

**8TH**  
**8 SCIENCE**  
8th Standard  
Science

435 x 1 = 435

- 1) Which one the following systems of unit is the British System of unit?  
(a) CGS (b) MKS (c) FPS (d) SI
- 2) Electric current is a \_\_\_\_\_ quantity  
(a) base (b) supplementary (c) derived (d) professional
- 3) SI unit of temperature is \_\_\_\_\_  
(a) celsius (b) fahrenheit (c) kelvin (d) ampere
- 4) Luminous intensity is the intensity of \_\_\_\_\_  
(a) Laser light (b) UV light (c) visible light (d) IR light
- 5) Closeness of two or more measured values is called as \_\_\_\_\_  
(a) accuracy (b) precision (c) error (d) approximation
- 6) Which of the following statements is wrong?  
(a) Approximation gives accurate value (b) Approximation simplifies the calculation  
(c) Approximation is very useful when little information is available  
(d) Approximation gives the nearest value only
- 7) If we apply a force against the direction of motion of a body, then the body will  
(a) stop moving (b) move with an increased speed (c) move with a decreased speed  
(d) move in a different direction
- 8) Pressure exerted by a liquid is increased by  
(a) the density of the liquid (b) the height of the liquid column (c) Both (a) & (b)  
(d) None of the above
- 9) Unit of pressure is  
(a) pascal (b)  $\text{Nm}^{-2}$  (c) poise (d) Both (a) & (b)
- 10) The value of the atmospheric pressure at sea level is  
(a) 76 cm of mercury column (b) 760 cm of mercury column  
(c) 176 cm of mercury column (d) 7.6 cm of mercury column
- 11) Pascal's law is used in  
(a) hydraulic lift (b) brake system (c) pressing heavy bundles (d) All the above
- 12) Which of the following liquids has more viscosity?  
(a) Grease (b) Water (c) Coconut oil (d) Ghee
- 13) The unit of viscosity is  
(a)  $\text{Nm}^2$  (b) poise (c)  $\text{kgms}^{-1}$  (d) no unit
- 14) Which of the following has curved reflecting surface?  
(a) plane mirrors (b) spherical mirrors (c) simple mirrors (d) None of the above

The spherical mirror with a reflecting surface curved inward is called

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- (a) convex mirror (b) concave mirror (c) curved mirror (d) None of the above

16) The spherical mirror used as a rear view mirror in the vehicle is

- (a) concave mirror (b) convex mirror (c) plane mirror (d) None of the above

17) The imaginary line passing through the centre of curvature and pole of a spherical mirror is called

- (a) centre of curvature (b) pole (c) principal axis (d) radius curvature

18) The distance from the pole to the focus is called

- (a) Pole length (b) focal length (c) principal axis (d) None of the above

19) If the focal length of a spherical mirror is 10 cm, what is the value of its radius of curvature?

- (a) 10 cm (b) 5 cm (c) 20 cm (d) 15 cm

20) If the image and object distance is same, then the object is placed at

- (a) infinity (b) at F (c) between f and P (d) at C

21) The liquid metal used in thermometers is

- (a) Copper (b) Mercury (c) Silver (d) Gold

22) The Pictorial symbol for water given by the alchemists was

- (a)  (b)  (c)  (d) 

23) Which one of the element name not derived from planet?

- (a) Plutonium (b) Neptunium (c) Uranium (d) Mercury

24) Symbol of Mercury is

- (a) Ag (b) Hg (c) Au (d) Pb

25) A form of non-metal which has high ductility is

- (a) nitrogen (b) oxygen (c) chlorine (d) carbon

26) The property which allows metals to be hammered into their sheets is \_\_\_\_\_

- (a) ductility (b) malleability (c) conductivity (d) tensile strength

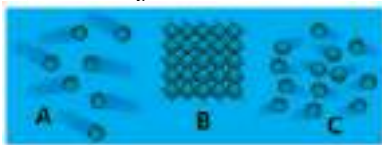
27) The non-metal which conduct current is

- (a) carbon (b) oxygen (c) aluminium (d) sulphur

28) Pencil lead contains

- (a) graphite (b) diamond (c) aluminium (d) sulphur

29) Identify the state of matter based on the arrangement of the molecules.



- (a) A - gas, B - solid, C - liquid (b) A - Liquid, B - solid, C - Gas  
(c) A - gas, B - solid, C - liquid (d) A - Liquid, B - Gas, C - Solid

30) Burning of paper is a \_\_\_\_\_ change.

- (a) Physical (b) chemical (c) physical & chemical (d) neutral

31) The burning of matchstick is an example for chemical reaction based on \_\_\_\_\_

- (a) Contact in physical states (b) electricity (c) light (d) catalyst
- 32) \_\_\_\_\_ metal undergoes rusting.
- (a) tin (b) sodium (c) copper (d) iron
- 33) The pigment responsible for browning of apples is\_\_\_\_\_.
- (a) Hydrated iron (II) oxide (b) melanin (c) starch (d) ozone
- 34) Brine is a concentrated solution of \_\_\_\_\_.
- (a) Sodium sulphate (b) sodium chloride (c) calcium chloride  
(d) sodium bromide
- 35) Limestone contains \_\_\_\_\_ mainly.
- (a) Calcium chloride (b) calcium carbonate (c) calcium nitrate  
(d) calcium sulphate
- 36) Which of the following factor induces electrolysis?
- (a) Heat (b) light (c) electricity (d) catalysis
- 37) In Haber's process of producing ammonia \_\_\_\_\_ is used as a catalyst.
- (a) Nitrogen (b) hydrogen (c) iron (d) nickel
- 38) Dissolved gases like sulphur dioxide, nitrogen oxides in rain water causes\_\_\_\_\_
- (a) Acid rain (b) base rain (c) heavy rain (d) neutral rain
- 39) \_\_\_\_\_ is responsible for Global warming.
- (a) Carbon di oxide (b) methane (c) chlorofluoro carbons (d) all the above
- 40) Micro organisms are measured in \_\_\_\_\_.
- (a) cm (b) mm (c) micron (d) meter
- 41) \_\_\_\_\_ shows both living and nonliving characteristics.
- (a) Protozoa (b) virus (c) bacteria (d) Fungi
- 42) \_\_\_\_\_ is a prokaryotic micro organisms.
- (a) Virus (b) algae (c) fungi (d) bacteria
- 43) Based on shape, the bacteria are classified into \_\_\_\_\_ types.
- (a) 2 (b) 3 (c) 4 (d) 5
- 44) Common cold in human is caused by \_\_\_\_\_
- (a) plasmodium (b) influenza (c) vibrio cholera (d) aphthovirus
- 45) Solanum trilobatum is the binomial name of Thoothuvalai. Here the word 'Solanum' refers to
- (a) Species (b) Genus (c) Class (d) Orders
- 46) An example for colonial form of algae is
- (a) Oscillatoria (b) Nostac (c) Volvox (d) Chlorella
- 47) Floridian starch is a reserve food material of
- (a) Chlorophyceae (b) Phaeophyceae (c) Rhodophyceae (d) Cyanophyceae
- 48) The well-developed sporophytic plant body is seen in
- (a) Bryophytes (b) Pteridophytes (c) Gymnosperms (d) Angiosperms

- 49) Binominal Nomenclature was first introduced in the year of  
(a) 1970 (b) 1975 (c) 1978 (d) 1623
- 50) Penicillin is an antibiotic, which is extracted from  
(a) Algae (b) Fungi (c) Bryophytes (d) Pteridophytes
- 51) One of the following is an edible mushroom  
(a) Polyporus (b) Agaricus (c) Pennicillium (d) Aspergillus
- 52) Plants that prevent soil erosion are  
(a) algae (b) fungi (c) bryophytes (d) pteridophytes
- 53) The first land plants are  
(a) bryophytes (b) pteridophytes (c) gymnosperm (d) angiosperm
- 54) \_\_\_\_\_ is tough and thick white sheath that protect the inner parts of the eye.  
(a) sclera (b) conjunctiva (c) cornea (d) iris
- 55) Maintenance of constant internal environment of the body is known as \_\_\_\_\_  
(a) Homeostasis (b) Homeophytes (c) Homeokinesis (d) Homeophilics
- 56) In the absence of oxygen, glucose is broken down in to \_\_\_\_\_.  
(a) Lactic acid (b) Citric acid (c) Acetic acid (d) Nitric acid
- 57) \_\_\_\_\_ cells are specialised cells that can be transformed into any kind of cells.  
(a) Nerve (b) Stem (c) Heart (d) Bone
- 58) The process of air passing in and out the lungs is called \_\_\_\_\_.  
(a) Inhalation (b) Exhalation (c) Breathing (d) None of these
- 59) Osmosis is the movement of water molecules from a \_\_\_\_\_.  
(a) Higher concentration to a region of lower concentration.  
(b) Lower concentration to a region of higher concentration. (c) Both of these  
(d) None of these
- 60) The erythrocyte is placed in \_\_\_\_\_ solution which has lesser concentration of solutes and greater concentration of water than in the cytoplasm.  
(a) Hypotonic (b) Hypertonic (c) Neutral (d) Acidic
- 61) Heat is a form of \_\_\_\_\_.  
(a) electrical energy (b) gravitational energy (c) thermal energy (d) None of these
- 62) If you apply some heat energy to a substance, which of the following can take place in it?  
(a) Expansion (b) Increase in temperature (c) Change of state (d) All the above
- 63) Which of the following substances will absorb more heat energy?  
(a) Solid (b) Liquid (c) Gas (d) All the above
- 64) If you apply equal amount of heat to a solid, liquid and gas individually, which of the following will have more expansion?  
(a) Solid (b) Liquid (c) Gas (d) All of above
- 65) The process of converting a liquid into a solid is called \_\_\_\_\_.  
(a) sublimation (b) condensation (c) freezing (d) deposition

- 66) Conduction is the heat transfer which takes place in a\_\_\_\_\_.
- (a) solid (b) liquid (c) gas (d) All of them
- 67) When an ebonite rod is rubbed with fur, the charge acquired by the fur is
- (a) negative (b) positive (c) partly positive and partly negative (d) None of these
- 68) The electrification of two different bodies on rubbing is because of the transfer of
- (a) neutrons (b) protons (c) electrons (d) protons and neutrons
- 69) Which of the following a simple circuit must have?
- (a) Energy Source, Battery, Load (b) Energy Source, Wire, Load  
(c) Energy Source, Wire, Switch (d) Battery, Wire, Switch
- 70) An electroscope has been charged by induction with the help of charged glassrod. The charge on the electroscope is
- (a) negative (b) positive (c) both positive and negative (d) None of the above
- 71) Fuse is
- (a) a switch (b) a wire with low resistance (c) a wire with high resistance  
(d) a protective device for breaking an electric circuit
- 72) Which of the following is true about oxygen?
- (a) Completely burning gas (b) Partially burning gas (c) Doesn't support burning  
(d) Supports burning
- 73) Aerated water contains
- (a) air (b) oxygen (c) carbon dioxide (d) nitrogen
- 74) Solvay process is a method to manufacture
- (a) lime water (b) aerated water (c) distilled water (d) sodium carbonate
- 75) Carbon dioxide with water changes
- (a) blue litmus to red (b) red litmus to blue (c) blue litmus to yellow  
(d) doesn't react with litmus
- 76) Which of the following is known as azote?
- (a) Oxygen (b) Nitrogen (c) Sulphur (d) Carbon dioxide
- 77) The same proportion of carbon and oxygen in the carbon dioxide obtained from different sources proves the law of \_\_\_\_\_
- (a) reciprocal proportion (b) definite proportion (c) multiple proportion  
(d) conservation of mass
- 78) Cathode rays are made up of
- (a) neutral particles (b) positively charged particles  
(c) negatively charged particles (d) None of the above
- 79) In water, hydrogen and oxygen are combined in the ratio of \_\_\_\_\_by mass.
- (a) 1:8 (b) 8:1 (c) 2:3 (d) 1:3
- 80) Which of the following statements made by Dalton has not undergone any change?

- (a) Atoms cannot be broken.  
(b) Atoms combine in small, whole numbers to form compounds.  
(c) Elements are made up of atoms. (d) All atoms of an elements are alike
- 81) In all atoms of an element  
(a) the atomic and the mass number are same.  
(b) the mass number is same and the atomic number is different  
(c) the atomic number is same and the mass number is different  
(d) both atomic and mass numbers may vary.
- 82) Which of the following parts of our body help us in movement?  
(i) Bones (ii) Skin (iii) Muscles (iv) Organs Choose the correct answer from the options below.  
(a) (i) and (iii) (b) (ii) and (iv) (c) (i) and (iv) (d) (i) and (iv)
- 83) Which one of the following organisms lack muscles and skeleton for movement?  
(a) Dog (b) Snail (c) Earth worm (d) Human being
- 84) \_\_\_\_\_ joints are immovable.  
(a) Shoulder and arm (b) Knee and joint (c) Upper jaw and skull  
(d) Lower jaw and upper jaw
- 85) Why do underwater divers wear fin-like flippers on their feet ?  
(a) To swim easily in water (b) To look like a fish. (c) To walk on water surface  
(d) To walk over the bottom of the sea (sea bed).
- 86) External ear (pinna )is supported by  
(a) bone (b) cartilage (c) tendon (d) capsule
- 87) Cockroach moves with the help of its  
(a) leg (b) bone (c) muscular foot (d) whole body
- 88) Which one of the following categories of vertebrae are correctly numbered.  
(a) Cervical-7 (b) Thoracic-10 (c) Lumbar - 4 (d) Sacral - 4
- 89) Adolescence is the period of life between \_\_\_\_\_ years of age.  
(a) 10 to 16 (b) 11 to 17 (c) 11 to 19 (d) 11 to 20
- 90) The period at which an organism attains sexual maturity is called \_\_\_\_\_  
(a) puberty (b) adolescence (c) growth (d) maturity
- 91) During puberty, the region below the waist become wider in \_\_\_\_\_  
(a) boys (b) girls (c) Both a and b (d) None of these
- 92) Adam's apple is the growth of the \_\_\_\_\_  
(a) pharynx (b) thyroid (c) larynx (d) parathyroid
- 93) Many adolescent boys and girls get pimples on face, due to the secretions of \_\_\_\_\_ gland.  
(a) sweat (b) sebaceous (c) sweat and sebaceous (d) None of these
- 94) The sperm is produced by \_\_\_\_\_  
(a) penis (b) ovary (c) uterus (d) testes

- 95) \_\_\_\_\_ are the chemical substances, secreted by endocrine glands.  
(a) Hormones (b) Enzymes (c) Proteins (d) Fatty acids
- 96) Androgen production is regulated by \_\_\_\_\_  
(a) GH hormone (b) LH hormone (c) TSH hormone (d) ACTH hormone
- 97) During menstruation, the progesterone level is \_\_\_\_\_  
(a) decreased (b) increased (c) ceased (d) normal
- 98) \_\_\_\_\_ intake needs to be increased to prevent osteoporosis in later life.  
(a) Potassium (b) Phosphorus (c) Iron (d) Calcium
- 99) Sound waves travel very fast in  
(a) air (b) metals (c) vacuum (d) liquids
- 100) Which of the following are the characteristics of vibrations?  
i. Frequency  
ii. Time period  
iii. Pitch  
iv. Loudness  
(a) i and ii (b) ii and iii (c) iii and iv (d) i and iv
- 101) The amplitude of the sound wave decides its  
(a) speed (b) pitch (c) loudness (d) frequency
- 102) What kind of musical instrument is a sitar?  
(a) String instrument (b) Percussion instrument (c) Wind instrument  
(d) None of these
- 103) Find the odd one out.  
(a) Harmonium (b) Flute (c) Nadaswaram (d) Violin
- 104) Noise is produced by  
(a) vibrations with high frequency. (b) regular vibrations.  
(c) regular and periodic vibrations. (d) irregular and non-periodic vibrations.
- 105) The range of audible frequency for the human ear is  
(a) 2 Hz to 2000 Hz (b) 20 Hz to 2000 Hz (c) 20 Hz to 20000 Hz  
(d) 200 Hz to 20000 Hz
- 106) If the amplitude and frequency of a sound wave are increased, which of the following is true?  
(a) Loudness increases and pitch is higher.  
(b) Loudness increases and pitch is unchanged.  
(c) Loudness increases and pitch is lower.  
(d) Loudness decreases and pitch is lower.
- 107) Which of the following may be caused by noise?  
(a) Irritation (b) Stress (c) Nervousness (d) All the above
- 108) A magnet attracts \_\_\_\_\_.  
(a) wooden materials (b) any metal (c) copper (d) iron and steel
- 109) One of the following is an example of a permanent magnet.

