

PMC PRACTICE TEST 18

PHYSICS

- Q.1** For given applied voltage, what will happen if we increase frequency of the applied voltage?
- A. Eddy current loss will decrease
 - B. Eddy current loss will increase
 - C. Eddy current loss will remain unchanged
 - D. None of these
- Q.2** Which rays have highest ionizing power
- A. Alpha
 - B. Beta
 - C. Gamma
 - D. White
- Q.3** Force acting on a negative charge is always:....
- A. In the direction opposite to electric field
 - B. In the direction of electric field
 - C. In the direction perpendicular to electric field
 - D. In the direction perpendicular to the velocity of charge
- Q.4** The acceleration of a moving object can be defined as:...
- A. Rate of change in speed
 - B. Rate of change in velocity
 - C. Rate of change in distance
 - D. Rate of change in displacement
- Q.5** The maximum value of displacement from the mean position is called:
- A. Height
 - B. Amplitude
 - C. Frequency
 - D. Distance
- Q.6** A steady current passing through a conductor produces
- A. Electric field
 - B. Magnetic field
 - C. Both of these
 - D. None of these
- Q.7** 1 kilo ohm = _____ ohm
- A. 10^3 ohm
 - B. 10^2 ohm
 - C. 10^4 ohm
 - D. None of them
- Q.8** The charge on electron is equal to
- A. Proton
 - B. Two protons
 - C. Two neutrons
 - D. None of these
- Q.9** The speed of sound in water is approximately:
- A. 1500 m/s
 - B. 5000 m/s
 - C. 330 m/s
 - D. 50 m/s

- Q.10** A succession of events which bring the system back to its initial condition is called:
- A. Oscillation
 - B. Vibration
 - C. Cycle
 - D. Circle
- Q.11** If peak Voltage across a full wave rectifier is 20V then V_{rms} is
- A. 7.07
 - B. 14.14 v
 - C. 16.8V
 - D. 12V
- Q.12** The relation between linear and angular velocity is:
- A. $v = r \times \omega$
 - B. $v = \omega \times r$
 - C. $\omega = v \times r$
 - D. $r = v \times \omega$
- Q.13** The maximum velocity of SHM is a_0 the period of oscillation is
- A. $2\pi x_0/a_0$
 - B. $2\pi a_0/x_0$
 - C. $2\pi a_0 x_0$
 - D. $2\pi/a_0 x_0$
- Q.14** In Boyle's law, which quantity is constant
- A. P
 - B. T
 - C. V
 - D. $R \backslash$
- Q.15** An apparatus which is used to measure current voltage and resistance
- A. Multimeter
 - B. Ammeter
 - C. Galvanometer
 - D. Voltmeter
- Q.16** Which is the unit of energy
- A. Joule
 - B. Erg
 - C. Unit(Kwh)
 - D. All of these
- Q.17** The resistance of a human body is about:
- A. 12 ohm
 - B. 120 ohm
 - C. 120K ohm
 - D. 120M ohm
- Q.18** A sealed container contains water at 10 degrees C and 0 degrees C. If the system is thermally isolated, then what happens to the total energy of the system?
- A. It decreases
 - B. It increases
 - C. It increases then remains same
 - D. It remains same

- Q.19** Average speed of a object after a completing a circle of 5 m radius in 5 seconds
- A. 2π
 - B. π
 - C. Zero
 - D. 10π
- Q.20** When a body moves in a circle of radius r with angular speed ω , its centripetal acceleration is
- A. ωr
 - B. $\omega^2 r$
 - C. ωr^2
 - D. ω/r
- Q.21** If a projectile is launched with 3m/s velocity at 60 degree angle then at highest point its horizontal velocity is
- A. 3 m/s
 - B. 2m/s
 - C. 1.5 m/s
 - D. 1.8 m/s
- Q.22** Transistors can be used as
- A. Half wave rectifier
 - B. Full wave rectifier
 - C. Both
 - D. None of these
- Q.23** A body moves a distance of 10 m along a straight line under the action of 5 N force. If work done is 25 J, then angle between the force and direction of motion of the body will be:
- A. 75°
 - B. 60°
 - C. 45°
 - D. 30°
- Q.24** When a light ray travels from the medium of low refractive index to a medium of high refractive index. Its....
- A. Speed decreases, frequency decreases, wavelength unchanged
 - B. Speed decreases, frequency unchanged, wavelength unchanged
 - C. Speed unchanged, frequency increases, wavelength decreases
 - D. Speed decreases, frequency unchanged, wavelength decreases
- Q.25** In case of harmonic oscillator total energy remains
- A. Variable
 - B. Infinity
 - C. Constant
 - D. Zero
- Q.26** $1/R_{eq} = 1/R_1 + 1/R_2 + 1/R_3 + \dots + 1/R_n$ is the combination in
- A. Series
 - B. Parallel
 - C. Both of them
 - D. None of them
- Q.27** A wave is produced by
- A. Disturbance
 - B. Heating
 - C. Freezing

- D. Clapping
- Q.28 You have three capacitors and a battery. In which of the following combinations of the three capacitors is the maximum possible energy stored when the combination is attached to the battery?**
- A. In parallel
 - B. In series
 - C. Either way because both combinations have the same capacitance
 - D. We cannot determine, because presence of resistance in the circuit determines capacitance
- Q.29 Ozone reflects ____ radiation from sun back into space**
- A. IR
 - B. UV
 - C. Alpha
 - D. All of these
- Q.30 In a standing waves, the distance between two consecutive nodes is:**
- A. Equal to one wavelength
 - B. Equal to two wavelength
 - C. Equal to half of wavelength
 - D. Equal to quarter of wavelength
- Q.31 X-rays are diffracted from ____**
- A. mirror
 - B. crystal
 - C. gas molecules
 - D. all of these
- Q.32 If for a gas $dW=0$, $dQ<0$ then**
- A. Temperature increases
 - B. Pressure increases
 - C. pressure decreases
 - D. Volume decreases
- Q.33 Quarks are ____ spin particles**
- A. Full
 - B. Half
 - C. Quarter
 - D. None of these
- Q.34 When 2Ω , 4Ω and 6Ω resistors are connected in parallel their resultant equivalent resistance will be**
- A. 12Ω
 - B. $11/12\Omega$
 - C. $12/11\Omega$
 - D. Data is insufficient
- Q.35 What is echo of sound?**
- A. When sound reflects back
 - B. When sound gets absorbed
 - C. When sound penetrates into objects
 - D. All of them
- Q.36 Henry is unit of**
- A. Self inductance only
 - B. Mutual inductance
 - C. Both a) and b)
 - D. Eemf

- Q.37 Work done in an adiabatic process in a gas depends on**
- A. Change in pressure
 - B. Change in temperature
 - C. Change in Volume
 - D. All of these
- Q.38 X-rays images are detected on ____ screen**
- A. Phosphorous
 - B. Carbon
 - C. Sodium
 - D. Helium
- Q.39 Black body is considered ideal when it**
- A. Emits all radiation
 - B. Absorbs all radiation
 - C. Both a and b
 - D. None of these
- Q.40 The SI unit of velocity is**
- A. m/s
 - B. 1/s
 - C. m/s^2
 - D. m/s^3
- Q.41 Wave particle duality does not explain**
- A. Momentum
 - B. Frequency
 - C. Mass
 - D. All of these
- Q.42 A negative point charge is moving along a circular orbit around a positive point charge. Which aspect(s) of the electric force on the negative point charge will remain constant as it moves?**
- A. Direction
 - B. Magnitude
 - C. Both direction and magnitude
 - D. Neither direction and magnitude
- Q.43 In the VT diagram slope of curve is**
- A. R
 - B. nR/P
 - C. P
 - D. R/P
- Q.44 An a.c. generator consists of a coil of 50 turns and an area 2.5 m^2 rotating at an angular speed of 60 rad s^{-1} in a uniform magnetic field of 0.3 T between two fixed pole pieces. What is the flux through the coil, when the current is zero?**
- A. Maximum
 - B. Minimum
 - C. Zero
 - D. Independent
- Q.45 Find the resistance if voltage of the circuit is 45 volts and current 30 Amp?**
- A. 1.6 ohm
 - B. 1.5 ohm
 - C. 1.7 ohm
 - D. 1.8 ohm

