PMC PRACTICE TEST 05

CHEMISTRY

Q.1 Alkanes are called as_____?
A. Olefines
B. Paraffins
C. Reactive
D. All of these

Q.2 Thermal energy is also called as_____?
A. Internal energy
B. Temperature of a body
C. Kinetic energy
D. Heat energy

Q.3 Which of the following properties does not belong to Gases?
A. Indefinite volume
B. Indefinite shape
C. Low density
D. Strong interactions

Q.4 Each half reaction in ion electron method is balanced by adding
A. Electrons on left hand side
B. Electron on ride hand side
C. Both left- or right-hand side
D. None of these

Q.5 The formula of Chile Saltpeter is
A. $NaNO_3$
B. $CaCO_3$
C. $Ba(NO_3)_2$
D. NH_4Cl

Q.6 To conduct electricity through Ionic Solid, ions should be
A. Excited
B. Energized
C. Free
D. In random Motion

Q.7 In Haber's process the final product ammonia is converted into
A. Solid state
B. Liquid state
C. Gaseous state
D. None of these

Q.8 When an electron is added, energy is released, so electron affinity is given the
A. Positive sign
B. Negative sign
C. Neutral
D. Delta sign

Q.9 The compounds which belongs to same functional group forms a_____?
A. Class
B. Group
C. Homologous series
D. None of these

Q.10 Globulin proteins are found in:
A. Animals
B. Plants
C. Human beings
D. None

Q.11 How enthalpy changes of reactions can be measured?
A. By spectrometry
B. By conductometry
C. By calorimetry
D. By refractometry

Q.12 Which of the following forces has ability to form clusters and large molecules?
A. Ionic bond
B. Induced dipole forces
C. H—bond
D. All of these

Q.13 Reaction of Aldehydes with Tollen's reagent results in formation of _____?
A. Red precipitate
B. Yellow precipitate
C. Silver mirror
D. Brick red precipitate

Q.14 The bonding pair of electrons are equally shared b/w the atoms in
A. HF
B. HCl
C. H_2O
D. H_2

Q.15 The total of all the possible kind of energies in a system is called
A. Total energy
B. Kinetic Energy
C. Potential Energy
D. Internal Energy

Q.16 Energy is absorbed
A. In Bond Breaking
B. In endothermic reactions
C. In Bond Formation
D. Both A and B

Q.17 Rate of diffusion of liquids is _____ than gases
A. Lower
B. Higher
C. Equal to
D. All of these

Q.18 Rectified spirit is converted into the absolute alcohol by_____?
A. Crystallization
B. Distillation
C. Re-distillation
D. Fractional distillation

Q.19 Which of the following catalyst is used in Friedel craft reaction?
A. $ZnCl_2$
B. $KMnO_4$
C. $AlCl_3$
D. V_2O_5

Q.20 Which of the following compound shows more H-Bonding?
A. CH_3OH
B. CH_3CH_2OH
C. C_6H_5OH
D. $C_6H_{11}OH$

Q.21 Which of the following solvent favor SN_2 reactions?
A. Water
B. Ammonia
C. Carbon tetrachloride
D. Acetic acid

Q.22 Enzymes are also called as_____?
A. Catalyst
B. Lipoproteins
C. Conjugated molecules
D. Biocatalyst

Q.23 Oxidation Number of all the elements in free state is
A. Unity
B. Positive
C. Zero
D. Negative

Q.24 Au^{3+} has _____ configuration
A. $5d^7$
B. $4d^9$
C. $5d^8$
D. $5d^{10}$

Q.25 In an Irreversible reaction the tendency of it to go in reverse direction is
A. High
B. low
C. Negligible
D. None of these

Q.26 The strength of London forces depends on size of
A. Electrons
B. Electronic cloud
C. Lone pair on an atom
D. Poles of atoms

Q.27 The energy is ___ when oppositely charged ions brought close to each other
A. Released
B. Absorbed
C. Remain same
D. Constant

Q.28 27 g of Al will react with how much mass of O_2 to produce Al_2O_3
A. 8 g of oxygen
B. 16 g of oxygen
C. 32 g of oxygen
D. 24 g of oxygen

Q.29 The platinum in SHE act as a
A. Buffer
B. Salt Bridge
C. Electrical Conductor
D. All of these

Q.30 Melting and Boiling points depends on_____?
A. Number of electrons
B. Number of Unpaired electrons
C. Number of Paired electrons
D. Number of Protons

Q.31 Rate = k [NO] [O_3], the order of this reaction is
A. 2
B. 0
C. 1
D. 3

Q.32 Glucose is converted into ethanol by the _____ enzyme present in yeast.
A. Invertase
B. Urease

