9TH

9 SCIENCE

9th Standard

Science

909 x 1 = 909

1) Choose the correct one

(a) mm < cm < m < km (b) mm > cm > m > km (c) km < m < cm < mm

(d) mm > m > cm > km

2) Rulers, measuring tapes and metre scales are used to measure

(a) Mass (b) Weight (c) Time (d) Length

3) 1 metric ton is equal to

(a) 100 quintals (b) 10 quintals (c) 1/10 quintals (d) 1/100 quintals

4) Which among the following is not a device to measure mass?

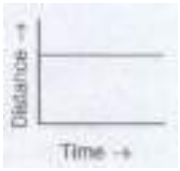
(a) Spring balance (b) Beam balance (c) Physical balance (d) Digital balance

5) Which of the following graph represents uniform motion of a moving particle?

(a) 

(b) 

(c) 

(d) 

6) The area under velocity – time graph represents

(a) velocity of the moving object (b) displacement covered by the moving object

(c) speed of the moving object (d) acceleration of the moving object

7) Which one of the following is most likely not a case of uniform circular motion?

(a) Motion of the Earth around the Sun (b) Motion of a toy train on a circular track

(c) Motion of a racing car on a circular track.

(d) Motion of hours hand on the dial of the clock

8) The centrifugal force is

(a) Real force (b) The force of reaction of centripetal force (c) Virtual force

(d) Directed towards the centre of the circular path.

9) When a ray of light passes from one medium to another medium, refraction takes place when angle of incidence is

(a) 0^o (b) 45^o (c) 90^o (d) 120^o

10) _____ is used as reflectors in torchlight.

(a) concave mirror (b) convex mirror (c) plane mirror (d) None of these

11) When the reflecting surface is curved outwards the mirror formed will be

(a) concave mirror (b) convex mirror (c) plane mirror (d) spherical mirror

12) When a beam of white light passes through a prism it gets

(a) Reflected (b) deviated and dispersed (c) only deviated (d) refrected

13) The speed of light is maximum in

(a) vacuum (b) glass (c) diamond (d) graphite

14) We can create enlarged, virtual images with

(a) concave mirror (b) convex mirror (c) plane mirror (d) spherical mirror

15) Among the following_____is a mixture

(a) Common Salt (b) Juice (c) Carbon dioxide (d) Pure Silver

16) When we mix a drop of ink in water we get a_____

(a) Heterogeneous Mixture (b) Homogeneous Mixture (c) Compound

(d) Suspension

17) _____ has the same properties throughout the sample

(a) Pure substance (b) Mixture (c) Colloid (d) Suspension

18) The separation of denser particles from lighter particles done by rotation at high speed is called _____

(a) Filtration (b) sedimentation (c) decantation (d) centrifugation

19) _____ is essential to perform separation by solvent extraction method.

(a) Separating funnel (b) centrifuge machine (c) filter paper (d) sieve

20) Among the following the odd pair is

(a) ${}_{8}O^{18}, {}_{17}Cl^{37}$ (b) ${}_{18}Ar^{40}, {}_{7}N^{14}$ (c) ${}_{14}Si^{30}$, ${}_{15}pd^{31}$ (d) ${}_{24}Cr^{54}$, ${}_{19}K^{39}$

21) Change in the number of neutrons in an atom changes it to

(a) an ion (b) an isotope (c) an isobar (d) another element

22) The term nucleons refer to

(a) Protons and electrons (b) only Neutrons (c) electrons and neutrons

(d) Protons and neutrons

23) The number of protons, neutrons and electrons present respectively in ${}^{80}_{35}Br$

(a) 80, 80, 35 (b) 35, 55, 80 (c) 35, 35, 80 (d) 35, 45, 35

24) The correct electronic configuration of potassium is

(a) 2,8,9 (b) 2,8,1 (c) 2,8,8,1 (d) 2,8,8,3

25) The tropic movement that helps the climbing vines to find a suitable support is _____.

(a) phototropism (b) geotropism (c) thigmotropism (d) chemotropism

26) The chemical reaction occurs during photosynthesis is _____.

(a) CO_2 is reduced and water is oxidized (b) water is reduced and CO_2 is oxidized

(c) both CO_2 and water are oxidized (d) both CO_2 and water are produced

27) The bending of root of a plant in response to water is called _____

(a) thigmonasty (b) phototropism (c) hydrotropism (d) photonasty

28) A growing seedling is kept in the dark room. A burning candle is placed near it for a few days. The top part of the seedling bends towards the burning candle. This is an example of _____.

(a) chemotropism (b) thigmotropism (c) phototropism (d) geotropism

29) The root of the plant is _____.

i) positively phototropic but negatively geotropic

ii) positively geotropic but negatively phototropic
iii) negatively phototropic but positively hydrotropic
iv)negatively hydrotropic but positively phototropic

(a) (i) and (ii) (b) (ii) and (iii) (c) (iii) and (iv) (d) (i) and (iv)

30) The non-directional movement of a plant part in response to temperature is called _____.

(a) thermotropism (b) Thermonasty (c) chemotropism (d) thigmonasty

31) Chlorophyll in a leaf is required for _____.

(a) photosynthesis (b) transpiration (c) tropic movement (d) nastic movement

32) Transpiration takes place through _____.

(a) fruit (b) seed (c) flower (d) stomata

33) Find the group having only marine members

(a) Mollusca (b) Porifera (c) Coelenterata (d) Echinodermata

34) Mesoglea is present in

(a) Porifera (b) Coelenterata (c) Annelida (d) Arthropoda

35) Which one of the following pairs is not a poikilothermic animal?

(a) Fishes and Amphibians (b) Amphibians and Aves (c) Aves and Mammals
(d) Reptiles and mammals

36) Identify the animal having four chambered heart

(a) Lizard (b) Snake (c) Crocodile (d) Calotes

37) The animal without skull is

(a) Acrania (b) Acephalia (c) Apteria (d) Acoelomate

38) Hermaphrodite organisms are

(a) Hydra, Tape worm, Earthworm, Amphioxus
(b) Hydra, Tape worm, Earthworm, Ascidian
(c) Hydra, Tape worm, Earthworm, Balanoglossus
(d) Hydra, Tape worm, Ascaris, Earthworm

39) Poikilothermic organisms are

(a) Fish, Frog, lizard, man (b) Fish, Frog, lizard, cow (c) Fish, Frog, lizard, snake
(d) Fish, Frog, lizard, crow

40) Excretory organ of tape worm is

(a) Flame cells (b) Nephridia (c) Body surface (d) Solenocytes

41) Air sacs and pneumatic bones are seen in

(a) fish (b) frog (c) birds (d) bat

42) Water vascular system is found in

(a) hydra (b) earth worm (c) star fish (d) ascaris

43) The nutrient required in trace amounts to accomplish various body functions is _____.

(a) Carbohydrate (b) Protein (c) Vitamin (d) Fat

44) The physician who discovered that scurvy can be cured by ingestion of citrus fruits is _____

(a) James Lind (b) Louis Pasteur (c) Charles Darwin (d) Isaac Newton

45) The sprouting of onion and potatoes can be delayed by the process of _____

(a) irradiation (b) Irradiation (c) Salting (d) Canning

46) Food and Adulteration Act was enacted by Government of India in the year _____.

(a) 1964 (b) 1954 (c) 1950 (d) 1963

47) An internal factor responsible for spoilage of food is _____.

(a) Wax coating (b) Contaminated utensils (c) Moisture content in food

(d) Synthetic preservatives

48) _____ is an electronic device which stores data and information

(a) Telescope (b) Television (c) Computer (d) Radio

49) _____ belongs to the generation IV of the computer

(a) Microprocessor (b) Artificial intelligence (c) Transistor (d) Vaccum Tubes

50) Data processing involves_____ steps

(a) seven (b) four (c) six (d) eight

51) 1. Abacus belongs to the first generation of the computer
2. ENIAC was used in the American military

(a) Both the statements are correct (b) Statement 1 is wrong but 2 is correct

(c) Statement 1 is correct but 2 is wrong (d) Both the statements are wrong.

52) Calorie is the unit of

(a) heat (b) work (c) temperature (d) food

53) SI unit of temperature is

(a) fahrenheit (b) joule (c) celsius (d) kelvin

54) Two cylindrical rods of same length have the area of cross section in the ratio 2:1. If both the rods are made up of same material, which of them conduct heat faster?

(a) Both rods (b) Rod-2 (c) Rod-1 (d) None of them

55) In which mode of transfer of heat, molecules pass on heat energy to neighbouring molecules without actually moving from their positions?

(a) Radiation (b) Conduction (c) Convection (d) Both B and C

56) A device in which the loss of heat due to conduction, convection and radiation is minimized in

(a) Solar cell (b) Solar cooker (c) Thermometer (d) Thermos flask

57) In current electricity, a positive charge refers to,

(a) presence of electron (b) presence of proton (c) absence of electron

(d) absence of proton

58) Rubbing of comb with hair.

(a) creates electric charge (b) transfers electric charge (c) either (a) or (b)
(d) neither (a) nor (b)

59) Electric field lines_____ from positive charge and_____ in negative charge.

(a) start; start (b) end; start (c) start; end (d) end; end

60) Potential near a charge is the measure of its_____ to bring a positive charge at that point.

(a) force (b) ability (c) tendency (d) work

61) In an electrolyte the current is due to the flow of

(a) electrons (b) positive ions (c) both (a) and (b) (d) neither (a) nor (b)

62) Heating effect of current is called,

(a) Joule heating (b) Coulomb heating (c) Voltage heating (d) Ampere heating

63) Electroplating is an example for

(a) heating effect (b) chemical effect (c) flowing effect (d) magnetic effect

64) Resistance of a wire depends on

(a) temperature (b) geometry (c) nature of material (d) all the above

65) Which of the following converts electrical energy into mechanical energy?

(a) motor (b) battery (c) generator (d) switch

66) The part of the AC generator that passes the current from the armature coil to the external circuit is

(a) field magnet (b) split rings (c) slip rings (d) brushes

67) Transformer works on.

(a) AC only (b) DC only (c) both AC and DC (d) AC nor effectively than DC

68) The unit of magnetic flux density is

(a) weber (b) weber/metre (c) weber/metre^2 (d) weber. metre^2

69) If Dobereiner is related with 'law of triads', then Newlands is related with _____.

(a) Modern periodic law (b) Hund's rule (c) Law of octaves
(d) Pauli's Exclusion principle

70) Modern periodic law states that the physical and chemical properties of elements are the periodic functions of their_____

(a) atomic numbers (b) atomic masses (c) similarities (d) anomalies

71) Elements in the modern periodic table are arranged in_____ groups and _____ periods.

(a) 7,18 (b) 18,7 (c) 17,8 (d) 8, 17

72) Number of valence electrons in carbon is

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

73) Sodium having atomic number 11, ready to_____electron/electrons to attain the nearest noble gas electronic configuration.

(a) gain one (b) gain two (c) lose one (d) lose two

74) The element that would form anion by gaining electrons in a chemical reaction is _____.

(a) Potassium (b) Calcium (c) Fluorine (d) Iron

75) Bond formed between a metal and non-metal atom is usually_____

(a) ionic bond (b) covalent bond (c) co-ordinate bond (d) covalent bond

76) _____compounds have high melting and boiling points.

(a) Covalent (b) Coordinate (c) Ionic (d) Coordinate

77) Covalent bond is formed by_____

(a) transfer of electrons (b) sharing of electrons (c) sharing a pair of electrons

(d) transfer of electrons

78) Oxidising agents are also called as_____because they remove electrons form other substances.

(a) electron donors (b) electron acceptors (c) electron donors (d) Ionic

79) Elements with stable electronic configurations have eight electrons in their valence shell. They are_____

(a) Halogens (b) Metals (c) Noble gases (d) non metals

80) The property which is characteristics of an Ionic compound is that

(a) it oen exists as gas at room temperature (b) it is hard and brittle

(c) it undergoes molecular reactions (d) it has low melting point

81) $Zn + 2HCl \longrightarrow ZnCl_2 +$ ____ $\uparrow (H_2, O_2, CO_2)$

(a) H_2 (b) O_2 (c) CO_2 (d) CO_2

82) Apple contains malic acid. Orange contains_____

(a) citric acid, (b) ascorbic acid (c) citric acid, (d) acid

83) Acids in plants and animals are organic acids. Whereas acids in rocks and minerals are_____

(a) Inorganic acids (b) Weak acids (c) citric acid (d) ascorbic acid

84) Acids turn blue litmus paper to_____

(a) Green (b) Red (c) Orange (d) Orange

85) Since metal carbonate and metal bicarbonate are basic they react with acids to give salt and water with the liberation of_____

(a) NO_2 (b) SO_2 (c) CO_2 (d) SO_2

86) The hydrated salt of copper sulphate has_____colour

(a) Red (b) White (c) Blue (d) White

87) The tissue composed of living thin walled polyhedral cell is

(a) Parenchyma (b) Collenchyma (c) Sclerenchyma (d) None of above

88) The fibres consists of

(a) Parenchyma (b) Sclerenchyma (c) Collenchyma (d) None of above

89) Companion cells are closely associated with

(a) sieve elements (b) vessel elements (c) Trichomes (d) guard cells

90) Which of the following is a complex tissue?

(a) Parenchyma (b) Collenchyma (c) Xylem (d) Sclerenchyma

91) Aerenchyma is found in

(a) epiphytes (b) hydrophytes (c) halophytes (d) xerophytes

92) Smooth muscles occur in

(a) uterus (b) artery (c) vein (d) all of the above

93) Nerve cell does not contains

(a) axon (b) nerve endings (c) tendons (d) dendrites

94) Which of the following is not a salivary gland?

(a) Sublingual (b) Lachrymal (c) Submaxillary (d) Parotid

95) Stomach of man mainly digests

(a) carbohydrates (b) proteins (c) fat (d) sucrose

96) To prevent the entry of food into the trachea, the opening is guarded by_____

(a) epiglottis (b) glottis (c) hard palate (d) soft palate

97) Bile helps in the digestion of_____

(a) proteins (b) sugar (c) fats (d) carbohydrates

98) The structural and functional unit of the kidney is_____

(a) villi (b) liver (c) nephron (d) ureter

99) Which one of the following substance is not a constituent of sweat?

(a) Urea (b) Protein (c) Water (d) Salt

100) The common passage meant for transporting urine and sperms in male is_____

(a) ureter (b) urethra (c) vas deferens (d) scrotum

101) Which of the following is not a part of female reproductive system?

(a) Ovary (b) Uterus (c) Testes (d) Fallopian tube

102) Which one of the following is an output device?

(a) Mouse (b) Keyboard (c) Speaker (d) Pendrive

103) Name the cable that connects CPU to the monitor.

(a) Ethernet (b) VGA (c) HDMI (d) USB

104) Which one of the following is an input device?

(a) Speaker (b) Mouse (c) Monitor (d) Printer

105) Which one of the following is an example for wireless connections?

(a) Wi-Fi (b) Electric wires (c) VGA (d) USB

106) Pen drive is _____device.

(a) Output (b) Input (c) Storage (d) connecting cable

107) The size of an air bubble rising up in water

(a) decreases (b) increases (c) remains same (d) may increase or decrease

108) Clouds float in atmosphere because of their low

(a) density (b) pressure (c) velocity (d) mass

109) In a pressure cooker, the food is cooked faster because

(a) increased pressure lowers the boiling point

(b) increased pressure raises the boiling point

(c) decreased pressure raises the boiling point

(d) increased pressure lowers the melting point

110) An empty plastic bottle closed with an airtight stopper is pushed down into a bucket filled with water. As the bottle is pushed down, there is an increasing force on the bottom as shown in graph. This is because

(a) more volume of liquid is dispaced (b) more weight of liquid is displaced

(c) pressure increases with depth (d) all the above

111) Which of the following vibrates when a musical note is produced by the cymbals in a orchestra?

(a) stretched strings (b) stretched membranes (c) air columns (d) metal plates

112) Sound travels in air:

(a) if there is no moisture in the atmosphere.

(b) if particles of medium travel from one place to another.

(c) if both particles as well as disturbance move from one place to another.

(d) if disturbance moves.

113) A musical instrument is producing continuous note. This note cannot be heard by a person having a normal hearing range. This note must then be passing through

(a) wax (b) vacuum (c) water (d) empty vessel

114) The maximum speed of vibrations which produces audible sound will be in

(a) seawater (b) ground glass (c) dry air (d) Human blood

115) The sound waves travel faster

(a) in liquids (b) in gases (c) in solids (d) in vacuum

116) Who proposed the heliocentric model of the universe?

(a) Tycho Brahe (b) Nicolaus Copernicus (c) Ptolemy (d) Archimedes

117) Which of the following is not a part of outer solar system?

(a) Mercury (b) Saturn (c) Uranus (d) Neptune

118) Ceres is a _____.

(a) Meteor (b) Star (c) Planet (d) Astroid

119) The period of revolution of planet A around the Sun is 8 times that of planet B. How many times is the distance of planet A as great as that of planet B?

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

120) The Big Bang occurred _____ years ago.

(a) 13.7 billion (b) 15 million (c) 15 billion (d) 20 million

121) A phenomenon in which an element exists in different modification in same physical state is called

(a) Isomerism (b) Allotropy (c) Catenation (d) Crystallinity

122) Carbon forms large number of organic compounds due to

(a) Allotropy (b) Isomerism (c) Tetravalency (d) Catenation

123) Plastics made of Polycarbonate (PC) and Acrylonitrile Butadiene Styrene (ABS) are made of resin code _____

(a) 2 (b) 5 (c) 6 (d) 7

124) Graphene is one atom thick layer of carbon obtained from

(a) Diamond (b) Fullerene (c) Graphite (d) Gas Carbon

125) The legal measures to prevent plastic pollution come under the _____ Protection Act 1988.

(a) Forest (b) Wildlife (c) Environment (d) Human Rights

126) Nandhini brings his lunch every day to school in a plastic container which has resin code number 5. The container is made of:

(a) Polystyrene (b) PVC (c) Polypropylene (d) LDPE

127) One Nanometre is

(a) 10^{-7} metre (b) 10^{-8} metre (c) 10^{-6} metre (d) 10^{-9} metre

128) The antibiotic Penicillin is obtained from _____

(a) plant (b) microorganism (c) animal (d) sunlight

129) 1% solution of Iodoform is used as

(a) antipyretic (b) antimalarial (c) antiseptic (d) antacid

130) The cathode of an electrochemical reaction involves _____

(a) oxidation (b) reduction (c) neutralisation (d) catenation

131) The age of a dead animal can be determined by using an isotope of _____

(a) carbon (b) iodine (c) phosphorous (d) oxygen

132) Which of the following does not contain natural dyes?

(a) Potato (b) Beetroot (c) Carrot (d) Turmeric

133) This type of food protect us from deficiency diseases.

(a) Carbohydrates (b) Vitamins (c) Proteins (d) Fats

134) Radiochemistry deals with

(a) oxidants (b) batteries (c) isotopes (d) nanoparticles

135) The groups responsible for the colour of an organic compound is called

(a) isotopes (b) auxochrome (c) chromogen (d) chromophore

136) Chlorinated hydrocarbons are used as

(a) fertilizers (b) pesticides (c) food colourants (d) preservatives

137) All the factors of biosphere which affect the ability of organisms to survive and reproduce are called as _____.

(a) biological factors (b) abiotic factors (c) biotic factors (d) physical factors

138) The ice sheets from the north and south poles and the icecaps on the mountains, get converted into water vapour through the process of _____.

(a) evaporation (b) condensation (c) sublimation (d) infiltration

139) The atmospheric carbon dioxide enters into the plants through the process of _____.

(a) photosynthesis (b) assimilation (c) respiration (d) decomposition

140) Increased amount of _____ in the atmosphere, results in greenhouse effect and global warming

(a) carbon monoxide (b) sulphur dioxide (c) nitrogen dioxide (d) carbon dioxide

141) The production and management of fish is called

(a) Pisciculture (b) Sericulture (c) Aquaculture (d) Monoculture

142) Which one of the following is not an exotic breed of cow?

(a) Jersey (b) Holstein-Friesan (c) Sahiwal (d) Brown Swiss

143) Which one of the following is an Italian species of honey bee?

(a) Apis mellifera (b) Apis dorsata (c) Apis florae (d) Apis cerana

144) Which one of the following is not an Indian major carp?

(a) Rohu (b) Catla (c) Mrigal (d) Singhara

145) Drones in the honey bee colony are formed from

(a) unfertilized egg (b) fertilized egg (c) parthenogenesis (d) both b and c

146) Which of the following is an high milk yielding variety of cow?

(a) Holstein- Friesan (b) Dorset (c) Sahiwal (d) Red Sindhi

147) Which Indian variety of honey bee is commonly used for apiculture?

(a) Apis dorsata (b) Apis florea (c) Apis mellifera (d) Apis indica

148) _____ is the method of growing plants without soil.

(a) Horticulture (b) Hydroponics (c) Pomology (d) None of these.

149) The symbiotic association of fungi and vascular plants is

(a) Lichen (b) Rhizobium (c) Mycorhizae (d) Azotobacter

150) The plant body of mushroom is

(a) Spawn (b) Mycelium (c) Leaf (d) All of these

151) Which of the following is transmitted through air?