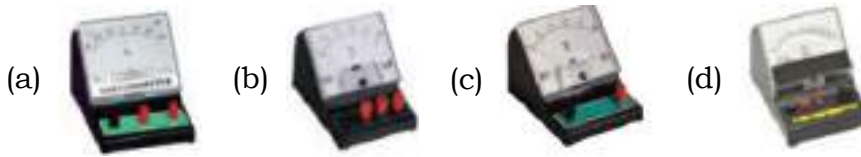


- (a) Electromagnet (b) Mumetal (c) Soft iron (d) Neodymium
- 110) The south pole of a bar magnet and the north pole of a U-shaped magnet will \_\_\_\_\_.
- (a) attract each other (b) repel each other (c) neither attract nor repel each other  
(d) None of the above
- 111) The shape of the Earth's magnetic field resembles that of an imaginary \_\_\_\_\_.
- (a) U-shaped magnet (b) straight conductor carrying current (c) solenoid coil  
(d) bar magnet
- 112) MRI stands for \_\_\_\_\_.
- (a) Magnetic Resonance Imaging (b) Magnetic Running Image  
(c) Magnetic Radio Imaging (d) Magnetic Radar Imaging
- 113) A compass is used for \_\_\_\_\_.
- (a) plotting magnetic lines (b) detection of magnetic field (c) navigation  
(d) All of these
- 114) Which of the following is a celestial body?
- (a) Sun (b) Moon (c) Stars (d) All the above
- 115) Mangalyaan was sent to \_\_\_\_\_.
- (a) Moon (b) Mars (c) Venus (d) Mercury
- 116) Chandrayaan - 1 was launched on
- (a) 22<sup>nd</sup> October 2008 (b) 8<sup>th</sup> November 2008 (c) 22<sup>nd</sup> July 2019  
(d) 22<sup>nd</sup> October 2019
- 117) \_\_\_\_\_ is called as Red planet.
- (a) Mercury (b) Venus (c) Earth (d) Mars
- 118) Which of the following is the working principle of Rockets?
- (a) Newton's first law (b) Newton's second law (c) Newton's third law  
(d) All the above
- 119) Cryogenic fuels are stored at
- (a) room temperature (b) low temperature (c) very low temperature  
(d) very high temperature
- 120) \_\_\_\_\_ was the first manned mission of NASA to go to the moon.
- (a) Apollo-5 (b) Apollo-8 (c) Apollo-10 (d) Apollo-11
- 121) Water changes to ice at
- (a) 0<sup>0</sup>C (b) 100<sup>0</sup>C (c) 102<sup>0</sup>C (d) 98<sup>0</sup>C
- 122) Solubility of carbon dioxide in water is high when the
- (a) pressure is low (b) pressure is high (c) temperature is high  
(d) None of the above
- 123) The gas collected at the cathode on electrolysis of water is
- (a) oxygen (b) hydrogen (c) nitrogen (d) carbon dioxide



- 124) Which of the following is a water pollutant?  
(a) Lead (b) Alum (c) Oxygen (d) Chlorine
- 125) Permanent hardness of water is due to the presence of \_\_\_\_\_  
(a) Sulphates and Chlorides (b) Dust particles (c) Carbonates and Bicarbonates  
(d) Other soluble particles
- 126) Acids are \_\_\_\_\_ in taste.  
(a) sour (b) sweet (c) bitter (d) salty
- 127) Aqueous solutions of \_\_\_\_\_ conduct electricity.  
(a) acid (b) base (c) salt (d) All of these
- 128) In acidic solutions blue litmus changes into \_\_\_\_\_ colour.  
(a) blue (b) green (c) red (d) white
- 129) The base is a substance that gives \_\_\_\_\_ on dissolving in water.  
(a)  $\text{OH}^-$  (b)  $\text{H}^+$  (c) OH (d) H
- 130) Sodium hydroxide is a \_\_\_\_\_  
(a) acid (b) base (c) oxide (d) alkali
- 131) Red ant sting contains \_\_\_\_\_  
(a) acetic acid (b) sulphuric acid (c) oxalic acid (d) formic acid
- 132) Magnesium hydroxides are used for treating \_\_\_\_\_  
(a) acidity (b) head pain (c) teeth decay (d) None of these
- 133) Acid mixed with base forms \_\_\_\_\_  
(a) salt and water (b) salt (c) water (d) No reaction
- 134) We brush our teeth with tooth paste because it is \_\_\_\_\_ in nature.  
(a) basic (b) acidic (c) basic and acidic (d) None of these
- 135) In basic solution turmeric indicator paper changes from yellow to \_\_\_\_\_  
(a) blue (b) green (c) yellow (d) red
- 136) The chemical mixed with LPG that helps in the detection of its leakage is \_\_\_\_\_  
(a) methanol (b) ethanol (c) camphor (d) mercapton
- 137) Which is known as syn gas?  
(a) Marsh gas (b) Water gas (c) Producer gas (d) Coal gas
- 138) The unit of calorific value of fuel is \_\_\_\_\_  
(a) kilo joule per mole (b) kilo joule per gram (c) kilo joule per kilo gram<sup>-1</sup>  
(d) joule per kilogram
- 139) \_\_\_\_\_ is the coal of superior quality.  
(a) Peat (b) Lignite (c) Bituminous (d) Anthracite
- 140) The main component of natural gas is \_\_\_\_\_  
(a) methane (b) ethane (c) propane (d) butane
- 141) The process of placing seeds in the soil is called

- (a) ploughing (b) sowing (c) crop production (d) crop rotation
- 142) Organism that control insects and pests of plant crops is  
(a) bio-pesticides (b) bio-fertilizers (c) earthworms (d) neem leaves
- 143) The method in which water flows over the soil surface and allow it to infiltrate is  
(a) irrigation (b) surface irrigation (c) sprinkler irrigation (d) drip irrigation
- 144) Effective microorganism preparation is not used in  
(a) seed treatment (b) foliar spray (c) soil treatment (d) bio-predators
- 145) Which of the following is not present in Panchagavya?  
(a) Cow dung (b) Cow's urine (c) Curd (d) Sugar
- 146) The plants found in a particular area are known as \_\_\_\_\_  
(a) fauna (b) flora (c) endemic (d) rare
- 147) Deforestation means \_\_\_\_\_  
(a) cleaning of forest (b) to grow plants (c) to look after plants (d) None of these.
- 148) The Red Data Book gives a list of \_\_\_\_\_  
(a) endemic species (b) extinct species (c) natural species (d) None of these
- 149) Insitu conservation is \_\_\_\_\_  
(a) off-site conservation (b) on-site conservation  
(c) off-site conservation and on-site conservation (d) None of these
- 150) Wildlife Protection Act was implemented in \_\_\_\_\_  
(a) 1986 (b) 1972 (c) 1973 (d) 1971
- 151) All functions begins with an \_\_\_\_\_ sign  
(a) = (b) - (c) > (d) }
- 152) \_\_\_\_\_ function is used to calculate the total of a given set of values.  
(a) Average (b) Sum (c) Min (d) Max
- 153) The \_\_\_\_\_ character is used in text formula.  
(a) Ampersand (b) Comma (c) Exclamation (d) Hyperlink
- 154) Which of the following is a relational operator?  
(a) + (b) > (c) - (d) NOT
- 155) The \_\_\_\_\_ function returns the smallest value in a set of values.  
(a) Average (b) Sum (c) Min (d) Max
- 156) Amount of substance is  
(a) directly proportional to the number of atoms  
(b) inversely proportional to the number of atoms  
(c) directly proportional to the square of number of atoms  
(d) inversely proportional to the square of number of atoms
- 157) Which one of the following devices is used to measure electric current



158) SI unit stands for

- (a) International system of units (b) Integrated System of units  
(c) International symbol of units (d) Integrated symbol of units

159) Quantities other than base quantities are called as

- (a) supplementary quantities (b) derived quantities (c) professional quantities  
(d) energy quantities

160) Normal temperature of the human body is between

- (a) 98.4°F and 99.6°F (b) 98.4°F and 98.6°F (c) 97.4°F and 98.6°F  
(d) 97.6°F and 99.6°F

161) \_\_\_\_\_ can be used as memory or storage element in the computers.

- (a) Conductors (b) Insulators (c) Superconductors (d) Semiconductors

162) \_\_\_\_\_ is the measure of the perceived power of light.

- (a) Luminous flux (b) Luminous power (c) Luminous Intensity (d) Both a and b

163) Electric current (I) = \_\_\_\_\_

- (a)  $Qt$  (b)  $t/Q$  (c)  $Q/t$  (d)  $Q/t^2$

164) The unit of charge is \_\_\_\_\_

- (a) Coulomb (b) Ampere (c) Radian (d) Steradian

165) The upper fixed point of thermometer is

- (a) 32°F (b) 180°F (c) 273 K (d) 373 K

166) Scientists use thermometers with \_\_\_\_\_ scale.

- (a) Fahrenheit (b) Kelvin (c) Celsius (d) Joule

167) Flow of \_\_\_\_\_ in a particular direction is known as electric current.

- (a) Electric charges (b) potential difference (c) Electric circuit (d) Coulomb

168) Super conductors conduct electric current without any loss even at \_\_\_\_\_ temperature.

- (a) 40 K (b) -353°C (c) -243.2°C (d) 20 K

169) The entity of a substance may be \_\_\_\_\_

- (a) Atoms (b) Molecules (c) Ions (d) all of the above

170) In analog clocks, seconds hand makes \_\_\_\_\_ rotations in one hour.

- (a) 1 (b) 4 (c) 120 (d) 60

171) The principle of a quartz clock is \_\_\_\_\_ of a crystal.

- (a) Reflecting property (b) Piezo-electric property (c) Electric pressure property  
(d) Total internal reflection property

172) The Earth is divided into \_\_\_\_\_ time zones based on longitude.

- (a) 12 (b) 36 (c) 180 (d) 24

- 173) Time difference between two adjacent time zones is \_\_\_\_\_  
(a) 1 minute (b) 1 second (c) 1 hour (d) 45 minutes
- 174) We are following \_\_\_\_\_ method for choosing ingredients while we prepare a dish  
(a) Approximation (b) Precision (c) Rounding off (d) Accuracy
- 175) \_\_\_\_\_ is the force acting perpendicularly on any given surface area of a body  
(a) Pressure (b) Thrust (c) Density (d) Volume
- 176) Even if we tilt the barometric tube at various angles, the level of mercury will \_\_\_\_\_  
(a) Not vary (b) increases (c) decreases (d) change
- 177) Rain drops are spherical in nature because of \_\_\_\_\_  
(a) Frictional force (b) Buoyant force (c) Surface tension (d) Viscous force
- 178) The unit for surface tension is \_\_\_\_\_  
(a) Nm (b)  $N^{-1}m$  (c)  $N^{-1}m^{-1}$  (d)  $Nm^{-1}$
- 179) If the area of contact is greater, then the \_\_\_\_\_ will be greater.  
(a) Pressure (b) Temperature (c) Friction (d) Force
- 180) Force changes \_\_\_\_\_ of a body.  
(a) shape (b) Size (c) direction of motion (d) All the above
- 181) Thrust is a force acting \_\_\_\_\_ on any given surface area of a body.  
(a) horizontally (b) perpendicularly (c) parallel (d) directly proportional
- 182) All objects on the surface of the Earth experience \_\_\_\_\_ due to atmosphere.  
(a) pressure (b) viscosity (c) force (d) surface tension
- 183) At higher altitudes the boiling point of water is \_\_\_\_\_  
(a)  $100^{\circ}C$  (b)  $110^{\circ}C$  (c)  $80^{\circ}C$  (d)  $90^{\circ}C$
- 184) Liquids exert the same pressure in all directions at a given \_\_\_\_\_  
(a) force (b) depth (c) thrust (d) density
- 185) Surface tension is the property of a \_\_\_\_\_  
(a) liquid (b) gas (c) solid (d) fluids
- 186) The SI unit of viscosity force is \_\_\_\_\_  
(a) Boyle (b)  $kg\ m^{-1}s$  (c)  $Ns\ m^{-2}$  (d)  $kg\ s^{-2}\ m^{-2}$
- 187) Pushing a book on a rough surface with some cylindrical pencils underneath the book is easy to move is due to \_\_\_\_\_  
(a) static friction (b) rolling friction (c) sliding friction (d) pressure
- 188) \_\_\_\_\_ causes physical damage to the machines.  
(a) Thrust (b) Pressure (c) Force (d) Friction
- 189) A road roller has a broad base, so it offers \_\_\_\_\_ on the road.  
(a) less friction (b) more friction (c) sliding friction (d) equilibrium friction
- 190) The centre of a sphere of which the reflecting surface of a spherical mirror is a part is called