C. Glycolysis   D. Zymase

Q.33 In CCl₄, all C-CL bonds are _____ but molecule is __ overall
   A. Polar, nonpolar   B. Nonpolar. neutral
   C. Polar. Neutral   D. Neutral, on polar

Q.34 Greater the amount of negative charge on an atom, the size of ion will also be
   A. Smaller   B. Greater
   C. Higher   D. Lower

Q.35 In a reaction having both alkyl halide and base, the base will attack on____?
   A. Electrophilic carbon   B. Nucleophilic carbon
   C. Beta-hydrogen   D. None of these

Q.36 The expression for the radius of nth orbit of hydrogen atom was derived by
   A. Planks   B. Bohr
   C. Rutherford   D. Einstein

Q.37 In a homologous series, adjacent members differ by a _____ unit?
   A. CH_3 B. CH_2
   C. CH   D. CH_4

Q.38 Nitrates of which pair of elements gives different products on thermal
   decomposition?
   A. Na, K   B. Mg, Ca
   C. Li , Na   D. Li, Ca

Q.39 In which of the following body part protein is not present?
   A. Skin   B. Hair
   C. Nails   D. Bones

Q.40 The region where probability of finding the electron is negligible is called as
   A. Nucleus   B. Atom
   C. Orbital   D. Nodal plane

Q.41 Which of the following enzymes present in yeast helps out in fermentation?
   A. Diastase   B. Maltase
   C. Zymase   D. All of above

Q.42 1-Chloropropane and 2-Chloropropane are_____?
   A. Position isomers   B. Chain Isomers
   C. Functional Group isomers   D. Metamers

Q.43 Which one of the following is not a organic compound?
   A. Urea   B. Methane
   C. Carbon dioxide   D. Coal

Q.44 What is the value of C−C bond length in benzene?
   A. 154 pm   B. 120 pm
   C. 134 pm   D. 139 pm

Q.45 Which of the following ester give Jasmine Flavour?
   A. Ethyl acetate   B. Octyl Acetate
   C. Amyl Butyrate   D. Benzyl Acetate

Q.46 The alkenes can be formed by alcohols in the presence of
   A. Acidified $KMnO_4$ B. Acidified $K_2Cr_2O_7$
   C. Acidified $cucl_2$ D. Pyridine

Q.47 ΔHf of which of the following cannot be measured directly?
   A. Al_2O_3 B. B_2O_3
   C. CO   D. All of these

Q.48 How many unhybridized orbitals are there in ethyne molecule?
   A. 1   B. 2
   C. 3   D. 4

Q.49 The rate of diffusion of a gas having molar mass 32 as compared to H_2 gas will be

A. 6 times

B. 4 times

C. One fourth

D. One eighth

Q.50 In Electrolysis of $NaNO_3$, Na^+ is

A. Discharged at anode

B. Discharge at cathode

C. Do Not discharge

D. None of these

Q.51 In one second if the concentration changes from 0.1 to 0.25 then the rate will be

A. 0.02 Moles/dm3s^{-1}

B. 0.03 Moles/dm3s^{-1}

C. 0.15 Moles/dm3s^{-1}

D. 0.11Moles/dm3s^{-1}

Q.52 Enzymes which bring about exchange of functional group is called_____.

A. Oxidoreductase

B. Hydrolases

C. Ligases

D. Transferases

Q.53 Lighter the Oxidation state of Metal more will be_____?

A. Acidity of metal

B. Polarization power

C. Basicity of metal

D. None of these

Q.54 It consists of discrete molecules

A. Sodium chloride

B. Dry ice

C. Copper

D. $CaCl_2$

Q.55 The order of size of 's' orbital is as follows

A. ...4s<3s<2s<1s

B. ...4s>3s>2s>1s

C. Constant

D. None of these

Q.56 Among halogens iodine is solid at room temperature while Br_2 is liquid and Cl.F are gases at room temperature, why?

A. Due to stronger dipole forces

B. Due to polarity

C. Due to stronger London forces

D. Due to stronger Debye forces

BIOLOGY

Q.57 Among the followings which is the longest supportive cell?

A. Trachea

B. Collenchyma cells

C. Sclereids

D. Tracheids

Q.58 Which of the following is soluble in hot water?

A. Starch

B. Glycogen

C. Amylose

D. Amylopectin

Q.59 What is critical in photoperiodism?

A. Length of light period

B. Length of dark period

C. Both a and b

D. None of these

Q.60 A type of bacterial cell that completely surrounded by flagella is called

A. Diplococcus

B. Tetrad

C. Peritrichous

D. Munotrichous

Q.61 Amoeboid movements and movement of cyclosis is due to?