- Q.46** Energy stored in an inductor is
- A. Electric energy
 - B. Magnetic energy
 - C. Electromagnetic energy
 - D. Both a) and b)
- Q.47** The electron is purely a ____ when free
- A. Particle nature
 - B. Wave nature
 - C. Dual nature
 - D. It transform to photon
- Q.48** How many milligrams of tritium will remain after 49.2 years if the starting amount is 32 mg? The half-life of tritium is 12.3 years
- A. 8mg
 - B. 2mg
 - C. 1mg
 - D. 4mg
- Q.49** If angular velocity increases the _____ also increases
- A. Time period
 - B. Frequency
 - C. Vibration
 - D. None of these
- Q.50** In half wave rectification, the output DC voltage is obtained across the load for
- A. The positive half cycle of input AC
 - B. The negative half cycle of input AC
 - C. The positive and negative half cycles of input AC
 - D. Either positive or negative half cycle of input AC
- Q.51** If a car moves from 15 m/s to 5 m/s in 10 sec then average acceleration is
- A. 1 m/s^2
 - B. 2 m/s^2
 - C. 5 m/s^2
 - D. 10 m/s^2
- Q.52** The charge and mass of photon is
- A. 0,0
 - B. $1+,0$
 - C. $1-,0$
 - D. 1,1
- Q.53** A beam of ion with velocity $2 \times 10^5 \text{ m/s}$ enters normally into a magnetic field of 0.04 T. The specific charge of ion is $5 \times 10^7 \text{ C/kg}$. Radius of circle is
- A. 0.1 m
 - B. 0.16 m
 - C. 0.2 m
 - D. 0.25 m
- Q.54** Time constant is defined as the time required by the capacitor:...
- A. To deposit 63% of the equilibrium charge
 - B. To deposit 36% of the equilibrium charge
 - C. To deposit 63 times of the equilibrium charge
 - D. To deposit 36 times of the equilibrium charge
- Q.55** A heater is used for 5 minutes to heat 500 g of water from 20°C to 50°C. What is the power of heater? Specific heat capacity of water is 4.2 J/g°C.

- A. 1260 W
B. 12.6 kW
C. 210 kW
D. 12.6 W
- Q.56** A variable force $F = 2x$ is applied what will be the work done in moving the particle from $X = 10$ to 0
A. 100 J
B. 50 J
C. -50 J
D. -100
- Q.57** During bond formation d orbitals splits into _____ of orbitals ?
A. 3 sets
B. 4 sets
C. 5 sets
D. 2 sets
- Q.58** Which of the following Halogen react fast with alkanes in substitution reactions?
A. Cl_2
B. F_2
C. I_2
D. Br_2

CHEMISTRY

- Q.59** Compounds having C and H atoms and their derivatives are called as _____?
A. Inorganic compounds
B. Organic compounds
C. Biochemical compounds
D. Carbohydrates
- Q.60** Energy released when one mole of an ionic crystal is formed is
A. Activation energy
B. Potential energy
C. Energy of formation
D. Lattice Energy
- Q.61** In the rate equation $R = k[A]^a[B]^b$, a and b as exponents decides
A. Direction of reaction
B. Extent of Reaction
C. Order of Reaction
D. Temperature of Reaction
- Q.62** The group which leaves from the substrate in a nucleophilic substitution reaction is called as ____?
A. Leaving group
B. Electrophile
C. Substrate
D. Weak nucleophile
- Q.63** Le Chatelier Principle is about
A. Reaction Mixture
B. Reactants
C. Equilibrium Mixture
D. Products

- Q.64 Butyric acid is derived from the word butyrum which means _____?**
- A. Milk
 - B. Butter
 - C. Cheese
 - D. None of these
- Q.65 The breakdown of molecular ions from natural products give important information about**
- A. size
 - B. position
 - C. Shape
 - D. Structure
- Q.66 Which of the following acid is used a coagulant for latex in the rubber industry?**
- A. Acetic acid
 - B. Butyric acid
 - C. Propionic acid
 - D. All of these
- Q.67 Linde's Method is based on**
- A. Joule-Thomson effect
 - B. Hess effect
 - C. Graham's effect
 - D. None of these
- Q.68 SI unit for energy change in a chemical reaction is**
- A. Joule/mole
 - B. KJ/mole
 - C. KJ mol^{-1}
 - D. All of these
- Q.69 Reduction of ketones produce _____?**
- A. Aldehydes
 - B. Methanol
 - C. Primary alcohols
 - D. Secondary alcohols
- Q.70 Change in concentration per unit time is called**
- A. Equilibrium constant
 - B. rate constant
 - C. Rate of reaction
 - D. All of these
- Q.71 Hydrolysis means reaction with**
- A. Oxygen
 - B. Hydrogen
 - C. Water
 - D. Air
- Q.72 In a carboxylic acid dimer, how many oxygens are present in the ring?**
- A. 4
 - B. 2
 - C. 3
 - D. 5
- Q.73 Due to which of the following forces present in water aquatic life is protected in Cold climate?**
- A. Dipole dipole forces

- B. Debye forces
C. H-bonding
D. London dispersion forces
- Q.74 The elements with intermediate value of ionization energy value are called**
A. Metals
B. Non metals
C. Metalloid
D. Transition elements
- Q.75 Denaturing of protein is _____ process.**
A. Reversible
B. Irreversible
C. Equilibrium
D. All of these
- Q.76 Decrease in Oxidation number is**
A. Oxidation
B. Reduction
C. Both A and B
D. None of these
- Q.77 In industries, methanol is prepared from?**
A. Marsh gas
B. Carbon dioxide and water
C. Water gas
D. Methane + H_2
- Q.78 Which one of the following is correct value of resonance energy of benzene?**
A. 155.5kJ/mol
B. 150.5kJ/mol
C. 170 kJ/mol
D. 140.5kJ/mol
- Q.79 $NaNO_3$ and $CaCO_3$ are**
A. Allotropes
B. Amorphous
C. Isomorphous
D. Polymorphous
- Q.80 Wholar prepare urea from _____?**
A. Ammonium cyanate
B. Ammonium acetate
C. Ammonium urease
D. Ammonium Carbonate
- Q.81 Avogadro's hypothesis is applicable to _____ only.**
A. All gases
B. Inert gases
C. Ideal gases
D. Light gases
- Q.82 Alkanes mostly give _____?**
A. Addition reactions
B. Elimination reactions
C. Reduction reactions
D. Substitution reactions
- Q.83 If Ammonia is not withdrawn continuously from equilibrium mixture its yield will be**

- A. Increased
 - B. Decreased
 - C. Remain unchanged
 - D. None of these
- Q.84 In complex compounds the oxidation number is written in**
- A. English
 - B. Greek
 - C. Roman numeral
 - D. Hebrew
- Q.85 The radius of an electron orbit in a hydrogen atom is of the order of**
- A. 10^{-8} m
 - B. 10^{-1} m
 - C. 10^{-11} m
 - D. 10^{-13} m
- Q.86 If number of molecules of different gases are same at S.T.P ,the occupied volume will be**
- A. Greater
 - B. Same
 - C. Smaller
 - D. Twice
- Q.87 Which of the following Shows tautomerism?**
- A. Amino acids
 - B. Ketones
 - C. Carboxylic acids
 - D. All of these
- Q.88 Which element is required for making Chlorophyll in Leaf?**
- A. Si
 - B. Ba
 - C. Mg
 - D. Ca
- Q.89 It is the brown colored gas**
- A. N_2
 - B. NO_2
 - C. H_2
 - D. O_2
- Q.90 In a galvanic cell ,Zinc Sulphate left beaker acquires a**
- A. A negative charge
 - B. A net positive charge
 - C. Neutral
 - D. None of these
- Q.91 Crystal are obtained by Saturated Solution through**
- A. Sedimentation
 - B. Drying
 - C. Heating
 - D. Cooling
- Q.92 Which of following is trihydric alcohol**
- A. Glycol and cyclohexanol
 - B. Glycerol
 - C. Ethylene glycol
 - D. Resorcinol

- Q.93 Which of the following compound is a Alcohol?**
A. $\text{CH}_3\text{-O-CH}_3$
B. $\text{CH}_3\text{-OH}$
C. CH_3COOH
D. CH_3COCH_3
- Q.94 Carbonyl system having no alpha hydrogen undergoes _____?**
A. Aldol condensation
B. Cannizzaro reaction
C. Haloform reaction
D. Oxidation reaction
- Q.95 A system is the _____ part of universe ?**
A. Real
B. Unreal
C. Imaginary
D. Both real or imaginary
- Q.96 Which of the following forces are developed only for few moments ?**
A. Dipole dipole forces
B. Debye forces
C. London dispersion forces
D. H-bonding
- Q.97 Gases are ideal at high _____ and become non ideal at high _____**
A. Pressure, volume
B. Pressure, temperature
C. Temperature, Pressure
D. Volume, pressure
- Q.98 A peptide having up to 10000 amino acids is called as _____?**
A. Dipeptide
B. Protein
C. Polypeptide
D. Peptide
- Q.99 Which of the following is best method to prepare alkyl halides from alcohols?**
A. Reaction of alcohol with HX
B. Reaction of alcohol with SOCl_2
C. Reaction of Alcohol with PCl_3
D. Reaction of Alcohol with PCl_5
- Q.100 The electronic configuration of Ne-1 is**
A. $1s^2, 2s^2, 2p_x^2, 2p_y^2, 2p_z^2$
B. $1s^2, 2s^2, 2p_x^2,$
C. $1s^2, 2s^2, 2p_x^2, 2p_y^1$
D. $1s^2, 2s^2, 2p_x^2, 2p_y^2, 2p_z^1$
- Q.101 For the reaction; $\text{NaOH} + \text{HCl} \rightarrow \text{NaCl} + \text{H}_2\text{O}$ the change in enthalpy is called as _____?**
A. Enthalpy of formation
B. Enthalpy of neutralization
C. Enthalpy of Sublimation
D. Enthalpy of reaction
- Q.102 What is the value of enthalpy of neutralization when one mole of base reacts with one mole of acid?**
A. -60.5 kJ/mol
B. -46.5 kJ/mol