- (a) pole (b) centre of curvature (c) radius of curvature (d) aperture
- 191) Focal length is equal to half of the  
(a) centre of curvature (b) axis (c) radius of curvature (d) None of the above
- 192) The refractive index of water is  
(a) 1.0 (b) 1.33 (c) 1.44 (d) 1.52
- 193) \_\_\_\_\_ form the perfect image of an object  
(a) Spherical mirrors (b) Parabolic mirrors (c) Plane mirrors  
(d) Cylindrical mirrors
- 194) Mirrors which magnify the object placed close to them.  
(a) Convex mirror (b) Concave mirror (c) Plane mirror (d) ellipsoid mirror
- 195) In which mirror the following statement is labeled?  
(a) Convex mirror (b) Concave mirror (c) Plane mirror (d) Spherical mirror
- 196) An imaginary line perpendicular to the reflecting surface is called  
(a) imaginary line (b) curved line (c) Perpendicular line (d) normal
- 197) When the angle of inclination decreases the number of images formed \_\_\_\_\_  
(a) increase (b) decreases (c) remain same (d) none of the above
- 198) Parabolic mirrors have \_\_\_\_\_ reflecting surface  
(a) convex (b) concave (c) spherical (d) plane
- 199) The light rays reflected by a parabolic mirror will be diverged in a direction which is \_\_\_\_\_ to the principal axis.  
(a) parallel (b) perpendicular (c) inclined (d) at  $45^\circ$  angle
- 200) \_\_\_\_\_ is the reason for obtaining three images with two mirrors.  
(a) Irregular reflection (b) parabolic reflection (c) Refraction  
(d) Multiple reflection
- 201) In multiple reflection, the number of images formed, depends on the \_\_\_\_\_  
(a) nature of the surface of the mirrors (b) angle of inclination of the mirrors  
(c) reflecting surface of the mirrors (d) distance between the mirrors
- 202) \_\_\_\_\_ mirrors provide a shadow - free illumination of the organ.  
(a) Concave mirrors (b) Convex mirrors (c) Parabolic mirrors (d) Plane mirrors
- 203) Matter is composed of  
(a) atoms (b) molecules (c) ions (d) all of the above
- 204) Which one of metal possess low tensile strength?  
(a) Silver (b) Copper (c) Zinc (d) Aluminium
- 205) Molecule \_\_\_\_\_ D. smallest unit of a substance  
(a) 1 - A, 2 - C, 3 - B, 4 - D (b) 1 - C, 2 - A, 3 - B, 4 - D (c) 1 - D, 2 - C, 3 - B, 4 - A  
(d) 1 - B, 2 - C, 3 - A, 4 - D
- 206) The smallest particle of an element is \_\_\_\_\_  
(a) atom (b) molecule (c) Compound (d) element

- 207) Which of the following element is named after a scientist?  
(a) Americium (b) Mercury (c) Nobelium (d) Neptunium
- 208) Which of the following does not possess metallic lustre?  
(a) Copper (b) Calcium (c) aluminium (d) gold
- 209) Compound obtained from living sources such as plants and animals are called  
(a) In Organic Compounds (b) Organic Compounds (c) Synthetic Compounds  
(d) Artificial Compounds
- 210) The compound used for the sterilisation of drinking water is \_\_\_\_\_  
(a) baking soda (b) washing soda (c) quick lime (d) bleaching powder.
- 211) \_\_\_\_\_ symbols represents the four basic element around us such as earth, air, fire and water  
(a) Alchemist (b) Greek (c) Dalton (d) Berzelius
- 212) The symbol for Boron is \_\_\_\_\_  
(a) Be (b) Ba (c) B (d) Br
- 213) The latin name of lead is  
(a) Plumbum (b) Plumbus (c) Plumboid (d) plumbium
- 214) The wealth of a country is measured by the amount of \_\_\_\_\_ in its reserve  
(a) Platinum (b) Silver (c) Diamond (d) Gold
- 215) \_\_\_\_\_ metal is at liquid state at room temperature  
(a) Osmium (b) Sodium (c) Potassium (d) Francium
- 216) \_\_\_\_\_ is the property that owes the use of iron for the constructor of railway tracks  
(a) Malleability (b) Ductility (c) Tensile strength (d) Sonorous
- 217) \_\_\_\_\_ metal is a poor conductor of electricity.  
(a) Zinc (b) Tungsten (c) Gallium (d) potassium
- 218) \_\_\_\_\_ is the hardest naturally occurring substance  
(a) Osmium (b) Gallium (c) Diamond (d) Nobelium
- 219) The constituent elements of sand are \_\_\_\_\_  
(a) Silicon, Oxygen (b) Sodium, Nitrogen (c) Zinc, Carbon (d) Carbon, Sulphur
- 220) The common name of Ferrous sulphate is \_\_\_\_\_  
(a) Blue vitriol (b) Green vitriol (c) Gypsum (d) Saltpetre
- 221) Rusting of iron is a \_\_\_\_\_ change.  
(a) physical (b) chemical (c) physical and chemical (d) neutral
- 222) Decomposition of limestone is an example for chemical reaction based on \_\_\_\_\_  
(a) contact (b) electricity (c) light (d) heat
- 223) The chemical reactions carried out by the passage of electricity is called.  
(a) Rusting (b) Thermolysis (c) Electrolysis (d) Photolysis
- 224) Enzymes and yeasts are called

- (a) catalysts (b) bio catalysts (c) chemical catalysts (d) physical catalysts
- 225) The brown colour of a cut apple is due to  
(a) rusting (b) rancidity (c) browning (d) fermentation
- 226) Bending of iron rod is a \_\_\_\_\_ change  
(a) physical (b) Chemical (c) irreversible (d) natural
- 227) The sides of a match box contain \_\_\_\_\_  
(a) potassium chlorate (b) antimony try sulphate (c) red phosphorus  
(d) potassium nitrate
- 228) When electricity is Passed thoroughly water containing small amounts of \_\_\_\_\_, hydrogen and oxygen gases are liberated.  
(a) hydrochloric acid (b) nitric acid (c) sulphuric acid (d) sodium hydroxide
- 229) In vanaspati ghee preparation finely divided \_\_\_\_\_ is used as a catalyst  
(a) nickel (b) iron (c) steel (d) zinc
- 230) \_\_\_\_\_ gas produces 'PoP' sound  
(a) Oxygen (b) Nitrogen (c) Hydrogen (d) Carbondioxide
- 231) Explosives, fireworks works on the basis of \_\_\_\_\_  
(a) production of Pressure (b) production of light (c) production of heat  
(d) production of sound
- 232) When we ignite methane gas it produces \_\_\_\_\_ and \_\_\_\_\_  
(a) sound and light (b) Heat and light (c) Pressure and light  
(d) Pressure and heat
- 233) When dilute hydrochloric acid is added to a solution of sodium bicarbonate \_\_\_\_\_ is evolved.  
(a) oxygen (b) chlorine (c) carbondioxide (d) nitrogen
- 234) \_\_\_\_\_ is a change of state from solid to gas  
(a) Melting (b) Sublimation (c) Tarnishing (d) Fermentation
- 235) \_\_\_\_\_ is the process by which chlorine is produced in Industrially  
(a) Habers process (b) Brine electrolysis (c) Exothermic process  
(d) Hall's process
- 236) The plant body of algae is called as \_\_\_\_\_.  
(a) stem (b) thallus (c) leaf (d) root
- 237) \_\_\_\_\_ is a ball-shaped bacteria.  
(a) Bacilli (b) Spinilla (c) Cocci (d) Vibrio
- 238) \_\_\_\_\_ is an example for Lophotrichous  
(a) vibrio (b) Pseudomonas (c) Rhodospirillum (d) Corny bacterium
- 239) Plasmodium belongs to \_\_\_\_\_ type of protozoan.  
(a) Ciliates (b) Flagellate (c) Pseudopods (d) sporozoans
- 240) \_\_\_\_\_ is an acid - loving bacteria



- (a) *Lactobacillus acidophilus* (b) *Pseudomonas* (c) *Xanthomonas*  
 (d) *Vibrio cholera*
- 241) The plant body of algae is called as \_\_\_\_\_  
 (a) stem (b) thallus (c) leaf (d) root
- 242) Viruses are \_\_\_\_\_ times smaller than bacteria.  
 (a) 10 (b) 100 (c) 1000 (d) 10000
- 243) Tobacco mosaic virus is a \_\_\_\_\_ shaped virus.  
 (a) spherical (b) helical (c) rod (d) complex
- 244) Which is the symbiotic fungi?  
 (a) *Rhizopus* (b) *Mycorrhiza* (c) *Puccinia* (d) *Ustilago*
- 245) *Fucoxanthin* is \_\_\_\_\_ coloured pigment.  
 (a) yellow (b) red (c) brown (d) blue
- 246) *Bifidobacterium bifidum* can help to repair \_\_\_\_\_  
 (a) childhood constipation (b) mouth ulcer (c) stomach ulcer (d) indigestion
- 247) The edible mushroom is \_\_\_\_\_  
 (a) *Polyporus* (b) *Agaricus* (c) *Penicillium* (d) *Aspergillus*
- 248) Soil erosion is prevented by \_\_\_\_\_ plants.  
 (a) Algae (b) Fungi (c) Bryophytes (d) Pteridophytes
- 249) The first vascular cryptogams in land plants are \_\_\_\_\_.  
 (a) Bryophytes (b) Pteridophytes (c) Gymnosperm (d) Angiosperm
- 250) The estimated number of species on the earth is \_\_\_\_\_ million  
 (a) 8.7 (b) 100 (c) 120 (d) 150
- 251) \_\_\_\_\_ is the earliest system of classification in plants.  
 (a) Natural system of classification (b) Artificial system of classification  
 (c) Phylogenetic system of classification (d) Modern system of classification
- 252) \_\_\_\_\_ is the giant kelp  
 (a) *Spirogyra* (b) *Volvox* (c) *Macrocystis* (d) *Chlorella*
- 253) \_\_\_\_\_ is used as a food for domestic animals  
 (a) *Gelidium* (b) *Ascophyllum* (c) *Laminaria* & *Ascophyllum*
- 254) *Cercospora personata* causes \_\_\_\_\_  
 (a) Wilt disease (b) Red rot of sugar cane (c) Blast disease (d) Tikka disease
- 255) *Nostoc* is a \_\_\_\_\_  
 (a) green algae (b) brown algae (c) red algae (d) blue green algae
- 256) When aseptate mycelium contains many nuclei it is called as \_\_\_\_\_  
 (a) coenocytic mycelium (b) hyphae mycelium (c) septate mycelium  
 (d) equisetum mycelium
- 257) Fungi live symbiotically with higher plants roots called \_\_\_\_\_  
 (a) *Rhizobium* (b) *Haustoria* (c) *Mycorrhiza* (d) *Velamen*

- 258) \_\_\_\_\_ species of fungi cause allergy to children  
(a) Aspergillus (b) Agaricus (c) Cladosporium (d) Claviceps
- 259) Equisetum belongs to the class \_\_\_\_\_  
(a) psilopsida (b) Lycopsida (c) Sphenopsida (d) Pteropsida
- 260) The \_\_\_\_\_ of Marsilea is used as food by tribal people  
(a) Sporocarp (b) Sporangia (c) Microspore (d) Megaspore
- 261) \_\_\_\_\_ possesses advanced characters like angiosperms.  
(a) Cycadales (b) Ginkgoales (c) Coniferales (d) Gnetales
- 262) There are \_\_\_\_\_ species of flowering plants.  
(a) 8.7 million (b) 6.5 million (c) 2.2 million (d) 4,00,000
- 263) Very minute algae floating on the surface of water are \_\_\_\_\_  
(a) Phyto plankton (b) Aquatic algae (c) Volvox (d) Epiphytes
- 264) \_\_\_\_\_ algae are giant kelp.  
(a) Volvox (b) Macrocystis (c) Cladophora (d) Lichen
- 265) \_\_\_\_\_ make up organs  
(a) Cells (b) Tissues (c) Organ system (d) None of the above
- 266) \_\_\_\_\_ are called as building blocks of life  
(a) Cells (b) nucleus (c) Cell organelles (d) tissues
- 267) \_\_\_\_\_ tissues for conduction of nerve impulses  
(a) Epithelial (b) Muscular (c) Nervous (d) Supporting
- 268) \_\_\_\_\_ is a thin transparent membrane that is spread across the sclera  
(a) Cornea (b) Conjunctiva (c) Retina (d) Ciliary body
- 269) \_\_\_\_\_ million alveoli located at the end of branchial tubes  
(a) 480 (b) 300 (c) 100 (d) 200
- 270) \_\_\_\_\_ is the smallest bacterium.  
(a) Mycoplasma (b) Mycobacterium (c) Cyanobacterium (d) E.coli
- 271) \_\_\_\_\_ cells of human are Amoeba like with irregular boundaries  
(a) RBC (b) WBC (c) nerve cell (d) ovum cell
- 272) Complex tissue is \_\_\_\_\_  
(a) homogenous (b) homotrophic (c) heterotrophic (d) heterogeneous
- 273) \_\_\_\_\_ tissues are for binding different structures of body  
(a) Epithelial (b) Muscular (c) Connective (d) Nervous
- 274) \_\_\_\_\_ maintain the biological clock of the human body  
(a) Lungs (b) Eyes (c) Endocrine system (d) Nervous system
- 275) After passing through the nasal cavity the air enters the  
(a) larynx (b) pharynx (c) windpipe (d) bronchi
- 276) \_\_\_\_\_ are capable of maintaining a constant body temperature despite the changes in the external temperature