A. Microfilaments

B. Microtubules

C. Intermediate filaments

D. Cytoskeleton

Q.62 Which of these transports' sperm from the testis to the penis?

A. Sperm duct

B. Scrotum

C. Urethra

D. Gamete

Q.63 The darker, outer portion of the brain is called:

A. White matter

B. Gray matter

C. Reflex arc

D. Medulla

Q.64 When were bacteriophages discovered by Twort?

A. 1915

B. 1920

C. 1910   D. 1820

Q.65 Which of the the following which one is non-cellular in most cases in animals?

A. Chlorenchyma   B. Mesoderm

C. Sclerenchyma   **D. Mesenchyme**

Q.66 The membrane of vacuole is called:

A. Tonoplast   B. Plasma membrane

C. Epidermis   D. Both B and C

Q.67 Which statement correctly outlines some of the main events in photosynthesis? (A LEVEL)

A. A 5C carbohydrate accepts carbon dioxide and is then reduced by NADPH derived from photophosphorylation

B. A 3C carbohydrate is regenerated and reduced by hydrogen molecules derived from photophosphorylation.

C. Photolysis uses light to produce reduced NADP and oxygen which are used to reduce a 3C carbohydrate.

D. Photolysis produces NADPH and ATP which are used to reduce a 5C carbohydrate

Q.68 In photosynthesis dark reaction, is called so because

A. It occurs in dark.   **B. It does not require light energy.**

C. It cannot occur during daytime.   D. It occurs more rapidly at night.

Q.69 In uncompetitive inhibition, the inhibitor binds with

A. Enzyme   B. Substrate

C. ES-complex   D. All of these

Q.70 Sycon is an example of:

A. Platyhelminthes   B. Annelida

C. Protozoa   **D. Porifera**

Q.71 As long as two species occupy different niches, there is?

A. Competition   **B. No competition**

C. Gene linkage   D. Polymorphism

Q.72 The type of plastids found in roots of plants _____ .

A. Chloroplasts   B. Chromoplasts

C. Leucoplasts   D. All of them

Q.73 Which of the following is not respiration?

A. Breakdown of glucose   B. Formation of glucose

C. Release of energy   **D. Exchange of gases**

Q.74 Which of the following is made up of an afferent pathway from a receptor and an efferent pathway to an effector?

A. Nerve cell   **B. Reflex arc**

C. Receptor cells   D. Mixed nerve

Q.75 The types of gametes produced by two pairs of chromosomes can be?

A. 2   B. 4

C. 6   D. 8

Q.76 Which of the following statements about chordates is true?

A. They are protostomes   B. All chordates are vertebrates

C. They lack a coelom   **D. Their anus forms from the blastopore**

Q.77 The stretch reflex, the Golgi tendon reflex, the crossed extensor reflex, and the withdrawal reflex are included in:

A. Stretch reflex   **B. Spinal reflex**

C. Golgi tendon reflex   D. Crossed Extensor Reflex

Q.78 Proteins are the polymers of?

A. Amino acids

B. Fatty acids

C. Nucleotides

D. None of these

Q.79 Which one of the following is not a double membranous structure?

A. Vacuole

B. Mitochondria

C. Chloroplast

D. Nucleus

Q.80 What do the two peaks in the action spectrum represent?

A. Absorption of light

B. Carbon dioxide consumption

C. Emission of light

D. Both A and B

Q.81 Pinworm is a common name used for which of the following?

A. Rhabditis

B. Ancylostoma duodenale

C. Taenia solium

D. Enterobius vermicularis

Q.82 Sex pili is formed in which of the following processes?

A. Sexual reproduction

B. Binary fission

C. Mitosis

D. Conjugation

Q.83 The sperm duct opens into which of the following?

A. Ureter

B. Urethra

C. Testes

D. All of these

Q.84 Each nasal cavity is subdivided into _____ passageways in man.

A. 1

B. 2

C. 3

D. 4

Q.85 Radula is a characteristic feature of:

A. Myriapods

B. Molluscs

C. Echinoderms

D. Cnidaria

Q.86 Under the microscope, the bacteria appear a bluish-purple color. Which class of bacteria are on the slide?

A. Helix

B. Around

C. Rod

D. Rigid helix

Q.87 The most abundant intracellular free nucleotide is

A. UTP

B. FAD

C. NAD

D. ATP

Q.88 A cell without a cell wall is termed as?

A. Tonoplast

B. Protoplast

C. Symplast

D. Epiblast

Q.89 The number of models that represent enzyme-substrate model is?

