



$C_6H_{12}O_6$
 $2NaCl = 2Na + Cl_2$
 $\sqrt{a^2+b^2}$
 $m=vp$
 CaO
 $2H_2 + O_2$
 $V = \pi r^2 h$
 $\sqrt{x-y}$

QUIZ

SCIENCE

2023-24



G-VII



- 1 Gold is always alloyed with one, among the following metals
a. Sodium b. Mercury **c. Copper** d. Calcium
- 2 Which one of the following makes covalent bond with halogens
a. Na b. K **c. H** d. Mg
- 3 Which one of the following gases diffuse most slowly?
a. O₂ **b. Cl₂** c. NH₃ d. H₂
- 4 Which metal is used for making mirrors?
a. Lead b. Iron **c. Silver** d. Lithium
- 5 The magnitude of dot and cross product of two vectors are $6\sqrt{3}$ and 6 respectively. The angle between them will be
a. A) 0° **b. 30°** c. 45° d. 60°
- 6 The magnitudes of rectangular component are equal if its angle with x-axis is:
a. 45° b. 90° c. 30° d. 0°
- 7 The fastest enzyme is
a. DNA gyrase b. Pepsin c. DNA polymerase **d. Carbonic anhydrase**
- 8 Which one of the following will react with HCl?
a. Carbon b. Silver **c. Zinc** d. Copper
- 9 Tuning of radio set is an example of
a. Mechanical resonance b. Musical resonance **c. Electrical resonance** d. Free vibration
- 10 The angle between the normal and the reflected rays is called angle of _____.
a. Reflection b. Refraction c. Incidence d. Diffraction
- 11 Transpiration is regulated by the movements of _____.
a. Parenchyma cells **b. Guard cells** c. Epithelial cells d. None of the above
- 12 What is the correct sequence?
a. Genus-species-order-kingdom b. Species-order-phylum-kingdom c. Species-genus-order-phylum **d. Kingdom-phylum-class-order**





- 13 The molecular formula of decane is
a. C₆H₁₄ b. C₇H₁₆ c. CaH₂₀ d. **C₁₀H₂₂**
- 14 Hydrogen acts as a _____ at normal temperatures and pressure
a. Metal b. **Nonmetal** c. Oxide d. Copper
- 15 It has the highest percentage in earth's crust and oceans.
a. Calcium b. Carbon c. **Oxygen** d. Nitrogen
- 16 The steroid hormones easily pass through the plasma membrane through simple diffusion because they are _____.
a. Gaseous b. Carbon-based c. Water Soluble d. **Lipid Soluble**
- 17 Erythrocytes are also known as:
a. White blood cells b. **Red blood cells** c. None of the above
- 18 An emulsion is a colloidal solution of:
a. Two solids b. **Two liquids** c. Two gases d. None of these
- 19 Three transition elements Cu, Ag and Au constitute group number
a. 9 b. 10 c. **11** d. 12
- 20 The solids in which particles are arranged in definite three-dimensional pattern are called:
a. Solids b. **Crystalline solids** c. Amorphous solids d. Both 'B' and 'C'
- 21 The direction of torque can be found by:
a. Head to tail rule b. **Right hand grip rule** c. Left hand rule d. Fleming rule
- 22 _____ is a protein deficiency disorder.
a. Scurvy b. Anaemia c. **Kwashiorkor** d. None of the above
- 23 Girdling around the trunk of a tree can cause it to _____ if it cannot regrow to bridge the wound.
a. Stop absorbing water b. Stop growing c. **Die** d. None of the above
- 24 Mark which one is non-metal?
a. Sodium b. Calcium c. **Nitrogen** d. Gold