- (a) Marine fish (b) Fresh water fish (c) Ostrich (d) Mammals
- 277) \_\_\_\_\_ ensures that the fluids in the body do not get too diluted or concentrated
- (a) Osmoregulation (b) Osmoconformation (c) Osmoconcentration (d) Osmosis
- 278) The energy formed from cellular respiration is made available to living cells in the form of \_\_\_\_\_
- (a) ADP (b) ATP (c) NADP (d) NADHP
- 279) In aerobic respiration each glucose molecule Produces \_\_\_\_\_
- (a) 38 ATPs (b) 37 ATPs (c) 36 ATPs (d) 35 ATPs
- 280) Due to vibratory motion, substances have an energy known as \_\_\_\_\_
- (a) potential energy (b) heat energy (c) mechanic energy (d) static energy
- 281) When we heat a solid the force of attraction between its molecules \_\_\_\_\_
- (a) remains same (b) decreases (c) increases (d) gets doubled
- 282) A silver spoon placed in hot water becomes hot. This is due to \_\_\_\_\_
- (a) conduction (b) convection (c) radiation (d) expansion
- 283) Formation of land breeze is due to \_\_\_\_\_
- (a) colduction (b) radiation (c) convection (d) atmospheric refraction
- 284) Air in the atmosphere is heated by \_\_\_\_\_
- (a) colduction (b) radiation (c) deposition (d) convection
- 285) \_\_\_\_\_ reflects heat radiation.
- (a) Black colour (b) Brown colour (c) Violet colour (d) White colour
- 286) \_\_\_\_\_ is the most commonly used scale to measure temperature.
- (a) Celsius scale (b) Fahrenheit scale (c) Kelvin scale (d) Calorimetric scale
- 287) The amount of energy in the food items is measured by the unit \_\_\_\_\_
- (a) joule (b) joule / kelvin (c) calorie (d) kilocalorie
- 288) \_\_\_\_\_ is a physical quantity which expresses whether an object is hot or cold.
- (a) Heat (b) Temperature (c) Force (d) Thermodynamics
- 289) A \_\_\_\_\_ can function both as the sensor and the controller of a thermal system.
- (a) calorimeter (b) Thermosflask (c) versorium (d) thermostat
- 290) In an object, electric charge is carried by the \_\_\_\_\_
- (a) periatomic partic (b) subatomic particles (c) nanoatomic particles (d) subelementary particles
- 291) The amount of charge possessed by each protons and electrons
- (a)  $1.602 \times 10^{-19} \text{ C}$  (b)  $1.602 \times 10^{19} \text{ C}$  (c)  $1.602 \times 10^{19} \text{ Q}$  (d)  $1.602 \times 10^{-9} \text{ C}$
- 292) Electrons flow from \_\_\_\_\_ to \_\_\_\_\_

- (a) higher potential to lower potential (b) higher voltage to lower voltage  
 (c) positively charged body to negatively charged body  
 (d) lower potential to higher potential
- 293) Electric discharge takes place in a medium mostly\_\_\_\_\_
- (a) solids (b) liquids (c) gases (d) vacuum
- 294) Which of the following is a conductor?
- (a) Rubber (b) Wood (c) Plastic (d) Graphite
- 295) The force of attraction or repulsion is greater when the charged objects are \_\_\_\_\_
- (a) closer (b) farther (c) neutralised (d) electrified
- 296) If two terminals of a battery are connected by a metallic wire, electrons will flow from\_\_\_\_\_
- (a) higher potential to lower potential (b) lower potential to higher potential  
 (c) negative terminal to positive terminal (d) positive terminal to negative terminal
- 297) \_\_\_\_\_is an electromotive force that causes electrons to flow.
- (a) Voltage (b) Friction (c) Joule (d) Resistance
- 298) The electrons in the\_\_\_\_\_orbit of an atom can be easily removed.
- (a) innermost (b) outermost (c) third (d) fourth
- 299) A fuse is a strip of alloy which has a \_\_\_\_\_
- (a) very high melting point (b) very high specific heat capacity  
 (c) very low resistance (d) very low melting point
- 300) \_\_\_\_\_ is the most abundant element on the earth by mass.
- (a) Oxygen (b) Nitrogen (c) Hydrogen (d) Helium
- 301) \_\_\_\_\_ molecule is known as ozone.
- (a) Dioxygen (b) monooxygen (c) Trioxxygen (d) Pentaooxygen
- 302) Oxygen does not react with \_\_\_\_\_even at high temperature
- (a) calcium (b) Silver (c) Aluminium (d) Sulphur
- 303) The chemical formula of rust is \_\_\_\_\_
- (a)  $\text{Fe}_2\text{O}_3 \cdot x \text{H}_2\text{O}$  (b)  $\text{Fe}_3\text{O}_4 \cdot x \text{H}_2\text{O}$  (c)  $\text{Fe}_3\text{O}_5 \cdot x \text{H}_2\text{O}$  (d)  $\text{Fe}_5\text{O}_6 \cdot x \text{H}_2\text{O}$
- 304) Non-metallic oxides are generally \_\_\_\_\_ in nature
- (a) basic (b) neutral (c) inert (d) acidic
- 305) \_\_\_\_\_ looks like water when it becomes a liquid at low temperature
- (a) Oxygen (b) Carbondioxide (c) Nitrogen (d) Hydrogen
- 306) \_\_\_\_\_ in air moderates the rate of combustion
- (a) Oxygen (b) Nitrogen (c) Carbondioxide (d) Helium
- 307) Much of the naturally occurring  $\text{CO}_2$  is emitted from \_\_\_\_\_
- (a) Human  $\text{CO}_2$  emissions (b) fermentation reactions  
 (c) Magma through volcanoes (d) Burning of fossil fuels

308) \_\_\_\_\_ is used along with ammonia in the manufacture of fertilizers like urea.

- (a) Nitrogen (b) Oxygen (c) Hydrogen (d) Carbon dioxide

309) \_\_\_\_\_ is the major reason for the extinction of coral reefs.

- (a) Acid rain (b) Global warming (c) Solar radiation (d) dry ice

310) \_\_\_\_\_ provided a basic theory about the nature of matter.

- (a) J.J. Thomson (b) Dalton (c) Lavoisier (d) Chadwick

311) Atoms of the different elements may have same masses is called \_\_\_\_\_

- (a) isobars (b) isotopes (c) compounds (d) isotones

312) \_\_\_\_\_ discovered neutron

- (a) J.J. Thomson (b) Dalton (c) Lavoisier (d) Chadwick

313) The electrons revolving in the outermost orbit are called \_\_\_\_\_ electrons.

- (a) compound (b) orbit (c) valence (d) variable

314) Valency of Nitrogen in ammonia is \_\_\_\_\_

- (a) 1 (b) 2 (c) 4 (d) 3

315) In an atom, the number of Protons is equal to the number of \_\_\_\_\_ and so the atom is electrically neutral

- (a) neutron (b) electron (c) anions (d) cations

316) In  $\text{H}_3\text{PO}_4$ , the valency of Amon is \_\_\_\_\_

- (a) 1 (b) 2 (c) 3 (d) 4

317) The chemical formula for calcium chloride is \_\_\_\_\_

- (a)  $\text{CaCl}_2$  (b)  $\text{CaO}$  (c)  $\text{CaCO}_3$  (d)  $\text{CaCl}$

318) Law of conservation of mass was started by \_\_\_\_\_ scientist

- (a) Rutheford (b) Lavoisier (c) Dalton (d) J.J thomson

319) An insoluble solid that emerges from a liquid solution is \_\_\_\_\_

- (a) Precipitate (b) Acid (c) Salt (d) Ions

320) \_\_\_\_\_ helps to perform necessary functions such as pumping of blood.

- (a) Locomotion (b) Movement (c) Growth (d) Cartilage

321) The body of snake consists of a large number \_\_\_\_\_

- (a) vertebrae (b) muscles (c) setae (d) bristles

322) Movement of some human organs happens because of the combined action of \_\_\_\_\_

- (a) tendons and ligaments (b) capsules and cartilages (c) bones and muscles  
(d) muscles and skin

323) \_\_\_\_\_ is seen with cells of the lymphatic system.

- (a) Slithering movement (b) Gliding movement (c) Muscular movement  
(d) Ciliary movement.

324) \_\_\_\_\_ type of movement is seen in the higher vertebrates.

- (a) Slithering movement (b) Gliding movement (c) Muscular movement  
(d) Ciliary movement
- 325) \_\_\_\_\_ joint allows the greatest range of movement.  
(a) Hinge (b) pivot (c) Condylod (d) Ball and socket.
- 326) Abduction - adduction movements are seen in \_\_\_\_\_ joint  
(a) gliding (b) saddle (c) pivot (d) hinge
- 327) Flat bones are found in \_\_\_\_\_  
(a) arms (b) wrist (c) shoulder (d) spine
- 328) Leg is made up of \_\_\_\_\_  
(a) tibia and fibula (b) radius and ulna (c) carpals and metacarpals  
(d) phalanges
- 329) \_\_\_\_\_ radiates from pupil of the eye like spokes of a bicycle.  
(a) Circular muscles (b) Radial muscles (c) Stapes muscle (d) Smooth muscles
- 330) \_\_\_\_\_ is the most crucial and significant period in an individual's life  
(a) Adolescence (b) Infancy (c) Adulthood (d) Middle age
- 331) \_\_\_\_\_ play an important role at the time of puberty  
(a) Voice change (b) Hormones (c) Change in body size (d) Nutrition
- 332) During \_\_\_\_\_ legs grow proportionately more than the trunk  
(a) adolescence (b) adulthood (c) childhood (d) middle age
- 333) Reproductive organs of boys and girls become fully functional at the time of \_\_\_\_\_  
(a) adolescence (b) menarche (c) ovulation (d) puberty
- 334) The secondary sex characters are regulated by \_\_\_\_\_  
(a) androgen, estrogen (b) testosterone, progesterone (c) prolactin, androgen  
(d) oxytocin, testosterone
- 335) \_\_\_\_\_ is more important for the continuation of human race.  
(a) Reproduction (b) Ovulation (c) Adolescence (d) Puberty
- 336) \_\_\_\_\_ is the beginning of adolescence in girls.  
(a) Ovulation (b) Menarche (c) Fertilization (d) Personal hygiene
- 337) \_\_\_\_\_ is a clear indicator of man's personality  
(a) Nutrition (b) Balanced diet (c) Personal hygiene (d) Reproductive health
- 338) Menstruation stops temporarily when \_\_\_\_\_  
(a) the ovary is surgically removed (b) the ovum gets fertilized  
(c) the girl attains puberty (d) ovulation occurs
- 339) \_\_\_\_\_ is the stoppage of menstruation.  
(a) Menarche (b) Menopause (c) Ovulation (d) Child birth
- 340) Sound travels faster in  
(a) distilled water (b) air (c) vacuum (d) steel

- 341) For the propagation of mechanical wave, the medium must possess?  
(a) inertia (b) uniform density (c) elasticity (d) all
- 342) In longitudinal wave high pressure region is called?  
(a) compression (b) rarefaction (c) crest (d) trough
- 343) The seismic wave is an example of \_\_\_\_\_ wave.  
(a) transverse (b) longitudinal (c) electric (d) electromagnetic
- 344) \_\_\_\_\_ of a sound enables us to distinguish a weak or feeble sound from loud sound.  
(a) Pitch (b) Loudness (c) Frequency (d) Timbre
- 345) Normal female voice has a \_\_\_\_\_ pitch than a male.  
(a) lower (b) higher (c) equal (d) all
- 346) \_\_\_\_\_ sound is used in SONAR.  
(a) Audible (b) Infrasonic (c) Ultrasonic (d) All
- 347) Flute is an example of \_\_\_\_\_ instrument.  
(a) stringed (b) wind (c) reed (d) Percussion
- 348) Any sound unpleasant to ear is called \_\_\_\_\_.  
(a) music (b) pitch (c) noise (d) frequency
- 349) Voice box in a human being is also called as \_\_\_\_\_.  
(a) vocal cord (b) ear drum (c) larynx (d) wind pipe
- 350) The outer and visible part of the human ear is called \_\_\_\_\_.  
(a) ear canal (b) ear drum (c) pinna (d) larynx
- 351) Which of the following is correct?  
(a)  $v = n/\lambda$  (b)  $v = n\lambda$  (c)  $v = n\lambda$  (d) all
- 352) \_\_\_\_\_ called magnetite (Iron oxide) which is the ore of iron is the strongest natural magnet.  
(a) Neodymium (b) Lodestone (c) Magnesium (d) Manganese
- 353) Bar magnet is \_\_\_\_\_ magnet.  
(a) natural (b) artificial (c) temporary (d) electro
- 354) A freely suspended magnet always shows \_\_\_\_\_ direction.  
(a) East- West (b) East-South (c) North -South (d) North-East
- 355) 1 tesla = \_\_\_\_\_ gauss.  
(a) 1 (b) 100 (c) 100 (d) 10000
- 356) Magnetic property of \_\_\_\_\_ magnetic substance not affected by temperature.  
(a) dia (b) para (c) ferro (d) all
- 357) \_\_\_\_\_ is the ferro magnetic substance.  
(a) Copper (b) Nickel (c) Aluminium (d) Platinum
- 358) Strongest artificial magnet is \_\_\_\_\_ magnets.  
(a) ALNICO (b) FENICO (c) Cobalt (d) Neodymium



- 359) The most powerful magnet in the universe is \_\_\_\_\_  
(a) ALNICO (b) magnetite (c) magnetar (d) Neodymium
- 360) Cause of Earth's magnetism.  
(a) masses of magnetic substances in the Earth (b) radiations from the Sun  
(c) action of the Moon (d) all the above
- 361) Which among the following not belongs to solar system?  
(a) Moon (b) Asteriods (c) Planets (d) Stars
- 362) Rockets were invented in  
(a) India (b) USA (c) China (d) Russia
- 363) Frame of rocket is made up of  
(a) Iron (b) Aluminium (c) Brass (d) Mercury
- 364) India's popular rockets are  
(a) PSLV (b) GSLV (c) Both (d) None
- 365) Some of the oxidizers are  
(a) oxygen (b) ozone (c) hydrogen peroxide (d) all
- 366) India's first satellite is  
(a) apple (b) Aryabhata (c) Baskara (d) Rohini
- 367) The first Indian to enter into the space,  
(a) Rakesh Sharma (b) Neil Armstrodg (c) Kalpana Chawla (d) Sunitha Williams
- 368) Chandrayaan-1 was operated for \_\_\_\_\_ days  
(a) 213 (b) 312 (c) 123 (d) 132
- 369) Our body is made up of \_\_\_\_\_ of water but it is not apparent.  
(a) 65 % (b) 75 % (c) 55% (d) 45%
- 370) Water was first prepared by \_\_\_\_\_  
(a) Henry Cavendish (b) Lavoisier (c) Avogadro (d) Chadwick
- 371) The freezing point of water \_\_\_\_\_ with increase in pressure.  
(a) increases (b) decreases (c) stable (d) increases and then decreases
- 372) Sodium reacts with water to form \_\_\_\_\_ and sodium hydroxide solution.  
(a) oxygen (b) sodium oxide (c) hydrogen (d) hydrogen oxide
- 373) Coke reacts with steam to produce \_\_\_\_\_.  
(a) CO<sub>2</sub> (b) carbon trioxide (c) water gas (d) carbonate
- 374) The largest source of water pollution in India is v\_\_\_\_\_  
(a) Domestic waste and plastics (b) Household detergent (c) Industrial waste  
(d) Untreated sewage
- 375) \_\_\_\_\_ affects the central nervous system of insects, animals and humans  
(a) DDT (b) Nitrates (c) Phosphates (d) Sulphates
- 376) \_\_\_\_\_ leads to a decrease in animal and plant diversity.  
(a) Sodium sulphates (b) Sodium phosphates (c) Nitrates (d) all the above