A. 1

B. 2

C. 3

D. 4

Q.90 Optimal pH for working of enzymes is?

A. 5

B. 7.5

C. 9

D. 3

Q.91 Which of the following statements correctly describes the tobacco mosaic virus (TMV)?

A. RNA virus

B. DNA Virus

C. Bacteriophage

D. DSDNA Virus

Q.92 Which of the following are modern-day descends of theropod dinosaurs?

A. Birds

B. Lions

C. Panther

D. Bears

Q.93 The proximal part of the oviduct is significant because:

A. Fertilization occurs here

B. Implantation occurs here

C. Placenta is established here

D. None of these

Q.94 It is suspected that this cell is prokaryotic. The presence of which of these cell structures would confirm that the cell is prokaryotic?

A. Cytoplasm
B. Ribosomes
C. Flagella
D. Peptidoglycan cell wall

Q.95 A pea plant with yellow seed was crossed to a plant having green seeds. What will happen in F1; if plants are true breeding?

A. Half of seeds will be yellow
B. All the seeds will be green
C. Both will be present in ratio of 1:2:1
D. All seeds will be yellow

Q.96 Which of the following is a viviparous animal?

A. Goat
B. Duck
C. Crocodile
D. All of these

Q.97 A motor neuron and all the muscle fibers it supplies is called a(n) _____.

A. Motor unit
B. Neuromuscular junction
C. Neural unit
D. Microtubules

Q.98 Muscles are composed of:

A. Silica
B. Polyester threads
C. Groups of cell fibers
D. Calcium and phosphorous

Q.99 The genetically engineered virus is available for which of the following hepatitis virus?

A. HBV
B. HAV
C. HCV
D. A and B

Q.100 The total number of amino acids that have been found in tissues and cells are?

A. 250
B. 200
C. 20
D. 170

Q.101 Trachea is also termed as:

A. Voice box
B. Epiglottis
C. Bronchi
D. Windpipe

Q.102 The fibrous connective tissue which attaches muscle to bone is called:

A. Tendon
B. Ligament
C. Reticular tissue
D. Cartilage

Q.103 The best definition of natural selection is?

A. Survival of the fittest
B. The most fit individuals adapt to their environment better than less fit individuals
C. Those who eat better, are healthier, and live longer are the most fit within a population
D. Preservation of traits that lead to increased survival and reproduction

Q.104 In the first reaction of catabolism___ free the _____

A. Fatty acids, polysaccharides
B. Protein, amino acids
C. Lipids, glucose
D. None of these

Q.105 Which pigment protein is also known as muscle haemoglobin?

A. Melanin
B. Myoglobin
C. Rhodopsin
D. Lutein

Q.106 Edward Jenner began inoculating humans with material from lesions caused by which disease?

A. Chickenpox
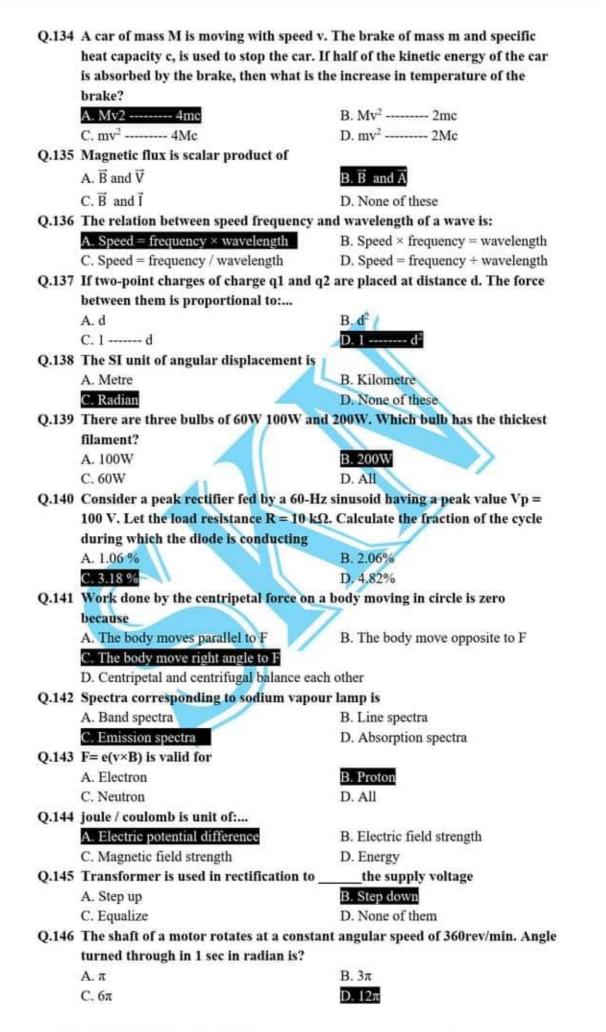B. Smallpox
C. Avian pox
D. Cowpox

Q.107 Which of these acts as a relay centre connecting hindbrain with the forebrain?
A. Forebrain	B. Midbrain
C. Hindbrain	D. Limbic system