(a) Tuberculosis (b) Meningitis (c) Typhoid (d) Cholera

152) One of the means of indirect transmission of a disease is

(a) sneezing (b) coughing (c) vectors (d) droplet infection

153) Diptheria affects the

(a) Lungs (b) Throat (c) Blood (d) Liver

154) The primary organ infected during tuberculosis is

(a) bone marrow (b) intestine (c) spleen (d) lungs

155) Microbes that generally enter the body through nose are likely to affect

(a) gut (b) lungs (c) liver (d) lymph nodes

156) The organ affected by jaundice is

(a) liver (b) lungs (c) kidney (d) brain

157) Poliomyelitis virus enters the body through

(a) skin (b) mouth and nose (c) ears (d) eye

158) Find out the part that is not found in CPU?

(a) Mother Board (b) SMPS (c) RAM (d) Mouse

159) Which of the following is correct?

(a) Free and Open source (b) Free and Traditional software

(c) Passive and Open source (d) Passive and Traditional source

160) LINUX is a

(a) Paid Software (b) Licensed Software (c) Free and Proprietary software

(d) Free and Open source software

161) Find out the Paid and Proprietary software from the given list

(a) Windows (b) MAC OS (c) Adobe Photoshop (d) All the above

162) _____is an Operating System.

(a) Android (b) Chrome (c) Internet (d) Pendrive

163) _____ is a structured delivery of information.

(a) Slide Show (b) Page (c) WordArt (d) Presentation

164) The slides are grouped together in a sequence to form _____

(a) slide show (b) sharts (c) page (d) messages

165) A presentation consists of many _____

(a) pages (b) slides (c) placeholders (d) messages

166) which key should be pressed to run a slide show ?

(a) F1 (b) Tab (c) F5 (d) F2

167) _____ is used to insert attractive text in the slide.

(a) Slide Show (b) Word Art (c) Text (d) Header and Footer

168) Distance between Chennai and Kanyakumari can be found in

(a) Kilometres (b) Metres (c) Centimetres (d) Millimetres

169) _____is the fundamental quantity.

(a) Length (b) Area (c) Volume (d) Density

170) _____is the derived quantity.

(a) Length (b) Volume (c) Mass (d) Time

171) Unit of time is_____.

(a) km (b) mm (c) second (d) cm

172) Many of the ancient system of measurement were based on the dimensions of_____.

(a) Plants (b) Animals (c) Human body (d) God

173) _____is not the unit of length.

(a) Muzham (b) Furlong (c) Mile (d) Hour

174) There are_____fundamental units in SI system of units.

(a) 7 (b) 4 (c) 6 (d) 5

175) Moment is equal to_____of an hour.

(a) $\frac{1}{40}$ (b) $\frac{1}{80}$ (c) $\frac{1}{60}$ (d) $\frac{1}{20}$

176) The unit of area is_____.

(a) m^3 (b) m (c) m^2 (d) $\frac{m}{s}$

177) Density is_____.

(a) $\frac{volume}{mass}$ (b) $\frac{mass}{volume}$ (c) $\frac{area}{volume}$ (d) $\frac{volume}{area}$

178) Unit of acceleration is_____.

(a) ms^{-2} (b) ms^{-1} (c) $\frac{m}{s}$ (d) $\frac{s}{m}$

179) Light year is the distance travelled by light_____.

(a) one year (b) two years (c) 10 years (d) 5 years

180) Light travels_____m in one second.

(a) 5×10^3 (b) 5×10^8 (c) 3×10^8 (d) 8×10^3

181) One meter is approximately equal to_____inches.

(a) 80 (b) 60 (c) 20 (d) 40

182) 1 quintal is equal to_____kg.

(a) 100 (b) 200 (c) 1000 (d) 10

183) Newton, henry, ampere and watt are_____named after scientist.

(a) length (b) distance (c) meter (d) units

184) The diameters of spherical objects are measured with a_____scale.

(a) pitch (b) meter (c) head (d) vernier

185) The measure the diameter of a thin wire_____is used.

(a) Screw gauge (b) Water gauge (c) Meter gauge (d) Wind gauge

186) With the help of common beam balance we can measure mass accurately up to_____gm.

(a) 2 gms (b) 5 gms (c) 100 gms (d) 20 gms

187) _____balance is used in lab.

(a) Spring (b) Common (c) Physical (d) Digital

188) _____is the unit distance used to measure astronomical objects outside the solar system.

(a) Parsec (b) km (c) cm (d) litre

189) Timing the race completed by your friend to measure the unit _____.

(a) time (b) second (c) hour (d) metre

190) SI system of units was developed and recommended in _____ for international usage.

(a) 1950 (b) 1980 (c) 1970 (d) 1960

191) SI unit of temperature _____ .

(a) Kelvin (b) candela (c) ampere (d) mole

192) A fortnight is _____ days.

(a) 28 (b) 12 (c) 14 (d) 21

193) One light year in vaccum is equal to _____ .

(a) 6.49×10^{15} m (b) 9.64×10^{15} m (c) 4.96×10^{15} m (d) 9.46×10^{15} m

194) Derived unit of pressure is _____.

(a) Pascal (b) Newton (c) Joule (d) Square meter

195) The total length of all the blood vessels in human body is _____ km.

(a) 69000 (b) 96000 (c) 60,900 (d) 90600

196) Least count of vernier is _____.

(a) 0.1 mm (b) 0.1 cm (c) 0.1 dm (d) 0.1 m

197) _____ is possible to measure the thickness of thin metalic plate.

(a) Vernier caliper (b) Digital vernier caliper (c) Screw gauge (d) Digital balance

198) All the things express in cargo in _____ etc.

(a) kilogram (b) gram (c) quintal (d) tonnes

199) _____ is the quantity of matter contained in a body.

(a) Weight (b) Mass (c) Thickness (d) Volume

200) Slope of the velocity - time graph gives

(a) speed (b) displacement (c) distance (d) acceleration

201) A body moving with an initial velocity $5ms^{-1}$ and accelerates at $2ms^{-2}$. Its velocity after 10s is

(a) $20ms^{-1}$ (b) $25ms^{-1}$ (c) $5ms^{-1}$ (d) $22.55ms^{-1}$

202) In a 100m race, the winner takes 10s to reach the finishing point. The average speed of the winner is

(a) $5ms^{-1}$ (b) $20ms^{-1}$ (c) $40ms^{-1}$ (d) $10ms^{-1}$

203) A car is being driven at a speed of 20 ms^{-1} when brakes are applied to bring it to rest in 5 s. The decelaration produced in this case will be

(a) $+4\ ms^{-2}$ (b) $-4\ ms^{-2}$ (c) $-0.25\ ms^{-2}$ (d) $+0.25\ ms^{-2}$

204) Unit of acceleration is

(a) ms^{-1} (b) ms^{-2} (c) ms (d) ms^2

205) The force responsible for drying of clothes in a washing machine is

(a) Centripetal force (b) Centrifugal force (c) Gravitational force

(d) Electro static force

206) The area under velocity time graph represents

(a) Velocity of the moving object (b) Displacement covered by the moving object

(c) Speed of the moving object

207) When a body starts from rest, the acceleration of the body after 2 second in _____ of its displacement.

(a) Half (b) Twice (c) Four times (d) One fourth

208) In a 100 m race, the winner takes 10 s to reach the finishing point. The average speed of the winner is _____ ms^{-1}.

(a) 5 (b) 10 (c) 20 (d) 40

209) Force involved in uniform circular motion is given by _____.

(a) $f = mv^2/r$ (b) $f = mvr$ (c) $f = mr^2/v$ (d) $f = v^2/r$

210) Speed is never _____

(a) fraction (b) negative (c) zero (d) positive

211) During uniform motion, the change in velocity is _____

(a) zero (b) infinity (c) constant (d) one

212) If velocity of a body decreases in equal intervals of time is termed _____

(a) uniform acceleration (b) non-uniform acceleration (c) negative acceleration (d) positive acceleration

213) Negative acceleration is expressed in _____

(a) m/s (b) -m/s (c) $-m/s^2$ (d) m/s^2

214) The velocity time graph is parallel to X-axis it shows _____.

(a) uniform velocity of an object (b) non-uniform velocity (c) stationary position of an object (d) acceleration motion of an object

215) The slope of the velocity time graph for uniformly accelerated motion give _____

(a) speed (b) acceleration (c) displacement (d) velocity

216) Area under a velocity time graph gives _____

(a) time taken by an object (b) distance travelled by an object (c) acceleration (d) retardation

217) The velocity of a freely falling body _____

(a) decreases (b) zero (c) increases (d) equal to one

218) A body moving along a circular path has _____

(a) constant speed (b) constant velocity (c) no radial acceleration (d) no tangential velocity

219) The hands of the clock, the spokes of wheel are example of _____

(a) linear motion (b) circular motion (c) oscillatory motion (d) revolutionary motion

220) In which direction of the motion of the particles does centripetal force act?

(a) parallel (b) radial (c) tangential (d) perpendicular

221) In a 50 m race the winner takes 5 s to reach the finishing point. The average speed of the winner is _____

(a) 20 m/s (b) 25 m/s (c) 10 m/s (d) 500 m/s

222) In physics the objects which do not change their position are said to be at _____.

(a) motion (b) rest (c) motion and rest (d) running

223) Find the odd one out.

(a) Car running on the road (b) Birds flying in the air (c) The wall of a room

(d) Bicycle riding on the road

224) Where the object moves along a circular path is _____.

(a) Linear motion (b) Oscillatory motion (c) Random motion (d) Circular motion

225) Displacement is a _____quantity.

(a) vector (b) scalar (c) vector and scalar (d) none of these

226) A bus starting from a stop and passes crowded area of the road is good example for

(a) uniform motion (b) non uniform motion (c) speed (d) velocity

227) Unit for velocity is _____.

(a) m/s (b) m/s^2 (c) m (d) m/s^2

228) The product of velocity, and time gives _____ as an object moving with uniform velocity.

(a) velocity (b) time (c) displacement (d) acceleration

229) The field of view * is maximum for _____

(a) plane mirror (b) concave mirror (c) convex mirror

230) The focal length of a concave mirror is 5cm. Its radius of curvature is

(a) 5 cm (b) 10 cm (c) 2.5 cm

231) A real and enlarged image can be obtained by using a

(a) convex mirror (b) plane mirror (c) concave mirror

232) Which of the following statements about total internal reflection is true?

(a) angle of incidence should be greater than critical angle

(b) light must travel from a medium of higher refractive index to a medium of lower refractive index

(c) both (a) and (b)

233) Mirrors having spherical surface of reflection are _____

(a) plane mirror (b) lenses (c) spherical mirrors (d) prism

234) A spherical mirror which has reflecting curved inward surface is _____mirror

(a) concave (b) convex (c) plano concave (d) plano convex

235) The mirror that diverge the light rays is_____

(a) concave (b) convex (c) plane (d) None of these

236) The centre of the sphere, of which a spherical mirror is a part is called _____

(a) pole (b) radius of curvature (c) focus (d) centre of curvature

237) The centre of the reflecting surface of a spherical mirror is _____

(a) centre of curvafure (b) focus (c) pole (d) radius of curvature

238) The point at which the rays are converged or diverged by a mirror is _____

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

239) The radius of curvature of the spherical mirror is equal to _____.

(a) focal length (b) twice the focal length (c) thrice the focal length

(d) half of the focal length

240) A virtual and equal sized image is formed by _____mirrors.

(a) convex (b) plane (c) convex (d) spherical

241) To form a real image -_____mirror is required.

(a) parallel (b) plane (c) convex (d) concave

242) Virtual and magnified image is formed by_____mirror

(a) concave (b) convex (c) plane (d) both concave and convex

243) According _____to of light, angle of incidence is equal to angle of reflection

(a) refraction (b) dispersion (c) reflection (d) total internal reflection

244) An object is placed between F and 2F of a concave, mirror image will be formed_____

(a) at infinity (b) beyond F (c) beyond 2F (d) between F and O

245) The mirror used by a dental surgeon, is _____

(a) plane (b) convex (c) concave and convex (d) concave

246) The angle between the normal and the refracted ray is called angle of _____

(a) reflection (b) refraction (c) incidence (d) deviation

247) The second law of refraction is stated by _____

(a) C.V. Raman (b) Gallileo (c) Newton (d) Snell

248) The velocity of light in air is_____

(a) 1.8×10^8 m/s (b) 3×10^8 m/s (c) 2.25×10^8 m/s (d) 3×10^6 m/s

249) The branch of physics that deals with the properties and application of light is called _____.

(a) Heat (b) Zoology (c) Optics (d) Visual communication

250) The geometrical centre of the spherical mirror is _____.

(a) Centre of curvature (b) Pole (c) Radius of curvature (d) Principal focus

251) Radius of curvature and focal length are related to each other by the formula _____.

(a) R = 2f (b) f = 2R (c) Rf = 2 (d) R = 2 + f

252) A ray passing through the centre of curvature is reflected back _____.

(a) travels parallel to the principal axis (b) passes through the focus

(c) along a path such that the angle of incidence is equal to the angle of reflection

(d) along its own path

253) If the light rays coming from an object actually meet, after reflection the image formed will be _____.

(a) Real image (b) Virtual image (c) False image (d) None of the above

254) When the object is in between the centre of curvature and focus, size of image is _____.

(a) same (b) magnified (c) smaller than object (d) no image formed

255) A _____ sign in the value of magnification indicates that the image is virtual.

(a) negative (b) positive (c) multiplicative (d) division

256) _____ mirrors are installed on public roads as trafic safety device.

(a) Convex (b) Concave (c) Plane (d) None of abow

257) Speed of light is first land based estimates was made by _____.

(a) Galileo Galilei (b) Ole Roemer (c) Armand Fizeau (d) Narinder Kapany

258) Refractive index of diamond is _____.

(a) 1.33 (b) 1.5 (c) 1.00 (d) 2.41

259) The physical state of water at 373 K is

(a) Solid (b) liquid (c) vapour (d) plasma

260) The constituents that form a mixture are also called

(a) Elements (b) Compounds (c) Alloys (d) Components

261) Difference in _____is the principle used in fractional distillation

(a) solubility (b) melting point (c) boiling point (d) adsorption

262) Filtration method is effective in separating _____ mixture

(a) Solid-solid (b) solid-liquid (c) liquid-liquid (d) liquid-gas

263) For a simple distillation process we need to have

(a) an evaporating dish (b) a separating funnel (c) a filter with filter paper (d) a Liebig condenser

264) Gas particles can be forced to get closer and can be easily compressed. So _____ increases.

(a) pressure (b) volume (c) mass (d) weight

265) Light, sound, heat, etc., are not matter. They are different forms of

(a) solids (b) liquids (c) gases (d) energy

266) Particles of matter are in constant motion as they posses_____energy.

(a) potential (b) kinetic (c) solar (d) wind

267) Solids_____into liquid

(a) freezes (b) condenses (c) vaporises (d) melts

268) _____ is a process by which a substance changes from the liquid to gaseous state.

(a) Boiling (b) Evaporation (c) Melting (d) Condensation

269) Evaporation takes place at the_____of a liquid.

(a) middle (b) surface (c) side (d) bottom

270) The direct change of state from solid to gas is called_____

(a) filtration (b) decantation (c) sublimation (d) evaporation

271) The pressure of a given mass of an ideal gas is inversely proportional to its volume at a constant_____

(a) volume (b) temperature (c) pressure (d) rate

272) A mixture can be separated into its constituents by_____

(a) Physical (b) Chemical (c) Electrical (d) Magnetic

273) Energy is neither given out nor absorbed in the preparation of_____

(a) element (b) compound (c) mixture (d) solvent

274) Gel are_____solutions with liquid dispersed in solid

(a) True (b) Suspension (c) Colloid (d) Homogeneous

275) The process of turning a liquid mixture into an emulsion is called_____

(a) Emulsification (b) Esterification (c) Purification (d) Mixing

276) To separate two or more miscible liquids which do not differ much in the boiling points_____is employed

(a) distillation (b) filtration (c) decantation (d) fractional distillation

277) Mixture of two immiscible liquids are separated by using a_____

(a) funnel (b) test tube (c) beaker (d) separating funnel

278) _____ proposed atomic theory.

(a) John Dalton (b) Robert Brown (c) Albert Einstein (d) Richard Feynman

279) Odd one out.

(a) Pollen particles move randomly

(b) Dancing of rock dust particles in the surface of water

(c) To and fro action of trees (d) Dust particles dancing a narrow beam light

280) A grain of common salt contains _____ particles.

(a) 2.1×10^{18} (b) 1.2×10^{18} (c) 2.1×10^{81} (d) 1.2×10^{81}

281) Melting point of sodium is _____ ^oC

(a) 3550 (b) 1540 (c) -219 (d) 98

282) Boiling point of oxygen is _____ ^oC

(a) -183 (b) 890 (c) 4832 (d) 2900

283) Boiling point of water inside the pressure cooker is _____.

(a) 100^oC (b) 110^oC (c) 120^oC (d) 80^oC

284) Odd one out.

(a) Dry ice (b) Mercury (c) Napthalene (d) Ammonium chloride

285) _____ posses highest kinetic energy.

(a) Solid (b) Liquid (c) Gas (d) None of these

286) _____ have high density particles.

(a) Solid (b) Liquid (c) gas (d) None of these

287) In modern periodic table _____ numbers of elements naturally occuring.

(a) 88 (b) 69 (c) 72 (d) 92

288) Identify the metalloids.
i) Boran, silicon
ii) Gold, mercury
iii) Oxygen, Neon
iv) Germanium, Arsenic

(a) i and ii (b) i and iii (c) i and iv (d) ii and iv

289) Among the following _____ is the metal.

(a) Carbon (b) Mercury (c) Arsenic (d) Germanium

290) Among the following which metal is to enough heat of our hand to change solid into liquid _____.

(a) Gallium (b) Mercury (c) Gold (d) Aluminium

291) Law of multiple proportions was proposed by _____

(a) J. Ritcher (b) Rutherford (c) John Dalton (d) J.J Thomson

292) $2H_2 + O_2 \longrightarrow 2H_2O$. This is a_____ reaction.

(a) Combination (b) Displacement (c) Decompostion (d) Exothermic

293) The compounds $N_{2}o$, NO_2, N_2O_4, N_2O_5 explains_____ law.

(a) Law of definite proportion (b) Law of multiple proportion

(c) Law of reciprocal proportion (d) Law of conservation of mass

294) An alpha particle is identical with a _____Nucleus.

(a) Argon (b) Chlorine (c) Neon (d) Helium

295) Most of the fast moving α particles passed straight through the gold foil explains _____

(a) An atom has nucleus (b) There is a large empty space around the nucleus.

(c) Electrons move in circular paths (d) Nucleus is in the centre

296) The circular orbits are numbered as 1,2,3,4, ... These numbers are referred as _____

(a) Principal Quantum Number (b) Azimuthal Quantum Number

(c) Mangetic Quantum Number (d) Spin Quantum Number

297) Maximum number of electrons that can be accommodated in an energy level is given by the formula _____

(a) n^2 (b) $2n^2$ (c) $3n^2$ (d) $2n^3$

298) James Chadwick observed when was exposed to a particle, particles with about the same mass as protons were emitted.

(a) Boron (b) Carbon (c) Helium (d) Beryllium

299) Protons and neutrons are collectively called as _____

(a) mesons (b) neutrino (c) Nucleons (d) Positrons

300) Atoms of the same element having same atomic number but different Mass number are called _____

(a) Isotopes (b) Isobars (c) Isotones (d) Isotherm

301) The outermost shell of an atom is called its_____ shell.

(a) inner (b) outer (c) valence (d) sub shell

302) Carbon has 4 valence electrons in the outermost shell. So the valency is _____

(a) 2 (b) 6 (c) 4 (d) 3

303) Elements which have valence electrons 1 or 2 or 3 are _____

(a) metal (b) non-metal (c) rare metal (d) valuable metal

304) The electronic configuration of Neon is 2, 8. So the valency is _____

(a) 2 (b) 8 (c) 0 (d) 10

305) Our bodies contain radioisotopes such as _____which continuously emit radiation.

(a) Potassium 40 (b) Iodine 131 (c) Cobalt 60 (d) Carbon 14

306) Gay-Lussac law always dealing with_____

(a) Solids (b) Liquids (c) Gases (d) Semi-solids

307) Odd one out

(a) Law of conservation of mass (b) Law of constant proportion

(c) Law of Flemming left hand (d) Law of Reciprocal proportion

308) Mass of oxygen atom _____ g

(a) 16 (b) 12 (c) 4 (d) 8

309) The law of reciprocal proportion was proposed by _____.

(a) John Dalton (b) Jeremias Ritcher (c) Gay Lussac (d) Ruther ford

310) James Chadwick was discovered _____.

(a) Proton (b) Electron (c) Positrons (d) Neutron

311) _____ is used fuel in Nuclear reactros.

(a) Uranium - 235 (b) Cobalt - 60 (c) Iodine - 13 I (d) Carbon - 14

312) Electronic configuration of phosphorus is _____.

(a) 2,8,3 (b) 2,8.4 (c) 2,8,5 (d) 2,8,8

313) Atomic number of Aluminium is 13 and mass number is 27 then the number of electrons present _____.

(a) 27 (b) 14 (c) 40 (d) 13

314) A big tree falls in a forest but its roots are still in contact with the soil. The branches of this fallen tree straight up. This happens in response to _____

(a) water and light (b) water and minerals (c) gravity and water

(d) light and gravity

315) Transpiration is best defined as _____

(a) loss of water by the plant

(b) evaporation of water from the aerial surfaces from the plant

(c) loss of water in the form of water vapour from the underground parts of the plant body

(d) release of water from the plant into the atmosphere

316) The plant part which exhibits negative geotropism is _____.

