referred to as

A. Muscle fibrin
B. Muscle fibers
C. Sarcomere
D. None of these

Q.163 The pay-off phase of glycolysis conserved the

A. Molecules of glucose
B. Molecules of fructose
C. ATP
D. water

Q.164 Which of the following comes under structural classification?

A. Synchondroses
B. Sutures
C. Gomphosis
D. All of these

Q.165 The structures with a diameter less than 1mm are:

A. Bronchioles
B. Bronchi
C. Alveoli
D. Air sac

Q.166 What is a key difference between spermatogenesis and oogenesis?

A. Spermatogenesis results in only 1 sperm; oogenesis results in 4 eggs.
B. Spermatogenesis results in 2 sperm; oogenesis results in only 1 egg.
C. Spermatogenesis results in 8 sperm; oogenesis results in only 4 eggs.
D. Spermatogenesis results in 4 sperm; oogenesis results in only 1 egg.

Q.167 The experiment that simulated conditions thought to be present on the early earth

A. Hershey Chase experiment
B. Geiger Marsden experiment
C. Schiehallion experiment
D. Miller–Urey experiment

Q.168 The optimum pH for enzyme arginase is?

A. 9
B. 9.3
C. 9.7
D. 10

Q.169 Ascaris is characterized by which of the following?

A. Presence of true coelom and metamerism
B. Presence of true coelom but the absence of metamerism
C. Absence of true coelom but the presence of metamerism
D. Absence of true coelom and metamerism

Q.170 In prokaryotic cells, ribosomes are?

A. 50S + 40S
B. 60S + 40S
C. 80 S
D. 70 S

Q.171 Damage to one of the following immediately kills the cell whether its prokaryotic or eukaryotic?

A. Nucleus
B. Cell membrane
C. Mitochondria
D. All of these

Q.172 Which of the following is not an example of positive feedback?

A. A forest fire slowly expands outward, which provides it with even more fuel to burn.
B. During childbirth, oxytocin creates a stimulus which causes the hypothalamus to release more oxytocin
C. As more buffalo begin to run in a herd, the overall level of panic increases. This results in even more buffalo running.
D. As blood calcium levels increase, parathyroid hormone (PTH) is reduced.

Q.173 The phage components begin to assemble into mature phages only after the synthesis of?

A. Structural protein
B. Nucleic acid
C. Both A and B
D. Amino acids

Q.174 The ventral root of the spinal cord contains axons of

A. Sensory neuron
B. Motor neuron
C. Mixed neuron
D. Spinal neuron

Q.175 Which of the following is not an evidence for evolution?

A. Fossil record
B. Common ancestor organisms
C. Vestigial structures
D. None of these

Q.176 Which of the following is a phospholipid?

A. Sterol
B. Cholesterol
C. lecithin
D. Steroid

Q.177 The brain area responsible for screening all incoming sensory data is:

A. Hypothalamus
B. Thalamus
C. Cerebellum
D. Cerebral cortex

Q.178 Which of the following is synthesized by free floating ribosomes of cytoplasm in humans?

A. DNA polymerase
B. Salivary amylase
C. Pancreatic amylase
D. DNA helicase

Q.179 Phylum Porifera is classified based on which of the following characteristic?

A. Branching
B. Symmetry
C. Spicules
D. Reproduction

Q.180 ssRNA (+) that is transcribed into double-stranded DNA by

A. DNA dependent DNA polymerase
B. DNA dependent RNA polymerase
C. RNA dependent DNA polymerase
D. RNA dependent RNA polymerase

ENGLISH

Q.181 She _____ for America tomorrow.

A. will leave
B. shall leave
C. left
D. leaving

Q.182 My watch is five minutes _____.

A. behind
B. before
C. slow
D. early

Q.183 A large sum of money _____ stolen in last nights bank robbery.

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

Q.184 While climbing onto the mountain top, I _____ (encounter) a strange animal which I'd never seen before.

A. encounter
B. encountered
C. will encounter
D. encountering

Q.185 The excuse he gave was extremely _____.

A. delicate
B. flimsy
C. slight
D. thin

Q.186 Saad likes to play _____ hockey.

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

Q.187 Either of the two dresses shall _____ good.

A. looking
B. look
C. looks
D. looked

Q.188 innumerable

A. limited
B. weary
C. countless
D. harmless

Q.189 It is raining cats and dogs.

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

Q.190 Choose the correct spelling of the word

A. except
B. exept
C. axept
D. exsept

Q.191 The old man _____ (yell) at the boys who teased him.

A. yell
B. yelled
C. yelling
D. yells

Q.192 The students cleaned up after they finished the experiment.

A. complex
B. simple
C. compound
D. None

Q.193 glistening

A. sweating and shining
B. polishing and shining
C. reflecting or sparkling
D. sparkling or shining

Choose the correct spelling of the word

A. length
B. lenth
C. length
D. lingth

Q.194 A large number of soldiers _____ died for the country.

A. has
B. is
C. are
D. have

Q.195 The children as well as their mother _____ missing after the floods.

A. is
B. are
C. was
D. were not

Q.196 _____ knows that Dallas is not the capital of Texas.

A. Anyone
B. Many persons
C. Not everyone
D. Somebody

Q.197 Catalyst

A. alluring
B. person or thing that causes a change
C. enticing
D. absolving

Q.198 Choose the correct sentence.

A. Mrs Sajjad: who was sitting behind the desk, gave me a big smile.
B. Mrs Sajjad who was sitting behind the desk gave me a big smile.
C. Mrs Sajjad, who was sitting behind the desk. gave me a big smile.
D. Mrs Sajjad, who was sitting behind the desk gave me a big smile?

Q.199 We _____ (visit) the lake many times before, but we enjoyed ourselves the most this time.

A. visit
B. have visited
C. visited
D. had visited

LOGICAL REASONING

Q.200 Find the different one

A. Mother
B. Sister
C. Maid
D. Aunt

Q.201 Statements

I. He have got cavity in his tooth
II. He eats too much chocolates

A. Statement 1 is the cause then 2 is its effect
B. Statement 2 is the cause then 1 is its effect.
C. Both statements are independent causes
D. Both statements are of common cause

Q.202 Gym is to exertion as consuming is to

A. Food
B. Dieting
C. Fitness
D. Eatery

Q.203 Complete the series. F16, H32, J48,_.

A. K66
B. L64
C. M68
D. N90

Q.204 Statement: The performance of most of the students in final exam of class X in the schools run by the government was excellent. Many teachers of government schools left the school and joined private schools.

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 independent causes

Q.205 I. The PIC doctors are on a strike.
II. There was a death in PIC as due to non-availability of the doctor for the check-up.

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 statements I and II are independent causes
D. Both statements I and II are the effects of independent cause.

Q.206 Balloons are filled with

A. Nitrogen
B. Helium
C. Oxygen
D. Both A and B

Q.207 Look at this series 80, 10, 70, 15, 60. What number should come next?

A. 20
B. 25
C. 30
D. 50

Q.208 Country with the highest Muslim population is _____

A. Pakistan
B. Malaysia
C. Indonesia
D. Iran

Q.209 Look at this series 5.2, 4.8, 4.4, 4. What number should come next

A. 3
B. 3.3
C. 3.5
D. 3.6