- 377) \_\_\_\_\_ is the technology used in RO purifiers  
(a) Osmosis (b) Reverse osmosis (c) Selective osmosis (d) all the above
- 378) A \_\_\_\_\_ is a substance which dissolves other molecules and compounds.  
(a) solvent (b) Solute (c) solution (d) binary solution
- 379) Green tea is \_\_\_\_\_ in nature  
(a) acidic (b) basic (c) neutral (d) salty
- 380) Aspirin is \_\_\_\_\_ in nature  
(a) acidic (b) basic (c) neutral (d) salty
- 381) Acids can be classified into organic and inorganic acids depending on their \_\_\_\_\_.  
(a) acidity (b) hydrogen ions (c) hydroxide ions (d) sources
- 382) The acid present in apple is \_\_\_\_\_  
(a) Tartaric acid (b) Acetic acid (c) Malic acid (d) oxalic acid
- 383) Acid is a substance that gives \_\_\_\_\_ on dissolving in water.  
(a)  $\text{OH}^-$  (b)  $\text{H}^+$  (c) OH (d) H
- 384) \_\_\_\_\_ is present in soap  
(a) Calcium hydroxide (b) Magnesium hydroxide (c) Ammonium hydroxide  
(d) Potassium hydroxide
- 385) Sodium hydroxide is also called \_\_\_\_\_  
(a) washing soda (b) baking soda (c) caustic soda (d) caustic potash
- 386)  $\text{H}_2\text{SO}_4 + \text{NaOH} \rightarrow$  \_\_\_\_\_  
(a)  $\text{NaSO}_4$  (b)  $\text{Na}_2\text{SO}_4$  (c)  $\text{Na}_2(\text{SO}_4)_3$  (d)  $\text{Na}_3\text{SO}_4$
- 387) \_\_\_\_\_ gas burns with a pop sound  
(a) Oxygen (b) Nitrogen (c) Hydrogen (d) Carbon dioxide
- 388) \_\_\_\_\_ is the most common indicator used in laboratories.  
(a) Litmus (b) Beetroot juice indicator (c) Turmeric indicator  
(d) Synthetic indicator
- 389) \_\_\_\_\_ is used as a propellant in aerosol sprays.  
(a) Methane (b) Ethane (c) propane (d) Butane
- 390) \_\_\_\_\_ is also called as associated gas.  
(a) Natural gas (b) Water gas (c) producer gas (d) Coal gas
- 391) \_\_\_\_\_ is stored in ultra cold liquid form.  
(a) CNG (b) LNG (c) Water gas (d) producer gas
- 392) \_\_\_\_\_ is used in museums to protect the monuments.  
(a) CNG (b) Producer gas (c) Coal gas (d) Natural gas
- 393) Bio gas is a mixture of \_\_\_\_\_ and \_\_\_\_\_.

- (a) carbon monoxide and hydrogen (b) hydrogen and methane  
(c) methane and carbon-dioxide (d) carbon monoxide and nitrogen
- 394) \_\_\_\_\_ is a sponge like coal.  
(a) Peat (b) Bituminous (c) Anthracite (d) Lignite
- 395) \_\_\_\_\_ are the useful substances obtained from petroleum and natural gas during fractional distillation.  
(a) Petro chemicals (b) distilled chemicals (c) Nano chemicals  
(d) Crude chemicals
- 396) Any fuel contains \_\_\_\_\_ as its main constituent.  
(a) hydrogen (b) nitrogen (c) carbon (d) oxygen
- 397) When cetane number is higher the ignition delay is \_\_\_\_\_.  
(a) longer (b) shorter (c) gradual (d) paused
- 398) \_\_\_\_\_ is the first and foremost energy source.  
(a) Sun (b) Natural gas (c) Coal (d) Petroleum
- 399) \_\_\_\_\_ crops which are sown in rainy season.  
(a) Rabi (b) Kharif (c) Zaid (d) Ornamental
- 400) Which crops are used for cordage and textile?  
(a) Sorghum (b) Millets (c) Croton (d) Cotton
- 401) The soil is not prepared by \_\_\_\_\_ methods  
(a) ploughing (b) levelling (c) dibbling (d) manuring
- 402) \_\_\_\_\_ also kill weeds and dig up unwanted vegetation available in the fields  
(a) Plough (b) Hoe (c) Leveller (d) Cultivator
- 403) Essential for the growth of plants are \_\_\_\_\_  
(a) nutrients (b) vitamins (c) carbohydrate (d) fat
- 404) \_\_\_\_\_ is the most common method in which weeds are destroyed physically.  
(a) Tillage method (b) Mechanical method (c) Crop rotation (d) Chemical method
- 405) The farm instrument \_\_\_\_\_ is used to harvest crops.  
(a) hoe (b) cultivator (c) sickle (d) plough
- 406) The process of separating the grains from their chaffs or pods is \_\_\_\_\_.  
(a) Winnowing (b) Levelling (c) Dibbling (d) Threshing
- 407) Food Corporation of India was set up on \_\_\_\_\_ at Chennai.  
(a) 14<sup>th</sup> February (b) 14<sup>th</sup> July (c) 14<sup>th</sup> January (d) 14<sup>th</sup> March
- 408) The royal Botanical Garden located in \_\_\_\_\_.  
(a) Kolkata (b) Mumbai (c) Chennai (d) Bengaluru
- 409) \_\_\_\_\_ are naturally occurring insects that use pests for feeding or multiplication  
(a) Bio Pesticide (b) Bio predators (c) Bio repellent (d) Bio fertilizer

- 410) \_\_\_\_\_ is a symbiotic bacteria fix atmospheric nitrogen.  
 (a) Anabeana (b) Nostoc (c) Rhizobium (d) None
- 411) Due to deforestation more than \_\_\_\_\_ % of the forest are cleaned.  
 (a) 40 (b) 50 (c) 60 (d) 70
- 412) \_\_\_\_\_ is the most commonly used fuel.  
 (a) Petrol (b) LPG (c) Wood (d) Kerosene
- 413) Chipko movement was founded by \_\_\_\_\_  
 (a) Wangari Maathai (b) Sunderal Bahuguna (c) Captain V. Sundaram  
 (d) Victoria
- 414) \_\_\_\_\_ forest is the largest rain forest in the world.  
 (a) Sundarbans (b) Green (c) Gir (d) Amazon
- 415) Environmental day is celebrated on \_\_\_\_\_  
 (a) June 5 (b) March 22 (c) July 28 (d) March 21
- 416) \_\_\_\_\_ plant is not a endangered plant.  
 (a) Malabar lily (b) Indian Mallow (c) Hibiscus plant (d) Musli plant
- 417) \_\_\_\_\_ has been declared state butterfly of Tamil Nadu.  
 (a) Green butterfly (b) dragonfly (c) Yellow butterfly (d) Yeoman butterfly
- 418) Indiri Gandhi Natural Park is located in \_\_\_\_\_  
 (a) Chennai (b) Coimbatore (c) The Nilgiris (d) Madurai
- 419) Vedanthangal Wildlife Sanctuary is established the year \_\_\_\_\_  
 (a) 2016 (b) 1976 (c) 1936 (d) 1988
- 420) The biosphere Manas is located in \_\_\_\_\_ state.  
 (a) Meghalaya (b) Tamil Nadu (c) West Bengal (d) Assam
- 421) In India the first zoo was established in \_\_\_\_\_  
 (a) Kanpur (b) Barrachpur (c) Cuttak (d) Amritsar
- 422) Blue Cross main office is located in \_\_\_\_\_.  
 (a) Guindy (b) Chrompet. (c) Tambaram (d) Royapuram
- 423) In India there are \_\_\_\_\_ natural parks were established.  
 (a) 60 (b) 70 (c) 73 (d) 72
- 424) Blue Cross was founded to care for working \_\_\_\_\_ on the street of London  
 (a) Cow (b) Goat (c) Elephant (d) Horses
- 425) Function wizard has \_\_\_\_\_ tabs  
 (a) Four (b) five (c) three (d) two
- 426) \_\_\_\_\_ is a function which is used to calculate power of an exponent value of a number.  
 (a) SUM () (b) AVERAGE () (c) EXP () (d) POWER ()
- 427) Each row in a database table represents a \_\_\_\_\_

(a) Field (b) Record (c) File (d) None of these

428) \_\_\_\_\_ is a set of data for database entry

(a) Field (b) Record (c) File (d) None of these

429) There are \_\_\_\_\_ types of sorting

(a) 3 (b) 2 (c) 4 (d) 5

430) For sorting the data, calc provide \_\_\_\_\_ icons on the standard tool bar

(a) 5 (b) 4 (c) 3 (d) 2

431) Sort Descending icon arrange data in \_\_\_\_\_ order

(a) Reverse (b) Z to A (c) Large to Small (d) All the above

432) \_\_\_\_\_ are a feature for displaying and browsing a selected list or subset of data from a worksheet.

(a) Sorting (b) Merging (c) Filtering (d) Editing

433) \_\_\_\_\_ tab in available page style dialog box

(a) Page (b) header (c) footer (d) All the above

434) A \_\_\_\_\_ is a predefined formula

(a) Function (b) Formula (c) Filter (d) none of these

435) \_\_\_\_\_ is a first spreadsheet

(a) Ms-excel (b) VisiCalc (c) Question pro (d) Improved

411 x 1 = 411

436) The solid angle is measured in \_\_\_\_\_.

437) The coldness or hotness of a substance is expressed by \_\_\_\_\_.

438) \_\_\_\_\_ is used to measure electric current.

439) One mole of a substance contains \_\_\_\_\_ atoms or molecules.

440) The uncertainty in measurement is called as \_\_\_\_\_.

441) The closeness of the measured value to the original value is \_\_\_\_\_

442) The intersection of two straight lines gives us \_\_\_\_\_.

443) The pressure of a liquid column \_\_\_\_\_ with the depth of the column.

444) Hydraulic lift works under the principle of \_\_\_\_\_.

445) The property of \_\_\_\_\_ of a liquid surface enables the water droplets to move upward in plants.

446) A simple barometer was first constructed by \_\_\_\_\_.

447) The spherical mirror used in a beauty parlour as make-up mirror is \_\_\_\_\_.

448) Geometric centre of the spherical mirror is \_\_\_\_\_.

449) Nature of the images formed by a convex mirror is \_\_\_\_\_.

450) The mirror used by the ophthalmologist to examine the eye is \_\_\_\_\_.

451) If the angle of incidence is  $45^\circ$ , then the angle of reflection is \_\_\_\_\_.

452) If an object is placed between two mirrors which are parallel to each other, the number of images formed is \_\_\_\_\_

453) The element which possess character of both metals and non metals are called \_\_\_\_\_.

454) The symbol of Tungsten is \_\_\_\_\_

- 455) Melting point of most metal is \_\_\_\_\_ than non-metal.
- 456) Water contains \_\_\_\_\_ and \_\_\_\_\_ element
- 457) \_\_\_\_\_ is used as semiconductor
- 458) Photosynthesis is a chemical reaction that takes place in presence of \_\_\_\_\_.
- 459) Iron objects undergo rusting when exposed to \_\_\_\_\_ and \_\_\_\_\_.
- 460) \_\_\_\_\_ is the basic material to manufacture urea.
- 461) Electrolysis of Brine solution gives \_\_\_\_\_ gases.
- 462) \_\_\_\_\_ is a chemical substance which alters the speed of a chemical reaction.
- 463) \_\_\_\_\_ is the enzyme responsible for browning of vegetables, fruits.
- 464) \_\_\_\_\_ is prepared from a mould called Penicillium.
- 465) \_\_\_\_\_ are the infectious protein particles.
- 466) The intact virus particle found outside the host cell is \_\_\_\_\_.
- 467) Micro organism can be seen with the help of a \_\_\_\_\_.
- 468) Bacteria, which have a flagellum at one end is classified as \_\_\_\_\_.
- 469) The word 'Taxonomy' is derived from \_\_\_\_\_.
- 470) Binomial Nomenclature was first introduced by \_\_\_\_\_
- 471) The book "Genera Plantarum" was written by \_\_\_\_\_
- 472) Monocotyledon seeds bear only \_\_\_\_\_cotyledon.
- 473) Brown algae belongs to \_\_\_\_\_class.
- 474) Agar Agar is obtained from \_\_\_\_\_ algae.
- 475) The reserve food material of fungi are \_\_\_\_\_ and \_\_\_\_\_
- 476) The first true land plant is \_\_\_\_\_
- 477) Xylem and phloem are absent in \_\_\_\_\_ plants.
- 478) Reticulate venation is present in \_\_\_\_\_ plants.
- 479) \_\_\_\_\_ is the structural and functional unit of living organisms.
- 480) The largest cell is egg of an \_\_\_\_\_.
- 481) \_\_\_\_\_ is a good example for anaerobic respiration.
- 482) \_\_\_\_\_ nerve is located at the end of the eyes behind the retina.
- 483) The size of the cells are measured in units of \_\_\_\_\_.
- 484) A calorimeter is a device used to measure the\_\_\_\_\_.
- 485) \_\_\_\_\_ is defined as the amount of heat required to raise the temperature of 1kg of a substance by 1°C.
- 486) A thermostat is a device which maintains \_\_\_\_\_.
- 487) The process of converting a substance from gas to solid is called\_\_\_\_\_.
- 488) If you apply heat energy, the temperature of a system will \_\_\_\_\_.
- 489) If the temperature of a liquid in a container is decreased, then the interatomic distance will \_\_\_\_\_.
- 490) \_\_\_\_\_takes place by rubbing objects together.
- 491) The body which has lost electrons becomes \_\_\_\_\_
- 492) \_\_\_\_\_ is a device that protects building from lightning strike.
- 493) \_\_\_\_\_ has a thin metallic filament that melts and breaks the connection when the circuit is overheated