- 25 Dimensions of force is
- a. MLT b. MLT-1 c. MLT-2 d. ML2T
- 26 Chlorine only reacts with methane in
- a. Darkness b. **Sunlight** c. Yellow light d. Screened light
- 27 The SI unit of power is
- a. Joule b. Horsepower c. KWh d. **Watt**
- 28 The soft gelatinous tissue found inside bones is called
- a. Bone effusion b. **Bone marrow** c. Bone abscess d. None of the above
- 29 The speed of light is greater in _____.
- a. **Air** b. Water c. Solid d. None of these
- 30 Chymosin is also known as _____.
- a. Lipase b. Amylase c. Trypsin d. **Rennin**
- 31 Zero is not significant only if it
- a. **Lies to the left of a significant digit** b. Is between two digits c. Is to the right of a significant digit d. Is before the decimal point
- 32 The SI unit of intensity of light is:
- a. Mole b. Kelvin c. **Candela** d. Ampere
- 33 The temperature -273°C after conversion to Kelvin scale becomes:
- a. **0 K** b. 273K c. 173K d. 100K
- 34 A group of plants and animals with similar traits of any rank is
- a. **Taxon** b. Species c. Genus d. Order
- 35 The rate of transpiration will _____ if the atmospheric pressure is low
- a. **Increase** b. Decrease c. Stay unchanged d. Can't be determined
- 36 Lens thick at the centre but thin at the edges is _____.
- a. Concave b. **Convex** c. Diverging d. Plane





- 37 Transport of food materials in higher plants occurs through _____.
- a. Flowers b. Companion cells c. Tracheids **d. Sieve elements**
- 38 The _____ of electrons form positive ions known as cations.
- a. Lose b. Gain c. Sharing d. None of these
- 39 Which is a derived unit:
- a. Candela b. Ampere c. Kelvin **d. Newton**
- 40 Metals which are easily oxidized are called
- a. Negative metals b. State metals **c. Reactive metals** d. Non-reactive metals
- 41 Which metal burns with golden yellow flame
- a. Calcium b. Barium **c. Sodium** d. Potassium
- 42 In SHM, the restoring force is directly proportional to
- a. Velocity b. Acceleration **c. Displacement** d. Time period
- 43 When an electric current is passed through molten sodium chloride, the sodium ion is attracted by the _____, from which it takes an electrode and becomes a sodium atom.
- a. Anode **b. Cathode** c. Both anode and cathode
- 44 The highest electronegative element in periodic table is
- a. Fluorine** b. Chlorine c. Bromine d. Iodine
- 45 The Iris consists of _____.
- a. Involuntary muscle** b. Voluntary muscle c. Skeletal muscle d. None of the above
- 46 Pancreatic juice is stimulated by the release of _____.
- a. Secretin b. Cholecystokinin c. Enterokinase **d. Both (a) and (b)**
- 47 The pathway of nerve impulse is
- a. Reflex arc** b. Concave arc c. Convex arc d. None of these
- 48 The smallest region of brain is:
- a. Forebrain b. Cerebellum **c. Midbrain** d. Cerebrum





- 49 The number of vibrations completed by a body in one second is called
- a. Time period **b. Frequency** c. Total vibrations d. Displacement
- 50 Antibodies are chemically _____.
- a. Fats b. Foreign pathogens c. Actin **d. Proteins**
- 51 Spicy food, coupled with anxiety, may lead to _____.
- a. Indigestion** b. Hypotension c. Seizures d. None of the above
- 52 Human skin cannot function as a respiratory organ because
- a. It is not permeable to O₂ and CO₂ b. It is rather thick c. It is dry, and diffusion through skin is poor **d. All of the above**
- 53 Animals which eat plants are
- a. Herbivores** b. Omnivores c. Carnivores
- 54 _____ are blood cells that transport oxygen through the bloodstream.
- a. Leukocytes **b. Erythrocytes** c. Platelets d. None of the above
- 55 _____ cells line the blood capillaries
- a. Alpha cells **b. Endothelial Cells** c. Oxyntic cells d. None of the above
- 56 Change of temperature can change the _____ of a solute in a solvent.
- a. Dilution **b. Solubility** c. Molarity d. Dipole moment
- 57 Water exists in both liquid and solid-state at _____ degrees Celcius.
- a. Zero** b. Two c. Hundred
- 58 Matter exists in three physical states:
- a. Solid, liquid, plasma b. Solid, water, vapour c. Plasma, liquid, solid **d. Solid, liquid, gas**
- 59 Living cells placed in an isotonic solution tend to retain their shape and size. This is based on the principle of _____.
- a. Diffusion b. Transpiration **c. Osmosis** d. None of the above
- 60 The conversion of a liquid into vapours is called:
- a. Evaporation** b. Boiling c. Cooling process d. Both 'A' and 'C'