- C. -70.5 kJ/mol
D. -57.4 kJ/mol
- Q.103 In Down Cells Cathode is made up of**
A. Graphite
B. Copper
C. Iron
D. Inert material
- Q.104 In organic chemistry, we deal with**
A. carbon
B. Hydrogen
C. Hydrocarbons
D. Potassium
- Q.105 Which of the following products are formed from cannizzaro reaction?**
A. Aldol product
B. Alcohol and carboxylate salt
C. Alcohol and carboxylic acid
D. Unsaturated reaction
- Q.106 The peaks in a mass spectrograph show number of _____ of an element**
A. Electrons
B. Isotopes
C. Protons
D. Neutrons
- Q.107 Percentage of free space in a body centered cubic unit cell is**
A. .32
B. .34
C. .28
D. .3
- Q.108 Kinetic molecular theory was proposed by**
A. Berzelius
B. Boltzmann
C. Bernoulli
D. Maxwell
- Q.109 Tetra ethyl addition to petrol is example of:**
A. Positive catalysis
B. Negative catalysis
C. Both a & b
D. None
- Q.110 First step in the SN_1 reaction is _____?**
A. Dehydration
B. Protonation
C. Ionization
D. Attack of nucleophile and departure of leaving group
- Q.111 Location of transition elements is in between?**
A. s and p block
B. d and f block
C. s and f block
D. None
- Q.112 Which character of p-orbital determines the geometry of molecules**
A. Planar

- B. Axial
- C. Non directional
- D. Directional

BIOLOGY

Q.113 Select the phase/s of breathing:

- A. Inhalation
- B. Exhalation
- C. Both and A and B
- D. Vocal waves

Q.114 Quantitative study of energy relationships in biological systems obeys?

- A. Bioenergetics
- B. Laws of thermodynamics
- C. Laws of thermochemistry
- D. Laws of chemical energetic

Q.115 Spinal cord is the part of the:

- A. Peripheral nervous system
- B. Central nervous system
- C. Autonomic nervous system
- D. None of these

Q.116 Haemophilia B is caused in the absence of:

- A. Factor XI
- B. Factor IX
- C. Factor VIII
- D. Factor VII

Q.117 Adaptation of traits to better fill a niche is known as which of the following?

- A. Polymorphism
- B. Gene linkage
- C. Specialization
- D. Replication

Q.118 Euplectella belongs to phylum _____ .

- A. Porifera
- B. Ctenophora
- C. Echinodermata
- D. None of the above.

Q.119 Phagocytosis is a form of _____. During phagocytosis, the cell membrane folds inwards in the form of a vacuole to engulf solid particles.

- A. Pinocytosis
- B. Exocytosis
- C. Endocytosis
- D. Erythrocytosis

Q.120 Which element has function in opening and closing of stomata?

- A. K
- B. Mg
- C. Cu
- D. Fe

Q.121 What is the name of the tube that carries the sperm from the testes to the urethra?

- A. Penis

- B. Seminal vesicles
- C. Prostate gland
- D. Sperm duct

Q.122 In mixed inhibition, the allosteric affect effects

- A. Shape of substrate
- B. Shape of inhibitor
- C. Shape of enzyme
- D. None of these

Q.123 In non-competitive inhibition, the quantity which remains same as the reaction proceed is?

- A. V_{max}
- B. K_m
- C. K_o
- D. V_o

Q.124 The Prokaryotic Life is characterized by

- A. Absence of locomotion
- B. Absence of nuclear envelope
- C. Absence of Protein
- D. Absence of nuclear material

Q.125 Which of the light is mainly absorbed by the plants?

- A. Orange
- B. Red
- C. Green
- D. Both A and B

Q.126 Enzymes involved in protein synthesis are most likely to associated with which cell organelle?

- A. Rough endoplasmic reticulum
- B. Golgi complex
- C. Ribosome
- D. All of the above

Q.127 In the evolutionary sense, which organism has the highest fitness?

- A. A sterile mule that can pull over 800 pounds
- B. A childless human male who lives to be over one hundred years old
- C. A dog who cannot give birth due to a hip abnormality, but is healthy in all other respects
- D. A prairie dog that, though smaller than the average member of her species, has twice as many healthy young in each litter

Q.128 Secretion of insulin from beta cells of pancreas is an example of which membrane function?

- A. Endocytosis
- B. Phagocytosis
- C. Exocytosis
- D. Pinocytosis

Q.129 What is the most common electron transport chain?

- A. Non-cyclic electron flow
- B. Cyclic electron flow
- C. Circular electron flow
- D. Both B and C

Q.130 AIDs was firstly reported in which types of individuals?

- A. Heterosexuals

- B. Homosexuals
- C. Both
- D. None

Q.131 When did experimental administration of the HIV virus begin?

- A. 200
- B. 2001
- C. 2005
- D. 1999

Q.132 Malonic acid is an example of which type of inhibitors?

- A. Irreversible inhibitor
- B. Reversible inhibitor
- C. Non-competitive inhibitor
- D. Competitive inhibitor

Q.133 What are osteocytes?

- A. White blood cell
- B. Bone cell
- C. Brain cell
- D. None of these

Q.134 The oviduct generally called:

- A. Fallopian tube
- B. Uterine tube
- C. Both A and B
- D. Uterus

Q.135 In Prokaryotes, respiration enzymes are present on

- A. Mesosomes and cell membrane
- B. Cell membrane and ribosome
- C. Mesosomes and ribosomes
- D. All of Above

Q.136 Lysosomes are known as “suicidal bags” because of?

- A. Parasitic activity
- B. Presence of food vacuoles
- C. Hydrolytic activity
- D. Catalytic activity

Q.137 The skeleton of the sponges is in the form of variously shaped needle like structures called?

- A. Stipules
- B. Brails
- C. Spines
- D. Spicules

Q.138 A chemical substance which can react (in place of substrate) with the enzyme but is not transformed into product/s and thus blocks the active site temporarily or permanently is called?

- A. Coenzyme
- B. Blocker
- C. Inhibitor
- D. Cofactor

Q.139 The enzyme-substrate complex is formed in which part of the enzyme molecule?

- A. Binding site
- B. Allosteric site

- C. Catalytic site
- D. None of the above

Q.140 The male gonads are known as?

- A. Testes
- B. Testosterone
- C. Ovaries
- D. Ovum

Q.141 Rigor mortis after death results due to which?

- A. Decrease in body temperature after death.
- B. Accumulation of rigid proteins molecules in sarcoplasm.
- C. Death of tissue due to unavailability of O₂.
- D. Unavailability of ATP, which is necessary to break the link between actin and myosin.

Q.142 Which of the following has a morphology of a helical virus?

- A. TMV
- B. T4 Phage
- C. Poxvirus
- D. Herpes virus

Q.143 Which of the following is the key function of pleural cavity?

- A. Reduces friction between membranes
- B. Slide easily on one another
- C. Allows membrane to adhere on one another
- D. All of these are correct

Q.144 Which type of reflex arc affects muscles?

- A. Autonomic reflex arc
- B. Somatic reflex arc
- C. Both A and B
- D. None of these

Q.145 Carbon dioxide is fixed in

- A. Light reaction
- B. Dark reaction
- C. Aerobic respiration
- D. Anaerobic respiration

Q.146 After leaving the spinal cord, the spinal nerve gets divided into nerve fibers, connecting to which of the following?

- A. Receptors
- B. Effectors
- C. Midbrain
- D. All parts of the body

Q.147 Gene for blue opsin is present on which chromosome?

- A. 6
- B. 7
- C. 8
- D. 11

Q.148 Inner layers of the sponges are made up of which of the following?

- A. Pinacocytes
- B. Choanoderm
- C. Pinacoderm
- D. Choanocytes

Q.149 Natural selection can amplify or diminish variations that are?

- A. Heritable
- B. Non heritable
- C. Both A and B
- D. Acquired

Q.150 The double layered thin membranous sacs that cover lungs are called:

- A. Alveoli
- B. Diaphragm
- C. Epithelial membrane
- D. Pleura

Q.151 The A band further divides into the:

- A. Z-line
- B. A band
- C. H zone
- D. Z zone

Q.152 In a certain species of feline, all males are much larger than females. Members of either sex that are of intermediate size struggle to find mates. What principle best describes this phenomenon?