Q.108 Which viruses enter the host cell as a whole?
A. Plant virus	B. Bacteriophages
C. Animal virus	D. None

Q.109 Cytochrome C is oxidised by which coenzyme in the ETC?
A. Cytochrome a	B. Coenzyme q
C. Coenzyme b	D. Coenzyme a

Q.110 In peas, the gene for yellow color (C) is dominant to the gene for green color (c). To determine the genotype of an unknown yellow pea, what kind of pea should you cross with it?
A. Another unknown green pea	B. Any genotype
C. Homozygous dominant
D. Homozygous recessive (cc) or known heterozygous (Cc)

Q.111 In the plants, there are 50 or more thylakoids piled upon each other to form?
A. Granum	B. Centrosome
C. Stroma	D. Multinucleate

Q.112 The neurons that interpret and receive information and stimulate motor neurons are what type of neurons?
A. Sensory neurons	B. Motor neurons
C. Interneurons	D. Rotator neurons

Q.113 lecithin contains _____
A. Ethanolamine	B. Choline
C. Serine	D. Betaine

Q.114 A long polypeptide that is cut up to generate several small proteins
A. Polyprotein	B. Polymerase
C. Polyisomerase	D. None of these

Q.115 Central nervous system is present in:
A. Asymmetrical animals	B. Bilaterally symmetrical animals
C. Radially symmetrical animals	D. B and C both are correct

Q.116 From one pyruvate passing through Krebs cycle, how many NADH are formed?
A. 1	B. 2
C. 3	D. 4

Q.117 Viruses can bud from
A. Rough endoplasmic reticulum	B. Golgi complex
C. Nuclear envelop	D. All of these

Q.118 Chitinous Setae are the locomotory organs of annelids which are present on?
A. Cell wall	B. Prostomium
C. Nucleolus	D. Parapodia

Q.119 Which of the following is true about muscle fibres?
A. Better adapted for slow sustained activities
B. For energy, they depend on anaerobic procedures
C. Myoglobin content is high
D. Possess mitochondria in huge numbers

Q.120 When a hemophilia carrier woman marries a normal man, who among her offspring may be affected:
A. All her children	B. Half of her daughters

C. All her daughters   D. Half of her sons

Q.121 Porcupine is a mammal because:
A. The scales on its body are modified as spines for protection against predators.
B. It lays eggs and has mammary glands.
C. The fur on its body is modified as spines and it is warm-blooded.
D. None of the above.

Q.122 Which of the following was considered as a missing link between reptiles and birds?
A. Pteranodon   B. Avimimus
C. Caudipteryx   D. Archaeopteryx

Q.123 Omnis cellula e cellula is hypothesized by?
A. Schleiden   B. Lorenz oken
C. Louis Pasteur   D. Rudolph Virchow

Q.124 The mechanism of enzyme activation is referred to as?
A. Activation energy   B. Catalysis
C. Enzyme specificity   D. Denaturation

PHYSICS

Q.125 The number of protons in the nucleus is called _____ number
A. Atomic   B. Charge
C. Atomic or charge   D. Neither atomic nor charge

Q.126 What does the constant n represent in the equation of state for an ideal gas $PV = nRT$?
A. Number of atoms in the gas   B. Number of moles of the gas
C. Number of nucleons   D. Number of molecules of gas

Q.127 Full wave rectifier uses
A. One diode   B. Two diode
C. Three diodes   D. Four diodes

Q.128 A 250V bulb passes a current of 0.3A. Calculate the power in the lamp.
A. 50W   B. 75W
C. 100W   D. 90W

Q.129 What will be the product of beta decay of C-14?
A. C-14   B. N-14
C. O-14   D. Be-14

Q.130 Who stated the Right-hand Thumb Rule?
A. Oersted   B. Maxwell
C. Einstein   D. Flaming

Q.131 A star moving away from earth shows:
A. Green shift   B. Red shift
C. Blue shift   D. None of these

Q.132 What is the SI unit of work?
A. Joule   B. Newton
C. Watt   D. None of these

Q.133 White rays can produce x-rays?
A. TRUE   B. FALSE
C. May depend on some conditions   D. None of these

Q.134 A car of mass M is moving with speed v. The brake of mass m and specific heat capacity c, is used to stop the car. If half of the kinetic energy of the car is absorbed by the brake, then what is the increase in temperature of the brake?