- 494) Three bulbs are connected end to end from the battery. This connection is called \_\_\_\_\_.
- 495) \_\_\_\_\_ is called as vital life
- 496) Nitrogen is \_\_\_\_\_ than air.
- 497) \_\_\_\_\_ is used as a fertilizer.
- 498) Dry ice is used as a \_\_\_\_\_.
- 499) The process of conversion of iron into hydrated form of oxides is called \_\_\_\_\_.
- 500) \_\_\_\_\_ is the smallest particle of an element.
- 501) An element is composed of \_\_\_\_\_ atoms.
- 502) An atom is made up of \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.
- 503) A negatively charged ion is called \_\_\_\_\_, while positively charged ion is called \_\_\_\_\_.
- 504) \_\_\_\_\_ is a negatively charged particle (Electron/Proton).
- 505) Proton is deflected towards the \_\_\_\_\_ charged plate (positively, negatively).
- 506) Movement of organisms from place to place is called \_\_\_\_\_.
- 507) \_\_\_\_\_ refers to change in position of the part of an organisms body.
- 508) A structure which provides rigid frame work to the body is called \_\_\_\_\_.
- 509) Axil skeleton in human consists of \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.
- 510) Appendicular skeleton in human consists of \_\_\_\_\_ and \_\_\_\_\_.
- 511) The place where two bones meet is termed as \_\_\_\_\_.
- 512) \_\_\_\_\_ is attached to soft parts of the body like blood vessels, iris, bronchi and the skin
- 513) \_\_\_\_\_ muscle makes pupil of eyes wider.
- 514) \_\_\_\_\_ is secreted by the ovaries of female.
- 515) The hormones secreted by the gonads are controlled by \_\_\_\_\_.
- 516) Milk secretion during lactation is controlled by \_\_\_\_\_ hormone
- 517) The male and the female gamete fuse together and form \_\_\_\_\_.
- 518) The first menstrual flow begins at puberty and it is termed as \_\_\_\_\_.
- 519) \_\_\_\_\_ usually occurs 14 days after ovulation.
- 520) \_\_\_\_\_ includes protein, carbohydrates, fats and vitamins in requisite proportion.
- 521) \_\_\_\_\_ helps to prevent thyroid gland related diseases.
- 522) Iron deficiency leads to \_\_\_\_\_.
- 523) In women fertilization takes place at \_\_\_\_\_.
- 524) Sound is produced by \_\_\_\_\_.
- 525) The vibrations of a simple pendulum are also known as \_\_\_\_\_.
- 526) Sound travels in the form of \_\_\_\_\_.
- 527) High-frequency sounds that cannot be heard by you are called \_\_\_\_\_.
- 528) Pitch of a sound depends on the \_\_\_\_\_ vibration.
- 529) If the thickness of a vibrating string is increased, its pitch \_\_\_\_\_.
- 530) The magnetic strength is \_\_\_\_\_ at the poles.



- 531) A magnet has \_\_\_\_\_ magnetic poles.
- 532) Magnets are used in \_\_\_\_\_ for generating electricity.
- 533) \_\_\_\_\_ are used to lift heavy iron pieces.
- 534) A freely suspended bar magnet is always pointing along the \_\_\_\_\_ north-south direction.
- 535) The study about stars and planets are known as \_\_\_\_\_.
- 536) Our sun belongs to \_\_\_\_\_ Galaxy.
- 537) Mars revolves around the Sun once in \_\_\_\_\_ days.
- 538) \_\_\_\_\_ is India's first interplanetary mission.
- 539) \_\_\_\_\_ was the first man to walk on the surface of the Moon.
- 540) Water is colourless, odourless and \_\_\_\_\_
- 541) The boiling point of water is \_\_\_\_\_
- 542) Temporary hardness of water can be removed by \_\_\_\_\_ of water.
- 543) The density of water is maximum at \_\_\_\_\_
- 544) Loading speeds up the process of \_\_\_\_\_
- 545) Benzoic acids are used for \_\_\_\_\_
- 546) The word sour refers to \_\_\_\_\_ in Latin.
- 547) Bases are \_\_\_\_\_ in taste.
- 548) Chemical formula of calcium oxide is \_\_\_\_\_
- 549) Wasp sting contains \_\_\_\_\_
- 550) Turmeric is used as a \_\_\_\_\_
- 551) In acidic solution the colour of the hibiscus indicator paper will change to \_\_\_\_\_
- 552) Producer gas is a mixture of \_\_\_\_\_
- 553) \_\_\_\_\_ is known as marsh gas.
- 554) The term petroleum means \_\_\_\_\_
- 555) Heating coal in the absence of air is called \_\_\_\_\_
- 556) An example for fossil fuel is \_\_\_\_\_
- 557) The process of actively growing seedling from one place and planting in the main field for further growth is called \_\_\_\_\_
- 558) \_\_\_\_\_ is a plant growing in a place where it is not wanted.
- 559) The chemicals used for killing the weeds or inhibiting their growth are called \_\_\_\_\_
- 560) \_\_\_\_\_ seeds transfers its unique characteristics to the descents.
- 561) \_\_\_\_\_ centers serve as the ultimate link between ICAR and farmers.
- 562) Several popular high yielding varieties of major crops have been developed by \_\_\_\_\_
- 563) WWF stands for \_\_\_\_\_.
- 564) The animal found in a particular area is known as \_\_\_\_\_.
- 565) Red Data Book is maintained by \_\_\_\_\_.
- 566) Mudumalai Wildlife Sanctuary is located in \_\_\_\_\_ district.
- 567) \_\_\_\_\_ is observed as 'World Wildlife Day'
- 568) \_\_\_\_\_ recognized the need of 'Standard Units' for physical quantities.

- 569) Luminous Intensity is the amount of visible light, that is emitted in unit area per unit \_\_\_\_.
- 570) Quartz clock uses \_\_\_\_ oscillations.
- 571) If the length of the book is 15cm then the magnitude is \_\_\_\_
- 572) \_\_\_\_ is used to measure each base quantities
- 573) The melting point of pure ice is \_\_\_\_
- 574) The number of divisions in the Fahrenheit \_\_\_\_
- 575) The angle formed at the vertex of the cone is \_\_\_\_
- 576) \_\_\_\_ are valid only if they are confirmed through various experiments.
- 577) \_\_\_\_ is the base of all scientific studies and experimentations.
- 578) SI system is formed in the 11<sup>th</sup> General conference on weights and Measures in \_\_\_\_ in the year \_\_\_\_.
- 579) Plane Angle is a \_\_\_\_ quantity
- 580) SI system is coined from the french name \_\_\_\_
- 581) When heat is removed from a substance, its temperature will \_\_\_\_
- 582) In thermometers \_\_\_\_ is taken as upper fixed Point.
- 583) \_\_\_\_ measures the temperature of an object without any physical contact.
- 584) Indian standard Time = Greenwich Mean Time + \_\_\_\_
- 585) Indian standard Time is calculated with reference to \_\_\_\_ longitude.
- 586) Liquids and gases together are called as \_\_\_\_
- 587) Force is a \_\_\_\_ quantity
- 588) \_\_\_\_ decides whether an object will sink or float
- 589) The S.I unit of viscous force is \_\_\_\_
- 590) \_\_\_\_ causes wear and tear of the surfaces in contact
- 591) If a batsman wants to hit the cricket ball to the boundary the striking force on the ball must be \_\_\_\_
- 592) The envelope of air surrounding Earth is called \_\_\_\_
- 593) Atmospheric pressure can be measured using the device called \_\_\_\_
- 594) Atmospheric pressure \_\_\_\_ with altitude from the surface of the Earth.
- 595) In SI system of units 1 atm \_\_\_\_ pascal.
- 596) Xylem vessels help the water to rise upward due to \_\_\_\_
- 597) Liquids and gases are known as \_\_\_\_
- 598) Xylem vessels help the water to rise upward due to \_\_\_\_
- 599) For a given volume, the surface area of a \_\_\_\_ is the minimum.
- 600) When oil is applied to your palm, the friction is \_\_\_\_
- 601) \_\_\_\_ acts in the opposite direction of the moving body
- 602) \_\_\_\_ is a device which produces numerous pattern of images
- 603) \_\_\_\_ is the best reflector of light
- 604) Nowadays, a thin layer of molten \_\_\_\_ or \_\_\_\_ is used for coating glass plates will become mirror
- 605) The number of images formed by a mirror depends on the \_\_\_\_ of the mirrors
- 606) In dispersion \_\_\_\_ color has the larger wavelength and less deviation

- 607) \_\_\_\_\_ form the perfect image of an object.
- 608) Light is a form of \_\_\_\_\_
- 609) \_\_\_\_\_ is an optical device with a polished surface that reflects the light falling on it.
- 610) Mirrors have a \_\_\_\_\_ or \_\_\_\_\_ surface.
- 611) In 16<sup>th</sup> century people of venice used an amalgam of \_\_\_\_\_ and \_\_\_\_\_ to coat a glass plate
- 612) In \_\_\_\_\_, the light rays will be reflected to travel a long distance without getting diminished.
- 613) When a ray of light travels from the denser medium into the rarer medium it \_\_\_\_\_ the normal.
- 614) Refraction of light rays, as they travel from one medium to another medium obeys \_\_\_\_\_
- 615) Refractive index of ordinary glass is \_\_\_\_\_
- 616) Refractive index is denoted by the Greek letter \_\_\_\_\_
- 617) Material which has a definite volume but no definite shape and has one free surface is called as \_\_\_\_\_
- 618) The chemical name of sugar is \_\_\_\_\_
- 619) The non-metal used in the manufacture of gun powder and vulcanization of rubber is \_\_\_\_\_
- 620) \_\_\_\_\_ is so hard that it can scratch glass.
- 621) \_\_\_\_\_ is the hardest naturally occurring substance.
- 622) All kinds of matter possess \_\_\_\_\_
- 623) \_\_\_\_\_ symbols is only of historical importance
- 624) Dalton's symbol for sulphur is \_\_\_\_\_
- 625) The modified version of \_\_\_\_\_ follows under the heading system for determining symbols of the elements
- 626) The latin name of tin is \_\_\_\_\_
- 627) \_\_\_\_\_ element got its symbol based on colour.
- 628) The index of prosperity of a country depends upon the amount of and \_\_\_\_\_ it produces and uses
- 629) The metal \_\_\_\_\_ is hard that it can scratch glass
- 630) \_\_\_\_\_ and \_\_\_\_\_ metals have low density.
- 631) The non - metal \_\_\_\_\_ is as tensile as steel
- 632) Reactants → \_\_\_\_\_.
- 633) When quick lime comes in contact with \_\_\_\_\_
- 634) The sides of the matchbox contains \_\_\_\_\_
- 635) The term electrolysis was introduced by \_\_\_\_\_.
- 636) The reactions achieved by the supply of heat only are called \_\_\_\_\_
- 637) The brown pigments of a cut apple is \_\_\_\_\_
- 638) The head of a match stick contains \_\_\_\_\_ and \_\_\_\_\_
- 639) On heating lead nitrate in a dry test tube, the reddish brown gas evolved is \_\_\_\_\_
- 640) \_\_\_\_\_ is the raw material for slaked lime and cement.

- 641) \_\_\_\_\_ is the branch of chemistry that deals with chemical reactions involving light
- 642) \_\_\_\_\_ is an important fertilizer in agriculture.
- 643) The substances which cause unwanted changes in properties of environment are called \_\_\_\_\_
- 644) The chemical reaction between sulphuric acid and sodium hydroxide solution is \_\_\_\_\_ reaction.
- 645) When magnesium reacts with dilute acids \_\_\_\_\_ is produced
- 646) \_\_\_\_\_ is a process in which electricity is used to carry out chemical reactions.
- 647) \_\_\_\_\_ is a biocatalyst.
- 648) \_\_\_\_\_ Vaccine is used to cure foot and mouth disease
- 649) Causative organism for rabies is \_\_\_\_\_
- 650) African sleeping sickness is spread by the bite of the \_\_\_\_\_
- 651) \_\_\_\_\_ is useful in the treatment of childhood constipation
- 652) \_\_\_\_\_ pigment is responsible for the brown color in algae.
- 653) The envelope has \_\_\_\_\_ that help the virus particles attach to the host cells
- 654) \_\_\_\_\_ stain is added to buttermilk to observe bacteria under microscope.
- 655) \_\_\_\_\_ shaped structure is called pyriform.
- 656) Foot and mouth disease is caused by \_\_\_\_\_
- 657) \_\_\_\_\_ is the hallucinogenic fungi
- 658) Queen of Medicine is \_\_\_\_\_
- 659) \_\_\_\_\_ is a valuable fuel like coal obtained from sphagnum
- 660) \_\_\_\_\_ cures peptic ulcer
- 661) Some fungi live symbiotically with higher plants roots called
- 662) Largest Herbarium of India is in \_\_\_\_\_
- 663) Yeast is \_\_\_\_\_ and \_\_\_\_\_ cell.
- 664) \_\_\_\_\_ species of fungi protects against allergy.
- 665) \_\_\_\_\_ causes ringworm
- 666) \_\_\_\_\_ was once used in disposable diapers.
- 667) \_\_\_\_\_ is known as club moss.
- 668) \_\_\_\_\_ is known as horse tail.
- 669) Protonemal stage is present in \_\_\_\_\_ class of bryophytes.
- 670) \_\_\_\_\_ is the first cell of the gametophytic generation of bryophytes.
- 671) Fungi like \_\_\_\_\_ is used to produce riboflavin
- 672) \_\_\_\_\_ is the Queen of medicine.
- 673) \_\_\_\_\_ is commonly known as the voice box
- 674) The term osmoregulation was coined by \_\_\_\_\_
- 675) \_\_\_\_\_ is the sum of chemical reactions by which living organisms sustain their life
- 676) \_\_\_\_\_ is the protective covering of the lungs
- 677) In human eye, lens is made up of \_\_\_\_\_

- 678) The higher levels of biological organization are composed of the \_\_\_\_\_
- 679) The study of cells is called \_\_\_\_\_
- 680) The longest cell is the \_\_\_\_\_
- 681) An example for the branched cell is \_\_\_\_\_
- 682) A simple tissue is \_\_\_\_\_
- 683) \_\_\_\_\_ tissue is meant for protection.
- 684) The human eye can differentiate approximately \_\_\_\_\_ colours.
- 685) Between the pharynx and the trachea lies a small air passage called \_\_\_\_\_
- 686) The mixing of food stuffs and digestive juices in the gut occurs by \_\_\_\_\_
- 687) Yeast makes bread soft and poetry due to the release of \_\_\_\_\_
- 688) Atoms and molecules are always at \_\_\_\_\_
- 689) When heat energy is supplied to a substance, it increases the \_\_\_\_\_ of the molecules.
- 690) When the molecules receive more energy, the temperature of the substance \_\_\_\_\_
- 691) In ice cubes the force of attraction between the molecule is \_\_\_\_\_ than that in water.
- 692) The process of converting a solid into a liquid is called \_\_\_\_\_
- 693) The process of converting a liquid into a gas is called \_\_\_\_\_
- 694) The process of converting a liquid into a solid is called \_\_\_\_\_
- 695) \_\_\_\_\_ is the only matter on the Earth that can be found naturally in all three states of matter.
- 696) All metals are \_\_\_\_\_ of heat.
- 697) \_\_\_\_\_ is the third form of heat transfer.
- 698) \_\_\_\_\_ in a material constitutes electric current and generates electricity.
- 699) Flow of positive charge is called \_\_\_\_\_
- 700) Flow of electrons from lower potential to higher potential is called \_\_\_\_\_
- 701) The first electroscope developed by William Gilbert was called \_\_\_\_\_
- 702) Transfer of charge from one object to another is called \_\_\_\_\_
- 703) \_\_\_\_\_ refers to the device that consumes the electric energy in a circuit.
- 704) \_\_\_\_\_ is the first electrical instrument.
- 705) Gold leaf electroscope was invented by \_\_\_\_\_
- 706) When a charged body is brought near the brass disc of electroscope, the gold leaves repel each other. This is because the leaves have \_\_\_\_\_
- 707) When electric current passes through a conductor, the heat produced depends on the amount of \_\_\_\_\_ offered by the conductor.
- 708) Electric charge is measured in \_\_\_\_\_
- 709) \_\_\_\_\_ is the first most abundant element on the earth
- 710) Oxygen is present in free state as \_\_\_\_\_ in the atmosphere.
- 711) Oxygen reacts with potassium at room temperature to form \_\_\_\_\_
- 712) The atmosphere of Titan is made up of 98% of \_\_\_\_\_
- 713) Nitrogen is \_\_\_\_\_ at ordinary conditions
- 714) \_\_\_\_\_ is the fourth most abundant element in the human body by mass.