(a) root (b) stem (c) branch (d) leaves

317) Dandelion flowers open the petals in bright light during the day time but close the petals in dark at night. This response of Dandelion flowers is called _____.

(a) geonasty (b) thigmonasty (c) chemonasty (d) photonasty

318) During photosynthesis plants exhale _____.

(a) Carbon dioxide (b) oxygen (c) hydrogen (d) helium

319) A plant is kept in a dark room for about 24 hours before conducting any experiment on photosynthesis in order to _____.

(a) remove chlorophyll from the leaf (b) remove starch from the leaves

(c) ensure that photosynthesis occurred (d) to prove transpiration

320) The common name of Mimosa pudica is_____

(a) sun flower (b) Touch me not (c) Moon plant (d) Thozhukanni

321) Sunflower follows the path of the sun from_____.

(a) south to north (b) North to south (c) East to West (d) west to east.

322) Desmodium gyrans is commonly known as_____.

(a) Money plant (b) Rose plant (c) Telegraph plant (d) Lilly plant.

323) Mimosa pudica is also known as_____.

(a) Nepenthes (b) Telegraph plant (c) Dancing plant (d) Thotta Surungi

324) The tip of the shoot is known as_____.

(a) Choleoptile (b) Colon (c) Coleorhiza (d) Collar.

325) Peter Boysen-Jensen further developed Darwin's experiment in_____.

(a) 1931 (b) 1913 (c) 1951 (d) 1941

326) The plant which respond to gravity is termed as_____.

(a) Gravitropism (b) Thermotropism (c) Seismotropism (d) Phototropism

327) Shoots are said to_____.

(a) Negative phototropism (b) Positive phototropism (c) Positive hydrotropism

(d) Negative chemotropism

328) Rhizophora is an example for_____.

(a) positive geotropism (b) Positive phototropism (c) Positive hydrotropism

(d) Negative geotropism

329) Botanical name of common dandelian is_____.

(a) Ipomoea alba (b) Mimosa pudica (c) Helianthus Annuus

(d) Taraxacum officinale

330) Among the following which one is an example for thigmonasty?

(a) Tulipa sp. (b) Mangifera indica (c) Leucaena sp (d) Brunnichia ovata

331) Nictinasty refers to_____.

(a) light (b) water (c) darkness (d) temperature

332) Among the following which one protects our mother earth?

(a) O_2 (b) O_3 (c) O_4 (d) O_5

333) The end product of photosynthesis is_____.

(a) Sucrose (b) fructose (c) glycogen (d) Glucose

334) The discovery of Jan Baptist van Helmont was on_____ of the banyan tree

(a) Height (b) Mass (c) width (d) thickness

335) Von Helmont conducted his experiment in the year_____.

(a) 1684 (b) 1468 (c) 1864 (d) 1648.

336) Priestley concluded that spring of mint had absorbed _____.

(a) CO_2 (b) O_2 (c) NO_2 (d) SO_2

337) Chlorophyll is a_____pigment

(a) Yellow (b) Orange (c) green (d) Blue.

338) To de-starch the plant, the plant should be kept is darkroom for_____.

(a) 12 hrs (b) 6 hrs (c) 48 hrs (d) 24 hrs

339) The gas evolved during photosynthesis is _____.

(a) CO_2 (b) H_2 (c) O_2 (d) N_2

340) Identify the emerald green sea slug_____.

(a) Vaucheria litorea (b) Nepenthes (c) Droseta (d) Elysia chlorotica

341) Identify the false statement

(a) Photosynthesis takes place in mitochondria (b) Photo means "light"

(c) The end product of photo synthesis is glucose

(d) Chlorophyll is necessary for photosynthesis.

342) Sunlight can peretrate _____ m into the ocean.

(a) 200m - 400m (b) 100m - 300m (c) 100m - 200m (d) 200m - 600m

343) Chlorophyll is present in the_____.

(a) Root (b) Leaf (c) Stem (d) Flower

344) The air exchange takes place continuo sly through_____.

(a) Grana (b) Stomata (c) Mitochondria (d) Stem

345) 90-95% of the water transpired from the leaves by_____.

(a) Lenticular (b) Cuticular (c) polar (d) Stomatal transpiration

346) _____% of water is used to produce carbohydrates by the plants.

(a) 0.01% (b) 0.001% (c) 0.1% (d) 0.6%.

347) Maize plant transpire _____ gallons of water during its life span.

(a) 34 (b) 44 (c) 64 (d) 54

348) Among the following which one is most biodiverse terrestrial place?

(a) Africa (b) America (c) Argentina (d) Amazon.

349) Photosynthesis occurs in most plants during the_____.

(a) Summer season (b) Winter season (c) Night time (d) Day time

350) The byproduct of photosynthesis is_____.

(a) CO_2 (b) O_2 (c) H_2O (d) Starch

351) The dancing plant is_____.

(a) Mimosa pudica (b) Desmodium gyrans (c) Helianthus annus (d) Rhizophora.

352) The dance of _____ leaf is mesmerizing.

(a) Indian telegraph plant (b) Touch me not plant (c) Common Dandelion plant (d) Moon flower plant

353) The tip of the embryonic shoot is covered by protective sheath called

(a) primary shoot (b) radicle (c) coleoptile (d) auxin

354) _____ flowers does exactly open in the night and hence closes in the day time.

(a) Taraxacum officinale (b) Ipomoea alba (c) Mimosa pudica (d) Brunnichia ovata

355) The _____ presents a spectacular example of thigmonasty.

(a) Coleus (b) Leucaena sp (c) Mangifera Indica (d) Dionaea musciphla

356) During the photosynthesis process the light energy is converted into _____ energy.

(a) chemical (b) heat (c) wind (d) atomic

357) The end product of photosynthesis is glucose it has _____ number of carbon molecues present.

(a) four (b) twelve (c) six (d) five

358) Living organism lives in the earth it need _____ to carry on cellular respiration.

(a) carbon dioxide (b) chlorine (c) hydrogen (d) oxygen

359) Leaf is tested for starch with _____ solution.

(a) sulphur (b) iodine (c) phosphrous (d) glucose

360) Identify macro nutrients from the following

(a) Iron (b) Copper (c) Oxygen (d) Boron

361) A big tree falls in a forest but its roots are still in contact with the soil. The branches of this fallen tree straight up. This happens in response to _____.

(a) water and light (b) water and minerals (c) gravity and water (d) light and gravity

362) A plant is kept in a dark room for about 24 hours before conducting any experiment on photosynthesis in order to _____.

(a) remove chlorophyll from the leaf (b) remove starch from the leaves (c) ensure that photosynthesis occurred (d) to prove transpiration

363) Which is not an insect?

(a) House fly (b) Bedbug (c) Mosquito (d) Spider

364) Dysentery is caused by

(a) Entamoeba (b) Euglena (c) Plasmodium (d) Paramecium

365) Which is not a feature of chordates

(a) Green glands (b) Sweat glands (c) Sebaceous gland (d) Mammary gland

366) The bilaterally symmetrical larvae which transform into radially symmetrical adult is

(a) Bipinnaria (b) Trochophore (c) Tadpole (d) Polyp

367) Choose the correct terms related for Hemichordate

(a) Vermiform, unsegmented, triploblastic, ciliary feeders

(b) Vermiform, segmented, triploblastic, ciliary feeders

(c) Vermiform, unsegmented, diploblastic, ciliary feeders

(d) Vermiform, unsegmented, triploblastic, filter feeders

368) Crop, gizzard and air sacs are seen in

(a) Fish (b) Frog (c) Bird (d) Bat

369) Tube like alimentary canal is found in

(a) Hydra (b) Earth worm (c) Starfish (d) Ascaris

370) During ecdysis which of the following is shed off

(a) Chitin (b) Mantle (c) Scales (d) Operculum

371) Cephalization is related to

(a) Head formation (b) Gut formation (c) Coelom formation (d) Gonad formation

372) The first systematic approach to the classification of living organisms was made by_____.

(a) Hooker (b) Carolus Linnaeus (c) Robert (d) Lister

373) Carolus Linnaeus was a_____botanist.

(a) German (b) American (c) Swedish (d) Russian

374) Among the following which one is not herbivore _____.

(a) Elephant (b) Cow (c) Zebra (d) Tiger

375) Identify which one is produces milk?

(a) Cat (b) Shark (c) Whale (d) Dolphin

376) Zoological name of Tiger is_____.

(a) Rana hexa dactyla (b) Panthera tigris (c) Pila globosa (d) None

377) All life can be divided into_____major categories.

(a) one (b) two (c) three (d) four

378) Identify the single celled organism.

(a) Fern (b) Rabbit (c) Cat (d) Pond algae

379) How many organisms given below show radial symmetry? Earthworms, grasshopper, rotifers jelly fish and star fish_____.

(a) four (b) three (c) two (d) five

380) Consider the following four statements whether they are correct or wrong for the classification of animal kingdom.

(a) Mesoglea (b) presence or absence of alimentary canal

(c) on the basis of grade of organization (d) presence of haemolymph

381) How many of the following organism are coelmate?
Earthworm, Leech, Amphious, Ascaris

(a) five (b) four (c) three (d) two

382) Identify the pseudocoelomatic organism.

(a) Tapeworm (b) Flatworm (c) Roundworm (d) Earthworm

383) From the following options select the statement which is not applicable to frog?

(a) They are amphibians (b) Three chambered heart (c) Presence of webbed feet
(d) Body is divided into head, thorax and abdomen.

384) Incomplete digestive system is found in_____.

(a) Platyhelminthes (b) Nemathelminthes (c) Annelida (d) Arthropoda

385) Which among the following organism has water vascular system in its body?

(a) Sponge (b) Hydra (c) Fish (d) Star fish

386) Identify the most common larva of segmented worms?

(a) Bipinnaria (b) Tadpole (c) Trochophore (d) Ascon

387) Excretion takes place through_____in insects.

(a) green glands (b) trachea (c) Malphigian tubules (d) Gills

388) Find the correct statement about frog.

(a) Heart is three chambered (b) Two chambered heart (c) 'S' shaped
(d) Heart is four chambered

389) Mesogloea is found in_____.

(a) Amoeba (b) Hydra (c) Flatworm (d) Earthworm

390) Find the incorrect pair.

(a) Earth worm - Metamerism (b) Round worm - Pseudocoelom
(c) Hydra Polyp - Medusa (d) Star fish - Asymmetrical

391) The blood vascular system of Arthropoda is_____.

(a) Open type (b) Closed type (c) Partially open type (d) Partially closed type

392) Which one of these is wrong regaring earthworm?

(a) Metamerism (b) True coelom (c) unisexual (d) presence of fore limbs

393) The non-cellularjelly like layer is present in between ectoderm and endoderm in coelenterates is_____.

(a) Mesoderm (b) Coelom (c) Coelenteron (d) Mesoglea

394) The presence of tube feet is a characteristic feature of the phylum_____.

(a) Arthropoda (b) Nemathelminthes (c) Mollusca (d) Echinodermata

395) Identify the incredible intelligent invertebrate?

(a) Pearl (b) Star fish (c) Octopus (d) Jelly fish

396) Which one of the following is not a mammalian character?

(a) Presence of mammary glands (b) Presence of Placenta
(c) Give birth to young ones (d) Heart is three chambered

397) The body of round worms are covered by_____.

(a) scales (b) thick cuticle (c) thin cuticle (d) chitin

398) Among the following which one is the largest phylum of animal kingdom?

(a) Mollusca (b) Porifera (c) Coelenterates (d) Echinodermata

399) Which of the following is incorrect in class Reptilia?

(a) Epidermal scales (b) Four chambered heart (c) Lungs

(d) Eggs are covered with shells

400) The binomial name of star fish is_____.

(a) Pila globosa (b) Asterias rubens (c) Hydra vulgaris (d) Amoebaproteus

401) The common name of Rana hexadactyla is_____.

(a) Crow (b) Toad (c) Frog (d) Dog

402) The smallest bat lives in_____.

(a) America (b) Thailand (c) Africa (d) Canada

403) Identify the phylum which exhibits polymorphism.

(a) Pinnelida (b) Arthropoda (c) Protozoa (d) Porifera

404) Adult male worm of Ascaris ranges from_____.

(a) 10 to 15 cm (b) 15 cm to 30 cm (c) 15 cm to 25 cm (d) 15 cm to 35 cm

405) Identify in which sub-phylum shows tubiculous forms?

(a) Prochordata (b) Urochordata (c) Hemichordata (d) Cephalochordata

406) Notochord extends forward beyond the brain in_____.

(a) Asicidian (b) Amphioxus (c) Balanoglossus (d) Star fish

407) Ascon worms belongs to_____.

(a) invertebrates (b) vertebrates (c) Urochordates (d) Hemichordates

408) Lateral line sense organs are present in_____.

(a) snake (b) birds (c) fish (d) jelly fish

409) Chordates are characterised by the presence of_____.

(a) Notochord (b) Cuticle (c) Green glands (d) Feathers

410) Myotomes are present in_____.

(a) Frog (b) Fish (c) Amoeba (d) Sponge

411) Among the following which are the first homeothermic vertebrates with spindle shaped body?

(a) Amphibians (b) Reptiles (c) Mammals (d) Aves

412) Identify the state bird of Tamil Nadu_____.

(a) Emerald dove (b) Archaeopteryx (c) Crow (d) Pigeon

413) Pneumatic bones are the characteristic feature of_____.

(a) Amphibians (b) Mammals (c) Reptiles (d) Aves

414) Which one is the Mammal like reptile?

(a) DImetrodon (b) Crocodile (c) Lizard (d) Snake

415) Albatross wing length is_____.

(a) 3.3 m (b) 3.4 m (c) 3.5 m (d) 3.6 m

416) Larva of frog is_____.

(a) Trochophore (b) Asicidian (c) Tadpole (d) Balanoglossus

417) The arrow poison frog is found in_____.

(a) Cuba (b) Japan (c) Malasiya (d) Thailand

418) The length of Bluewhale is_____.

(a) 15 m (b) 20 m (c) 25 m (d) 35 m

419) Phillippine goby is found in_____.

(a) marine water (b) brackish water (c) salt water (d) fresh water

420) The body of soft bodied animals are covered by_____.

(a) Spicules (b) Scales (c) Bristles (d) Mantle

421) Find the correct sequence

(a) Frog ⟶ Fish ⟶ Snake ⟶ Dove ⟶ Lion

(b) Fish ⟶ Snake ⟶ Frog ⟶ Lion ⟶ Dove

(c) Fish ⟶ Snake ⟶ Frog ⟶ Lion ⟶ Crow

(d) Fish ⟶ Frog ⟶ Snake ⟶ Dove ⟶ Lion

422) Among the following which one is radial symmetry?

(a) Snail (b) Grasshopper (c) Starfish (d) Peacock

423) _____ have true coelom.

(a) Earth worm (b) Tape worm (c) Round worm (d) Grass hopper

424) Phylum _____ body wall contains spicules which form the skeletal frame work.

(a) Protozoa (b) Porifera (c) Coelenterata (d) Platyhelminthes

425) In platyhelminthes animals, the excretion and osmoregulation occur through _____ cells

(a) cuticle (b) body (c) nerve (d) flame

426) _____ is an intestinal infection in mammals caused by an adult tape worm.

(a) Taeniasis (b) Fever (c) Head ache (d) Trochopore

427) Which one is not related annelida among the following?

(a) In the phylum include Earthworms and leeches

(b) The word metamerism is related to in the phylum

(c) The insect has to shed it periodically in a process called moulting

(d) The body is covered by moist outer cuticle

428) These are phylum arthropoda animals _____.

(a) Insects, Spiders, Millipedes, Centipedes (b) Earthworm, Leeches, Round, Worms

(c) Star fish, See urchin, Pearl oyster, Snail

(d) Sea lily, Asicidian, Amphioxus, Balanogiossus.

429) The most common larva of phylum mollusca is _____.

(a) Cnidoblasts (b) Veliger larva (c) Bipinnaria larva (d) Ascidian

430) Echinodermata animals are locomoted through _____.

(a) Pseudopodia (b) Cilia (c) Wings (d) Tube feet

431) _____ is a costly dish served in foreign countries.

(a) Star fish (b) Sea urchin (c) Sea cucumber (d) Pearl oyster

432) Balanoglossus is classified _____ which sub phylum among the following.

(a) Hemichordata (b) Cephalochordata (c) Urochordata (d) None of the above

433) _____ body is enveloped by a tunic or test.

(a) Balanoglossus (b) Amphioxus (c) Ascidian (d) Exocoetus

434) _____ can swim faster than a cheetah can run.

(a) Exocoetus (b) Sailfish (c) Star fish (d) Pearl oyster

435) The pisces have _____ chambered heart

(a) 4 (b) 3 (c) 2 (d) no heart

436) _____ is the binomial name of cockroach.

(a) Lampito mauritii (b) Hirudinaria grambosa (c) Asterias rubens
(d) Periplaneta americana

437) October _____ is declared as Global Iodine deficiency day.

(a) 20st (b) 21st (c) 19th (d) 18th

438) Who introduced the term vitamin?

(a) Dr. Joseph (b) Dr. Paul (c) Dr. Jagadesh (d) Dr. Funk

439) Identify the trace element

(a) Iron (b) Iodine (c) Calcium (d) Potassium

440) Lipids provide _____ kcal energy per gram.

(a) 8 k Cal (b) 9 k Cal (c) 10 k Cal (d) 12 k Cal

441) Fats are _____

(a) Glyceric acid (b) mono glycerides (c) diglycerides (d) triglycerides

442) Riboflavin is other name of vitamin _____

(a) B_1 (b) B_2 (c) B_6 (d) B_{12}

443) Scaly skin, nerve disorders are due to the deficiency of _____

(a) Vitamin B_3 (b) Vitamin B_6 (c) Vitamin B_{12} (d) Vitamin B_2

444) Reproductive abnormalities are due to the deficiency of vitamin _____

(a) A (b) D (c) E (d) K

445) The temperature required for deep freezing is _____

(a) -23°C to -30°C (b) -23°C to -28°C (c) -23°C to -25°C (d) -23°C to -32°C

446) Diarrhoea is caused due to the deficiency of vitamin _____

(a) B_6 (b) B_3 (c) B_{12} (d) B_2

447) Identify the polysaccharide.

(a) Glucose (b) Fructose (c) Cellulose (d) Galactose

448) The polysaccharide found in liver and muscles is _____ .

(a) Starch (b) Cellulose (c) Chitin (d) Glycogen

449) Defect related to high storage of vitamin is _____.

(a) Scurvy (b) Beriberi (c) Hyper vitaminosis (d) Pellagra

450) Any disease caused by the presence of excess vitamin is _____ .

(a) Night blindness (b) Osteoporosis (c) Vitaminosis (d) Hyper vitaminosis

451) Which one of the following is a disaccharide?

(a) Maltose (b) Starch (c) Chitin (d) Cellulose

452) Identify the monosaccharide

(a) Amylose (b) Sucrose (c) Glucose (d) Lactose

453) Marasmus is caused due to the deficiency of _____ .

(a) Starch (b) Carbohydrates (c) Fats (d) Proteins

454) Blood clot is prevented by the vitamin _____ .

(a) A (b) D (c) E (d) K

455) Dryness of cornea is due to _____ .

(a) Pellagra (b) Beriberi (c) Xerophthalmia (d) Scurvy

456) Vitamin E is otherwise known as _____ .

(a) Riboflavin (b) Thiamine (c) Tocopherol (d) Calciferol

457) Which vitamin causes bow legs?

(a) Vitamin A (b) Vitamin C (c) Vitamin D (d) Vitamin E

458) (c) Vitamin B_1 deficiency causes _____ .

(a) Rickets (b) Beri-beri (c) Anaemia (d) Osteomalacia

459) Cheilosis is caused due to the deficiency of the vitamin _____ .

(a) B_1 (b) B_2 (c) B_6 (d) B_{12}

460) Whole wheat, meat, vegetable oil, milk is rich in vitamin _____

(a) E (b) A (c) D (d) K

461) Proteins are made of _____ .

(a) Ascorbic acid (b) Amino acid (c) Citric acid (d) Folic acid

462) Plant cell wall is made up of _____.

(a) Starch (b) Glucose (c) Cellulose (d) Chitin

463) Lipases are _____.

(a) Carbohydrates (b) Vitamins (c) Minerals (d) Enzymes

464) Lipases are enzymes which breaks down _____.

(a) Proteins (b) Fats (c) Carbohydrates (d) Food

465) How many major minerals are there in the human body?

(a) 4 (b) 6 (c) 5 (d) 3

466) Identify the protein deficiency disease

(a) Marasmus (b) Pellagra (c) bow legs (d) Goitre

467) Without _____ particular metabolic processes could not exist.

(a) Food (b) Rest (c) Sleep (d) Water

468) Among the following which disease affect children between 1 - 5 years.

(a) Marasmus (b) Kwashiorkar (c) Scurvy (d) Pellagra

469) Identify the mineral which regulates nerve and muscles activity?

(a) Iron (b) Iodine (c) Sodium (d) Potassium

470) _____ is important component of haemoglobin.

(a) Iodine (b) Iron (c) Calcium (d) Potassium

471) Osteoporosis in adults is due to the deficiency of _____ .

(a) Calcium (b) Sodium (c) Potassium (d) Iron

472) Internal factor which is responsible for food spoilage is _____.

(a) catabolic activities (b) anabolic activities (c) metabolic activities

(d) enzymatic activities

473) Dehydration is the process of _____ .

(a) addition of water (b) removal of water (c) heating of water

(d) freezing of water

474) Identify the gas which prevents the growth of fungus.