- 61 An object is placed at the centre of curvature of a concave mirror. The image produced by the mirror is located
- a. Out beyond the centre of curvature **b. At the centre of curvature** c. Between the centre of curvature and the focal point d. At the focal point
- 62 Powerful acids, bases, and salts, on the other hand, are _____ electrolytes.
- a. Weak **b. Strong** c. Neutral
- 63 Which of the following is not conservative force?
- a. **Friction** b. Electric c. Gravitational d. Magnetic
- 64 In humans, lacteals are found in _____.
- a. **Ileum** b. Oesophagus c. Ear d. None of the above
- 65 Plants that possess spores and embryo but lack vascular tissues and seeds:
- a. Rhodophyta **b. Bryophyta** c. Pteridophyta d. Phaeophyta
- 66 Which type of image is formed by a concave lens on a screen?
- a. Inverted and real b. Inverted and virtual c. Upright and real **d. Upright, virtual and smaller than object**
- 67 The SI unit of the solid angle is
- a. Degree **b. Steradian** c. Revolution d. Radian
- 68 Which class has the largest number of animals?
- a. Fishes b. Reptiles **c. Insects** d. Mammals
- 69 The direction of a vector in space is specified by:
- a. One angle b. Two angles **c. Three angles** d. No angle
- 70 Which type of image is produced by the converging lens of human eye if it views a distant object?
- a. Real, erect, same size **b. Real, inverted, diminished** c. Virtual, erect, diminished d. Virtual, inverted, magnified
- 71 The existence of solid in different physical forms is called:
- a. Crystals **b. Allotropy** c. Evaporation d. Transition
- 72 Fog is an example of solution:
- a. Solid in gas **b. Liquid in gas** c. Liquid in solid d. Solid in liquid





- 73 A solution containing relatively higher concentration of solute is called:
a. Dilute solution b. Saturated solution **c. Concentrated solution** d. Suspension
- 74 The main function of guard cells is to help with _____
a. Transpiration b. Guttation c. Transcription d. None of the above
- 75 During electrolysis _____ takes place at anode.
a. Catenation **b. Oxidation** c. Reduction d. Addition
- 76 The range of projectile is same for angles of projection:
a. 30° and 45° b. 45° and 60° c. 50° and 45° **d. 30° and 60°**
- 77 If both components of a vector are negative, then resultant lies in:
a. 1st quadrant b. 2nd quadrant **c. 3rd quadrant** d. 4th quadrant
- 78 An infant feeding entirely on the mother's milk passes stools that are coloured yellow. What is the reason for this?
a. Casein **b. Bile pigments** c. Pancreatic pigments d. None of the above
- 79 The small intestine has three parts. The first part is called :.
a. Duodenum b. Oesophagus c. Larynx d. None of the above
- 80 Flame cells are the excretory structures for
a. Annelida b. Coelenterates **c. Platyhelminthes** d. Echinodermata
- 81 The retina is the _____ layer in the eye.
a. Middle **b. Innermost** c. Outermost d. Outer
- 82 Ionization energy of sodium is less than
a. Aluminum b. Magnesium c. Copper **d. All of these**
- 83 If a body is at rest, then it will be in
a. Static equilibrium b. Dynamic equilibrium c. Translational equilibrium d. Unstable equilibrium
- 84 Which of the following is a phospholipid?
a. Sterol b. Cholesterol **c. Lecithin** d. Steroid