- 715) The pH of pure rain water is around \_\_\_\_\_
- 716) \_\_\_\_\_ is used to remove carbon impurities from steel
- 717) Oxygen is about \_\_\_\_\_ times more soluble in water than nitrogen
- 718) Percentage of calcium present in the Earth's crust is \_\_\_\_\_
- 719) The Greek word 'Atomos' means \_\_\_\_\_
- 720) Atoms of the same element have different masses are called \_\_\_\_\_
- 721) The electrode connected to the positive terminal is called the \_\_\_\_\_
- 722) In television tube \_\_\_\_\_ are deflected by magnetic fields.
- 723) Example of fluorescent materials is \_\_\_\_\_
- 724) \_\_\_\_\_ has no charge.
- 725) Thomson's atom model was called as \_\_\_\_\_
- 726) Atoms which carry positive or negative charges are called \_\_\_\_\_
- 727) The other name of law of conservation of mass is \_\_\_\_\_
- 728) Law of constant proportions was proposed by \_\_\_\_\_.
- 729) Breathing is an \_\_\_\_\_ movement.
- 730) Earthworm has large number of bristles called \_\_\_\_\_
- 731) Movement of snake is called \_\_\_\_\_
- 732) \_\_\_\_\_ is the fastest animal on 6 legs.
- 733) \_\_\_\_\_ joint allows rotation about its longitudinal axis only.
- 734) \_\_\_\_\_ is a Glassy smooth cartilage.
- 735) \_\_\_\_\_ is the longest and strongest bone of the human skeleton.
- 736) The bone present in arm bone are joint by \_\_\_\_\_ joints
- 737) The only bone in the skull which has movable joint is the \_\_\_\_\_
- 738) Ankle is made up of \_\_\_\_\_
- 739) \_\_\_\_\_ is a natural process that takes place in all living organisms.
- 740) \_\_\_\_\_ is the period of transition from childhood to adulthood.
- 741) \_\_\_\_\_ and \_\_\_\_\_ are called primary sex organs of the male and female respectively.
- 742) \_\_\_\_\_ marks the end of the reproductive phase of a woman life.
- 743) \_\_\_\_\_ can be considered as periodic preparation for pregnancy
- 744) \_\_\_\_\_ of boys and girls become fully functional at the time of puberty.
- 745) At the time of puberty ovaries start releasing \_\_\_\_\_
- 746) \_\_\_\_\_ causes expulsion of milk from the breast.
- 747) \_\_\_\_\_ influences the development of the Graafian follicle in female.
- 748) The physical and mental well-being of an individual is regarded as an \_\_\_\_\_
- 749) Sound cannot travel through \_\_\_\_\_
- 750) The unit of frequency \_\_\_\_\_
- 751) Speed of sound in air at 0°C is \_\_\_\_\_
- 752) The low pressure region in the propagation of sound is \_\_\_\_\_
- 753) Astronauts communicate with other with \_\_\_\_\_ waves.
- 754) In \_\_\_\_\_ waves particles of the medium vibrate perpendicular to the direction of propagation of waves.

- 755) \_\_\_\_\_ of sound enables us to distinguish between a flat sound and a shrill sound.
- 756) A sound with a frequency less than \_\_\_\_\_ Hz is called as infrasonic sound.
- 757) Mouth organ is a \_\_\_\_\_ instrument.
- 758) In percussion instrument leather membrane is stretched across a hollow box is called \_\_\_\_\_
- 759) The larynx has two ligaments called \_\_\_\_\_
- 760) All communication systems must be operated in \_\_\_\_\_ volume.
- 761) People working in noisy factories should wear \_\_\_\_\_
- 762) Reflection of sound is called \_\_\_\_\_
- 763) Magnets found in nature is called \_\_\_\_\_ magnets.
- 764) \_\_\_\_\_ suggested that earth as the huge bar magnet.
- 765) Like poles of magnet \_\_\_\_\_ each other.
- 766) Space around the magnet where its influence is observed is called \_\_\_\_\_
- 767) Tiny pivoted magnet needle is called \_\_\_\_\_
- 768) When ferro magnetic substance is heated it becomes \_\_\_\_\_ magnetic substance.
- 769) The temperature at which the ferro magnet material becomes para material is called \_\_\_\_\_
- 770) The angle between earth's magnetic axis and geographical axis \_\_\_\_\_
- 771) Earth's magnet is \_\_\_\_\_ times more powerful than a fridge magnet.
- 772) \_\_\_\_\_ train has no wheel.
- 773) In \_\_\_\_\_ rocket propellants fuel and oxidizer compounds are already combined
- 774) Expansion of ISRO
- 775) Mars vehicle \_\_\_\_\_
- 776) The \_\_\_\_\_ is the only natural satellite of the Earth
- 777) Sivan is popularly known as the \_\_\_\_\_
- 778) \_\_\_\_\_ set a record of the longest space walking lime by a female astronaut.
- 779) \_\_\_\_\_ became the first Asian country to reach Mars.
- 780) Mars is the fourth planet from the \_\_\_\_\_
- 781) \_\_\_\_\_ is the world's smallest satellite.
- 782) If this high velocity is given to the rocket at the surface of the Earth, the rocket will be burnt due to \_\_\_\_\_
- 783) \_\_\_\_\_ of our planet earth is filled with water.
- 784) The chemical name of water is \_\_\_\_\_
- 785) Henry Cavendish called hydrogen as \_\_\_\_\_
- 786) Henry Cavendish created carbon dioxide by \_\_\_\_\_
- 787) The density of pure water is \_\_\_\_\_
- 788) Every litre of potable water contains \_\_\_\_\_ of dissolved salts.
- 789) Ground water sources are called \_\_\_\_\_
- 790) On an average a person uses \_\_\_\_\_ litres of water per day for washing clothes, cooking, bathing etc
- 791) There are large \_\_\_\_\_ and \_\_\_\_\_ reserves below the sea level.



- 792) \_\_\_\_\_ can be found in almost every fresh water source.
- 793) Dietary fats are \_\_\_\_\_ in nature
- 794) Acid present in sourmilk is \_\_\_\_\_
- 795) Water soluble bases are called \_\_\_\_\_
- 796) \_\_\_\_\_ is commercially called washing soda.
- 797) \_\_\_\_\_ is called caustic potash
- 798) \_\_\_\_\_ is present in solution for cleaning windows.
- 799)  $\text{CH}_3\text{COOH} + \text{NaOH} \rightarrow$
- 800) Generally metals do not react with \_\_\_\_\_
- 801) All bases react with non-metallic oxides to form \_\_\_\_\_.
- 802)  $\text{HCl} + \text{NaOH}$
- 803) \_\_\_\_\_ are the organic compounds consisting of hydrogen and carbon.
- 804) \_\_\_\_\_ quickly vapourises at room temperature.
- 805) \_\_\_\_\_ is used to produce polystyrene
- 806) \_\_\_\_\_ is also known as wood gas.
- 807) The breaking down of organic matter in \_\_\_\_\_ leads to the formation of biogas.
- 808) \_\_\_\_\_ is the international leader in coal reserves.
- 809) \_\_\_\_\_ has lower sulphur content than other types of coal
- 810) \_\_\_\_\_ is also called as black gold
- 811) \_\_\_\_\_ could be the best alternative fuel in future.
- 812) \_\_\_\_\_ is the purest form of coal.
- 813) \_\_\_\_\_ crops are grown in winter seasons
- 814) \_\_\_\_\_ are cultivated for human consumption
- 815) The first step in the crop production is \_\_\_\_\_
- 816) \_\_\_\_\_ is the agricultural tool used to till the land remove weeds.
- 817) \_\_\_\_\_ is the placement of seed in a furrow, pit or hole at predetermined spacing
- 818) \_\_\_\_\_ is an organic substance-obtained from the decomposition of plants or animal waste.
- 819) Plants absorb water from their surrounding with the help of the \_\_\_\_\_ system
- 820) \_\_\_\_\_ method is much advisable in areas facing water scarcity for irrigation.
- 821) \_\_\_\_\_ harvesting method is used in large sized agriculture fields.
- 822) \_\_\_\_\_ is the process of separating the grains from husk.
- 823) \_\_\_\_\_ bacteria is found in the root nodules of Leguminous plants.
- 824) The non governmental seed bank located in New Delhi is \_\_\_\_\_
- 825) \_\_\_\_\_ is a natural bio indicator of climate change and our pollution effect.
- 826) The example of effective micro organisms is \_\_\_\_\_.
- 827) \_\_\_\_\_ is the Bio fertilizer which is used to fixing nitrogen.
- 828) Destruction of forests in order to make the land available for different uses is known as \_\_\_\_\_.
- 829) With increasing \_\_\_\_\_ there is an over growing demand for food production

- 830) \_\_\_\_\_ destroy the trees on a massive scale.  
831) \_\_\_\_\_ is the recent cyclone in Tamil Nadu  
832) More than \_\_\_\_\_ % of the words species remain in the tropical rainforest.  
833) Trees absorb and store a large amount of water with the help of their \_\_\_\_\_

- 834) \_\_\_\_\_ is the lungs of planet.  
835) \_\_\_\_\_ is the endangered plant.  
836) \_\_\_\_\_ is the endangered animal.  
837) Animals may also be destroyed due to natural disasters like \_\_\_\_\_  
838) \_\_\_\_\_ is the native tree of India.  
839) Red data book has no information about the \_\_\_\_\_  
840) Vedanthangal wildlife sanctuary is located in \_\_\_\_\_ District.  
841) \_\_\_\_\_ parks are area where wild animals are conserved.  
842) Each page in Calc is called as \_\_\_\_\_  
843) A Column is a \_\_\_\_\_ of boxes  
844) A row is a \_\_\_\_\_ of boxes  
845) The intersection of a \_\_\_\_\_ and \_\_\_\_\_ is a cells.  
846) A group of cells is known as \_\_\_\_\_ of cells  
CHOOSE CORRECT PAIR

4 x 1 = 4

- 847) Laminaria – Iodins  
Nostoc – N<sub>2</sub> fixation  
Polysiphonia – Green algae  
Rhodophyceae – Fucoxanthin  
i) a, b, c 2) c,d c) a, c, d d) a ,b ,c, d  
848) Phyllanthus amarus – Euphorbiaceae  
Solomum trilobatum – Solanaceae  
Acalypha indica – Malvaceae  
Aegle marmelos – Rutaceac  
ii) a,b ii) c,d iii) a,b,c iv) a,b,d

- 849) a) Reticulate / parallel venation, closed seeded plants, sieve tubes are present in phloem.  
b) Seeds are open, ovary is not present, gametes are produced in cones.  
c) Tracheids are the conducting cells, companion cells not are present in phloem.  
d) Trimerous or tetramerous, closed seed, seed with seed coat, bears fruit.  
1) a,b 2) b,c 3) e,d 4) a,d

- 850) a) In Bryophytes – Gametophytes - Sex organ – Gamete fusion – Zygote - Spore mother cell – spore – Thallus.  
b ) In Angiosperm – pollination – fertilization – zygote – new plant.  
c) In Gymnosperm – male cone, and female cone – microspore and megaspore – Zygote – new sporophytes plant.  
d) In pteridophytes – pollination by wind, fertilization in the presence of water – zygote prothallus, new plant.  
1) a, b, c 2) a, b 3) c, d 4) b, d

ARRANGE CORRECT

15 x 1 = 15

- 851) SI, CGS, FPS, MKS  
852) Atomic clock, Sun dial, Digital clock, Analog clock.