(a) Nitrogen (b) Oxygen (c) Carbon-di-oxide (d) Hydrogen

475) Pasteurization involves boiling of milk to a temperature of _____ ^{o}C.

(a) 36^{o} (b) 46^{o} (c) 63^{o} (d) 93^{o}

476) Among the following which one is the synthetic preservative?

(a) Sodium benzoate (b) Sodium tri carbonate (c) Sodium tetra sulphate

(d) Sodium monasulphate

477) Among the following which one comes under quality control agency?

(a) ISI (b) PSI (c) ESI (d) MSI

478) Nerve impulses do not get transmitted due to the deficiency of _____.

(a) Sodium (b) Calcium (c) Potassium (d) Iodine

479) Direction: In the following question, a statement of a Assertion is given and a corresponding state of a Reason is given just below it. Of the statements given below, mark the correct answer as:
Assertion: Haemoglobin contains iron.
Reason: Iron deficiency leads to anaemia

(a) Assertion and reason are true and the Reason is the correct explanation of Assertion

(b) Assertion and Reason are true but Reason is not the correct explanation of Assertion

(c) Assertion is true but Reason is false (d) Both Assertion and Reason is false

480) Direction: In the following question, a statement of a Assertion is given and a corresponding state of a Reason is given just below it. Of the statements given below, mark the correct answer as:

Assertion: AGMARK is a quality control agency
Reason: ISI is a symbol of quality

(a) Assertion and reason are true and the Reason is the correct explanation of Assertion

(b) Assertion and Reason are true but Reason is not the correct explanation of Assertion

(c) Assertion is true but Reason is false (d) Both Assertion and Reason is false

481) _____ are the chief source of energy.

(a) Carbohydrates (b) Proteins (c) Fats (d) Minerals

482) _____ also known as triglycerides are esters of free fatty acid chains and glycerol.

(a) Carbohydrates (b) Proteins (c) Fats (d) Minerals

483) An organic chemical compound is called _____.

(a) proteins (b) vitamins (c) fats (d) minerals

484) _____ is the important component of haemoglobin.

(a) Potassium (b) Iodine (c) Iron (d) Calcium

485) _____ gas is filled in air tight packets of potato wafers and other food products.

(a) Oxygen (b) Chlorine (c) Carbon dioxide (d) Nitrogen

486) Pasteurisation helps in avoiding spoilage of _____.

(a) honey (b) orange juice (c) milk (d) curd

487) Addition of _____ removes the moisture content in the food by the process of osmosis.

(a) water (b) salt (c) lime juice (d) H_2SO_4

488) The world food day is celebrated on _____.

(a) 16^{th} october (b) 16^{th} June (c) 15^{th} October (d) 15^{th} July

489) Odd one out _____.

(a) Vinegar (b) Citric acid (c) Potassium chloride (d) Sodium bicarbonate

490) Chemicals like _____ to ripen mangoes.

(a) potassium sulphate (b) potassium iodide (c) sulphuric acid (d) calcium carbide

491) _____ colour is defect the presence of starch in milk.

(a) Green (b) Blue (c) Red (d) Orange

492) _____ is certifies agricultural and marketing.

(a) FSSAI (b) FPO (c) AGMARK (d) ISI

493) The specific heat capacity of water is

(a) 4200 $Jkg^{-1}K^{-1}$ (b) 420 $Jg^{-1}K^{-1}$ (c) 0.42 $Jg^{-1}K^{-1}$ (d) 4.2 $Jkg^{-1}K^{-1}$

494) Two cylinders of equal height and radius are made of copper and aluminium. Which of them conducts heat faster?

(a) Copper rod (b) Aluminium rod (c) Both of them (d) None of them

495) Water is used as a coolant because it_____

(a) is inexpensive (b) is easily available (c) is a good conductor of heat

(d) has a high specific heat capacity

496) The amount of heat required to raise the temperature through 1^0C is called_____

(a) thermal energy (b) calorie (c) heat capacity (d) specific heat capacity

497) The temperature at which a liquid gets converted into its vapour state is called its_____

(a) melting point (b) boiling point (c) dew point (d) freezing point

498) Sweating causes cooling because water has a_____

(a) high specific heat (b) low specific heat (c) high latent heat of fusion

(d) high latent heat of vaporisation

499) Which of the following is true?

(a) 1 J = 412 calorie (b) 1 J = 0.24 calorie (c) 1 calorie = 4.2 J (d) Both b and c

500) Ice does not melt rapidly because of

(a) high specific heat capacity (b) high latent of fusion (c) high heat capacity

(d) high latent heat of fusion

501) Which one of the following scales has lower fixed point at 0°C?

(a) Kelvin scale (b) Fahrenheit scale (c) Celsius scale (d) All of these

502) When we heat one end of an iron rod, its other end also get heated. Can you say, Which one of the following is behind this?

(a) Convection of heat (b) Radiation of heat (c) Insulation of heat

(d) Conduction of heat

503) In which of the following, chemical energy is converted into heat energy?

(a) Heater (b) Refrigerators (c) Candle (d) Motor

504) On a cold day, it is hard to open the lid of a tight container. But when you gently heat the neck you can easily open the lid. why?

(a) On heating Glass expands and lid contracts

(b) On heating lid expands more than the neck and thus slides easily

(c) Neck becomes slippery on heating (d) Lid of the bottle cannot bear the heat.

505) Molecules are generally at motion and poss _____ energy.

(a) light (b) heat (c) potential (d) kinetic

506) When heat is added to a substance the molecules _____ energy.

(a) loss (b) gain (c) equal (d) none of these

507) _____ is greater for liquids than for solids.

(a) Expansion (b) Temperature (c) Chemical change (d) Change in state

508) In _____ molecules are closely arranged.

(a) gas (b) Iiquid (c) solid (d) oxygen

509) _____ is used in thermometers because it is a good conductor of heat.

(a) Glass (b) Water (c) Alcohol (d) Mercury

510) Tall _____ are kept in kitchen and industrial furnaces.

(a) chimneys (b) hot balloon (c) cooler (d) thermometer

511) Transfer of heat energy from the sun reaches us in the form of _____.

(a) convection (b) radiation (c) conduction (d) none of these

512) _____ surface absorb more heat from the surroundings.

(a) White (b) Black (c) Red (d) Yellow

513) Temperature is measured with a _____.

(a) Voltmeter (b) Ammeter (c) Thermometer (d) Galvanometer

514) The formula for converting a Fahrenheit scale to celsius scale is _____.

(a) $F = \frac{9}{5}C + 32$ (b) $C = \frac{5}{9}(F - 32)$ (c) $k = C + 273.15$

(d) $C = K - 273.15$

515) The specific heat capacity of water in gaseous state is _____ J kg^{-1} k^{-1}.

(a) 460 (b) 2100 (c) 504 (d) 4200

516) The temperature at which a liquid changes its state to gas is called _____.

(a) melting point (b) condensation (c) vaporization (d) boiling point

517) The following is not a safety device.

(a) Fuse (b) Trip switch (c) Ground connection (d) Wire

518) In India the frequency of alternating current is

(a) 220 Hz (b) 50 Hz (c) 5 Hz (d) 100 Hz

519) A current of 2A passing through conductor produces 80 J of heat in 10 seconds. The resistance of the conductor is_____

(a) 0.5Ω (b) 2Ω (c) 4Ω (d) 20Ω

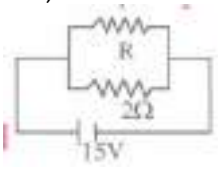
520) The resistance of a straight conductor is independent of_____

(a) temperature (b) material (c) cross sectional area (d) shape of cross section

521) Two resistances R_1 and R_2 are connected is parallel. Their equivalent resistance is_____

(a) R_1+R_2 (b) $\frac{R_1 R_2}{R_1 + R_2}$ (c) $\frac{R_1 + R_2}{R_1 R_2}$ (d) $\sqrt{R_1 + R_2}$

522) If in the circuit, power dissipation is 150 W, then R - is_____



(a) 2Ω (b) 6Ω (c) 5Ω (d) 4Ω

523) The resistance of a conductor is R. If its length is doubled, then its new resistance will be_____

(a) R (b) 2R (c) 4R (d) 8R

524) **Assertion (A)** Electric current will not flow between two charged bodies when connected if their charges are same.
Reason (R) Current is the rate of flow of charge.

(a) If both assertion and reason are true and reason is the correct explanation of assertion

(b) If both assertion and reason are true but reason is not the correct explanation of assertion.

(c) If assertion is true but reason is false (d) If assertion is false but reason is true.

525) **Assertion (A)** : A bird perches on a high power line and nothing happens to the bird.
Reason (R) : The level of bird is very high from the ground.

(a) If both assertion and reason are true and reason is the correct explanation of assertion.

(b) If both assertion and reason are true but reason is not the correct explanation of assertion.

(c) If assertion is true but reason is false (d) If assertion is false but reason is true

526) In an atom the protons are _____ charged.

(a) negative (b) positive (c) neutral (d) no charge

527) If an electron is removed from the atom, it becomes _____ charged.

(a) positive (b) negative (c) neutral (d) none of these

528) A system has two charges +7C and - 4C. The net charge of the system is _____.

(a) +7C (b) -4C (c) -3C (d) +3C

529) Electro static forces between two point obey _____Iaw.

(a) Newtons first (b) Newtons second (c) Newton's third (d) Ohms law

530) Normally potential difference is produced by a _____.

(a) battery (b) bulb (c) switch (d) tube light

531) _____ is an instrument used to measure the strength of the electric current in a circuit.

(a) Galvanometer (b) Ammeter (c) Voltmeter (d) Watt meter

532) Among the following _____ is the insulator.

(a) copper (b) aluminium (c) polymer (d) iron

533) Among the following _____ is the symbol of resistance.

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

534) 5Ω, 10Ω, 15Ω resistors are connected in a series connection the effective resistance is _____.

(a) 30Ω (b) 15Ω (c) 3Ω (d) 10Ω

535) Which one of the following is not an electric heating appliances?

(a) iron box (b) water heater (c) toaster (d) mosquito bat

536) An electric generator converts

(a) electrical energy into mechanical energy (b) mechanical energy into heat energy

(c) electrical energy into electrical energy

(d) mechanical energy into electrical energy

537) The direction of magnetic field around a straight conductor carrying current can be determined by_____

(a) Fleming's left hand rule (b) Lenz's law (c) Right hand thumb rule
(d) Fleming's right hand rule

538) The magnetic field produced due to a circular wire at its centre is_____

(a) at 45° to the plane of the wir (b) at 60° to the plane of the wire
(c) in the plane of the wire (d) perpendicular to the plane of the wire

539) A magnetic field exerts no force on_____

(a) stationary electric charge (b) a magnet
(c) an electric charge moving perpendicular to its direction
(d) an unmagnetised iron bar

540) At the centre of a magnet, the magnetism is_____

(a) zero (b) same as the poles (c) maximum (d) minimum

541) Induced current flows through a coil_____

(a) more that the period during which flux changes through it.
(b) less than the period during which flux changes through it
(c) only for the period during which flux changes through it (d) None of the above

542) The _____ produces its own magnetic field.

(a) Pen (b) Tree (c) Earth (d) Bird

543) Magnetic flux unit is _____.

(a) Tesla (b) Weber (c) Weber/m^2 (d) farad

544) To change the direction of the current we use a small device called _____.

(a) commutator (b) transformer (c) carbon brushes (d) galvanometer

545) A _____ cannot be used with the source of direct current.

(a) transformer (b) meter (c) bulb (d) motor

546) An _____ contain an electromagnet consisting of coils insulated wire around iron rods.

(a) iron box (b) bulb (c) electric bell (d) tube light

547) The increasing order of the energy of subshells is

(a) s > p > d > f (b) s (c) s (d) p

548) If the electronic configuration of an element is $1s^2\ 2S^2\ ^2p^6\ 3s^2\ 3p^1$, then it will occupy_____ block of the periodic table.

(a) s (b) p (c) d (d) f

549) Noble gases are placed in_____ group in the modern periodic table.

(a) 13^{th} (b) 18^{th} (c) 17^{th} (d) 2^{nd}

550) Group 16 elements are collectively called as_____

(a) chalcogen family (b) carbon family (c) halogens (d) nitrogen family

551) The maximum number of electrons that can be accommodated in s, p ,d, and f subshells are_____

(a) 14, 10, 6, 2 (b) 6, 10, 2, 14 (c) 2, 6, 10, 14 (d) 6, 2, 14, 10

552) d-block elements are otherwise known as_____

(a) transition elements (b) inner transition elements (c) halogens

(d) alkali metals

553) Which block of the periodic table contains metals, non-metals and metalloids?

(a) s (b) p (c) d (d) f

554) **Assertion (A)**: Group 2 elements in the modern periodic table are called alkaline earth metals.
Reason (R): The oxides of group 2 elements produce alkaline solutions when they are dissolved in water

(a) A is right R is wrong (b) R explains A (c) R does not explain A

(d) R is right A is wrong

555) **Assertion (A):** Noble gases are chemically inert in nature.
Reason (R) : Noble gases have stable electronic structures

(a) Both A & R are right (b) Both A & R are wrong (c) A is right R is wrong

(d) A is wrong R is right

556) **Assertion (A):** Non-metals are electronegative.
Reason (R) : Non-metal lose electrons to form cation

(a) Both A & R are right (b) Both A & R are wrong (c) A is right R is wrong

(d) A is wrong R is right

557) _____ arranged the elements into groups containing three elements.

(a) Dobereiner (b) Newland (c) Mendeleev (d) Moseley

558) _____ arranged 56 elements known at that time according to his law of periodicity.

(a) Dobereiner (b) Newland (c) Mendeleev (d) Moseley

559) There is no place for _____ in the Mendeleev table.

(a) isotope (b) Lithium (c) Hydrogen (d) Berylium

560) IUPAC secretariat is in _____.

(a) China (b) Japan (c) India (d) America

561) The 13^{th} group elements are called as _____.

(a) Nitrogen family (b) Carbon family (c) Boron family (d) Oxygen family

562) _____ is the best example of alkali metal.

(a) Calcium (b) Sodium (c) Magnesium (d) Nickel

563) Among the following which non metal has high melting point?

(a) Diamond (b) Sodium (c) Pottassium (d) Aluminium

564) _____ reacts with steam to form their oxides and hydrogen.

(a) Copper (b) Nickel (c) Iron (d) Silver

565) _____ react with halogen to form ionic halides.

(a) Non metals (b) Metals (c) Salcogen (d) Actinides

566) _____ reacts with water to form carbon monoxide and hydrogen.

(a) Copper (b) Nitrogen (c) Aluminium (d) Carbon

567) Atoms having 1,2 or 3 electrons in its valence shell will readily form_____

(a) cation (b) anion (c) Calcium (d) anion

568) Which of the following atom can exist independently?

(a) Magnesium (b) Chlorine (c) Hydrogen (d) Neon

569) Alkali and alkaline earth metals form_____ compound when they react with nonmetals

(a) ionic (b) covalent (c) co-ordinate covalent (d) all the above

570) _____compounds are highly brittle

(a) Ionic (b) Covalent (c) Co-ordinate covalent (d) Covalent

571) The bond which is formed by mutual sharing of electrons is called _____bond.

(a) ionic (b) covalent (c) co-ordinate covalent bond (d) all the above

572) _____is an example of a covalent compound having high melting point

(a) Magnesium oxide (b) Silicon carbide (c) Ammonia (d) All the above

573) Which of the following compound(s) possesses high melting point?

(a) NaCI (b) $MgCI_2$ (c) CCl_4 (d) Both a & b

574) **Statement (A)** Ionic compounds do not conduct electricity in solid state.
Reason (B) The ions in ionic compounds are tightly held together by stong electrostatic force of attraction and they can not move freely

(a) B explains A (b) B do not explain A (c) B is wrong A (d) A is right B is wrong

575) **Statement (A)** : Covalent compounds are bad conductor of electricity.
Reason (B) Covalent compounds contain charged particles (ions)

(a) B explains A (b) B does not explain A (c) Both A & B are right

(d) Both A & B are wrong

576) Electronic configuration of Argon is _____.

(a) 2,8,18,8 (b) 2,8 (c) 2,8,8 (d) 2,6

577) Except _____ all other noble gases have eight electrons in their valence shell.

(a) Xenon (b) Argon (c) Neon (d) Helium

578) Atomic number of sodium is _____.

(a) 11 (b) 8 (c) 7 (d) 5

579) _____ has five valence electrons.

(a) Beryllium (b) Nitrogen (c) Oxygen (d) Carbon

580) The attractive forces being electrostatic the bond is called _____ bond.

(a) Electrostatic (b) Electrovalent (c) Ionic (d) Hydrogen

581) _____ bond is forced between a metal and non metal.

(a) Ionic (b) Covalent (c) Coordinate (d) Metallic

582) Chemical formula of Benzene is _____.

(a) CCl_4 (b) LiCl (c) CH_4 (d) C_6H_6

583) Formation of hydrogen molecule is example of _____ bond.

(a) Ionic (b) Covalent (c) Coordinate (d) Hydrogen

584) pH value of human blood is_____

(a) 7.0 (b) 7.4 (c) 7.6 (d) 7.6

585) The nature of the tooth paste commonly used is in nature

(a) acidic (b) basic (c) neutral (d) neutral

586) You are given pure water to test the pH value using pH paper. It shows colour

(a) White (b) black (c) green (d) black

587) Acid secreted in our stomach is_____

(a) hydrochloric acid (b) sulphuric acid (c) nitric acid (d) carbonic acid

588) Hydrochloric Acid reacts with metal bicarbonates to give_____

(a) metal chloride (b) water (c) carbon di - oxide (d) all the above

589) _____&_____metals do not react with HCI or HNO_3

(a) Gold & Magnesium (b) Silver & Magnesium (c) Gold & Silver

(d) Zinc & Silver

590) The molar ratio of hydrochloric acid and nitric acid in aquaregia is_____

(a) 1:3 (b) 6:3 (c) 2:3 (d) 3:1

591) Bases ionise in water to form_____ions

(a) H^+ (b) H_3O^+ (c) OH^- (d) O^{2-}

592) Which of the following are the is a weak bases?

(a) NH_4OH & NaOH (b) $Ca(OH)_2$& KOH (c) NH_4OH & $Ca(OH)_2$ (d) NaOH & KOH

593) NaOH & KOH are____

(a) strong bases (b) metal Oxides (c) weak bases (d) diacidic bases

594) Which of the following solution is soapy to touch?

(a) Acidic (b) Basic (c) Salt (d) Aquaregia

595) Which of the following solutions do not conduct electricity?

(a) alcohol (b) glucose (c) sulphuric acid (d) both a & b

596) The pH value of neutral solution is_____

(a) =7 (b) < 7 (c) none of the above (d) -7

597) Sour taste chemical compound is known as:

(a) acid (b) salt (c) base (d) none of these

598) Bee and Ant has formic acid. Tomato contain _____acid.

(a) malic (b) citric (c) tartaric (d) oxalic

599) When Hydrogen chloride is dissolved in water we get _____ ions in aqueous solution.

(a) H^+, NO_2^- (b) H^+, Cl (c) C^+, O^- (d) H_2^+, SO_4

600) Among the following which one is monobasic acid?

(a) H_4SO_4 (b) H_2CO_3 (c) HCl (d) HNO_3

601) _____ has four hydrogen atoms but only one can be replaced.

(a) H_2SO_4 (b) H_2CO_3 (c) CH_3COOH (d) H_3PO_4

602) _____ acid is used as bleach for wood and removing black stains.

(a) Oxalic acid (b) Citric acid (c) Carbonic acid (d) Nitric acid

603) _____ is a aqueous solution having soapy touch.

(a) NaOH (b) H_2SO_4 (c) HCl (d) HNO_3

604) _____ is used to remove grease stains from clothes.

(a) Sodium hydroxide (b) Ammonium hydroxide (c) Calcium hydroxide
(d) Magnesium hydroxide

605) Acids have pH.

(a) greater than 7 (b) less than 7 (c) equal to 7 (d) less than 10

606) _____ soil is suitable for the growth of Citrus fruit trees.

(a) Acidic (b) Neutral (c) Alkaline (d) None

607) _____ is used in soda acid fire extinguishers.

(a) Common salt (b) Baking soda (c) Washing soda (d) Bleaching powder

608) A meristematic tissue consists of

(a) Immature cells which are in a state of division and growth (b) Mature cells
(c) Non-living cells (d) Sclerenchyma cells

609) Chlorenchyma is known to develop in the

(a) cytoplasm of chlorella (b) mycelium of a green mould such as aspergillus
(c) spore capsule of moss (d) pollen tube of pinus

610) Two long bones of the hand are dislocated in a person who met with an accident. Which among the following may be the possible reason?

(a) Tendon injury (b) Break of skeletal muscle (c) Ligament tear
(d) Rupture of Areolar tissue

611) Unstriated muscles are found in

(a) blood vessels (b) gastrointestinal tract (c) urinary bladder (d) all of these

612) Which of the following is not found in a neuron?