- A. Bottleneck affect
- B. Directional selection
- C. Genetic drift
- D. Disruptive selection

Q.153 Which of the following is false about the sarcoplasmic reticulum?

- A. The sarcoplasmic reticulum is a specialized smooth endoplasmic reticulum
- B. The sarcoplasmic reticulum releases calcium ions into the cytoplasm of the muscle cell
- C. A change in membrane potential causes the sarcoplasmic reticulum to become more permeable to calcium ions
- D. The sarcoplasmic reticulum is found only in voluntary muscle cells

Q.154 Human testes produce how many million sperms every day?

- A. 10
- B. 20
- C. 30
- D. 26

Q.155 All of the following are characteristics of prokaryotic cells except for?

- A. Unicellularity
- B. Lack of membrane-bound organelle
- C. Lack of a nucleus
- D. They are usually found in protists and fungi

Q.156 How many amino acids are constituents of proteins only?

- A. 25
- B. 20
- C. 21
- D. 22

Q.157 Each air-sac consists of several microscopic single layered structures called:

- A. Bronchioles
- B. Windpipe
- C. Bronchi
- D. Alveoli

Q.158 Which of the following characters of pea plant is dominant?

- A. Yellow pods

- B. White flowers
- C. Wrinkled seeds
- D. Axial flowers

Q.159 The stage of photosynthesis that actually produces sugar is ____

- A. The calvin cycle
- B. Photosystem I
- C. Photosystem II
- D. The light reaction

Q.160 In human, the total inside capacity of lungs is about:

- A. 3.5 liters
- B. 2.5 liters
- C. 5 liters
- D. 6 liters

Q.161 Neo-Darwinism has integrated discoveries and ideas from which of the following fields of study?

- A. Genetics
- B. Paleontology
- C. Taxonomy
- D. All of these

Q.162 The factor which decreases the oxygen saturation of hemoglobin:

- A. CO₂
- B. Temperature
- C. pH of blood
- D. All of these are correct

Q.163 The optimum pH for the functioning of pancreatic lipase is?

- A. 8
- B. 9
- C. 7
- D. 6

Q.164 For a diploid species, each locus is represented ____ in the genome of an individual

- A. Eight
- B. Once
- C. Twice
- D. Empty space

Q.165 Structures that were once functional in the past but no longer serve a purpose due to evolutionary adaptations and physiological changes are referred to as?

- A. Vestigial
- B. Analogous structures
- C. Homologous structures
- D. None of these

Q.166 Which of the following plays vital role in defense activity of macrophages?

- A. Lysozymes
- B. Lysosomes
- C. Mitochondria
- D. Nucleus

Q.167 Where does the human body store spermatozoa?

- A. Ejaculatory duct
- B. Seminal vesicle

- C. Seminiferous tubules
 - D. Epididymis
- Q.168 How do competitive inhibitors affect enzyme efficiency?**
- A. Raise the maximum rate of the enzymatic reaction
 - B. Lower the maximum rate of the enzymatic reaction
 - C. Lower the Michaelis constant
 - D. Raise the Michaelis constant
- Q.169 In most triploblastic after embryonic development, the three layers are represented as?**
- A. Their functions in the body
 - B. Structures associated with them
 - C. Separate layers of cells
 - D. Structures formed from them
- Q.170 Which of the following acts as the thermoregulator region of the brain?**
- A. Cerebellum
 - B. Cerebrum
 - C. Hypothalamus
 - D. Thalamus
- Q.171 The lipoproteins are rich in cholesterol _____**
- A. Chylomicrons
 - B. VLDL
 - C. LDL
 - D. HDL
- Q.172 Which of the following are the part of functional classification?**
- A. Ellipsoidal
 - B. Gomphosis
 - C. Syndesmosis
 - D. None of these
- Q.173 The pair of salivary glands located behind the jaws is called:**
- A. Sublingual gland
 - B. Submaxillary glands
 - C. Parotid glands
 - D. Adrenal glands
- Q.174 During lytic cycle how many phages are released from infected host cell?**
- A. 100-300
 - B. 100-500
 - C. 100-200
 - D. 100-400
- Q.175 Which brain part is responsible for our basic and primitive emotions?**
- A. Limbic system
 - B. Thalamus
 - C. Hypothalamus
 - D. Cerebrum
- Q.176 Fertilization of human egg occurs in:**
- A. Ovary
 - B. Uterus
 - C. Oviduct (fallopian tube)
 - D. Cervix
- Q.177 The haploid number of chromosomes in the human eggs and sperms are?**
- A. 22

- B. 23
- C. 21
- D. 24

Q.178 Notochord occurs throughout life and all through the length of the body in which of the following?

- A. Hemichordata
- B. Urochordata
- C. Vertebrata
- D. Cephalochordata

Q.179 The synthesis of ATP in the presence of oxygen is called?

- A. Respiration
- B. Calvin cycle
- C. Oxidative phosphorylation
- D. Chemiosmosis

Q.180 Bacteriophages have been used widely in genetic research, since they are the smallest and simplest biological entities capable of?

- A. Self replication in host cell
- B. Duplication
- C. Self duplication
- D. Multiplication in host cell

ENGLISH

Q.181 The baby _____ for milk now.

- A. Cry
- B. Cried
- C. Cries
- D. Is crying

Q.182 Had you worked hard (A)/ from the beginning (B)/ of the term (C)/ you will have passed. (D)

- A. Had you worked hard
- B. From the beginning
- C. Of the term
- D. You will have passed.

Q.183 Choose the correct sentence.

- A. Why can't I speak to Ms. Parvin today!
- B. Why can't I speak to Ms. Parvin today?
- C. Why cant I speak to Ms. Parvin today?
- D. Why can't i speak to Ms. Parvin today?

Q.184 _____ butter is melting

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

Q.185 Ahmad is always _____ about showing up for work because he feels that tardiness is a sign of irresponsibility.

- A. Tolerable
- B. Punctual
- C. Legible
- D. Delayed

Q.186 Get lost.

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

Q.187 Choose the correct spelling of the word

- A. Disappeared
- B. Disapeared
- C. Disapared
- D. Disapearred

Q.188 My brother's birthday is _____ the 5th of November.

- A. at
- B. in
- C. on
- D. about

Q.189 Choose the correct sentence.

- A. Ariel is trying hard in school this semester, her father said.
- B. Ariel is trying hard in school this semester,' her father said.
- C. Ariel is trying hard in school this semester?' her father said.
- D. Ariel is trying hard in School this semester,' her father said.

Q.190 Sana became _____ at typing because she practiced every day for six months.

- A. Reflective
- B. Redundant
- C. Proficient
- D. Dormant

Q.191 It was _____ dark, dreary night.

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

Q.192 Choose the correct sentence.

- A. Our head teacher is called mrs Amjad.
- B. Our head teacher is called Mrs. Amjad.
- C. Our head teacher is called Mrs Amjad.
- D. Our head teacher is called Mrs. Amjad!

Q.193 Sara denied _____ (leave) the car window open.

- A. Leave
- B. Leaving
- C. Left
- D. To have left

Q.194 Is there anything _____ you'd like to ask me about?

- A. else
- B. more
- C. extra
- D. much

Q.195 Sam _____ his homework at night.

- A. do
- B. doing
- C. is doing
- D. does

- Q.196** That night every one of the boat's crew _____ down with fever.
- A. is
 - B. are
 - C. was
 - D. were
- Q.197** What do you usually have for _____ breakfast?
- A. a
 - B. an
 - C. the
 - D. no article
- Q.198** Choose the present indefinite tense form of the sentence. "He had been sleeping."
- A. He has been sleeping.
 - B. He had slept.
 - C. He has slept.
 - D. He sleeps.
- Q.199** Choose the correct spelling of the word
- A. Shekspeare
 - B. Shakspare
 - C. Shakespare
 - D. Shakespeare
- Q.200** Over-speeding is a traffic offense which leads to _____ accidents.
- A. Troublesome
 - B. Final
 - C. Great
 - D. Gruesome

LOGICAL REASONING

Logical Games

- Q.201** From the following, which one is an odd pair?

- A. Petrol- Car
- B. Oil - Lamp
- C. Coal - Engine
- D. Smoke_ Fire

Statements and Actions

- Q.202** Statement The ratio is poverty is at alarming point in our country. I. The Government needs to take step for economic and development growth. II. The lower class area of people in our country needs to be supported as most of them lives hand to mouth.

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

Dependent Causes/ Independent Causes/

- Q.203** Statement: Large number of people living in the low-lying areas has been evacuated during the last few days to safer places. The government has rushed in relief supplies to the people living in the affected areas.

- 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

Logical Games

Q.204 What should come next to save, secure, protect, ?

- A. Guard
- B. Lock
- C. Conserve
- D. Humble

Dependent Causes/ Independent Causes/

Q.205 The queen expressed her desire to marry the king again. II. The king would not remarry his ex-wife.

- 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.