- 853) Arrange the following in the increasing order of friction when one run a toy car on the following.  
towel, newspaper, dry marble floor, wet marble floor
- 854) Arrange the following in decreasing order of viscous force.  
Coconut oil, honey, water, ghee
- 855) Yellow, Violet, Red, Indigo, Green, Blue, Orange
- 856) Curved Mirror, Mirror, Parabolic mirror, Spherical mirror
- 857) Metals are non-sonorous whereas non-metals are sonorous
- 858) The physical properties of metalloids tend to be nonmetallic, but their chemical properties tend to be metallic
- 859) Chemical reactions in which heat is liberated are endothermic and in which heat is absorbed are exothermic reactions
- 860) On exposure to air, copper vessels become black and silver vessels become green
- 861) (Retting, Tanning, BCG vaccine, FMD)  
a) It is a preventive measure for foot and mouth disease.  
b) Linen thread is made from flax plants  
c) This vaccine should be given for tuberculosis  
d) Makes the skin of animal soft and pliable
- 862) (Virus, Amphitrichous, glycogen, flagellates)  
a) Some protozoans have flagella for locomotion.  
b) It shows both living and non-living character.  
c) Reserve food material of yeast.  
d) Presence of flagella at both ends
- 863) [Haustoria, Mysocchiza, Aloe vera, Keezhonelli]  
a. It cures peptic ulcer.  
b. It belongs to the family Euphorbiaceae.  
c. Their special roots are present in parasites.  
d. They show symbiotic association of fungi with higher plant roots.
- 864) [Gracillaria, Laminaria, Aspergillus, Agaricus]  
a. Agar-Agar is extracted from this algae.  
b. This algae is used as a food for cattle.  
c. It can cause allergy to children  
d. This is the most common edible mushroom.
- 865) Tissues, organ system, organism, cell, organ
- 19 x 2 = 38
- 866) If 2 coulomb of charge flows through a circuit for 10 seconds, calculate the current.
- 867) Convert  $60^\circ$  into radian.
- 868) Convert  $\frac{\pi}{4}$  into degree.
- 869) Round off the number 1.864 to two decimal places.
- 870) Round off the number 1.868 to two decimal places.
- 871) A stone weighs 500 N. Calculate the pressure exerted by it if it makes a contact with a surface of area  $25 \text{ cm}^2$ .
- 872) Calculate the pressure exerted by the foot of an elephant using the following data.  
Average weight of an elephant is 4000 N. Surface area of the sole of its foot is  $0.1 \text{ m}^2$ .
- 873) The radius of curvature of a spherical mirror is 25 cm. Find its focal length.
- 874) If two plane mirrors are inclined to each other at an angle of  $45^\circ$ , find the number of images formed.

- 875) Speed of light in air is  $3 \times 10^8 \text{ m s}^{-1}$  and the refractive index of a medium is 1.5. Find the speed of light in the medium.
- 876) Focal length of a spherical mirror is 7 cm. What is its radius of curvature?
- 877) If two plane mirrors are inclined to each other at an angle of  $90^\circ$ , find the number of images formed.
- 878) Speed of light in air is  $3 \times 10^8 \text{ ms}^{-1}$  and the speed of light in a medium is  $2 \times 10^8 \text{ ms}^{-1}$ . Find the refractive index of the medium with respect to air.
- 879) Refractive index of water is  $4/3$  and the refractive index of glass is  $3/2$ . Find the refractive index of glass with respect to the refractive index of water.
- 880) Ruthvik and Ruha hear a gunshot 2 seconds after it is fired. How far away from the gun they are standing? (Speed of sound in air is equal to  $330 \text{ ms}^{-1}$ )
- 881) A sound wave travels 2000 m in 8 s. What is the velocity of the sound?
- 882) A wave with a frequency of 500 Hz is traveling at a speed of  $200 \text{ ms}^{-1}$ . What is the wavelength?
- 883) A sound has a frequency of 50 Hz and a wavelength of 10 m. What is the speed of the sound?
- 884) A sound has a frequency of 5 Hz and a speed of  $25 \text{ ms}^{-1}$ . What is the wavelength of the sound?
- COMPLETE ANALOGY 102 x 2 = 204
- 885) Knot in a thread : \_\_\_\_\_ friction; ball bearing : \_\_\_\_\_ friction
- 886) Downward force : weight ; Upward force offered by liquid : \_\_\_\_\_
- 887) Electric current: Ammeter  
Luminous Intensity: \_\_\_\_\_
- 888) Quartz clock: Piezoelectric property  
Atomic clock: \_\_\_\_\_
- 889) Road roller: Greater area of contact  
Cycle tyre : \_\_\_\_\_
- 890) Treaded tyres : Increase friction  
\_\_\_\_\_ : Decrease friction
- 891) Force acting perpendicularly on given on a surface of area : Thrust  
Force acting perpendicularly on a surface of area one square metre : \_\_\_\_\_
- 892) Hydraulic lift : Pascal's law  
Spherical shape of a raindrop : \_\_\_\_\_
- 893) Decreased area of contact : pressure increases  
\_\_\_\_\_ : pressure decreases
- 894) 1 pascal:  $1 \text{ Nm}^{-2}$   
1 newton : \_\_\_\_\_
- 895) Thrust : newton  
\_\_\_\_\_ :  $\text{Nm}^{-2}$
- 896) Refractive index:  $\mu = C / V$   
Snell's law: \_\_\_\_\_
- 897) Microphones: Parabolic mirrors  
Head mirrors by doctors ; \_\_\_\_\_
- 898) Kaleidoscope : Multiple reflection  
Rainbow : \_\_\_\_\_
- 899) Parabolic mirror : Parabolic surface  
Spherical mirror : \_\_\_\_\_

- 900) Concave mirror: Magnified image  
Convex mirror : \_\_\_\_\_
- 901) Regular reflection: Specular reflection  
Irregular reflection : \_\_\_\_\_
- 902) Mercury: liquid metal\_\_\_\_\_liquid non-metal
- 903) Sodium bicarbonate; Baking Soda;Sodium Carbonate\_\_\_\_\_
- 904) Fertilizers: Land pollution :: Oil spillage: \_\_\_\_\_
- 905) Iron in water and air: Brown colour :: Iron in copper sulphate solution:\_\_\_\_\_
- 906) Rusting : Ferric oxide  
Tarnishing of bras vessels : \_\_\_\_\_
- 907) Air pollution: Oxides of nitrogen  
Land pollution : \_\_\_\_\_
- 908) Haber's process : Catalysis  
Formation of Ozone : \_\_\_\_\_
- 909) Drywood + fire: Contact in physical state  
\_\_\_\_\_ : Chemical reaction based on heat
- 910) Popsound: Hydrogen  
Crackling sound : \_\_\_\_\_
- 911) Euglena: Protozoan; Albugo: \_\_\_\_\_
- 912) Algae: Grass of water; Lactobacillus: \_\_\_\_\_
- 913) Pseudopodia : false feet  
Virus : \_\_\_\_\_
- 914) Penicillin : 1928  
Pasteurization : \_\_\_\_\_
- 915) Zoon : animal  
protos : \_\_\_\_\_
- 916) Algae: Autotrophs  
:: Fungi: \_\_\_\_\_
- 917) Athlete's foot : Tinea pedis  
Dandruff : \_\_\_\_\_
- 918) :: Free petal: Polypetalae  
:: Fused petal: \_\_\_\_\_
- 919) Fragmentation: Spirogyra  
:: Spore formation: \_\_\_\_\_
- 920) Fragmentation : Spirogyra  
Spore formation : \_\_\_\_\_
- 921) Laminaria : Brown algae  
Oscillatoria : \_\_\_\_\_
- 922) Parasite: Haustoria  
Symbiosis : \_\_\_\_\_
- 923) Penicillium notatum : Penicillin  
\_\_\_\_\_ : Riboflavin
- 924) Bryophytes : Non - Vascular cryptogame  
\_\_\_\_\_ : Vascular cryptogame
- 925) Definite : Nucleus  
Eukaryotes : \_\_\_\_\_: Prokaryotes

- 926) Stem cell : \_\_\_\_\_  
Foetal cell : cell differentiation
- 927) Nervous tissue : Conductions of nerve impulse  
\_\_\_\_\_ : movements and locomotion
- 928) Simple tissue : \_\_\_\_\_  
Complex tissue : Tissues of dry skin
- 929) Maintaining body temperature : Homeostasis  
Equalizing the fluid concentration : \_\_\_\_\_
- 930) Conduction : Solids  
Convection : \_\_\_\_\_
- 931) Ironing clothes : conduction  
Hot air balloon : \_\_\_\_\_
- 932) Expression of hotness : Temperature  
Measuring amount of heat : \_\_\_\_\_ or coldness of a body in a process
- 933)  $C^1 : Q/ T'$   
C : \_\_\_\_\_
- 934) Thermosflask: Silvered walls  
\_\_\_\_\_ : Sensor
- 935) Potential difference : Voltage :: Flow of electrons: \_\_\_\_\_
- 936) Electroscope rod : Brass: : Electroscope leaves : \_\_\_\_\_
- 937) Chemical effect of current Electroplating : : Heating effect of current: \_\_\_\_\_
- 938) Lightning Arresters : Lightning:: \_\_\_\_\_ : Electrical devices.
- 939) Earth wire : Low resistance : : Fuse : \_\_\_\_\_
- 940) Lavoisier: Oxygen : : C.W Scheele \_\_\_\_\_
- 941) Oxygen (free state) : Air: : Oxygen (combined state) \_\_\_\_\_
- 942) Sodium + Oxygen : Sodium Oxide: : Silver + Oxygen : \_\_\_\_\_
- 943) Gun powder: Nitrogen : : Fire extinguisher \_\_\_\_\_
- 944) Global warming: Loss of biodiversity: : Acid rain : \_\_\_\_\_
- 945) Discharge tube : Crooke's tube  
Thomson Atom model : \_\_\_\_\_
- 946) Cathode rays : don't depend on gas taken in tube  
\_\_\_\_\_ : depend on gas taken in tube.
- 947) Cathode rays : green glow  
Anode rays : \_\_\_\_\_
- 948) Electron :  $9.1 \times 10^{-28}$  g  
Proton : \_\_\_\_\_
- 949) HCl : 1  
CH<sub>4</sub> : \_\_\_\_\_
- 950) Locomotion : organism level  
Movement : \_\_\_\_\_
- 951) Forelimbs of birds : wings  
Hind limbs of birds : \_\_\_\_\_
- 952) Atlas : pivot  
\_\_\_\_\_ : condyloid
- 953) Scales in fishes: Exoskeleton  
\_\_\_\_\_ : Endoskeleton

- 954) Rib cage: Lungs, heart, liver  
vertebral column : \_\_\_\_\_
- 955) Puberty girls : 10-11 years of age  
puberty in boys : \_\_\_\_\_
- 956) Puberty height gain : 23 cm to 26 cm  
puberty weight gain : \_\_\_\_\_
- 957) Testes : Androgen  
ovaries : \_\_\_\_\_
- 958) FSH in female: development-of Graafin follicle  
FSH in male : \_\_\_\_\_
- 959) Calcium : milk and milk products  
\_\_\_\_\_ : jaggery
- 960) Boiling point of water : \_\_\_\_\_  
Freezing point of water : 0°C
- 961) Boiling point : Increases with increase in pressure  
Freezing point : \_\_\_\_\_
- 962) Chloride + water : \_\_\_\_\_  
Magnesium + water : Magnesium hydroxide
- 963) Potable water : 1 - 2 grams of salt  
Sea water : \_\_\_\_\_
- 964) Alum : Sedimentation  
\_\_\_\_\_ : sterilization.
- 965) Organic acid: Lactic acid  
Mineral acid : \_\_\_\_\_
- 966) Acid in solid state : Benzoic acid  
Bases in liquid state : \_\_\_\_\_
- 967) Bases releasing OH<sup>-</sup> ions : \_\_\_\_\_  
Bases do not release OH<sup>-</sup> ions : Calcium carbonate
- 968) Ammonium hydroxide: Nylon  
Calcium hydroxide : \_\_\_\_\_
- 969) Litmus : \_\_\_\_\_  
Phenolphthalein : Synthetic indicator
- 970) Producer gas : carbon monoxide, nitrogen  
Coal gas : \_\_\_\_\_
- 971) Coal : alumina refineries  
Natural gas : \_\_\_\_\_
- 972) Methane in CNG : 88.5 %  
Ethane in CNG : \_\_\_\_\_
- 973) Suction gas : \_\_\_\_\_  
Synthesis gas : water gas.
- 974) Asphalt : \_\_\_\_\_  
Petrol : Solvent for dry cleaning
- 975) Rainy season : Kharif crops,  
Summer season : \_\_\_\_\_
- 976) Euphorbia : ornamental crop  
hemp : \_\_\_\_\_
- 977) Kill weeds : cultivator  
dig up soil : \_\_\_\_\_



978) Irrigation done by manually : Traditional method

Irrigation done by pump and pipes : \_\_\_\_\_

979) Grains from chaff or pods : Threshing

Separating grain from husk : \_\_\_\_\_

980) Mixture of soil compost, plant seed : seed ball

Combination of products obtained from cow : \_\_\_\_\_

981) Chipko Movement : Sundarlal Bahuguna

Blue cross : \_\_\_\_\_

982) Vardah : Tamil Nadu

Pani : \_\_\_\_\_

983) Endangered plant : Malabar lily

Endangered Animal : \_\_\_\_\_

984) State Animal : Nilgiris Tahr

State Butterfly : \_\_\_\_\_

985) Kanha National park : Madhyapradesh

Gir National park : \_\_\_\_\_

986) Theni : Meghamalai wildlife sanctuary

Thirunelveli ; \_\_\_\_\_

14 x 5 = 70

987) An iron ball requires 1000 J of heat to raise its temperature by 20°C. Calculate the heat capacity of the ball.

988) The heat capacity of the vessel of mass 100 kg is 8000 J/°C. Find its specific heat capacity.

989) The temperature of a metal ball is 30°C. When an energy of 3000 J is supplied, its temperature raises by 40°C. Calculate its heat capacity.

990) The energy required to rise the temperature of an iron ball by 1 K is 500 JK<sup>-1</sup>. Calculate the amount of energy required to raise its temperature by 20 K.

991) An energy of 84000 J is required to raise the temperature of 2 kg of water from 60°C to 70°C. Calculate the specific heat capacity of water.

992) The specific heat capacity of a metal is 160 Jkg<sup>-1</sup> K<sup>-1</sup>. Calculate the amount of heat energy required to raise the temperature of 500 gram of the metal from 125°C to 325°C.

993) The specific heat capacity of a metal ball of mass 10 Kg is 500 Jkg<sup>-1</sup> K<sup>-1</sup>. Find its heat capacity.

994) Calculate the energy required to increase the temperature of 3 kg of water from 20°C to 100°C. The specific heat capacity of water is 4200 J/kg°C.

995) A hot water bottle cools down from 80°C to 20°C releasing 756000 J of thermal energy. Calculate the mass of the water in the hot water bottle. The specific heat capacity of water is 4200 J/kg°C.

996) A hot 1 kg chunk of copper is allowed to cool to 100°C. It gives off 231 KJ of energy. What was the initial temperature of copper if its specific heat capacity is 385 J/kg°C.

997) Compute the specific heat capacity if it requires 6000 J of heat in order to get the temperature of a body of a mass 1000 g raised by 10°C.

998) A sound wave has a frequency of 2 kHz and wavelength of 15 cm. How much time will it take to travel 1.5 km?

999) What is the wavelength of a sound wave in air at 20° C with a frequency of 1000Hz?

1000) The frequency of a source of sound is 500 Hz. Calculate the number of times it vibrates in a minute.

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