(a) Sarcolemma (b) Dendrite (c) Neurolemma (d) Axon

613) Long, unbranched multinucleated cells are

(a) striated muscle cells (b) smooth muscles (c) cardiac muscles
(d) none of the above

614) White fibres of connective tissue are made up of

(a) elastin (b) reticular fibres (c) collagen (d) myosin

615) Brush bordered epithelium is found in

(a) stomach (b) small intestine (c) fallopian tube (d) trachea

616) Which muscles act involuntary?
(i) Striated muscles
(iii) Cardiac muscles
(ii) Smooth muscles
(iv) Skeletal muscles

(a) (i) and (ii) (b) (ii) and (iii) (c) (iii) and (iv) (d) (i) and (iv)

617) Tendon connects

(a) cartilage with muscles (b) bone with muscles (c) ligament with muscles
(d) bone with bone

618) In a certain type of cell division the diploid number of chromosome is reduced to half. This kind of division occurs in

(a) testis (b) ovary (c) both ovary and testis (d) all body cells

619) _____is derived from ground meristem

(a) Cortex (b) Epidermis (c) Xylem (d) Cambium

620) The function of phloem fibres is_____

(a) passage of food (b) store food (c) mechanical strength (d) preparation of food

621) The_____ epithelium forms a selective permeable membrane surface.

(a) Ciliated (b) Squamous (c) Cuboidal (d) Glandular

622) Elastic structures which connect bone to bone are called_____

(a) muscles (b) tendons (c) ligaments (d) areolar tissue

623) _____is seen in unicellular animals.

(a) Mitosis (b) mieosis (c) Amitosis (d) none of the above

624) Disappearance of spindle fibres is seen in_____

(a) metaphase (b) prophase (c) anaphase (d) telophase

625) The _____is a long fibre like process

(a) dendron (b) axon (c) dendrite (d) neurilemma

626) Bouquet stage refers to_____

(a) diakinesis (b) leptotene (c) zygotene (d) pachytene

627) The term meristem is derived from _____ word.

(a) Latin (b) Sanskrit (c) Greek (d) Scientific

628) Meristematic tissue undergoes _____ cell division.

(a) mitotic (b) meiotic (c) amitotic (d) none

629) _____ meristem lies between the region of permanent tissues and is part of primary meristem.

(a) Apical (b) Intercalary (c) Lateral (d) Procambium

630) In aquatic plants, Parenchyma possess intracelluar air space and is named as _____.

(a) Chlorenchyma (b) Collenchyma (c) Sclerenchyma (d) Aerenchyma

631) In potato parenchyma vacuoles are filled with _____.

(a) protein (b) fat (c) starch (d) vitarnins

632) _____ are also common in fruits and seeds.

(a) Fibres (b) Sclereids (c) Tracheids (d) Vessels

633) _____ celIs are elongated, lignified and pointed at both ends.

(a) Xylem parenchyma (b) Xylem vessels (c) Xylem fibres (d) Xylem tracheids

634) The _____ are living cells found in phloem.

(a) sieve elements (b) companion cells (c) phloem fibres (d) phloem parenchyma

635) The study of tissue is known as.

(a) Cytology (b) Histology (c) Physiology (d) Cell biology

636) _____ epithelium is found in moist surface of buccal cavity and pharynx.

(a) Squamous (b) Cuboidal (c) Ciliated (d) Compound

637) The matrix is composed of large cartilage cells called

(a) Chondrocytes (b) Tendons (c) Osteocytes (d) Lamellae

638) Red blood corpuscles are otherwise called as

(a) Leucocytes (b) Granulocytes (c) Erythrocytes (d) Lymphocytes

639) Cardiac muscle is a contractile tissue found in the

(a) Kidney (b) Liver (c) Stomach (d) Heart

640) Nerve cells are developed from glial cells by

(a) Oogenesis (b) Neurogenesis (c) Spermatogenesis (d) none

641) In which stage of mitotic cell division do nuclear membrane and nucleolus reappear in daughter nucleus?

(a) Prophase (b) Metaphase (c) Anaphase (d) Telophase

642) _____ last for about 120 days and are replaced.

(a) Skin cells (b) Red blood cells (c) Bone cells (d) Liver cells

643) In meiotic cell division chromosome pairing takes place in _____ stage.

(a) leptotene (b) zygotene (c) pachytene (d) diplotene

644) _____ are used in the treatment of certain degenerative diseases.

(a) Stem cells (b) Liver cells (c) Bone cells (d) Body cells

645) Excretion means_____

(a) taking in oxygen from the air and giving out carbon dioxide

(b) disposal of harmful germs and worms from our body

(c) distribution of digested food to the body tissues through blood

(d) removal of nitrogenous wastes generated in the body

646) In the dental formula $\frac{2}{2}, \frac{1}{1}, \frac{2}{2}, \frac{3}{3}$ refers to_____

(a) incisors (b) molas (c) premolars (d) cantne

647) Lysozyme is seen in_____

(a) gastric juice (b) intestinal juice (c) Bile (d) saliva

648) _____is the smallest gland

(a) Pancreas (b) Sublingual (c) Parotid (d) Submaxillary

649) Curdling of milk protein is done by_____

(a) pepsin (b) rennin (c) lipase (d) maltase

650) _____acts as birth canal.

(a) Fallopian tube (b) Vagina (c) Uterus (d) Vasdeferens

651) The act of bringing swallowed food back to the mouth is called_____

(a) egestion (b) ingestion (c) micturition (d) regurgitation

652) Gastric glands do not secrete_____

(a) renin (b) pepsin (c) lipase (d) none of the above

653) Organ and Organ system have appeared first in the phylum.

(a) Platyhelminthes (b) Porifera (c) Annelida (d) Arthropoda

654) The process of nutrition begins with intake of food called _____.

(a) digestion (b) ingestion (c) assimilation (d) egestion

655) _____ is the passage of food starting from the mouth and ends with the anus.

(a) Buccal cavity (b) Malphigian corpuscle (c) Renal tubule (d) Alimentary canal

656) _____ pairs of salivary glands are present in the mouth cavity.

(a) One (b) Two (c) Three (d) Four

657) _____ is a muscular membranous canal about 22 cm in length.

(a) Small intestine (b) Oesophagus (c) Large intestine (d) None of these

658) _____ receives the bile duct and pancreatic duct.

(a) Ileum (b) Jejunum (c) Duodenum (d) Colon

659) _____ is the largest digestive gland of the body.

(a) Pancreas (b) Stomach (c) Liver (d) Parotid gland

660) In human _____ is the major excretory product.

(a) ammonia (b) urea (c) carbon dioxide (d) lactic acid

661) Stores urine temporarily.

(a) Urethra (b) Ureter (c) Kidney (d) Urinary bladder

662) _____ maintains the osmotic pressure in blood and tissues.

(a) Liver (b) Skin (c) Kidney (d) Anus

663) Urine is expelled out through the _____.

(a) urethra (b) ureter (c) urinary bladder (d) nephron

664) Male gonads produce male gametes like _____.

(a) ovum (b) sperm (c) testes (d) ovaries

665) _____ is the smallest cell in the male body.

(a) Neuron (b) Nephron (c) Sperm (d) Body cells

666) The male sex hormone is _____.

(a) testosterone (b) oestrogen (c) progestrone (d) pepsin

667) _____plays an important role in a computer as an inpute device

(a) Keyboard (b) Scanner (c) Printer (d) Mouse

668) _____is an essentional part of the computer

(a) Keyboard (b) CPU (c) Mouse (d) Wi-Fi

669) A bit has a single binary value either _____ or _____

(a) 1,-1 (b) 0,1 (c) 1,2 (d) 2,0

670) Personal computer comes under the_____ computer.

(a) mainframe (b) rrum (c) micro (d) super

671) _____cable transmits high quality and high bandwidth streams of audio and video

(a) VGA (b) USB (c) Data (d) HDMI

672) _____is used to connect the speaker to the computer

(a) Audio jack (b) Power card (c) Data cable (d) USB cable

673) _____cable helps to establish internet connectivity.

(a) Power card (b) Audio jack (c) Ethernet (d) USB

674) Unit of thrust is _____.

(a) Newton (b) Pascal (c) cm^3 (d) km

675) Instrument used to measure relative density

(a) Hydrometer (b) Lactometer (c) Barometer (d) Pycnometer

676) In CGS system pressure is measured in _____.

(a) dyne cm^{-2} (b) dyne (c) dyne cm^{-3} (d) None

677) Heavy trucks are fitted with six to eight wheels, As area increases, Pressure will _____.

(a) decrease (b) increase (c) remains the same

678) Air gets _____ as we go down below the sea level like mines

(a) heavier (b) thinner (c) greater (d) lesser

679) An iron ball is weighed in air and then in water by a spring balance.

(a) Its weight in air is more than in water. (b) Its weight in water is more than in air

(c) Its weight is same both in air and water. (d) Its weight is zero in water.

680) When a solid is partly or wholly immersed in a fluid, it experiences an apparent loss in _____.

(a) weight (b) buoyant force (c) liquid displaced (d) None

681) A huge ship of heavy mass _____ on sea water.

(a) sink (b) float (c) both float and sink (d) none of these

682) The inter molecular force in _____ are strong.

(a) liquid (b) gas (c) solids (d) oxygen

683) The force per unit area acting on an object concerned is called _____.

(a) pressure (b) density (c) temperature (d) velocity

684) In CGS system force is measured in _____.

(a) Newton (b) Pascal (c) Meter (d) Dyne

685) The atmospheric layer height is nearly _____ km.

(a) 200 (b) 100 (c) 300 (d) 400

686) Human _____ is adapted to breath at a pressure of sea level.

(a) kidney (b) lungs (c) brain (d) liver

687) Atmospheric pressure of mount Everest is _____ k pa.

(a) 33.7 (b) 101.3 (c) 106.7 (d) 62.5

688) On a typical day at sea level the height of the mercury column is _____ mm.

(a) 650 (b) 760 (c) 320 (d) 7600

689) One bar is equal to _____ pa.

(a) 1×10^4 (b) 1×10^8 (c) 1×10^5 (d) 1×10^7

690) _____ is a device for measuring atmospheric pressure without use of liquids.

(a) Fortin's barometer (b) Lacto meter (c) Aneroid barometer (d) Hydro meter

691) The SI unit of density is _____.

(a) kg/m^3 (b) kg/m^2 (c) kg/cm^2 (d) g/m^2

692) Any substance having more density than liquid will _____ in the liquid.

(a) float (b) float or sink (c) sink (d) none of these

693) The average reading of normal milk is _____.

(a) 27 (b) 29 (c) 36 (d) 32

694) Lactometer is used to measure _____.

(a) purity of milk (b) density of sugar (c) higher level of alcohol in sprits

(d) density of water

695) If the speed of a wave is 340 m s^{-1} and its frequency is 1700 Hz, then wavelength λ for this wave in cm will be

(a) 34 (b) 20 (c) 15 (d) 0.2

696) Which of the following statement best describes frequency?

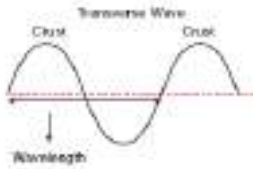
(a) the number of complete vibrations per second.

(b) the distance travelled by a wave per second.

(c) the distance between one crest of wave and the next one.

(d) the maximum disturbance caused by a wave.

697) In the sound wave produced by a vibrating turning fork as shown in the diagram, half the wave length is represented by:



(a) BD (b) AB (c) AE (d) DE

698) When the pitch of note by a harmonium is lowered, then the wave length of the note

(a) first decreases and then increases (b) decreases (c) remains the same

(d) increases

699) The speeds of sound in four different media are given below. Which of the following is the most likely speed in m s^{-1} with which the two under water whales in a sea can talk to each other when separated by a large distance?

(a) 5170 (b) 1280 (c) 340 (d) 1530

700) Which of the following can produce longitudinal waves as well as transverse waves under different conditions?

(a) TV transmitter (b) tuning fork (c) water (d) slinky

701) The velocities of sound waves in four media P, O, Q, R and S are 18,00 km/h, 900 km/h, 0 km/h, and 1200 km/h respectively. Which could be a liquid medium?

(a) R (b) Q (c) P (d) S

702) Which of the following are infrasonic waves?

(a) 5 kHz (b) 25 Hz (c) 10 Hz (d) 15000 Hz

703) What name is given to the aricrafts which fly at speeds greater than the speed of sound?

(a) Ultrasonic jets (b) Infrasonic jets (c) Supersonic jets (d) Regular jets

704) Speed of sound in solids does not depend upon _____.

(a) temperature (b) density (c) medium (d) pressure

705) Which of the following sound is not the cause of noise pollution?

(a) Loud speaker (b) Horn of vehicle (c) Explosion (d) Television

706) The back and forth motion of the object is called _____.

(a) Vibration (b) Rotation (c) Translation (d) Linear motion

707) A small bee produces sound, while it moves, the sound is created due to _____.

(a) grinding its teeth (b) Friction due to air (c) flapping of wings

(d) sound due to its vocal chord

708) A Sonar device on a submarine send out a signal and receives an echo 5 seconds later. Calculate the speed of sound it water if the distance of the object from the submarine is 3500 m.

(a) 1440 ms^{-1} (b) 1460 ms^{-1} (c) 1400 ms^{-1} (d) 1550 ms^{-1}

709) The phenomenon of echo of sound waves is due to _____.

(a) Reflection (b) Interference (c) Diffraction (d) All of the above

710) Sound needs a material medium like _____ for its propagation.

(a) air (b) water (c) steel (d) All the above

711) A small disturbance which is carried forward in a medium is called _____.

(a) wave (b) light (c) magnetism (d) ray

712) If the vibration of the particles has large amplitude the sound will be _____.

(a) soft (b) loud (c) both Soft and loud (d) reduced

713) Amplitude is denoted as A. Its SI unit is _____.

(a) kilogram (b) newton (c) meter (d) litre

714) Human ear can hear sound with frequency from _____.

(a) 10 Hz to 10000 Hz (b) 20 Hz to 20000 Hz (c) 5 Hz to 5000 Hz

(d) None of these

715) Sound with frequency less than 20 Hz is called _____ sound.

(a) ultrasonic (b) supersonic (c) infrasonic (d) ultra violet

716) The maximum distance in which a sound wave repeats itself is called its _____.

(a) amplitude (b) frequency (c) time period (d) wavelength

717) The SI unit of wavelength is _____.

(a) metre (b) hertz (c) second (d) none of these

718) The intensity level of sound in city traffic is _____ decibels.

(a) 120 (b) 40 (c) 70 (d) 100

719) The sound of thunder is heard a little _____ than the flash of light is seen.

(a) quicker (b) Iater (c) faster (d) speeder

720) Sound travels about _____ faster in water than in air.

(a) 5 times (b) 4 times (c) 6 times (d) 10 times

721) The speed of sound in air is _____ m/s at 25°C.

(a) 330 (b) 360 (c) 280 (d) 340

722) Sounds with loudness of _____ is partial in the air.

(a) 240 dB (b) 120 dB (c) 380 dB (d) 360 dB

723) The inner parts of the body is examined with _____ sound.

(a) ultra (b) supersonic (c) ordinary (d) infrasonic

724) _____ is a device that uses ultrasonic waves to measure the distance.

(a) LUNAR (b) SONAR (c) RADAR (d) Glider

725) Which of the following statements is correct?
A. There are eight planets in our Solar System.
B. Except Mars, all other planets revolve around the Sun in elliptical orbits

(a) A only (b) B only (c) Both A and B (d) None

726) Which of the following is not a member of the solar system?

(a) An asteroid (b) A satellite (c) A constellation (d) A comet

727) Which of the following is not a planet of our solar system?

(a) Sirius (b) Mercury (c) Saturn (d) Earth

728) The colour of a star is a measure of its _____.

(a) age (b) temperature (c) size (d) distance from the earth

729) In a geostationary orbit, a satellite is at a distance of _____ from the Earth.

(a) 53,880 km (b) 25,880 km (c) 36,000 km (d) 1,12,000 km

730) Stars, in a constellation form _____.

(a) No shape (b) any arbitrary shape (c) a recognisable shape
(d) a straight line always

731) Which of the following units is used to measure distance between the stars?

(a) km (b) m (c) light year (d) fm

732) The member of our solar system, with highly tiited orbit is _____.

(a) Earth (b) Pluto (c) Mars (d) Saturn

733) The universe contains _____.

(a) Galaxies (b) Planets (c) Stars (d) All the above

734) One light year is equal to _____ km.

(a) 9.7046×10^{12} (b) 9.6407×10^{12} (c) 9.4607×10^{12} (d) 9.4607×10^{11}

735) All the matter in the universe is made up of _____.
I) Hydrogen
II) Sodium
III) Iodine
IV) Helium

(a) I and II (b) I and III (c) I and IV (d) II and IV

736) Around _____ of the universe is made up of dark matter.

(a) 25% (b) 27% (c) 29% (d) 28%

737) There are _____ formally accepted constellations.

(a) 88 (b) 68 (c) 78 (d) 98

738) The Sun is believed to be more than _____ billion years old.

(a) 3.2 (b) 4.6 (c) 3.7 (d) 4.3

739) Sun's gravity is _____ that of the Earth.

(a) 20 times (b) 22 times (c) 27 times (d) 28 times

740) _____ is the planet nearest to sun.

(a) Mercury (b) Earth (c) Venus (d) Mars

741) The hottest planet of our solar system is _____.

(a) Mercury (b) Earth (c) Venus (d) Jupiter

742) The _____ is the living beings lives in the planet.

(a) Mercury (b) Venus (c) Jupiter (d) Earth

743) _____ planet spins in the opposite direction to all other planets.

(a) Mercury (b) Venus (c) Jupiter (d) Earth

744) _____ is a Giant planet.

(a) Jupiter (b) Saturn (c) Uranus (d) Neptune

745) Jupiter is about 11 times larger than _____.

(a) Saturn (b) Uranus (c) Earth (d) Mars

746) _____ has bright shiny rings and it is yellowish in colour.

(a) Mars (b) Saturn (c) Venus (d) Earth

747) _____ is the only moon in the solar system with clouds.

(a) Titan (b) Triton (c) Gangmede (d) Deimos

748) _____ is the cold gas giant planet in the solar system.

(a) Neptune (b) Jupiter (c) Earth (d) Uranus

749) Neptune has _____ number of moons.

(a) 22 (b) 13 (c) 19 (d) 15

750) Comet Halley was last seen in _____.

(a) 1984 (b) 1968 (c) 1986 (d) 1988

751) The mass of earth is _____ kg.

(a) 5.972×10^{24} kg (b) 5.972×10^{23} kg (c) 5.972×10^{24} g (d) 5.972×10^{23} g

752) _____ proposed three laws of planetary motion.

(a) Tycho Brahe (b) Johannes Kepler (c) Archimedes (d) Aryabhatta

753) The mass of the international space station is _____.

(a) 4,20,000 kg (b) 42,000 kg (c) 4,20,0000 kg (d) 4,20,000 g

754) Number of free electron(s) in each carbon of graphite is

(a) one (b) Two (c) Three (d) Four

755) The carbon atoms in fullerene are arranged in mixed

(a) Tetragon and Pentagon (b) Pentagon and Hexagon (c) Hexagon and Heptagon
(d) Heptagon and Octagon

756) Diamond is not a good conductor of electricity because

(a) it is very hard (b) it has no free electron (c) its structure is uniform
(d) it is insoluble in water

757) Which of the following does not contain double bond

(a) CO_2 (b) C_2H_4 (c) HCl (d) O_2

758) Which of the following is highly toxic?

(a) Carbon dioxide (b) Carbon monoxide (c) Calcium carbonate
(d) Sodium bicarbonate

759) Raagav brings his lunch every day to school in a plastic container which has resin code number 5. The container is made of

(a) Polystyrene (b) PVC (c) Polypropylene (d) LDPE

760) Which of the following plastic items are banned by the Government of Tamil Nadu as of 1st January 2019?

(a) Plastic sheets (b) Plastic tea cups (c) Plastic water packets (d) All the above

761) Graphite is used as lubricant in machines because

(a) it is good conductor of electricity
(b) it is made of slippery layers and has high melting point (c) it has high density
(d) it is strong and soft

762) The lead pencil contains

(a) Graphite (b) Diamond (c) Lead (d) Charcoal

763) Plastic resin codes are shown as three chasing arrows in a _____ with a number in the middle or letters (an acronym of that plastic type).

(a) Logo (b) Recycling symbol (c) Square (d) Triangle

764) What is the minimum number of carbon atoms of an alkane must have to form an isomer?

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

765) Hydrocarbons on burning in the air give CO_2 and _____.

(a) Water and heat (b) CO and Heat (c) Water and CO
(d) Water and Sulphur dioxide

766) Which of the following is prepared by heating CaO and coke?

(a) CaC_2 (b) $CaCO_3$ (c) CO_2 (d) CO

767) In a covalent bond formation

(a) transfer of electrons takes place

(b) equal sharing of electrons between two atoms takes place.

(c) electrons are shared by one atom only.

(d) electrons are donated by one atom and shared by both atoms.

768) Which Amorphous form of carbon is used in making electrode in dry cell?

(a) coke (b) gas carbon (c) lampblack (d) charcoal

769) The thinnest and strongest allotrop of carbon is _____.

(a) Graphite (b) Fullerene (c) Graphene (d) Diamond

770) Incomplete combustion of carbon fuels release this toxic gas into the atmosphere.

(a) CO (b) CO_2 (c) NO (d) NO_2

771) _____ is one of the most important non metallic element.

(a) Silver (b) Tungsten (c) Aluminium (d) Carbon

772) Carbon is found in the form of _____.

(a) diamond (b) charcoal (c) graphite (d) all the above

773) _____ established that diamond is a pure form of carbon.

(a) Carl Scheele (b) Smithson Tennant (c) Benjamin Brodie (d) Francis Bundy

774) _____ produced pure graphite from carbon.

(a) Francis Bundy (b) Benjamin Brodie (c) Smithson Tennant

(d) Antonie Lavoisier

775) _____ is an organic carbon compound.