- 85 The oscillations in which amplitude decreased steadily with time are called:
- a. Natural oscillations b. Free oscillation **c. Damped oscillations** d. Forced oscillations
- 86 Most primitive vascular plants:
- a. Mosses b. Cycads c. Kelps **d. Ferns**
- 87 What is the enzyme that breaks down lactose?
- a. Lipase enzymes b. Pepsin c. Amylase **d. Lactase**
- 88 Nyctalopia can occur due to the deficiency of _____.
- a. Vitamin A** b. Vitamin C c. Vitamin K d. Vitamin B2
- 89 $F = ma$
- a. Newton's 1st law of motion **b. Newton's 12nd law of motion** c. Newton's 3rd law of motion
- 90 An example of non-electrolyte is:
- a. Glucose** b. NaCl c. HCl d. H₂SO₄
- 91 The frequency of waves produced in microwaves oven is:
- a. 1435 MHz **b. 2450 MHz** c. 1860 MHz d. 2850 MHz
- 92 One of the reasons why some people cough after eating a meal may be due to the improper movement of _____.
- a. Larynx b. Diaphragm c. Neck **d. Epiglottis**
- 93 _____ stimulates the production of gastric juice in the stomach.
- a. Gastrin** b. Enterokinase c. Rennin d. Digestion
- 94 Doctors will suggest _____ if person is suffering from high blood cholesterol.
- a. Ghee **b. Vegetable Oil** c. Dalda d. Lard
- 95 The _____ is the only movable part of the skull.
- a. Nasal Conchae **b. Mandible** c. Vomer d. Maxilla
- 96 Steradian is the angel which lies in:
- a. One dimension b. Two dimensions **c. Three dimensions** d. None





- 97 What is a seed plant that has no fruit?
a. Bryophytes **b. Gymnosperms** c. Mosses d. Pteridophytes
- 98 When a force is parallel to the direction of motion of the body, then work done on the body is:
a. Zero b. Minimum c. Infinity **d. Maximum**
- 99 The basement membrane is derived from _____.
a. Myosin b. Pachyderm c. Endoderm **d. Epidermis & connective tissue**
- 100 The unit of force is _____ and its symbol is _____ which is the correct pair?
a. Newton, n **b. Newton, N** c. Newton, n d. None of the above
- 101 Antigens are typically found in
a. Plasma **b. Cell surface** c. Nuclear membrane d. None of the above
- 102 Algae is
a. Unicellular **b. Multicellular**
- 103 The most valuable metal among the following is
a. Gold **b. Uranium** c. Osmium d. Rubidium
- 104 Mass per unit volume is called:
a. Pressure b. Temperature **c. Density** d. Solubility
- 105 All metals are solids except
a. Sodium b. Magnesium **c. Mercury** d. Gold
- 106 The term phylum was coined by
a. Linnaeus b. Cuvier **c. Haeckel** d. Theophrastus
- 107 The general electronic valence shell configuration of alkali metals is
a. ns^2 **b. ns^1** c. ns^2, np^1 d. ns^2, np^2
- 108 The heaviest metal is
a. Uranium b. Gold **c. Osmium** d. Calcium





- 109 The cardiac muscle is found in
a. Chest b. Lungs c. **Heart** d. All of the above
- 110 Solution which can dissolve further amount of a solute at particular temperature is called:
a. Saturated solution b. **Unsaturated solution** c. Colloidal solution d. Supersaturated solution
- 111 Scurvy is caused by not having enough _____ in your diet over a long period of time
a. **Vitamin C** b. Vitamin D c. Vitamin E
- 112 The magnitude of a vector can never be:
a. Positive b. **Negative** c. None of these
- 113 During projectile motion, the horizontal component of velocity:
a. Changes with time b. Becomes zero c. **Remains constant** d. Increases with time
- 114 Sharpness of resonance is.
a. Directly proportional to damping force b. **Inversely proportional to damping force** c. Equal to square of damping force d. None of these
- 115 Which of the following halogen has pale yellow colour?
a. **F₂** b. Cl₂ c. Br₂ d. I₂
- 116 Binomial nomenclature was given by
a. **Linnaeus** b. Hugo De Vries c. John Ray d. Huxley
- 117 Where does the exchange of gases occur in birds?
a. Air sacs only b. Air sacs and Lungs c. **Lungs only**
- 118 Non-metallic character of elements increases from left to right across the period and _____ from top to bottom.
a. Increases b. **Decreases** c. Remain same d. Stable
- 119 _____ is not a skull bone
a. **Sternum** b. Occipital bone c. Vomer d. Pterygoid
- 120 Hydrogen is released when water reacts with
a. Na b. Li c. K d. **All of them**