A. $Mv2$ --------- $4mc$

B. Mv^2 --------- $2mc$

C. mv^2 --------- $4Mc$

D. mv^2 --------- $2Mc$

Q.135 Magnetic flux is scalar product of

A. $\vec{B}$ and $\vec{V}$

B. $\vec{B}$ and $\vec{A}$

C. $\vec{B}$ and $\vec{I}$

D. None of these

Q.136 The relation between speed frequency and wavelength of a wave is:

A. Speed = frequency × wavelength

B. Speed × frequency = wavelength

C. Speed = frequency / wavelength

D. Speed = frequency + wavelength

Q.137 If two-point charges of charge q1 and q2 are placed at distance d. The force between them is proportional to:...

A. d

B. d^2

C. 1 ------- d

D. 1 ------- d^2

Q.138 The SI unit of angular displacement is

A. Metre

B. Kilometre

C. Radian

D. None of these

Q.139 There are three bulbs of 60W 100W and 200W. Which bulb has the thickest filament?

A. 100W

B. 200W

C. 60W

D. All

Q.140 Consider a peak rectifier fed by a 60-Hz sinusoid having a peak value Vp = 100 V. Let the load resistance R = 10 kΩ. Calculate the fraction of the cycle during which the diode is conducting

A. 1.06 %

B. 2.06%

C. 3.18 %

D. 4.82%

Q.141 Work done by the centripetal force on a body moving in circle is zero because

A. The body moves parallel to F

B. The body move opposite to F

C. The body move right angle to F

D. Centripetal and centrifugal balance each other

Q.142 Spectra corresponding to sodium vapour lamp is

A. Band spectra

B. Line spectra

C. Emission spectra

D. Absorption spectra

Q.143 F= e(v×B) is valid for

A. Electron

B. Proton

C. Neutron

D. All

Q.144 joule / coulomb is unit of:...

A. Electric potential difference

B. Electric field strength

C. Magnetic field strength

D. Energy

Q.145 Transformer is used in rectification to _____the supply voltage

A. Step up

B. Step down

C. Equalize

D. None of them

Q.146 The shaft of a motor rotates at a constant angular speed of 360rev/min. Angle turned through in 1 sec in radian is?

A. π

B. 3π

C. 6π

D. 12π

Q.147 Which two or more of the following actions would increase the energy stored in a parallel plate capacitor when a constant potential difference is applied across the plates?

A. Decreasing the area of the plates Decreasing the separation between the plates

B. Decreasing the area of the plates Increasing the separation between the plates Inserting a dielectric between the plates

C. Increasing the area of the plates Decreasing the separation between the plates Inserting a dielectric between the plates

D. Increasing the area of the plates Increasing the separation between the plates

Q.148 Calculate the energy of a photon of wavelength 6600 angstroms.

A. 0.3×10^{-19}J   B. 3×10^{-19}J

C. 30×10^{-19}J   D. 300×10^{-19}J

Q.149 For an adiabatic process, the first law of thermodynamics can be written as:

A. Work done by the system = decrease in internal energy of system

B. Work done by the system = increase in internal energy of system

C. Work done on the system = decrease in internal energy of system

D. Work done on the system = decrease in internal energy of system + heat released

Q.150 In a bridge type full wave rectifier, if Vm is the peak voltage across the secondary of the transformer, the maximum voltage coming across each reverse biased diode is

A. Vm   B. $Vm/\sqrt{2}$

C. 2Vm   D. Vm/3

Q.151 Photocell is similar to

A. Photoelectric effect   B. Compton effect

C. Photoluminescence   D. None of these

Q.152 If the heat absorbed is 10J and Work done is 5 J, then change in internal energy is

A. -5J   B. 10J

C. 15J   D. 5J

Q.153 Reciprocal of resistivity is called

A. Resistance   B. Inductance

C. Conductivity   D. Flexibility

Q.154 The magnetic flux linked with a coil is inversely proportional to the

A. Area of cross section   B. Number of turns

C. Magnetic field   D. None of these

Q.155 For constant linear acceleration, angular acceleration and radius are

A. Equal   B. Inversely related

C. Directly related   D. No relation

Q.156 An armature coil consists of 30 turns of wire, each of area A = 0.05 m² and total resistance of 10 Ω. It rotates in a magnetic field of 0.15T at an angular speed of 84 radian per second. Determine the value of maximum induced emf produced in the coil.