(a) Ethanol (b) Calcium carbonate (c) Carbondioxide (d) Carbon monoxide

776) _____ takes part in plant process photosynthesis.

(a) Calcium carbide (b) Carbondi sulphide (c) Carbon dioxide

(d) Calcium carbonate

777) _____ used as a reducing agent.

(a) Carbon monoxide (b) Carbon dioxide (c) Calcium carbide

(d) Calcium carbonate

778) _____ is a greyish black solid.

(a) Sodium bicarbonate (b) Calcium carbonate (c) Calcium carbide

(d) Carbon di sulphite

779) _____ is a highly poisonous gas.

(a) Calcium carbide (b) Carbon di sulphide (c) Carbon dioxide

(d) Sodium bicarbonate

780) _____ have macromolecules of catenated carbon compounds.

(a) Plastics (b) Glass (c) Rubber (d) paper

781) _____ has triple bond in hydro carbons.

(a) Alkane (b) Alkene (c) Alkyne (d) none of these

782) _____ charcoal is used to remove colour in sugarcane industry.

(a) Wood (b) Bone (c) Sugar (d) None of these

783) _____ is a plastic and may cause cancer.

(a) Dioxions (b) Styrene (c) Bisphenol A (d) Lead

784) Poly carbonate plastic contains _____.

(a) Styrene (b) Bisphenol A (c) Cadmium (d) Lead

785) _____ of plastic bags do not get recycled.

(a) 70% (b) 90% (c) 97% (d) 63%

786) Sea birds are affected by _____.

(a) Carry bags (b) Plastic plates (c) Water pouches (d) Plastic straws

787) Do not eat hot or spicy food items in _____ containers.

(a) plastic (b) rubber (c) glass (d) paper

788) Most one time use plates are made from _____.

(a) Poly vinyl chloride (b) Poly carbonate (c) Acrylonitrile Butadiene
(d) Polystyrene

789) Number of free electron(s) in each carbon of graphite is _____ .

(a) one (b) Two (c) Three (d) Four

790) The lead pencil contains:

(a) Graphite (b) Diamond (c) Lead (d) Charcoal

791) Which of the following does not contain double bond.

(a) CO_2 (b) C_2H_4 (c) HCl (d) O_2

792) _____ Present in the lemon juice acts as electrolyte.

(a) Sulphuric acid (b) Nitric acid (c) Hydrochloric acid (d) Citric acid

793) Which of the foliowing methods is suitable for preventing iron frying pan from rusting?

(a) Applying grease (b) Applying paint (c) Applying coating of zinc
(d) All the above

794) The source of drug of liquid paraffin is _____.

(a) Micro organism (b) Minerals (c) Plants (d) Animal

795) Chloroform reacts with oxygen and forms this toxic substance, hence it is not used now

(a) Carbonyl chloride (b) Carbon di oxide (c) Carbon monoxide
(d) Carbon di sulphide

796) Paracetamol is an _____.

(a) Analgesics (b) Antipyretics (c) Antiseptic (d) Anti malarial

797) Congo red is a _____.

(a) Direct dye (b) Vat dye (c) Basic dye (d) add dye

798) Our nails grow _____ each second.

(a) 2nm (b) 1mm (c) 1nm (d) 2mm

799) Among these which one is not related to nano chemistry?

(a) Nano coatings in sports equipment (b) UV - blocking coatings on glass bottles
(c) Stitching clothes (d) Circuits of microchips

800) Prolonged UV - exposure cause skin burns and _____.

(a) cancer (b) Jaundice (c) fever (d) malaria

801) _____ is/are the medicines used for treatement of diseases isolated from plants.

(a) Morphine (b) Quinine (c) Atropine (d) All of these

802) The drugs which cause loss of sensation are called _____.

(a) Antipyretic (b) Anaesthetics (c) Analgesics (d) Antiseptics

803) _____ gas is used as anaesthetics.

(a) Nitrous oxide (b) Chloroform (c) Ether (d) Propyl halide

804) _____ acts both as antipyretic and as well as analgesic.

(a) Asprin (b) Novalgin (c) Phenacetin (d) Paracetamol.

805) _____ is a minor antiseptic mainly used for cleansing wounds.

(a) Hydrocholoric acid (b) Pottasium hydroxide (c) Hydrogen peroxide
(d) Calcium hydroxide

806) The following is a components of electro chemical ceII
i) Electrode
ii) Connecting wire
iii) Electrolyte
iv) Battery

(a) i and ii (b) i and iii (c) i and iv (d) ii and iii

807) Gold covering jewels are made by gold electro plated over _____.

(a) copper (b) silver (c) tin (d) all the above

808) Radio isotope _____ is diagnosis of pregnancy disorder.

(a) Sodium - 24 (b) Cobalt - 60 (c) Iron - 59 (d) Iodine - 131

809) Synthetic dye manufacturing stated in _____.

(a) 1956 (b) 1926 (c) 1826 (d) 1856

810) Dye should have a character is/ are _____.

(a) suitable colour (b) be fast to light
(c) resistant to the action of water, dilute acids (d) all the above

811) _____ chemistry is a major source of food production in agriculture.

(a) Agricultural (b) Electro (c) Nano (d) Pharmaceutical

812) _____ are used to kill vectors of disease, to kill pests that damage crops.

(a) Manure (b) Fertilizer (c) Pesticide (d) none of these

813) _____ is the energy giving food.

(a) Proteins (b) Carbohydrates (c) Vitamins (d) Minerals

814) The study of analysis of human body print is known as _____.

(a) Alcohol test (b) Forensic (c) Biometrics (d) None of these

815) Free living soil bacteria such as Pseudomonas sp are responsible for the _____ process in the nitrogen cycle.

(a) ammonification (b) nitrogen fixation (c) nitrification (d) denitrification

816) Which of the following is not an adaptation of hydrophytes?

(a) poorly developed root system (b) reduced plant body

(c) water storing parenchymatous tissues (d) finely divided submerged leaves

817) In some xerophytes, leaves are modified into spines as an adaptation _____.

(a) to reduce transpiration rate (b) to store water

(c) to reduce consumption of water (d) all of the above

818) Identify the incorrect statement with respect to adaptations of earthworm.

(a) Earthworm has a stream lined body with no antennae or fins.

(b) Each segment of earthworm has setae.

(c) Many earthworms become inactive in a process called hibernation, during winter season.

(d) Earthworms remain in its burrow during day time, to avoid sunlight.

819) Which of the following is one of the strategies to conserve water?

(a) Water recycling (b) Increasing the number of bore wells

(c) Using large overhead water tanks (d) Watering the plants using hose

820) Specific constituents such as nitrogen, phosphorus, suspended solids and heavy metals found in the wastewater are removed during _____ treatment of water recycling process.

(a) primary (b) tertiary (c) secondary (d) none of the above

821) How much percentage of Nitrogen consist in Earth's atmosphere?

(a) 25% (b) 12% (c) 92% (d) 78%

822) Deforestation generally decrease _____.

(a) Rainfall (b) Global warming (c) Soil erosion (d) Drought

823) World water day is celebrated every year on _____.

(a) August 12 (b) 22nd March (c) June 5 (d) July 10

824) Biotic components include _____.

(a) All living organism (b) Light, temperature etc. (c) Water, mineral and gases

(d) Self nourishing green plants

825) Which part of plant consisting Nitrogen fixing bacteria?

(a) Roots (b) Stems (c) Leaves (d) All the above

826) The amount of CO_2 present in the atmospheric air is _____.

(a) 0.318% (b) 0.383% (c) 21% (d) 78%

827) Which cycie involves transpiration?

(a) Water cycle (b) Nitrogen cycle (c) Carbon cycle (d) All the above

828) In the Biosphere _____ is the Abiotic factors.

(a) hibiscus (b) monkey (c) water (d) human

829) The biogeochemical cycle is/are _____.

(a) Water cycle (b) Nitrogen cycle (c) Carbon cycle (d) All the above

830) Plants release water vapour into the atmosphere through stomata. This is called _____.

(a) sublimation (b) Transpiration (c) Condensation (d) Precipitation

831) _____ is a primary nutrient important for survival of all living organism.

(a) Nitrogen (b) Iodine (c) Helium (d) Aluminimum

832) _____ animals synthesize proteins from their food.

(a) Herbivores (b) carnivorous (c) omnivorous (d) None of these

833) The atmospheric carbon dioxitle enters into the plant through the process of _____.

(a) transpiration (b) respiration (c) photosynthesis (d) food storing

834) Roots are absent in the hydrophytic plant of _____.

(a) Hydrilla (b) Wolffia (c) Lemna (d) Lily

835) _____ plants have air chambers to provide buoyancy and mechanical support to plant.

(a) Lemna (b) Hydrilla (c) Lotus (d) Eichhornia

836) _____ plant is called as cinderella of the plant kingdom.

(a) Eichhornia (b) Lotus (c) Lily (d) Hydrilla

837) Which one is not a hydrophytes plant among the following?

(a) Lotus (b) Lily (c) Opuntia (d) Eichhornia

838) The _____ is not a xerophytic plant.

(a) Acacia (b) Calotropis (c) Opuntia (d) Lemna

839) _____ plants are grow in situations that are neither too wet nor too dry.

(a) Hydrophytes (b) Xerophytes (c) Mesophytes (d) None of these

840) _____ plays a large role in keeping soil healthy.

(a) Birds (b) Plants (c) Earthworm (d) Cattles

841) Which of the following are Indian cattle?
i. Bos indicus
ii. Bos domesticus
iii. Bos bubalis
iv. Bos vulgaris

(a) i and ii (b) i and iii (c) ii and iii (d) iii and iv

842) Which one of the following is refered as red worms?

(a) Eudrilus fetida (b) Eudrilus eugieniae (c) Perionyx excavatus
(d) Lampito mauritii

843) Mehsana is a breed of

(a) Cow (b) Buffalo (c) Goat (d) Sheep

844) Binomial name of Nilavembu is

(a) Leucas aspera (b) Andrographis paniculata (c) Crotolaria juncea
(d) Cassia fistula

845) Apiculture is the rearing of _____.

(a) Silk worm (b) Bacteria (c) Apex culture (d) Honey bees

846) The quality and taste of honey depends upon the flower visited by _____.

(a) bees (b) flies (c) farmer (d) queen bee

847) Nowadays organic farming and organic products are very popular, which of the following is the reason for people to prefer this kind of products.

(a) Organic food may have higher nutritional value than conventional food
(b) Consuming organic food may also reduce exposure to artificial chemicals
(c) it reduces air pollution (d) All the above

848) It is a live floating nitrogen factory.

(a) Azolla (b) Azospirillum (c) Azotobacter (d) Rhizobium

849) Which of the following can be an analogy to earthworm in agriculture?

(a) Harvestor (b) Plough (c) Seed drill (d) threshes

850) Flavonoids drug is obtained from _____.

(a) Nilavembu (b) Katralai (c) Vepalai (d) Pappali

851) Haryana, Ongole, Kankrej are the cattle breeds favoured by farmers, because they are _____.

(a) Draught breeds (b) Dual purpose breeds (c) Buffalo breeds (d) Dairy breeds

852) Which of the following is correctly matched?

(a) Apiculture - Honey bee (b) Pisciculture- Silk moth (c) Sericulture - Fish
(d) Aquaculture - Mosquito

853) India is the largest producer of _____ fruits.

(a) Guava (b) Litchi (c) Mango (d) All the above

854) _____ is the science of growing vegetables.

(a) Olerioulture (b) Pomology (c) Floriculture (d) Landscape gardening

855) _____ is the largest producer of vegetables.

(a) India (b) China (c) England (d) Australia

856) India stands first in the world in the production of _____.

(a) Cabbage (b) Brinjal (c) tomato (d) Lady's Finger

857) In vermicompost _____ is used to make compost.

(a) Cattle (b) Earthworms (c) Birds (d) Home Wastes

858) Azospirillum is/are inoculated on _____ crops.

(a) Maize (b) Barley (c) Sorghum (d) All the above

859) _____ is a free floating aquatic fern found on water surfaces having Anabaena.

(a) Rhizobium (b) Azospirillum (c) Azolla (d) Mycorrhizae

860) Botanical name of Tulsi is _____.

(a) Aloe vera (b) Ocimum sanctum (c) Cinchona Officinalis (d) Carica papaya

861) _____ drug is obtained from Nannia.

(a) Terpenoids (b) Quinine (c) Terpene (d) Papain

862) Mushroom grow better in _____ temperature.

(a) 15ºC - 23ºC (b) 25ºC - 30ºC (c) 10ºC - 18ºC (d) -23ºC - 28ºC

863) Dairy farming involves raising of cattle for _____ production.

(a) Egg (b) Meat (c) Manure (d) Milk

864) _____ breeds show excellent resistant to disease.

(a) Indigenous (b) Exotic (c) Jersey (d) Brown swiss

865) _____ is originated in Kangayam and is observed in Dharapuram and Perundurai.

(a) Bargur (b) Kangayam (c) Umblachery (d) Pulikulam

866) _____ are the indigenous buffalo breeds which are good milk yielders.

(a) Surti (b) Red Sindhi (c) Deoni (d) Gir

867) _____ is a Indian freshwater cultivable fish.

(a) Koduva (b) Madavai (c) Kendai (d) Milk fish

868) _____ are social insects.

(a) House fly (b) Mosquitoes (c) Butterflies (d) Honeybee

869) _____ are sterile female bees and are the smallest number of the colony.

(a) Worker bee (b) Drones (c) Queen bee (d) None of these

870) _____ is a sweet, viscous, edible natural food product.

(a) Milk (b) Meat (c) Honey (d) Egg

871) The most economically important shell fish resources of India are _____.

(a) crabs (b) prawns (c) lobster (d) oysters

872) Mycology is the branch of biology that deals with the study of

(a) algae (b) virus (c) bacteria (d) fungi

873) The major constituent of vinegar is

(a) citric acid (b) acetic acid (c) oxalic acid (d) hydrochloric acid

874) Bacteria involved in curd formation is

(a) Lactobacillus acidophilus (b) Nitosomonas (c) Bacillus ramous (d) none of the above

875) The most fatal form of Malaria is caused by

(a) Plasmodium ovale (b) Plasmodium falciparum (c) Plasmodium malariae (d) Plasmodium vivax

876) Syphilis is caused by

(a) Treponema pallidum (b) Leptospira (c) Pasteurella (d) Vibrio cholerae

877) Mosquito borne viral diseases are

(a) malaria and yellow fever (b) dengue and chikungunya (c) filariasis and typhus
(d) kala azar and diptheria

878) Which one of the following is a pair of viral disease?

(a) Filariasis, AIDS (b) Common cold, AIDS (c) Dysentry, Common cold
(d) Typhoid, Tuberculosis

879) Which of the following disease is spread by animal bite?

(a) Pneumonia (b) Tuberculosis (c) Cholera (d) Rabies

880) Severity of disease symptom depends upon

(a) number of microbes (b) target organ (c) both a and b (d) none of these.

881) Poliomyelitis virus which causes infantile paralysis enters the body through

(a) skin (b) mouth and nose (c) ears (d) eye

882) Flagella arranged along the sides of the bacteria _____.

(a) Peritrichous (b) Monotrichous (c) Lophotrichous (d) Amphitrichous

883) Which substance is produced within an organism to prevent the spread of microorganism?

(a) Antiseptics (b) Antibiotics (c) Antibodies (d) All the above

884) Which antibiotic is extracted from fungi?

(a) Streptomycin (b) Erythromycin (c) Bacitracin (d) Penicillin

885) Which of the following micro organism helps in fermentation?

(a) Yeast (b) Mould (c) Mushroom (d) Rhizopus

886) Carrier of malaria causing protozoa

(a) Cockroach (b) Housefly (c) Butterfly (d) Female Anopheles mosquito

887) The most common carrier of communicable diseases is _____.

(a) ant (b) dragonfly (c) lizard (d) housefly

888) Which disease is treated using antibiotics?

(a) AIDS (b) Dengue fever (c) Cholera (d) Hepatitis B

889) This bacteria gives special aroma to coffee beans and tea leaves.

(a) Bacillus megaterium (b) Lactobacillus (c) Aspergillus niger (d) None

890) A cluster of polar flagella found in bacterium is _____.

(a) Pseudomonas aeruginosa (b) Pseudomonas fluorescens
(c) Aquaspirillum serpens (d) salmonella typhi

891) The only bacteria that lives in dead organic matter.

(a) parasitic (b) symbiotic (c) saprophytic (d) all the above

892) In Bacteria cocci are arranged in grape-like clusters is _____.

(a) diplococci (b) streptococci (c) tetracocci (d) staphylococci

893) The body of fungus is called _____.

(a) thallus (b) hypae (c) mycelium (d) globule

894) The term prion was coined by

(a) Antonie van Leeuwenhoek (b) Robert Koch (c) Stanley B. Prusiner
(d) Sir Ronald Ross

895) _____ is affected by neuro degenerative disease.

(a) Intestine (b) Cerebral cortex (c) Kidney (d) Forelimb

896) _____ protein is toxic to the insect larva and kills them.

(a) Cry (b) Brown (c) Black (d) Dry

897) Beans of coffee and cocos, leaves of tea and tobacco are fermented by the bacteria

(a) Lactobacillus sp (b) Aspergillus niger (c) Saccharomyces cerevisiae
(d) Bacillus megaterium

898) Fungus Aspergillus niger produces _____.

(a) oxalic acid (b) acetic acid (c) citric acid (d) all the above

899) Which one is a communicable disease?

(a) Diabetes (b) Obesity (c) Malaria (d) Goitre

900) Which one is a non-communicable disease?

(a) Influenza (b) Goitre (c) Malaria (d) Chicken pox

901) _____ is the disease causal by the bacteria Mycobacterium tuberculosis.

(a) Common cold (b) Influenza (c) Tuberculosis (d) Diptheria

902) _____ is the causative organism of common cold disease.

(a) Rhino virus (b) Myovirus (c) Rubella virus (d) Variola virus

903) _____ disease is called yellow fever.

(a) Poliomyelitis (b) Hepatitis 'A' (c) Acute Diarrhoea (d) Mumps

904) In Acute diarrhoea disease _____ part is affected in human being.

(a) intestinal (b) kidney (c) pancrease (d) lungs

905) _____ disease is caused by the bite of infected Aedes aegypti mosquito.

(a) Malaria (b) Filaria (c) Chikungunya (d) Swine flu

906) _____ fever is known as break bone fever.

(a) Chikungunya (b) Dengu (c) Malaria (d) Swine flu

907) Filariasis is transmitted by the bite of infected _____ mosquito.

(a) Anopheles (b) Ades aegypti (c) Culex (d) None of these

908) The Influenza A virus (H5N1) kills a high proportion of _____.

(a) poultry (b) cow (c) dog (d) pig

909) The HIV attacks the _____ cells.

(a) white blood (b) red blood (c) platelets (d) lymph

837 x 1 = 837

910) Metre is the unit of _____

911) 1 kg of rice is weighed by _____

912) The thickness of a cricket ball is measured by _____

913) The radius of a thin wire is measured by _____

914) A physical balance measures small differences in mass up to _____.

915) Speed is a _____ quantity whereas velocity is a _____ quantity

916) The slope of the distance – time graph at any point gives _____.

917) Negative acceleration is called _____

918) Area under velocity – time graph shows _____

919) In going from a rarer to denser medium, the ray of light bends _____

920) The mirror used in search light is _____ .

921) The angle of deviation of light ray in a prism depends on the angle of _____

922) The radius of curvature of a concave mirror whose focal length is 5cm is _____

923) Large _____ mirrors are used to concentrate sunlight to produce heat in solar furnaces

924) A _____mixture has no distinguishable boundary between its components

925) An example of a substance that sublimes is _____.

926) Alcohol can be separated from water by _____

927) In petroleum refining, the method of separation used is _____

928) Chromatography is based on the principle of _____.

929) Calcium and Argon are examples of a pair of _____

930) Total Number of electrons that can be accommodated in an orbit is given by_____.

931) _____ isotope is used in the nuclear reactors.

932) The number of neutrons present in ${}^{7}_{3}Li$ is ------

933) The valency of Argon is _____

934) The shoot system grows upward in response to _____.

935) _____ is positively hydrotropic as well as positively geotropic.

936) The green pigment present in the plant is _____

937) The solar tracking of sunflower in accordance with the path of sun is due to _____.

938) The response of a plant part towards gravity is _____.

939) Plants may inhale carbon dioxide for photosynthesis but need _____ for their living.

940) The larvae of an amphibian is _____.

941) The skeletal framework of Porifera is _____.

942) Ctenidia are respiratory organs in _____.

943) Skates are _____ fishes.

944) _____ are jawless vertebrates.

945) _____ is the unique characteristic feature of mammal.

946) Spiny anteater is an example for _____ mammal.

947) Deficiency diseases can be prevented by taking _____ diet.

948) The process of affecting the natural composition and the quality of food substance is known as _____

949) Vitamin D is called as _____ vitamin as it can be synthesised by the body from the rays of the sun.

950) Dehydration is based on the principle of removal of _____.

951) AGMARK is used to certify _____ and _____ products in India.

952)

Vitamin	Rich source	Deficiency disease
Calciferol		Rickets
	Papaya	Night blindness
Ascorbic acid		
	Whole grains	Beriberi

953) Food should not be purchased beyond the date of _____.

954) The fastest mode of heat transfer is _____.

955) During day time, air blows from_____to_____

956) Liquids and gases are generally _____ conductors of heat.