Verbal Classification

Q.206 Which of following can never be ending of a perfect square?

- A. 0
- B. 0
- C. 14
- D. Both A and B

Making Judgements

Q.207 A thermometer is to temperature as a compass is to

- A. Pressure
- B. Humidity
- C. Direction
- D. Needle

Dependent Causes/ Independent Causes/

Q.208 The department of finance has levied more taxes. II. The economic shortfall of the country has slashed.

- 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.

Statements and Actions

Q.209 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

Fact Checking

- 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

As we know there is lot of mistakes in answer keys of PMC Practice tests, so I have decided to rectify all in proper in SKN STUDY GROUP

Join it

SKN

PMC PRACTICE TEST 18

PHYSICS

- Q.1 For given applied voltage, what will happen if we increase frequency of the applied voltage?
A. Eddy current loss will decrease
B. Eddy current loss will increase
C. Eddy current loss will remain unchanged
D. None of these
- Q.2 Which rays have highest ionizing power
A. Alpha
B. Beta
C. Gamma
D. White
- Q.3 Force acting on a negative charge is always:
A. In the direction opposite to electric field
B. In the direction of electric field
C. In the direction perpendicular to electric field
D. In the direction perpendicular to the velocity of charge
- Q.4 The acceleration of a moving object can be defined as:..
A. Rate of change in speed
B. Rate of change in velocity
C. Rate of change in distance
D. Rate of change in displacement
- Q.5 The maximum value of displacement from the mean position is called:
A. Height
B. Amplitude
C. Frequency
D. Distance
- Q.6 A steady current passing through a conductor produces
A. Electric field
B. Magnetic field
C. Both of these
D. None of these
- Q.7 1 kilo ohm = _____ ohm
A. 10^3 ohm
B. 10^2 ohm
C. 10^4 ohm
D. None of them
- Q.8 The charge on electron is equal to
A. Proton
B. Two protons
C. Two neutrons
D. None of these
- Q.9 The speed of sound in water is approximately:
A. 1500 m/s
B. 5000 m/s
C. 330 m/s
D. 50 m/s
- Q.10 A succession of events which bring the system back to its initial condition is called:
A. Oscillation
B. Vibration
C. Cycle
D. Circle
- Q.11 If peak Voltage across a full wave rectifier is 20V then V_{rms} is
A. 7.07
B. 14.14 v
C. 16.8V
D. 12V
- Q.12 The relation between linear and angular velocity is:
A. $v = r \times \omega$
B. $v = \omega \times r$
C. $\omega = v \times r$
D. $r = v \times \omega$
- Q.13 The maximum velocity of SHM is a_0 the period of oscillation is
A. $2\pi x_0/a_0$
B. $2\pi a_0/x_0$
C. $2\pi a_0 \times x_0$
D. $2\pi/a_0 x_0$
- Q.14 In Boyle's law, which quantity is constant
A. P
B. T
C. V
D. R
- Q.15 An apparatus which is used to measure current voltage and resistance
A. Multimeter
B. Ammeter
C. Galvanometer
D. Voltmeter
- Q.16 Which is the unit of energy
A. Joule
B. Erg
C. Unit(Kwh)
D. All of these
- Q.17 The resistance of a human body is about:
A. 12 ohm
B. 120 ohm
C. 120K ohm
D. 120M ohm

- Q.18** A sealed container contains water at 10 degrees C and 0 degrees C. If the system is thermally isolated, then what happens to the total energy of the system?
 A. It decreases
 B. It increases
 C. It increases then remains same
D. It remains same
- Q.19** Average speed of a object after a completing a circle of 5 m radius in 5 seconds
A. 2π
 B. π
 C. Zero
 D. 10π
- Q.20** When a body moves in a circle of radius r with angular speed ω , its centripetal acceleration is
 A. ωr
B. $\omega^2 r$
 C. ωr^2
 D. ω/r
- Q.21** If a projectile is launched with 3m/s velocity at 60 degree angle then at highest point its horizontal velocity is
 A. 3 m/s
C. 1.5 m/s
 B. 2m/s
 D. 1.8 m/s
- Q.22** Transistors can be used as
 A. Half wave rectifier
 B. Full wave rectifier
 C. Both
D. None of these
- Q.23** A body moves a distance of 10 m along a straight line under the action of 5 N force. If work done is 25 J, then angle between the force and direction of motion of the body will be:
 A. 75°
B. 60°
 C. 45°
 D. 30°
- Q.24** When a light ray travels from the medium of low refractive index to a medium of high refractive index. Its....
 A. Speed decreases, frequency decreases, wavelength unchanged
 B. Speed decreases, frequency unchanged, wavelength unchanged
 C. Speed unchanged, frequency increases, wavelength decreases
D. Speed decreases, frequency unchanged, wavelength decreases
- Q.25** In case of harmonic oscillator total energy remains
 A. Variable
C. Constant
 B. Infinity
 D. Zero
- Q.26** $1/R_{eq} = 1/R_1 + 1/R_2 + 1/R_3 + \dots + 1/R_n$ is the combination in
 A. Series
B. Parallel
 C. Both of them
 D. None of them
- Q.27** A wave is produced by
A. Disturbance
 B. Heating
 C. Freezing
 D. Clapping
- Q.28** You have three capacitors and a battery. In which of the following combinations of the three capacitors is the maximum possible energy stored when the combination is attached to the battery?
A. In parallel
 B. In series
 C. Either way because both combinations have the same capacitance
 D. We cannot determine, because presence of resistance in the circuit determines capacitance
- Q.29** Ozone reflects ____ radiation from sun back into space
 A. IR
B. UV
 C. Alpha
 D. All of these
- Q.30** In a standing wave, the distance between two consecutive nodes is:
 A. Equal to one wavelength
 B. Equal to two wavelength
C. Equal to half of wavelength
 D. Equal to quarter of wavelength
- Q.31** X-rays are diffracted from____
 A. mirror
 B. crystal
 C. gas molecules
 D. all of these
- Q.32** If for a gas $dW=0$, $dQ<0$ then
 A. Temperature increases
 B. Pressure increases
C. pressure decreases
 D. Volume decreases
- Q.33** Quarks are ____ spin particles
 A. Full
B. Half
 C. Quarter
 D. None of these

- Q.34** When 2Ω , 4Ω and 6Ω resistors are connected in parallel their resultant equivalent resistance will be
 A. 12Ω
C. $12/11\Omega$
 B. $11/12\Omega$
 D. Data is insufficient
- Q.35** What is echo of sound?
A. When sound reflects back
 B. When sound gets absorbed
 C. When sound penetrates into objects
 D. All of them
- Q.36** Henry is unit of
 A. Self inductance only
C. Both a) and b)
 B. Mutual inductance
 D. Emf
- Q.37** Work done in an adiabatic process in a gas depends on
 A. Change in pressure
 C. Change in Volume
B. Change in temperature
 D. All of these
- Q.38** X-rays images are detected on ____ screen
A. Phosphorous
 B. Carbon
 C. Sodium
 D. Helium
- Q.39** Black body is considered ideal when it
 A. Emits all radiation
C. Both a and b
 B. Absorbs all radiation
 D. None of these
- Q.40** The SI unit of velocity is
A. m/s
 B. $1/s$
 C. m/s^2
 D. m/s^3
- Q.41** Wave particle duality does not explain
 A. Momentum
 C. Mass
B. Frequency
 D. All of these
- Q.42** A negative point charge is moving along a circular orbit around a positive point charge. Which aspect(s) of the electric force on the negative point charge will remain constant as it moves?
 A. Direction
 C. Both direction and magnitude
B. Magnitude
 D. Neither direction and magnitude
- Q.43** In the VT diagram slope of curve is
 A. R
 C. P
B. nR/P
 D. R/P
- Q.44** An a.c. generator consists of a coil of 50 turns and an area 2.5 m^2 rotating at an angular speed of 60 rad s^{-1} in a uniform magnetic field of 0.3 T between two fixed pole pieces. What is the flux through the coil, when the current is zero?
A. Maximum
 B. Minimum
 C. Zero
 D. Independent
- Q.45** Find the resistance if voltage of the circuit is 45 volts and current 30 Amp?
 A. 1.6 ohm
 C. 1.7 ohm
B. 1.5 ohm
 D. 1.8 ohm
- Q.46** Energy stored in an inductor is
 A. Electric energy
 C. Electromagnetic energy
B. Magnetic energy
 D. Both a) and b)
- Q.47** The electron is purely a ____ when free
 A. Particle nature
C. Dual nature
 B. Wave nature
 D. It transform to photon
- Q.48** How many milligrams of tritium will remain after 49.2 years if the starting amount is 32 mg? The half-life of tritium is 12.3 years
 A. 8mg
 C. 1mg
B. 2mg
 D. 4mg
- Q.49** If angular velocity increases the ____ also increases
 A. Time period
 C. Vibration
B. Frequency
 D. None of these
- Q.50** In half wave rectification, the output DC voltage is obtained across the load for
 A. The positive half cycle of input AC
 B. The negative half cycle of input AC
 C. The positive and negative half cycles of input AC
D. Either positive or negative half cycle of input AC
- Q.51** If a car moves from 15 m/s to 5 m/s in 10 sec then average acceleration is
A. 1 m/s^2
 B. 2 m/s^2