121 The force which opposes the applied force producing the displacement in the spring is called
a. **Restoring force** b. Periodic force c. Centripetal force d. Resistive force

122 Radiation does more damage to cancer cells when compared to normal cells because
a. Cancer cells do not multiply often b. Cancer cells do not have access to nutrition c. Cancer cells have a weak cellular structure **d. Cancer cells undergo rapid division**

123 The area between the velocity-time graph and the time axis is numerically equal to:
a. Velocity **b. Displacement** c. Time d. Acceleration

124 Which one of the following metal has yellow colour
a. Lead **b. Gold** c. Iron d. Potassium

125 If the line of action of force passes through axis of rotation or the origin, then its torque is:
a. Maximum b. Unity **c. Zero** d. None of these

126 The slope of the velocity-time graph is:
a. Acceleration b. Distance c. Force d. Momentum

127 The work done is said to be negative when force and displacement are
a. Parallel **b. Anti-parallel** c. Perpendicular d. None

128 Earthworms breathe through their _____
a. Pores on its anterior end b. Head **c. Skin** d. Lungs

129 Starch, glue and gelatin are the examples of:
a. Colloidal solution b. Solution **c. Colloids** d. Crystalloids

130 The concentration of the solute in solution, when it is in equilibrium with solid substance, at a particular temperature is called:
a. Molarity b. Dilution c. Colloidal solution **d. Supersaturated solution**

131 The time required to complete one vibration is called:
a. Time period b. Frequency c. Time period d. Velocity

132 Metals have the tendency to lose their valence electron. This property of a metal is termed as
a. Electro negativity **b. Electro positivity** c. Electron affinity d. Ionization power





- 133 The bone is a natural reservoir for ____.
- a. Fluorine b. Water **c. Calcium** d. Iron
- 134 When the bob of simple pendulum is at extreme position, it has
- a. K.E **b. P.E** c. Both P.E and K.E d. None
- 135 A body will be in complete equilibrium when it is satisfying:
- a. 1st condition of equilibrium b. 2nd condition of equilibrium **c. Both 1st and 2nd condition of equilibrium** d. Impossible
- 136 Meiosis occurs in
- a. Conidia **b. Meiocyte** c. Megaspore d. Gemmule
- 137 Energy transformation is never 100% efficient because of
- a. Catabolism **b. Entropy** c. Homeostasis d. Anabolism
- 138 Plastics, glass rubber, lamp-black etc. are the examples of:
- a. Crystalline solids b. Super cooled liquids **c. Amorphous solids** d. Ionic solids
- 139 Non-metals are essential
- a. For the maintenance b. For the existence c. For the safety of life **d. All of these**
- 140 Convex mirror produce image that is ____.
- a. Larger than object **b. Smaller than object** c. Equal to object d. Very large in size
- 141 Silver is get tarnished by
- a. Oxygen b. Nitrogen **c. Hydrogen sulphide** d. All of them
- 142 Salamander belongs to the class
- a. Pisces b. Aves c. Reptiles **d. Amphibian**
- 143 The movement of materials from the leaves to other tissues of the plant is called ____.
- a. Tropic movement b. Guttation c. Transpiration **d. Translocation**
- 144 A field in which the work is done in a moving a body along a closed path is zero is called:
- a. Electric field **b. Conservative field** c. Electromagnetic field d. Maximum