957) The fixed temperature at which matter changes state from solid to liquid is called _____.

958) Electrons move from_____ potential to _____ potential

959) The direction opposite to the movement of electron is called _____ current.

960) The e.m.f of a cell is analogues to_____of a pipe line.

961) The domestic electricity in India is an ac with a frequency of_____Hz

962) The SI unit of magnetic field induction is_____

963) Devices which is used to convert high alternating current to low alternating current _____.

964) An electric motor converts_____

965) A device for producing electric current is_____.

966) In Dobereiner's triads, the atomic weight of the middle element is the _____of the atomic masses of 1st and 3rd elements.

967) Noble gases belong to_____ group of the periodic table

968) The basis of the classifications proposed by Dobereiner, Newlands and Mendeleev was_____

969) Example for liquid metal is_____

970) _____tissues provides mechanical support to organs.

971) Parenchyma, collenchyma, sclerenchyma are_____type of tissue

972) _____and_____ are complex tissues

973) Epithelial cells with cilia are found in _____of our body

974) Lining of small intestine is made up of _____.

975) The opening of the stomach into the intestine is called_____.

976) The muscular and sensory organ which helps in mixing the food with saliva is_____.

977) Bile, secreted by liver is stored temporarily in _____.

978) The longest part of alimentary canal is_____.

979) The human body functions normally at a temperature of about_____

980) The largest cell in the human body of a female is_____

981) The weight of the body immersed in a liquid appears to be_____ than its actual weight.

982) The instrument used to measure atmospheric pressure is _____.

983) The magnitude of buoyant force acting on an object immersed in a liquid depends on _____of the liquid.

984) A drinking straw works on the existence of _____.

985) Vibration of object produces_____.

986) Sound is a _____ wave and needs a material medium to travel.

987) Number of vibrations produced in one second is _____

988) The velocity of sound in solid is _____ than the velocity of sound in air.

989) Loudness is proportional to the square of the _____.

990) _____ is a medical instrument used for listening to sounds produced in the body.

991) The repeated reflection that results in persistence of sound is called _____ .

992) The speed of Sun in km/s is _____.

993) The rotational period of the Sun near its poles is _____.

994) India's first satellite is _____.

995) The third law of Kepler is also known as the Law of _____.

996) The number of planets in our Solar System is _____.

997) _____ named carbon.

998) Buckminster Fullerene contains _____ carbon atoms.

999) Compounds with same molecular formula and different structural formula are knows as _____.

1000) There are _____ plastic resin codes

1001) _____ is a suitable solvent for sulphur.

1002) _____ is an electrochemical cell which converts electrical energy into chemical change(Reaction).

1003) Painkiller drugs are called _____

1004) _____, _____ and _____ are macronutrients required for plant growth.

1005) _____ is a chemical used in finger print analysis.

1006) Indigo is a _____ dye.

1007) Quinine drug is obtained from _____.

1008) Carica papaya leaf can cure _____ disease.

1009) Vermicompost is a type of soil made by _____ and microorganisms.

1010) _____ refers to the culture of prawns, pearl and edible oysters.

1011) _____ is a preservative in honey.

1012) _____ is the method of culturing different variety of fish in a water body.

1013) The largest member in a honey bee hive is the _____.

1014) _____ break down organic matter and animal waste into ammonia.

1015) Typhoid fever is caused by _____.

1016) H1N1 virus causes _____.

1017) _____ is a vector of viral disease dengue.

1018) _____ vaccine gives considerable protection against tuberculosis.

1019) Cholera is caused by _____ and malaria is caused by _____.

1020) The SI unit of volume is_____.

1021) Least count of screw gauge_____.

1022) Least count of Vernier caliper is_____.

1023) Length, mass and time are called_____.

1024) 1 Angstrom (A^0)=_____m.

1025) A_____is the standard quantity with which unknown quantities are compared.

1026) The smallest amount of time imaginable to us is a twinkling of eye is called_____.

1027) Donkey power is equal to_____.

1028) Length is defined as the distance between_____.

1029) The unit of velocity is_____.

1030) JS^{-1} is the unit of_____.

1031) Light year is equal to_____m.

1032) Parsec is the unit of distance of used to measure_____objects outside the solar system.

1033) Distance between two atoms is measured in_____unit.

1034) _____is the quantity of matter contained in the body.

1035) 1 metric tonne is equal to_____kg.

1036) Zero Kelvin is commonly known as_____.

1037) $\frac{C}{100} = \frac{()}{180}$_____.

1038) 400 k in celsius scale is_____^{0}C

1039) The diameter of spherical objects can be measured with_____.

1040) _____ quantity is a quantity that can be measured.

1041) Physical quantities have a _____ value and unit of _____.

1042) Our forefather used unit like one _____ is equal to 660 feet.

1043) _____ unit system is metre. kilogram and second.

1044) SI unit of electric current is _____.

1045) Light travels _____ in one second or _____ kilometre.

1046) Unit of derived quantity force is _____.

1047) One Astronomical unit is equal to _____.

1048) The nearest star from the sun is _____.

1049) Value of one nanometre is equal to _____.

1050) A _____ tongue is twice it length of its body.

1051) One kilogram is the mass of a particular international proto type made of _____ alloy.

1052) Larger unit for measuring time is _____.

1053) One hour is equal to _____ times Nazhikai.

1054) 0 (zero) kelvin is commonly known as _____.

1055) _____ is a inventor of a precise instrument called vernier caliper.

1056) Least count of screw gauge is _____.

1057) _____ helps us to find the weight of an object.

1058) _____ has magnitude and direction.

1059) Mass has magnitude alone to mass is a _____ quantity.

1060) Density of mercury is _____.

1061) Consider an object is rest at position x = 20m. Then its displacement – time graph will be straight line to _____ the axis.

1062) The graph of uniform motion is _____

1063) During uniform motion of an object along a straight line, the change in the velocity is _____

1064) The displacement made in one second is _____

1065) Give an example of a motion in which the displacement is zero, but the distance travelled is not zero _____

1066) Acceleration is a _____ quantity.

1067) _____ determines the direction of motion of an object-velocity or acceleration.

1068) For a freely falling body the acceleration 'a' is replaced by _____

1069) An object under uniform circular motion experiences _____

1070) When we thrown an object vertically upwards it moves _____ the acceleration due to gravity.

1071) When a body thrown vertically upwards in space then at the highest point, the body has zero velocity and acceleration _____ to the acceleration due to gravity.

1072) When we separate cream from milk with the help of machines it act as a principle of _____.

1073) Merry go round rotate about vertical axis with the principle of _____.

1074) An object describes a repetitive to and fro movement retracing its original path it is _____ motion.

1075) _____ quantity having both magnitude and direction.

1076) The area under the velocity time graph is _____ to the magnitude of the displacement.

1077) The ratio of sine of the angle of incidence to the sine of _____ is a constant

1078) A spherical mirror whose reflecting surface is curved outwards is called _____ mirror

1079) All distances parallel to the principal axis are measured from the _____ of the mirror

1080) A negative sign in the value of magnification indicates that the image is_____

1081) Light is refracted or bent while going from one medium to another because its _____ changes

1082) Light travels in the form of _____

1083) The branch of optics that treats light as rays is named ray optics or_____

1084) The distance between the pole and the principal focus is_____

1085) The virtual image is always erect and cannot be_____.

1086) The mirror equation is_____

1087) _____ can be defined as the ratio of the height of the image (h_1) to the height of the object (h_0) .

1088) Magnification can be related to_____ and_____

1089) _____mirror is used as make up mirror.

1090) _____mirrors are used as rear view mirros

1091) When a ray of light travels from optically rarer medium to optically denser

medium it beads_____.

1092) When a ray of light travels from_____ to rarer it bends away from the normal

1093) The second law of refraction is also known as_____

1094) $\frac{\sin i}{\sin r} = constant$. This constant is called the_____.

1095) Light has maximum speed in_____

1096) When the angle of incidence exceeds the value of critical angle it reflected back to the same medium is called _____

1097) Optical fibers are bundle of high quality composite _____ fibres.

1098) _____ is regarded as the father of optics.

1099) The angle made by the incident ray with the normal is called _____.

1100) The angle made by the reflected ray with the normal is called _____.

1101) Minors whose reflection surface on spherical are called _____ mirrors.

1102) The centre of the hollow sphere of which the spherical mirror forms a part is called _____.

1103) A plane mirror provides a much _____ field of view compared to convex minor.

1104) _____ mirrors are used in blind spots in shops.

1105) When a ray of light travels from as optically denser medium to an optically rarer medium it bends _____ from the normal.

1106) Refractive index of water is _____ .

1107) 1500C = _____ K

1108) Evaporation is always accompanied by_____ in temperature

1109) Latent heat is the energy used for _____

1110) Sand is removed from naphthalene by _____ method.

1111) The solubility of solid in water _____with an increase in temperature

1112) All matter is made up of tiny particles and these particles are in constant motion which possess_____

1113) The particles start moving faster as their kinetic energy_____

1114) The pressure depends on the temperature of the gas and the_____it occupies

1115) The temperature of gases can be expressed in_____scale.

1116) Element cannot be further broken into simpler particles of matter by chemical methods of _____,_____and _____

1117) In homogeneous mixture the components are uniformly mixed and it will have_____phase

1118) In_____mixture the components are not mixed throughly and it will have more

1119) A colloidal solution is a heterogeneous system consisting of the_____phase and_____medium

1120) Brownian movement of particle is due to the unbalanced bombardment of the particles by the molecules of_____medium

1121) Tyndall effect is due to the scattering of light by_____particles

1122) _____ are colloidal solution with liquid dispersed in solid.

1123) _____ is a special type of mixture made by combining two liquids that normally don't mix

1124) Two immiscible liquids can be separated by solvent_____method

1125) Brownian motion named after the botanist _____.

1126) Silicon atoms on a surface via _____ microscopy.

1127) The tendency for particles of water or mercury to _____ causes spheres or drops.

1128) _____ occurs at any temperature.

1129) _____ particles are tightly packed.

1130) LPG is highly inflammable _____ gas.

1131) _____ is the SI unit of temperature.

1132) One metre is equal to_____ nanometres.

1133) The head light of vehicles work on the principles of _____ effect.

1134) By _____ method is used to separate salt from sea water.

1135) Examples of solid in solid is _____.

1136) Example of liquid in liquid is _____.

1137) Example of gas in liquid is _____.

1138) The law of reciprocal proportions was proposed by

1139) In Gay Lussac's law all the volumes are measured under similar conditions of _____and_____.

1140) Matter consists of very small and indivisible particles called_____

1141) Alpha radiation are made up of two protons and two_____.

1142) Positive charges are concentrated in the central region of the atom called _____.

1143) Bohr model was applicable only to _____

1144) The path by which electrons revolve around the nucleus is called _____

1145) Protons repel each other because of their_____

1146) _____reduce the repulsive force between the positively charged protons.

1147) Protons and neutrons are collectively called as_____

1148) The total number of protons and neutrons present in the nucleus is called _____

1149) _____are atoms of the same element having same atomic number but different, mass numbers.

1150) _____has no neutron.

1151) Isotope of Hydrogen, _____is radioactive isotope.

1152) C^{14} is used in_____

1153) Calcium and argon are _____

1154) Elements having same numbers of neutrons are called_____

1155) Atomic number of Aluminium is 13 the electronic configuration is _____

1156) The electronic configuration of sulphur is 2, 8, 6. The number electrons, _____protons and Atomic number

1157) The number of protons is 17 and neutron is 18. The mass number is_____. The element is_____

1158) The outermost shell of an atom is called _____

1159) The electrons present in the valence shell are known as _____

1160) Positively charged ions are called_____

1161) Negatively charged ions are called_____

1162) The number which designate and distinguish various atomic orbitals and electrons present in the atoms are called_____

1163) _____ was called as Father of Nuclear physics.

1164) Gamma rays are _____ waves.

1165) Alpha particles are _____ charged.

1166) While revolving in these discrete orbits the _____ donot radiate energy.

1167) _____ is defined as the path by which electrons revolve around the nucleus.

1168) The elementary particles such as protons and neutrons are collectively called as _____.

1169) _____ are filled in a stepwise manner in the increasing order of energy.

1170) Atomic number is 17 and mass number is 35 the element is _____.

1171) Hydrogen have valence _____ is one.

1172) The electronic configuration of Neon is 2,8 so the valence is _____.

1173) The minerals like nitrogen, potassium and phosphorus, are required in substantial quantity by the plants are called _____.

1174) Towards a stimulus :_____ Away from the stimulus : Negative tropism.

1175) Hydrotropism : Response towards water Phototropism : _____

1176) Photosynthesis : _____ Transpiration : Stomata

1177) When the leaves of a sensitive plant are touched with a finger, they fold up and when light fades at dusk the petals of a Dandelion flower close. These two plants show ____ and_____ movements.

1178) Opening and closing of Moon flower is not a tropism because the movement in this is _____.

1179) The raw materials for photosynthesis are _____ and _____.

1180) When iodine solution is added for testing starch, part of the leaf with _____ turn blue-black colour.

1181) In leaves, the food is stored in the form of _____.

1182) Plants utilize only _____% of the absorbed water for photosynthesis and the other activities.

1183) Plants inhale and exhale continuously through the _____.

1184) The leaves of _____closes on touching.

1185) Helianthus annus follows the path of the sun from_____.

1186) The dance of_____ leaf is mesmerizing

1187) Movements in plants are triggered by an _____stimul.

1188) In Desmodium gyrans the compound leaf shows_____leaflets.

1189) The tip of the embryonic shoot is covered by a protective sheath called_____.

1190) The plant hormone was identified as_____.

1191) Unidirectional movement of plant part to light stimulus is called_____.

1192) The plant respond to gravity is_____.

1193) The plant respond to water is_____.

1194) Once the shoot touches a suitable support, it grows towards the surface it is_____.

1195) Movement of plant in response to chemical stimuli_____.

1196) Like animals, plants too_____.

1197) _____is an example for halophyte.

1198) Rhizophora roots turn _____upright respiration

1199) _____movements are independent of the stimuli.

1200) _____is an example for insectivorus plant.

1201) The common name of Dionaea muscipula is_____.

1202) Photo means_____.

1203) Green plants are_____.

1204) _____protects our mother earth..

1205) The end product of photosynthesis is_____.

1206) Plants take in _____for photosynthesis

1207) Plants needs_____ to carry on cellular respiration

1208) Priestley concluded that the plant was converting the _____ back into oxygen.

1209) Priestleydevised extraordinary experiment in_____.

1210) _____is not the major contributor to the gaining of the mass of the plant.

1211) _____is a green pigment present in leaves.

1212) Structurally chlorophyll resemble_____.

1213) Plants are called primary_____.

1214) Sunlight can penetrate _____into the ocean

1215) _____bacteria is one example of life in extreme environment.

1216) The sea slug consunes alga_____.

1217) Plants inhale and exhale continuously through the_____.

1218) _____gms of water reacts with _____gms of CO_2 to form _____gms of carbohydrate.

1219) Guard cells of stomata are_____.

1220) A maize plant transpire _____gallons of water during its life spam.

1221) _____is necessary for continuous supply of minerals.

1222) The conifers have a _____shape.

1223) _____implies increased level of average temperature.

1224) Vespa oriental is capable of trapping_____.

1225) Yellow light sensitive pigment is called_____.

1226) During photosynthesis, light energy is converted into_____ energy.

1227) In Desmodium gyrans the _____ leaf shows three leaflets.

1228) Germinated seeds that grow towards _____.

1229) The water soluble chemical identified as the plant hormone _____.

1230) _____ is a growth movement.

1231) Green plants are _____ in their mode of nutrition.

1232) The plant draws up water and minerals from the ground through _____.

1233) _____ plant has variegated leaves.

1234) In chlorophyll atomic structure has _____ is present in the centre part.

1235) In stomata the guard cells are_____ shaped.

1236) Transpiration is a necessary to creates a _____ in leaf and stem.
1237) The excretory opening of Porifera is_____
1238) The second largest phylum of animal kingdom is _____.
1239) In India National deworming day is observed on _____.
1240) Myotomes are seen in _____
1241) In birds the air sacs communicate with _____.
1242) Placenta is the unique characteristic feature of _____.
1243) The binomial name of our National Bird is _____.
1244) Blue revolution is the rearing of _____.
1245) In mammals testis are enclosed by _____.
1246) Sponge does not have _____ tissues.
1247) The group of animals that lack true tissues are called as _____
1248) Flat worms are _____
1249) Germ layers are formed during the development of an _____
1250) _____ becomes the mouth.
1251) In amoeba, locomotion is by _____
1252) Pseudopodia is otherwise called as _____
1253) Cellular grade of organisation is seen in _____
1254) The other name of Coelenterata is _____
1255) Excretion and osmoregulation occur through _____ in flat worms.
1256) Free living soil nematodes are _____
1257) In Annelids, excretion is by _____
1258) Chitin is made up of _____ saccharide.
1259) The coelomic cavity is filled with _____
1260) Arthropod is an _____ and the largest phylum.
1261) Land arthropods breathe through _____
1262) Only one eye is present in _____
1263) The body is divided into head, muscular foot and _____in the Phylum mollusca.
1264) The most common larva in Mollusca is trochophore and _____ larva.
1265) Spiny skinned Animals are exclusively _____ organisms.
1266) _____ is the special feature of Echinoderms.
1267) Adults are _____ in Echinodermata
1268) The animals with backbones are _____
1269) _____ are considered as the fore runner of vertebrata.
1270) Gill slits are covered by an _____
1271) The cosmopolitan _____ can swim faster than a cheetah.
1272) Culturing of aquatic organisms is referred as _____
1273) _____ are the first vertebrates to like an land.
1274) In _____ the heart is four chambered.
1275) _____ was the first bird.
1276) The largest bat is the _____ fox.

1277) The smallest bat weighs _____ grams and no longer then 3.3 cm.

1278) _____ introduced the method of naming the animals with two names known as binomial names.

1279) Protozoans are mostly _____

1280) Toads are exclusively _____

1281) _____ comes under phylum Nematoda.

1282) Binomial classification has _____ and _____ words given to each animal and plant.

1283) In the Binomial name the first name indicates _____ and second is _____

1284) _____ is a plane of arrangement of Body parts.

1285) _____ means pore bearers.

1286) In sponges through _____ circulation of water takes place.

1287) Stinging cells are called _____

1288) Excretion and Osmoregulation occur through _____ in flat worms

1289) Most of the members in flat worms are _____

1290) Wuchereria bancrofti causes _____

1291) Segmented worms have a central nervous system with a _____

1292) The word Arthropod means _____

1293) Phylum Arthropoda includes more than _____ species.

1294) The exoskeleton is made up of polysaccharide called _____

1295) Small arthropods directly absorb oxygen through their _____

1296) The first systematic approach to the classification of living organism was made by _____.

1297) _____ has no nucleus.

1298) _____ are formed during the development of an embryo.

1299) _____ refers to a fluid filled cavity inside the body.

1300) _____ phylum may exist in two different body forms namely a poly and a medusa.

1301) _____ infection in human intestine.

1302) Earth worm are locomoted by the help of _____.

1303) Segmented worms have a central nervons system with a _____.

1304) The exoskeleton as arthropods made up of a polysaccharides called _____.

1305) Many land arthropods breathe through a system of tiny body tubes called _____.

1306) The animals with backbones are _____.

1307) ln frogs hind limbs have _____.

1308) _____ eggs are covered with shells.

1309) Birds eggs as covered by hard _____ shell.

1310) Do not purchase food beyond the date of _____

1311) **Unscramble the words in the brackets to complete the sentence**

Salting is a process involving addition of ____ (aslt) removes the ____ (oitmsuer) content in the_____ (dofo) by the process of _____ (sosisom) and prevents the growth

of_____
(artcaeib).

1312) _____ is the basic necessity of life.

1313) _____ refers to the compounds which give us energy.

1314) In carbohydrates, the ratio of carbon, hydrogen and oxygen is _____

1315) Glucose is a _____

1316) Sugar is a _____

1317) Cellulose in vegetables is _____

1318) Rice, potatoes and bread is rich in _____

1319) _____ are polymer chains made of aminoacids.

1320) There are _____ essential amino acids.

1321) _____ are enzymes involved in the break down of fats.

1322) Mineral is a _____ element.

1323) Minerals are the constituents of teeth, bones, tissues, blood, muscle and _____

1324) Metabolism includes two process namely _____ and _____

1325) The other name of Vitamin A is _____

1326) Pernicious anaemia is caused by the deficiency of _____

1327) Swollen and bleeding gums are the symptoms of _____

1328) Irritation in eyes, dry skin are the symptoms of the disease _____

1329) Protein deficiency diseases are _____ and _____

1330) Marasmus affects infants below the age of _____ year.

1331) Daily requirement of carbohydrate is _____ gms.

1332) 40 gm is the daily requirement of _____

1333) Global Iodine deficiency day falls on _____

1334) _____ is the deficiency disease of Iodine.

1335) Calcium is one of the _____

1336) _____ is the deficiency disease caused by calcium.

1337) _____ regulates nerve and muscle activity.

1338) Seafood is rich in _____

1339) _____ maintains fluid balance.

1340) Iodine is helpful for the formation of _____ hormone.

1341) _____ is required for normal growth and development.

1342) _____ is the process of prevention from decay or spoilage of food.

1343) The process of removal of water is called as _____

1344) FCI was setup in the year _____

1345) Drying inhibits the growth of _____

1346) Ionizing radiations are X-rays, gamma ray or _____ to kill harmful bacteria.