- C. 5 m/s^2 D. 10 m/s^2
- Q.52 The charge and mass of photon is**
A. 0,0 B. 1+,0
 C. 1-,0 D. 1,1
- Q.53 A beam of ion with velocity $2 \times 10^5 \text{ m/s}$ enters normally into a magnetic field of 0.04 T. The specific charge of ion is $5 \times 10^7 \text{ C/kg}$. Radius of circle is**
A. 0.1 m B. 0.16 m
 C. 0.2 m D. 0.25 m
- Q.54 Time constant is defined as the time required by the capacitor:**
A. To deposit 63% of the equilibrium charge
 B. To deposit 36% of the equilibrium charge
 C. To deposit 63 times of the equilibrium charge
 D. To deposit 36 times of the equilibrium charge
- Q.55 A heater is used for 5 minutes to heat 500 g of water from 20°C to 50°C. What is the power of heater? Specific heat capacity of water is 4.2 J/g°C .**
A. 1260 W B. 12.6 kW
 C. 210 Kw D. 12.6 W
- Q.56 A variable force $F = 2x$ is applied what will be the work done in moving the particle from $X = 10$ to 0**
 A. 100 J B. 50 J
 C. -50 J D. -100

CHEMISTRY

- Q.57 During bond formation d orbitals splits into _____ of orbitals?**
 A. 3 sets B. 4 sets
 C. 5 sets D. 2 sets
- Q.58 Which of the following Halogen react fast with alkanes in substitution reactions?**
 A. Cl_2 **B. F_1**
 C. I_2 D. Br_2
- Q.59 Compounds having C and H atoms and their derivatives are called as _____?**
 A. Inorganic compounds **B. Organic compounds**
 C. Biochemical compounds D. Carbohydrates
- Q.60 Energy released when one mole of an ionic crystal is formed is**
 A. Activation energy B. Potential energy
 C. Energy of formation D. Lattice Energy
- Q.61 In the rate equation $R = k[A]^a[B]^b$, a and b as exponents decides**
 A. Direction of reaction B. Extent of Reaction
C. Order of Reaction D. Temperature of Reaction
- Q.62 The group which leaves from the substrate in a nucleophilic substitution reaction is called as _____?**
A. Leaving group B. Electrophile
 C. Substrate D. Weak nucleophile
- Q.63 Le Chatelier Principle is about**
 A. Reaction Mixture B. Reactants
C. Equilibrium Mixture D. Products
- Q.64 Butyric acid is derived from the word butyrum which means _____?**
 A. Milk **B. Butter**
 C. Cheese D. None of these
- Q.65 The breakdown of molecular ions from natural products give important information about**
 A. size B. position
 C. Shape **D. Structure**
- Q.66 Which of the following acid is used a coagulant for latex in the rubber industry?**
A. Acetic acid B. Butyric acid
 C. Propionic acid D. All of these
- Q.67 Linde's Method is based on**
A. Joule-Thomson effect B. Hess effect
 C. Graham's effect D. None of these
- Q.68 SI unit for energy change in a chemical reaction is**
 A. Joule/mole B. KJ/mole
 C. KJ mol^{-1} **D. All of these**

- Q.69 Reduction of ketones produce _____?**
 A. Aldehydes
 B. Methanol
 C. Primary alcohols
 D. Secondary alcohols
- Q.70 Change in concentration per unit time is called**
 A. Equilibrium constant
 B. Rate constant
 C. Rate of reaction
 D. All of these
- Q.71 Hydrolysis means reaction with**
 A. Oxygen
 B. Hydrogen
 C. Water
 D. Air
- Q.72 In a carboxylic acid dimer, how many oxygens are present in the ring?**
 A. 4
 B. 2
 C. 3
 D. 5
- Q.73 Due to which of the following forces present in water aquatic life is protected in Cold climate?**
 A. Dipole dipole forces
 B. Debye forces
 C. H-bonding
 D. London dispersion forces
- Q.74 The elements with intermediate value of ionization energy value are called**
 A. Metals
 B. Non metals
 C. Metalloid
 D. Transition elements
- Q.75 Denaturing of protein is _____ process.**
 A. Reversible
 B. Irreversible
 C. Equilibrium
 D. All of these
- Q.76 Decrease in Oxidation number is**
 A. Oxidation
 B. Reduction
 C. Both A and B
 D. None of these
- Q.77 In industries, methanol is prepared from?**
 A. Marsh gas
 B. Carbon dioxide and water
 C. Water gas
 D. Methane + H₂
- Q.78 Which one of the following is correct value of resonance energy of benzene?**
 A. 155.5kJ/mol
 B. 150.5kJ/mol
 C. 170 kJ/mol
 D. 140.5kJ/mol
- Q.79 NaNO₃ and CaCO₃ are**
 A. Allotropes
 B. Amorphous
 C. Isomorphous
 D. Polymorphous
- Q.80 Wholar prepare urea from _____?**
 A. Ammonium cyanate
 B. Ammonium acetate
 C. Ammonium urease
 D. Ammonium Carbonate
- Q.81 Avogadro's hypothesis is applicable to _____ only.**
 A. All gases
 B. Inert gases
 C. Ideal gases
 D. Light gases
- Q.82 Alkanes mostly give _____?**
 A. Addition reactions
 B. Elimination reactions
 C. Reduction reactions
 D. Substitution reactions
- Q.83 If Ammonia is not withdrawn continuously from equilibrium mixture its yield will be**
 A. Increased
 B. Decreased
 C. Remain unchanged
 D. None of these
- Q.84 In complex compounds the oxidation number is written in**
 A. English
 B. Greek
 C. Roman numeral
 D. Hebrew
- Q.85 The radius of an electron orbit in a hydrogen atom is of the order of**
 A. 1 -8 m
 B. 1 -1 m
 C. 1 -11 m
 D. 1 -13 m
- Q.86 If number of molecules of different gases are same at S.T.P, the occupied volume will be**
 A. Greater
 B. Same
 C. Smaller
 D. Twice
- Q.87 Which of the following Shows tautomerism?**
 A. Amino acids
 B. Ketones
 C. Carboxylic acids
 D. All of these

- Q.88 Which element is required for making Chlorophyll in Leaf?**
 A. Si B. Ba
C. Mg D. Ca
- Q.89 It is the brown colored gas**
 A. N_2 B. NO_2
 C. H_2 D. O_2
- Q.90 In a galvanic cell, Zinc Sulphate left beaker acquires a**
 A. A negative charge B. A net positive charge
 C. Neutral D. None of these
- Q.91 Crystal are obtained by Saturated Solution through**
 A. Sedimentation B. Drying
 C. Heating D. Cooling
- Q.92 Which of following is trihydric alcohol**
 A. Glycol and cyclohexanol B. Glycerol
 C. Ethylene glycol D. Resorcinol
- Q.93 Which of the following compound is a Alcohol?**
 A. CH_3-O-CH_3 B. CH_3-OH
 C. CH_3COOH D. CH_3COCH_3
- Q.94 Carbonyl system having no alpha hydrogen undergoes _____?**
 A. Aldol condensation B. Cannizzaro reaction
 C. Haloform reaction D. Oxidation reaction
- Q.95 A system is the _____ part of universe?**
 A. Real B. Unreal
 C. Imaginary D. Both real or imaginary
- Q.96 Which of the following forces are developed only for few moments?**
 A. Dipole dipole forces B. Debye forces
C. London dispersion forces D. H-bonding
- Q.97 Gases are ideal at high _____ and become non ideal at high _____**
 A. Pressure, volume B. Pressure, temperature
C. Temperature, Pressure D. Volume, pressure
- Q.98 A peptide having up to 10000 amino acids is called as _____?**
 A. Dipeptide B. Protein
C. Polypeptide D. Peptide
- Q.99 Which of the following is best method to prepare alkyl halides from alcohols?**
 A. Reaction of alcohol with HX B. Reaction of alcohol with $SOCl_2$
 C. Reaction of Alcohol with PCl_3 D. Reaction of Alcohol with PCl_5
- Q.100 The electronic configuration of Ne^{-1} is**
A. $1s^2, 2s^2, 2p_x^2, 2p_y^2, 2p_z^2$ B. $1s^2, 2s^2, 2p_x^2,$
 C. $1s^2, 2s^2, 2p_x^2, 2p_y^1$ D. $1s^2, 2s^2, 2p_x^2, 2p_y^2, 2p_z^1$
- Q.101 For the reaction; $NaOH + HCl \rightarrow NaCl + H_2O$ the change in enthalpy is called as _____?**
 A. Enthalpy of formation B. Enthalpy of neutralization
 C. Enthalpy of Sublimation D. Enthalpy of reaction
- Q.102 What is the value of enthalpy of neutralization when one mole of base reacts with one mole of acid?**
 A. - 60.5 kJ/mol B. -46.5kJ/mol
 C. -70.5 kJ/mol **D. -57.4kJ/mol**
- Q.103 In Down Cells Cathode is made up of**
 A. Graphite B. Copper
C. Iron D. Inert material
- Q.104 In organic chemistry, we deal with**
 A. Carbon B. Hydrogen
C. Hydrocarbons D. Potassium
- Q.105 Which of the following products are formed from cannizzaro reaction?**
 A. Aldol product B. Alcohol and carboxylate salt
 C. Alcohol and carboxylic acid D. Unsaturated reaction
- Q.106 he peaks forms in a mass spectrograph shows number of _____ of an element**
 A. Electrons B. Isotopes
 C. Protons D. Neutrons