A. 1V   B. 500V

C. 63V   D. 43V

Q.157 When a charge experience a force, there will be_____ field developed

A. Magnetic   B. Electric

C. Static   D. All of these

Q.158 The down quark has charge_____

A. 1/2-   B. 1/2+

C. 1/3-   D. 2/3+

Q.159 Acceleration of rolling object is zero at _____ point of hill
A. **Highest**
B. Lowest
C. Middle
D. None of these

Q.160 Electron cannot reside inside nucleus is explained by
A. Compton effect
B. Photoelectric effect
C. Zeeman effect
D. **Uncertainty principle**

Q.161 Two forces of $F_1 = 5$ N and $F_2 = 15$ N are working on a body in opposite direction. If body displaced by 5 m in direction of net force, what will be the work done by F_2
A. 25 J
B. -75 J
C. **75 J**
D. 50 J

Q.162 Alternating Current Generators use
A. Coiled rings
B. Split rings
C. **Slip rings**
D. Solenoid rings

Q.163 Bright Lines in pattern shows
A. Absorption
B. **Emission**
C. Release
D. Free particle

Q.164 The density of oxygen is 16 times the density of hydrogen. If the speed of sound in oxygen is v, then what is the speed of sound in hydrogen?
A. v/4
B. **4v**
C. v/2
D. 2v

Q.165 Two copper conductors have equal length. The cross-sectional area of one conductor is four times that of the other. If the conductor having smaller cross-sectional area has a resistance of 40 ohms the resistance of other conductor will be
A. 160 ohm
B. 80 ohm
C. 20 ohm
D. **10 ohm**

Q.166 The Na atom cannot produce x-rays because
A. Inner shell transition is possible
B. **Inner shell transition is not possible**
C. It is non-radioactive
D. None of these

Q.167 Atom is neutral because it has equal number of
A. **Charge particles**
B. Uncharged particles
C. Neutrons
D. All of these

Q.168 What is the SI Unit of EMF?
A. Ohm
B. Ampere
C. **Volts**
D. Newton's

Q.169 An object is undergoing simple harmonic motion. It's time period is T and total energy is E. The amplitude of vibration is reduced to half. What is the new time period and total energy of the system?
A. Time period = T/2 total energy = E/4
B. **Time period = T total energy = E/4**
C. Time period = T/2 total energy = E/2
D. Time period = T total energy = E/2

Q.170 An object is moving in a circle. It completes 6 revolutions in every 3 seconds. What is its frequency?
A. 0.5π Hz
B. 2π Hz
C. 0.5 Hz
D. **2 Hz**

Q.171 The anti-particle of quark is_____
A. Electrons
B. Protons
C. Neutrons
D. **None of these**

Q.172 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 H_1 When connected in parallel across the same battery, the heat generated during the same time is H_2 Then:

A. $H_1 = H_2$ **B. $H_1 < H_2$**

C. $H_1 > H_2$ D. $H_1 > H_2$

Q.173 Calculate the charge passing through the circuit if it's current it 10 Amp and the recorded time is 15 seconds

A. 1500 Coulomb   **B. 150 Coulomb**

C. 13400 Coulomb   D. 140 Coulomb

Q.174 To get a peak load voltage of 40V out of a bridge rectifier, what should be the approximate rms value of secondary voltage?

A. 0V   B. 14.4V

C. 28.3V   **D. 56.6 V**

Q.175 A thermally insulated rigid container contains an ideal gas. It is heated through a resistance coil of 100Ω by passing a current of 1 A for five minutes, then change in internal energy of the gas is

A. 0Kj   B. 10kJ

C. 20 kJ   **D. 30 kJ**

Q.176 Radiation emitted by hot bodies have color

A. Red   B. Green

C. Blue   **D. Black**

Q.177 A cable 4 km long and of total resistance 1 ohm carries electric current from a generator producing 100kW at 10,000 Volts. The current in amperes in the cable is

A. 10   B. 10,000

C. 1000   **D. 100,000**

Q.178 A particle carrying a charge 3e, accelerates through a potential difference of 2V. The energy acquired by it is:

A. 1.6×10^{-19} J   **B. 9.6×10^{-19} J**

C. 9.6×10^{-18} J   D. 1.6×10^{-18} J

Q.179 Magnetic field lines have a property that lines are _____

A. Non intersecting   B. Intersect near south pole

C. Intersect near north pole   D. Intersect every where

Q.180 1 light year distance is

A. Distance travelled by earth in one year

B. Distance travelled by star in one year

C. Distance travelled by light in one year

D. Distance travelled by light in one galactic year

ENGLISH

Q.181 Choose the correct sentence.