- 145 A football player will throw a football at a maximum distance if the angle of projection is:
a. 30o **b. 45o** c. 60o d. 90o
- 146 The main organ of the respiratory system is:
a. **Lungs** b. Heart c. Arm d. Skin
- 147 C₆H₁₄ is the molecular formula of
a. Pentane **b. Hexane** c. Propane d. Decane
- 148 Enterokinase helps in the conversion of _____.
a. Lactose to Sucrose **b. Trypsinogen into trypsin** c. Pepsinogen into pepsin d. Proteins into polypeptide
- 149 How many series of d-block elements are there in the periodic
a. Three **b. Four** c. Five d. Two
- 150 Blue-green algae belong to which group?
a. Protista **b. Prokaryotes** c. Fungi d. Bryophytes
- 151 The _____ of a liquid depends on temperature, atmospheric pressure, and the vapor pressure of the liquid.
a. Melting point b. Freezing point **c. Boiling point** d. None of these
- 152 Which one of the following is not regarded as a fundamental quantity in Physics?
a. Length b. Mass c. Time **d. Weight**
- 153 Non-metal oxides are _____ in nature.
a. Acidic b. Basic c. Neutral d. Suboxide
- 154 Metabolism refers to
a. Release of energy b. Gain of energy c. Catabolism **d. Gain or release of energy**
- 155 These are highly oxidizing agents
a. Alkali metals b. Alkaline earth metals c. Transition metals **d. Halogens**
- 156 Motion of projectile is _____ dimensional.
a. One **b. Two** c. Three d. Four





- 157 Sodium does not react with
a. Carbon b. Nitrogen c. Hydrogen d. Both a and b
- 158 The epithelial cells present in the intestine have small finger-like microscopic projections called:
a. Glottis b. Pilus c. Bolus d. Microvilli
- 159 The exudation of xylem sap drops on the edges of leaves is called _____.
a. Transpiration b. Guttation c. Condensation d. None of the above
- 160 An example of weak electrolyte is :
a. HNO₃ b. HCl c. H₂SO₄ d. H₂CO₃
- 161 Oxygen has two allotropic forms:
a. O₂ and O₄ b. O₂ and O₃ c. O and O₃ d. O₂ and O
- 162 The density of gold is:
a. 12.70 gcm⁻³ b. 17.86 gcm⁻³ c. 19.3 gcm⁻³ d. None of the above
- 163 A dental condition that is characterized by hyper mineralization of teeth enamel due to excessive intake of _____. The teeth often appear mottled.
a. Sodium b. Calcium c. Fluoride d. Mercury
- 164 The most common speed units are:
a. M/sec b. Km/h c. Miles / hour (MPH) d. All of them
- 165 Light travels at speed of _____ km per second?
a. 300 b. 3000 c. V30000 d. 300000
- 166 Robert Boyle's was a natural:
a. Philosopher b. Chemist c. Physicist d. All of above
- 167 When the velocity-time graph is a straight line parallel to time axis then:
a. Acceleration is maximum b. Acceleration is variable c. Acceleration is zero d. Velocity is zero
- 168 _____ is the enzyme need for muscle contraction. It is present in Myosin.
a. Actin b. Trypsin c. ATPase d. None of the above





- 169 Light enters the eye through transparent membrane called _____.
a. Retina **b. Cornea** c. Iris d. Pupil
- 170 The energy stored in the spring of a watch is:
a. K.E b. Electrical Energy **c. Elastic P.E** d. Solar Energy
- 171 If the pressure of a gas is held constant, increasing the temperature of the gas increases its volume, this law is known as:
a. Boyle's law **b. Charles Law** c. None of these
- 172 At mean position, during SHM:
a. P.E is maximum and K.E is minimum **b. P.E is minimum and K.E is maximum** c. Both K.E and P.E are maximum d. Both K.E and P.E are minimum
- 173 Which one does not work according to resonance?
a. T.V b. Radio c. Microwave oven **d. Bulb**
- 174 Unit of frequency is
a. Metres b. Kilometres **c. Hertz** d. Newton
- 175 In dry cell _____ acts as cathode.
a. Zn cup **b. Graphite rod** c. Paste d. Steel rod
- 176 According to law of reflection _____.
a. $l > r$ b. $l < r$ c. $R > i$ **d. $l = r$**
- 177 Density is expressed in:
a. $G\ cm^{-3}$ b. $G\ dm^{-3}$ **c. Both 'A' and 'B'** d. None of these
- 178 The least electronegative element among the given halogens is
a. Fluorine b. Chlorine c. Bromine **d. Iodine**
- 179 Solar energy is renewable energy source.
a. TRUE b. FALSE
- 180 Which one is the correct representation of the unit of pressure?
a. $Kg/Meter^2$ **b. Newton/meter²** c. $G/meter^2$





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