- Q.107** Percentage of free space in a body centered cubic unit cell is
A. .32
 B. .34
 C. .28
 D. .3
- Q.108** Kinetic molecular theory was proposed by
 A. Berzelius
C. Bernoulli
 B. Boltzmann
 D. Maxwell
- Q.109** Tetra ethyl addition to petrol is example of:
A. Positive catalysis
 B. Negative catalysis
 C. Both a & b
 D. None
- Q.110** First step in the SN_1 reaction is ____?
 A. Dehydration
C. Ionization
 B. Protonation
 D. Attack of nucleophile and departure of leaving group
- Q.111** Location of transition elements is in between?
A. S and p block
 B. D and F block
 C. S and F block
 D. None
- Q.112** Which character of p-orbital determines the geometry of molecules
 A. Planar
 B. Axial
 C. Non directional
D. Directional

BIOLOGY

- Q.113** Select the phase/s of breathing:
 A. Inhalation
C. Both and A and B
 B. Exhalation
 D. Vocal waves
- Q.114** Quantitative study of energy relationships in biological systems obeys?
 A. Bioenergetics
 C. Laws of thermochemistry
B. Laws of thermodynamics
 D. Laws of chemical energetic
- Q.115** Spinal cord is the part of the:
 A. Peripheral nervous system
 C. Autonomic nervous system
B. Central nervous system
 D. None of these
- Q.116** Haemophilia B is caused in the absence of:
 A. Factor XI
 C. Factor VIII
B. Factor IX
 D. Factor VII
- Q.117** Adaptation of traits to better fill a niche is known as which of the following?
 A. Polymorphism
C. Specialization
 B. Gene linkage
 D. Replication
- Q.118** Euplectella belongs to phylum _____.
A. Porifera
 C. Echinodermata
 B. Ctenophora
 D. None of the above.
- Q.119** Phagocytosis is a form of _____. During phagocytosis, the cell membrane folds inwards in the form of a vacuole to engulf solid particles.
 A. Pinocytosis
C. Endocytosis
 B. Exocytosis
 D. Erythrocytosis
- Q.120** Which element has function in opening and closing of stomata?
A. K
 C. Cu
 B. Mg
 D. Fe
- Q.121** What is the name of the tube that carries the sperm from the testes to the urethra?
 A. Penis
 C. Prostate gland
D. Sperm duct
 B. Seminal vesicles
- Q.122** In mixed inhibition, the allosteric affect effects
 A. Shape of substrate
C. Shape of enzyme
 B. Shape of inhibitor
 D. None of these
- Q.123** In non-competitive inhibition, the quantity which remains same as the reaction proceed is?
 A. V_{max}
 C. K_o
B. K_m
 D. V_o
- Q.124** The Prokaryotic Life is characterized by
 A. Absence of locomotion
 C. Absence of Protein
B. Absence of nuclear envelope
 D. Absence of nuclear material

- Q.125 Which of the light is mainly absorbed by the plants?**
 A. Orange B. Red
 C. Green **D. Both A and B**
- Q.126 Enzymes involved in protein synthesis are most likely to associated with which cell organelle?**
 A. Rough endoplasmic reticulum B. Golgi complex
C. Ribosome D. All of the above
- Q.127 In the evolutionary sense, which organism has the highest fitness?**
 A. A sterile mule that can pull over 800 pounds
 B. A childless human male who lives to be over one hundred years old
 C. A dog who cannot give birth due to a hip abnormality, but is healthy in all other respects
D. A prairie dog that, though smaller than the average member of her species, has twice as many healthy young in each litter
- Q.128 Secretion of insulin from beta cells of pancreas is an example of which membrane function?**
 A. Endocytosis B. Phagocytosis
C. Exocytosis D. Pinocytosis
- Q.129 What is the most common electron transport chain?**
A. Non-cyclic electron flow B. Cyclic electron flow
 C. Circular electron flow D. Both B and C
- Q.130 AIDs was firstly reported in which types of individuals?**
 A. Heterosexuals **B. Homosexuals**
 C. Both D. None
- Q.131 When did experimental administration of the HIV virus begin?**
 A. 2002 **B. 2001**
 C. 2005 D. 1999
- Q.132 Malonic acid is an example of which type of inhibitors?**
 A. Irreversible inhibitor B. Reversible inhibitor
 C. Non-competitive inhibitor **D. Competitive inhibitor**
- Q.133 What are osteocytes?**
 A. White blood cell **B. Bone cell**
 C. Brain cell D. None of these
- Q.134 The oviduct generally called:**
 A. Fallopian tube B. Uterine tube
C. Both A and B D. Uterus
- Q.135 In Prokaryotes, respiration enzymes are present on**
A. Mesosomes and cell membrane B. Cell membrane and ribosome
 C. Mososomeses and ribosomes D. All of Above
- Q.136 Lysosomes are known as "suicidal bags" because of?**
 A. Parasitic activity B. Presence of food vacuoles
C. Hydrolytic activity D. Catalytic activity
- Q.137 The skeleton of the sponges is in the form of variously shaped needle like structures called?**
 A. Stipules B. Brails
 C. Spines **D. Spicules**
- Q.138 A chemical substance which can react (in place of substrate) with the enzyme but is not transformed into product/s and thus blocks the active site temporarily or permanently is called?**
 A. Coenzyme B. Blocker
C. Inhibitor D. Cofactor
- Q.139 The enzyme-substrate complex is formed in which part of the enzyme molecule?**
A. Binding site B. Allosteric site
 C. Catalytic site D. None of the above
- Q.140 The male gonads are known as?**
A. Testes B. Testosterone
 C. Ovaries D. Ovum
- Q.141 Rigor mortis after death results due to which?**
 A. Decrease in body temperature after death.
 B. Accumulation of rigid proteins molecules in sarcoplasm.
 C. Death of tissue due to unavailability of O₂.
D. Unavailability of ATP, which is necessary to break the link between actin and myosin.

- Q.142 Which of the following has a morphology of a helical virus?**
A. TMV B. T4 Phage
 C. Poxvirus D. Herpes virus
- Q.143 Which of the following is the key function of pleural cavity?**
 A. Reduces friction between membranes
 B. Slide easily on one another
 C. Allows membrane to adhere on one another
D. All of these are correct
- Q.144 Which type of reflex arc affects muscles?**
 A. Autonomic reflex arc **B. Somatic reflex arc**
 C. Both A and B D. None of these
- Q.145 Carbon dioxide is fixed in**
 A. Light reaction **B. Dark reaction**
 C. Aerobic respiration D. Anaerobic respiration
- Q.146 After leaving the spinal cord, the spinal nerve gets divided into nerve fibers, connecting to which of the following?**
 A. Receptors B. Effectors
 C. Midbrain **D. All parts of the body**
- Q.147 Gene for blue opsin is present on which chromosome?**
 A. 6 **B. 7**
 C. 8 D. 11
- Q.148 Inner layers of the sponges are made up of which of the following?**
 A. Pinacocytes B. Choanoderm
 C. Pinacoderm **D. Choanocytes**
- Q.149 Natural selection can amplify or diminish variations that are?**
A. Heritable B. Non heritable
 C. Both A and B D. Acquired
- Q.150 The double layered thin membranous sacs that cover lungs are called:**
 A. Alveoli B. Diaphragm
 C. Epithelial membrane **D. Pleura**
- Q.151 The A band further divides into the:**
 A. Z-line B. A band
C. H zone D. Z zone
- Q.152 In a certain species of feline, all males are much larger than females. Members of either sex that are of intermediate size struggle to find mates. What principle best describes this phenomenon?**
 A. Bottleneck affect B. Directional selection
 C. Genetic drift **D. Disruptive selection**
- Q.153 Which of the following is false about the sarcoplasmic reticulum?**
 A. The sarcoplasmic reticulum is a specialized smooth endoplasmic reticulum
 B. The sarcoplasmic reticulum releases calcium ions into the cytoplasm of the muscle cell
 C. A change in membrane potential causes the sarcoplasmic reticulum to become more permeable to calcium ions
D. The sarcoplasmic reticulum is found only in voluntary muscle cells
- Q.154 Human testes produce how many million sperms every day?**
 A. 10 **B. 20**
 C. 30 D. 26
- Q.155 All of the following are characteristics of prokaryotic cells except for?**
 A. Unicellularity
 B. Lack of membrane-bound organelle
 C. Lack of a nucleus
D. They are usually found in protists and fungi
- Q.156 How many amino acids are constituents of proteins only?**
A. 25 B. 20
 C. 21 D. 22
- Q.157 Each air-sac consists of several microscopic single layered structures called:**
 A. Bronchioles B. Windpipe
 C. Bronchi **D. Alveoli**
- Q.158 Which of the following characters of pea plant is dominant?**
 A. Yellow pods B. White flowers
 C. Wrinkled seeds **D. Axial flowers**