A. Huda watched the news on the BBC.

B. Huda watched the news on the BBC?

C. Huda watched the news on the bbc.

D. Huda, watched the news, on the BBC.

Q.182 Measles _____ a contagious childhood disease

A. is   B. are

C. were   D. be

Q.183 She ran with quick steps to the house when it _____ (start)raining.

A. start
B. starting
C. started
D. was started

Q.184 Fetch _____ chair and sit down.

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

Q.185 John _____ to be a doctor.

A. wants
B. wanting
C. is wanting
D. have wanted

Q.186 Father must _____ left his briefcase at the office.

A. of
B. had
C. have
D. opt

Q.187 <u>Even if the doctor</u> <u>put in his best efforts,</u> <u>he could not succeed in</u> <u>saving the patient.</u>

A. Even if the doctor
B. Put in his best efforts, he
C. Could not succeed in
D. Saving the patient.

Q.188 I like _____ blue T-shirt over there better than _____ red one.

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

Q.189 relinquish

A. Use
B. Surrender
C. Increase
D. Retain

Q.190 You will find more information in the _____.

A. Attached to file
B. Attached file
C. Attachment file
D. file what is attached

Q.191 Waft

A. wave
B. drift
C. stump
D. keep

Q.192 When I go swimming. I have to keep my eyes closed underwater.

A. Complex
B. Simple
C. Compound
D. None

Q.193 Choose the correct sentence.

A. You're going to lose your slice of cake if you do not eat it quickly!
B. Your'e going to lose your slice of cake if you do not eat it quickly.
C. You're going to lose your slice of cake if you do not eat it quickly.
D. Youre going to lose your slice of cake if you do not eat it quickly.

Q.194 we are

A. we're
B. were
C. wer'e
D. were'

Q.195 My friend _____ (suffer) from cholera since August.

A. suffer
B. suffered
C. suffering
D. is suffering

Q.196 Some of the people waiting in line _____ getting impatient.

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

Q.197 I think _____ man over there is very ill. He can't stand on his feet.

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

Q.198 Our car broke down; so we came last.

A. complex
B. Simple

C. Compound   D. Compound-complex

Q.199 I _____ (write)a new book. I _____ (hope) to finish it by the end of this month.

A. write, hoping

B. am writing, hope

C. wrote, am hopeful

D. writing, hope

Q.200 I lived on_____ Main Street when I first came to town.

A. a

B. an

C. the

D. no article

LOGICAL REASONING

Q.201 Which one of the following have four sides

A. Triangle

B. Square

C. Circle

D. Right triangle

Q.202 Statement:

According to reports the childrens below age 10 are being aggressive because of mobile phones

COURSE OF ACTION:

I. Parents needs to be strict to their child.

II. Parents need to be concerned and lemmatize their screening time.

A. Both of them follows

B. None of them follows

C. Only I follows

D. Only II follows

Q.203 Statements:

Nutritious food is delicious and good for health. Apple is nutritious.

Conclusions:

(I) Apple is good for health.

(II) Delicious foods are nutritious.

A. Only conclusion (I) follows

B. Only conclusion (II) follows

C. Both conclusions follow

D. Both of them do not follow

Q.204 Which one of the following is a different one?

A. Skin

B. Lungs

C. Heart

D. Life

Q.205 Renown, Reputation, Abeyance, ?

A. Misery

B. Humble

C. Discontinuation

D. Best

Q.206 If in a certain language, NOIDA is coded as OPJEB, how is DELHI coded in that language?

A. CDKGH

B. EFMIJ

C. FGNJK

D. IHLED

Q.207 Chef: Restaurant

A. Doctor: Nurse

B. Driver: Passenger

C. Teacher: Schools

D. Writer: Editor

Q.208 The area of a triangle will be when a = 1m, b = 2m, c = 3m, a, b, c being lengths of respective sides.

A. 0 sq m

B. 3 sq m

C. 2 sq m

D. Both A and B

Q.209 Statement

Should coal engines be replaced by electric engines in trains?

Arguments

(I) Yes. Coal engines cause a lot of pollution.

(II) Yes. Electric engines are good on performance, easy to operate, and low on maintenance.

(III) No. Pakistan does not produce enough electricity to fulfill its domestic needs also."

A. All are strong

B. Only I and II are strong

C. Only II and III are strong

D. Only I and III are strong

Q.210 FESCO stands for _____

A. Faizabad Electricity Supply Company

B. Frontier Electricity Supply Company

C. Faisalabad Electric Supply Company

D. Federal Electric Supply Company