- Q.159** The stage of photosynthesis that actually produces sugar is ____
A. The calvin cycle B. Photosystem I
 C. Photosystem II D. The light reaction
- Q.160** In human, the total inside capacity of lungs is about:
 A. 3.5 liters B. 2.5 liters
C. 5 liters D. 6 liters
- Q.161** Neo-Darwinism has integrated discoveries and ideas from which of the following fields of study?
 A. Genetics B. Paleontology
 C. Taxonomy **D. All of these**
- Q.162** The factor which decreases the oxygen saturation of hemoglobin:
 A. CO₂ B. Temperature
 C. pH of blood **D. All of these are correct**
- Q.163** The optimum pH for the functioning of pancreatic lipase is?
 A. 8 **B. 9**
 C. 7 D. 6
- Q.164** For a diploid species, each locus is represented ____ in the genome of an individual
 A. Sight B. Once
C. Twice D. Empty space
- Q.165** Structures that were once functional in the past but no longer serve a purpose due to evolutionary adaptations and physiological changes are referred to as?
A. Vestigial B. Analogous structures
 C. Homologous structures D. None of these
- Q.166** Which of the following plays vital role in defense activity of macrophages?
 A. Lysozymes **B. Lysosomes**
 C. Mitochondria D. Nucleus
- Q.167** Where does the human body store spermatozoa?
 A. Ejaculatory duct B. Seminal vesicle
 C. Seminiferous tubules **D. Epididymis**
- Q.168** How do competitive inhibitors affect enzyme efficiency?
 A. Raise the maximum rate of the enzymatic reaction
 B. Lower the maximum rate of the enzymatic reaction
 C. Lower the Michaelis constant
D. Raise the Michaelis constant
- Q.169** In most triploblastic after embryonic development, the three layers are represented as?
 A. Their functions in the body B. Structures associated with them
 C. Separate layers of cells **D. Structures formed from them**
- Q.170** Which of the following acts as the thermoregulator region of the brain?
 A. Cerebellum B. Cerebrum
C. Hypothalamus D. Thalamus
- Q.171** The lipoproteins are rich in cholesterol ____
 A. Chylomicrons B. VLDL
C. LDL D. HDL
- Q.172** Which of the following are the part of functional classification?
 A. Ellipsoidal B. Gomphosis
 C. Syndesmosis **D. None of these**
- Q.173** The pair of salivary glands located behind the jaws is called:
 A. Sublingual gland **B. Submaxillary glands**
 C. Parotid glands D. Adrenal glands
- Q.174** During lytic cycle how many phages are released from infected host cell?
A. 100-300 B. 100-500
 C. 100-200 D. 100-400
- Q.175** Which brain part is responsible for our basic and primitive emotions?
A. Limbic system B. Thalamus
 C. Hypothalamus D. Cerebrum
- Q.176** Fertilization of human egg occurs in:
 A. Ovary B. Uterus
C. Oviduct (fallopian tube) D. Cervix
- Q.177** The haploid number of chromosomes in the human eggs and sperms are?
 A. 22 **B. 23**

- C. 21
Q.178 Notochord occurs throughout life and all through the length of the body in which of the following?
A. Hemichordata
C. Vertebrata
B. Urochordata
D. Cephalochordata
- Q.179 The synthesis of ATP in the presence of oxygen is called?
A. Respiration
C. Oxidative phosphorylation
B. Calvin cycle
D. Chemiosmosis
- Q.180 Bacteriophages have been used widely in genetic research, since they are the smallest and simplest biological entities capable of?
A. Self replication in host cell
C. Self duplication.
B. Duplication
D. Multiplication in host cell

ENGLISH

- Q.181 The baby _____ for milk now.
A. Cry
C. Cries
B. Cried
D. Is crying
- Q.182 Had you worked hard (A)/ from the beginning (B)/ of the term (C)/ you will have passed. (D)
A. Had you worked hard
C. Of the term
B. From the beginning
D. You will have passed.
- Q.183 Choose the correct sentence.
A. Why can't I speak to Ms. Parvin today!
C. Why cant I speak to Ms. Parvin today?
B. Why can't I speak to Ms. Parvin today?
D. Why can't i speak to Ms. Parvin today?
- Q.184 _____ butter is melting
A. A
C. The
B. An
D. No article
- Q.185 Ahmad is always _____ about showing up for work because he feels that tardiness is a sign of irresponsibility.
A. Tolerable
C. Legible
B. Punctual
D. Delayed
- Q.186 Get lost.
A. Declarative
C. Interrogative
B. Imperative
D. Exclamatory
- Q.187 Choose the correct spelling of the word
A. Disappeared
C. Disapared
B. Disapeared
D. Disapearred
- Q.188 My brother's birthday is _____ the 5th of November.
A. at
C. on
B. in
D. about
- Q.189 Choose the correct sentence.
A. Ariel is trying hard in school this semester, her father said.
B. Ariel is trying hard in school this semester,' her father said.
C. Ariel is trying hard in school this semester?' her father said.
D. Ariel is trying hard in School this semester,' her father said.
- Q.190 Sana became _____ at typing because she practiced every day for six months.
A. Reflective
C. Proficient
B. Redundant
D. Dormant
- Q.191 It was _____ dark, dreary night.
A. a
C. the
B. an
D. no article
- Q.192 Choose the correct sentence.
A. Our head teacher is called mrs Amjad.
B. Our head teacher is called Mrs. Amjad.
C. Our head teacher is called Mrs Amjad.
D. Our head teacher is called Mrs. Amjad!
- Q.193 Sara denied _____ (leave) the car window open.
A. Leave
C. Left
B. Leaving
D. To have left

- Q.194 Is there anything _____ you'd like to ask me about?
 A. else B. more
 C. extra D. much
- Q.195 Sam _____ his homework at night.
 A. do B. doing
 C. is doing D. does
- Q.196 That night every one of the boat's crew _____ down with fever.
 A. is B. are
 C. was D. were
- Q.197 What do you usually have for _____ breakfast?
 A. a B. an
 C. the D. no article
- Q.198 Choose the present indefinite tense form of the sentence. "He had been sleeping."
 A. He has been sleeping. B. He had slept.
 C. He has slept. D. He sleeps.
- Q.199 Choose the correct spelling of the word
 A. Shekspeare B. Shakspeare
 C. Shakespare D. Shakespeare
- Q.200 Over-speeding is a traffic offense which leads to _____ accidents.
 A. Troublesome B. Final
 C. Great D. Gruesome

LOGICAL REASONING

Logical Games

- Q.201 From the following, which one is an odd pair?
 A. Petrol- Car B. Oil - Lamp
 C. Coal – Engine D. Smoke _ Fire
- Statements and Actions
- Q.202 Statement The ratio is poverty is at alarming point in our country. I. The Government needs to take step for economic and development growth. II. The lower class area of people in our country needs to be supported as most of them lives hand to mouth.
 A. Both of them follows B. None of them follows
 C. Only I follows D. Only b follows
- Dependent Causes/ Independent Causes/
- Q.203 Statement: Large number of people living in the low-lying areas has been evacuated during the last few days to safer places. The government has rushed in relief supplies to the people living in the affected areas.
 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
- Logical Games
- Q.204 What should come next to save, secure, protect?
 A. Guard B. Lock
 C. Conserve D. Humble
- Dependent Causes/ Independent Causes/
- Q.205 The queen expressed her desire to marry the king again. II. The king would not remarry his ex-wife.
 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.

Verbal Classification

Q.206 Which of following can never be ending of a perfect square?

A. 0

B. 0

C. 1 4

D. Both A and B

Making Judgements

Q.207 A thermometer is to temperature as a compass is to

A. Pressure

B. Humidity

C. Direction

D. Needle

Dependent Causes/ Independent Causes/

Q.208 The department of finance has levied more taxes. II. The economic shortfall of the country has slashed.

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.

Statements and Actions

Q.209 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

Fact Checking

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

As we know there is lot of mistakes in answer keys of PMC Practice tests, so I have decided to rectify all in proper in SKN STUDY GROUP

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