1347) Micro organisms cannot grow below _____

1348) _____ are preserved at sub-zero temperature.

1349) _____ was the founder of AMUL.

1350) Pasteurisation was invented by _____

1351) Louis Pasteur developed vaccination against _____ and _____

1352) Natural preservatives are salt, sugar and _____

1353) Addition of salt removes the moisture content in the food by the process of _____

1354) The _____ nature of honey helps in reducing the water content of food.

1355) _____ preservatives delay the microbial growth.

1356) World Food Day is on _____

1357) Microbial contamination is due to the presence of pathogens like and Salmonella in fruits & vegetables.

1358) Common salt is adultered with _____

1359) Ice cream is adulterated with _____

1360) The apple appears glossy due to the coating of _____

1361)

Class of carbohydrate	Rich in	Component
Monosaccharide _____ Poly saccharide	_____ Edible sugar Cellulose & Starch	Fructose Lactose _____

1362)

Month/Year	Date	Day
October	_____ _____	World food day
October _____	7th	Global Iodine deficiency _____

1363) _____ is the basic necessity of life.

1364) _____ components are glucose, fructose and galactose.

1365) There are _____ essential amino acids present in our body.

1366) _____ is a fat soluble vitamin.(vitamin A)

1367) Vitamin C is otherwise called as _____.

1368) _____ disease usually affects infants below the age of one year.

1369) _____ is caused due to Iodine deficiency.

1370) _____ developed vaccination against rabies.

1371) White revolution is Started by _____.

1372) _____ is responsible for protecting and promoting the public health through regulation and supervision of food safety.

1373) _____is a process just reverse of melting

1374) While a substance is undergoing a change of state, the temperature of the body remains the_____

1375) A change of state is a change of a substance from_____

1376) _____ is the degree of hotness or coldness of a body.

1377) The solid, liquid, gaseous phases of water can coexist in equilibrium at_____

1378) The sum of the kinetic and potential energy is called the_____ of the molecules.

1379) _____is greater for liquids than for solids and maximum in case of gases.

1380) When heat energy is added to a substance, the kinetic energy of its particles _____ and so the particles many at higher speed.

1381) When a dog keeps out its tongue and breathes hard, the moisture on the tongue turns into _____ and it evaporates.

1382) Black marks appearing on the ceiling above a lamp or fan caused by dust being carried upwards in air _____ produced by hot lamp or the running fan.

1383) Expansion is maximum in _____.

1384) When heat ice cubes they become _____.

1385) _____ are used as door flaps to keep warm air into igloos.

1386) During night time air above the sea is _____.

1387) Radiation can occur even in _____.

1388) Radiation consist of _____ waves travelling at the speed of light.

1389) The capacity of a substance to gain heat energy is denoted by the term _____.

1390) Specific heat capacity of Brass is _____.

1391) SI unit of heat capacity is _____.

1392) The process is which a liquid is converted to vapour by absorbing heat is called _____.

1393) Trip switch is a_____safety device

1394) The number of electrons constituting 1 coulomb charge is_____

1395) Resistors are connected in series, if the resistance of electric circuit is to be_____

1396) Electric fuse is a wire made up of a material having_____melting point.

1397) _____is the only non-metal that is a good conductor of electricity

1398) If the area of cross section of the conductor is doubled its resistance gets_____

1399) A negative charge will move from_____to_____ potential.

1400) _____is work done per unit charge

1401) An electrochemical cell converts _____energy into_____ energy.

1402) Three resistors are connected in series with a cell. If the current in each resistor is 1.5A, then the current through the cell will be_____

1403) Three resistors are connected in parallel with a battery. If the current in each resistor is 2A, then the current through the battery will be_____

1404) If an electron is added in excess to an atom then the atom is called _____ ion.

1405) Charge on one electron is equal to _____ coulomb.

1406) _____ lines of force are imaginary lines.

1407) _____ is an instrument used to measure the potential difference.

1408) _____ discovered the relation between potential difference, current and resistance.

1409) Domestic supply is in the form of _____.

1410) The device used to convert ac to dc is called _____.

1411) The voltage of dc can be varied easily using a device called _____.

1412) In the United States of America the voltage of ac used for domestic purpose is _____.

1413) _____ works on replay principle.

1414) No force acts in a current carrying conductor when it is _____ the magnetic field.

1415) The magnetic field inside a_____is uniform.

1416) An AC generator is provided with_____ slip rings which rotate with the coil

1417) The moving part of an electric motor is called_____

1418) A magnetic field is a _____quantity.

1419) The SI unit of magnetic field strength is_____

1420) The laws of induction were given by_____

1421) The relation between weber and Tesla is_____

1422) Unlike magnetic poles_____ whereas like poles_____

1423) Magnetic lines of force never_____ each other

1424) Sailors use_____ to find the direction in order to navigate on the sea.

1425) The strongest natural magnet is _____magnetite.

1426) _____ is important in navigation of the earth.

1427) Magnetic field lines start at _____ pole and ends at _____ pole.

1428) Magnetic lines of force will be _____ at the poles than at the equator.

1429) _____ discovered that a current carrying conductor gets deflected when it is placed in a magnetic field.

1430) To get _____ current a split ring type commutator must be used.

1431) Transformer works on the principal of _____ .

1432) In electric bell the _____ hits the bell and makes it ring.

1433) Now a days _____ fields as important role in hyperthermia treatment of cancer.

1434) B, Si, Ge and As are the examples of_____

1435) _____group elements are called alkaline earth metals.

1436) The elements that follow lanthanum are called_____

1437) _____block element is placed at the bottom of the periodic table

1438) f-block elements are also know as_____

1439) The mixture of metal with mercury is called_____

1440) The only non-metal which can produce a soft metallic clink when it is shaken in a bottle is_____

1441) _____is the only non-metals which can conduct heat.

1442) Dobereiner called three element groups as _____.

1443) In the Newlands table _____ is placed between fluorine and sodium.

1444) Mendeleev's periodic table has eight vertical columns called _____.

1445) In modern periodic 16^{th} group is known as _____.

1446) _____ element is the last element of modern periodic table.

1447) _____ elements are called as alkali metals.

1448) The elements that follow Lanthanum are called _____.

1449) _____ is the lightest, smallest and first element of the periodic table.

1450) _____ gas is used in discharge lamps for the orange column.

1451) When metal is alloyed with _____ it is called amalgam.

1452) _____ is a non metal which has high melting and boiling point.

1453) Non metals _____ on reaction with metal.

1454) _____ alloy is used to make artificial jewellery.

1455) _____theory explains the formation of molecules

1456) The valency of noble gases is_____

1457) _____is the only noble gas which does not have eight electrons in their valence shell.

1458) The atom that loses electrons will from a_____

1459) _____compounds have high density

1460) In covalent bond formation, the sharing of_____ electrons takes place in their outermost shell.

1461) Polar solvents contain bond between atoms with_____

1462) _____ & _____atoms have similar electro negativities

1463) Molecular reactions are _____in covalent compound.

1464) Jonic compounds are_____ in nature.

1465) _____ and _____gave successful explanation based upon the concept of electronic configurations of noble gases.

1466) ln Ionic bond formation the atom gaining electrons will form an _____.

1467) Chlorine has one electron less to the nearest stable electronic configuration of a noble gas _____.

1468) Triple covalent bond represented by a triple line (≡) between two atoms is _____.

1469) The molecular reaction in covalent compound is _____.

1470) Ionic compounds conducts electricity in _____ state.

1471) Addition of oxygen is known as _____.

1472) One of the most valuable metal _____ has high resistance to corrosion.

1473) Acid reacts with base to form a neutral product called_____

1474) The taste of acid is_____

1475) _____ contain one or more replaceable hydrogen atoms

1476) _____ acids have relatively smaller amount of acids dissolved in solvent.

1477) Acids react with metallic oxides to produce_____

1478) _____acid is used in aerated drinks

1479) Chemical formula of aquaregia is_____

1480) Water soluble bases are called_____

1481) Non-metallic oxides are_____in nature

1482) _____are bitter in taste

1483) The word acid is derived from the Latin name _____.

1484) Grape fruit contains _____ acid.

1485) _____ proposed a theory on acid and bases.

1486) _____ acids ionise completely in water.

1487) _____ acid is a constituent of baking powder.

1488) Aquaregia chiefly dissolve metals such as _____ and _____.

1489) Non metalic oxides are _____ in nature.

1490) _____ is used as a medicine for stomach disorder.

1491) A neutral solution has pH _____ to 7.

1492) _____ contains a mixture of indicator.

1493) pH of stomach fluid is approximately _____.

1494) Rice requires _____ soil for its growth.

1495) The_____ tissues are made up of more than one type of cells and these wok together as a unit

1496) The two types of skeletal connective tissues are_____and_____

1497) Humans have 46 chromosomes. Their sperms and eggs will have _____chromosomes each.

1498) During pairing of chromosomes in meiosis, the _____ chromosomes come to lie side by side.

1499) The word meristem is derived from a greek word_____

1500) Cork Cambium is an example of _____meristem

1501) The meristem found at the base of internodes is called_____

1502) In apple paranchyma stores_____

1503) Extensively long cells seen in the simple tissue_____

1504) During mieosis the paired chromosomes are called_____

1505) Mitosis was discovered by_____

1506) Both smooth and cardiac muscles are_____ in nature.

1507) _____is a non-flexible skeletal connective tissue

1508) _____acts as a fat reservoir

1509) _____epithelium is seen in sweat glands.

1510) Genetic variations occur in mieosis because of_____

1511) The term meristem was coined by _____.

1512) _____ meristem increase the thickness of the plant part.

1513) In apple parenchyma stores _____.

1514) Parenchyma cells exposed to light may develop chloroplasts and are known as _____.

1515) _____ is used in making of rope and fabrics.

1516) _____ conducts water, mineral, nutrients upward from root to leaves.

1517) The main function of xylem _____ is to store starch and fatty substances.

1518) The study of cell is known as _____.

1519) Fat cell is a spherical or oval adipose cell and contains a large droplet of _____.

1520) The matrix of the bone is in the form of concentric rings called _____.

1521) Sprain is caused by excessive pulling of _____.

1522) Erythrocytes contain a respiratory pigment called _____.

1523) The longest cell of the body is _____.

1524) _____ cell divisions is otherwise called as Reduction division.

1525) Division of nucleus into two daughter nuclei is called _____.

1526) Organs which are concerned with the formation, storage and elimination of urine constitute the_____

1527) In the process of urine formation, maximum amount of water from the glomerular filtrate is reabsorbed in the_____

1528) _____is the smallest cell in males

1529) Progesterone is secreted by_____

1530) The oviducts are also known as_____

1531) One mature ovum is released once in every _____ days

1532) Beta cells of pancreas produce_____

1533) Parts of the body concerned with the digestion of food form the _____.

1534) _____ are hard structures meant for holding. curling. grinding and crushing the food.

1535) _____ are the largest salivary glands are present in the mouth cavity.

1536) Saliva contain an antibacterial enzyme called _____.

1537) _____ converts starch into maltose.

1538) Oesophagus conducts food from pharynx to the stomach by _____.

1539) The gastric glands present in the inner wall of _____ secrete gastric juice.

1540) _____ is known as Father of Gastric Physiology.

1541) The longest part of the small intestine is _____.

1542) _____ produces fibrinogen and prothrombin used for clotting of blood.

1543) _____ acts both as an exocrine gland and as an endocrine gland.

1544) The _____ is the longest part of the digestive system.

1545) _____ eliminates metabolic wastes through respiration.

1546) Maintain the fluid and electrolytes balance in our body by _____.

1547) The process of purifying blood by an artificial kidney is called _____.

1548) In a fluid, buoyant force exists because pressure at the _____ of an object is greater than the pressure at the top.

1549) Pressure at a given depth does not depend upon the _____ of the vessel containing the liquid. It only depends on the _____.

1550) The empty space in barometer above the mercury column is called as _____.

1551) _____ is a device for measuring atmosphere pressure without the use of liquids

1552) In petrol bunks, the tyre pressure of vehicles is measured in a unit called _____.

1553) For pressure lower than atmosphere pressure, Absolute pressure = _____

1554) Density of any substance with respect to the density of water at 4°C is called as _____.

1555) _____ is an experiment, that demonstrates the principle of buyonacy.

1556) _____ have to wear a special suit while travelling in space.

1557) The net force acting perpendicular to the surface is called _____.

1558) SI unit of thrust is _____.

1559) _____ does not depend on shape and size of the container.

1560) Mercury barometer is first designed by _____.

1561) In petrol bunks tyre pressure vehicles is measured in a unit called _____.

1562) The total mass of atmosphere is _____ km in the radius of earth.

1563) Pascals law is used in _____ machine.

1564) The symbol for density is _____.

1565) Relative density can be measured using _____.

1566) A sound wave has a frequency of 4 k hz and wavelength 2 m. Then the velocity of sound is _____ .

1567) Ultrasounds can also be used to detect cracks and flows in _____ .

1568) In the inner ear, the pressure variations are turned into electrical signals by the _____ .

1569) Loudness is determined by the _____ of vibration

1570) Unwanted sound is called _____.

1571) Shrillness of sound is determined by the _____ of vibration.

1572) The unit of frequency is _____.

1573) The greater the surface area of the vibrating body, the _____ is the loudness of sound.

1574) The second which we hear again a little later is called _____.

1575) _____ needs a medium for propagation.

1576) Sound cannot travel through _____.

1577) When object _____ sound is produced.

1578) Sound is a _____ wave.

1579) The SI unit of frequency is _____.

1580) Sound with frequency greater than 20,000 Hz is called _____ sound.

1581) _____ and time period are reciprocal to each other.

1582) The loudness of a sound depends on the _____ of the sound wave.

1583) A sound of single frequency is called a _____.

1584) Collection of tones is called a _____.

1585) Speed of sound in iron is _____m/s.

1586) The outer ear is called _____.

1587) _____ is the only moon in the solar system that moves in the opposite direction to the direction in which its planet spins.

1588) The Planet which is farthest from the Sun is _____.

1589) A celestial body that revolves around a planet is known as _____.

1590) Asteroids are found between the orbits of _____ and _____.

1591) A group of stars that appear to form a pattern in the sky is known as _____.

1592) Greek name of Sun is _____.

1593) Most of the energy emitted by the Sun in the form of radiation is _____ rays.

1594) One can not see the Sun in north pole for _____ days.

1595) _____ are really the collection of billions of stars.

1596) The universe began with the start of a massive explosion called the _____.

1597) The silicon in our computer chips are formed in the _____.

1598) Around 68% of the universe is _____.

1599) Stars are built by _____ gas.

1600) The sun has three quarter of _____ gas and one quarter of _____ gas.

1601) The sun's diameter across equator is _____ km.

1602) _____ moves around the sun faster than any other planet.

1603) The first planet outside the orbit of the Earth is _____.

1604) _____ is the largest moon of our solar system.

1605) The largest moon in Neptune is _____.

1606) The biggest asteroid is _____ 946 km across.

1607) _____ comet appears after nearly 76 years.

1608) _____ is the first artificial satellite which was launched in 1956.

1609) _____ is the condition in which people or objects appear to be weightless.

1610) _____ is the formula calculating orbital velocity

1611) The _____ is intended to act as a scientific laboratory.

1612) _____ astronaut spent most number of days in ISS.

1613) Different methods of formation of carbon is the main reason for its _____.

1614) The elements present in methane is _____ and _____.

1615) The atomic number of carbon is _____.

1616) Chemical linkage into chains of atoms of the same element is known as _____.

1617) The latin word _____ meaning coal.

1618) Tendency of carbon to share its four electrons with that of the other atoms to complete. It is called _____.

1619) _____ represents the type of polymer used to make the plastic.

1620) _____ named carbon from the Latin word 'carbo'.

1621) About _____ % of the weight of human body is carbon.

1622) The most vital _____ reaction of plants involve carbon compounds.

1623) Carbon chemistry is also called as _____ chemistry.

1624) The most recently discovered allotrope of carbon is _____.

1625) _____ is used as Antacid.

1626) _____ is a main component of water gas.

1627) Carbon can form four covalent bond with other elements called _____.

1628) The compound _____ has double bond.

1629) _____ is used to making electrode in dry cell.

1630) _____ causes pollution to our environment.

1631) There are _____ unsafe plastic.

1632) _____ is one of the rnost toxic chemicals known to human.

1633) _____ are the heavy metal lbund is polyvinyl chloride plastics.

1634) _____ is a most recently produced allotrope of carbon.

1635) Different methods of formation of carbon is the main reason for its _____.

1636) 1.Four covalent bonds :Diamond
Three covalent bonds :_____.
2.Polyvinyl chloride plastics:Resin code 3
Thermocol :_____.
3.Polycarbonate plastics :Bisphenol - A
Polystyrene plastics :_____.

1637) Aspirin is an _____

1638) _____ was awarded noble prize for his discovery of spontaneous radioactivity in 1903.

1639) _____ substances are incorporated in fabrics to prevent the growth of bacteria.

1640) Drugs which cause loss of sensation is called _____.

1641) The detection of alcohol in drunken drivers is possible through the _____ reaction of ethanol.

1642) _____ Isotope used for the treatment of Blood disorder and Skin disease.

1643) The diameter of one _____ atom is around 0.2 nm.

1644) Sunscreen lotions containing nano _____ provide enhanced sun protection factor.

1645) _____ is the chemicals used for treating disease.

1646) _____ is an anaesthetic chemical which has a pleasant smell sweet taste.

1647) _____ are the compounds which relieve all sorts of pains without the loss of conciousness.

1648) _____ is a natural antimalarial obtained from cinchona bark.

1649) The _____ is the first antibiotic.

1650) The _____ is a drug which provide relief from burning sensation in stomach.

1651) _____ is a solid electrical conductor made of metal.

1652) The process of depositing a thin layer of one metal over another is called _____.

1653) _____ is thought to be the second leading isotope to cause lung cancer.

1654) The radioisotope used for this purpose of photosynthesis called _____.

1655) _____ is used in treatment of skin disease.

1656) Aniline purple was synthesized by _____.

1657) _____ involve determination of pH, porosity and texture.

1658) _____ are required for physical growth of body,

1659) In diet that contain all three foods in right propertions is called _____.

1660) Some of the precipitated water moves deep into the soil and increases ground water level is called as _____.

1661) Leguminous plants like pea and beans have a symbiotic relationship with nitrogen fixing bacteria _____.

1662) Cindrella of the plant kingdom is called as _____.

1663) In opuntia leaves are modified into _____.

1664) Plants that grow in dry habitat are called as _____.

1665) _____ is a manure prepared by earthworm.

1666) _____ is a primary nutrient for the survival of all living organisms.

1667) A liquid is converted to gas before reaching the boiling point is _____.

1668) Condensation is the reverse process of _____.

1669) Leguminous plants like pea have a symbiotic nitrogen fixing bacteria _____.

1670) _____ animals convert plant proteins into animal proteins.

1671) The bacteria responsible for nitrification are called as _____ bacteria

1672) Plants growing in or near water are called _____.

1673) Plant growing in dry habit are called _____.

1674) In _____ plants leaves are modified into spires.

1675) _____ are the only mammals that can fly.

1676) Bats are _____ blooded animals.

1677) Bats give out high frequency sound called _____.

1678) The _____ has a cylindrical elongated and segmented body.

1679) The ideal temperature range of earthworm is _____.

1680) Earthworms are referred as _____.

1681) World Water Days is celebrated every year on _____.

1682) _____ ponds help the farmers to store water and to use it for irrigation.

1683) IUCN was founded on _____ , 1948 at Switzerland.

1684) _____ is a nodulating type of micro organism associating symbiotically with the root of legume plants.

1685) Ganoderma lucidum, is commonly known as _____ mushroom.

1686) _____ is the maintenance of bee colonies in modern hives.

1687) The fertile female in a honey bee hive is _____.

1688) Pasturage is related to _____.

1689) The most intensive type of vegetable growing is called as _____.

1690) Floriculture is the art of cultivation of _____.

1691) _____ is obtained by the collection and decomposition of green leaves, twigs of trees, shrubs and herbs.

1692) Tamil nadu government recently launched _____ which aims at better management of natural farming.

1693) _____ plant is used for treating Leukemia and cancer.

1694) In _____ system of gardening, the growth medium is air.

1695) Young female calf is called as _____ young male is called as _____.

1696) _____ is called as Father of while revolution.

1697) The word horticulture is derived from the Latin word _____ and _____.

1698) India is the second largest producer of _____.

1699) _____ is growing vegetables in small scale in house hold.

1700) Pradhan Mantri Fasal Bima Yojana (PMFBY) was launched on _____ 2016

1701) _____ is capable of producing antifungal and antibacterial compounds.

1702) _____ increase the uptake of phosphorus.

1703) _____ fever is cured by Nilavembu.

1704) Dairying is the production and marketing of _____ and its products.

1705) In India _____ breeds are the main milk producer.

1706) Unavailable of green folder cattle can be fed with _____.

1707) _____ is an organic liquid fertilizer.

1708) _____ was called the father of white Revolution.

1709) _____ is an Indian marine water cultivable fish.

1710) _____ comprises of liver oil and body oil.

1711) Vermiwash contain high amount of enzymes along with _____.

1712) _____ is also called as Bee keeping.

1713) ln a honey comb _____ cells contain honey and pollen.

1714) The honey bees suck the _____ from various flowers.

1715) _____ helps in building up of haemoglobin content in this blood.

1716) The hyphae with branches form a complex network called _____.

1717) First antibiotic _____ was developed by _____.

1718) Baker's yeast is _____.

1719) The two non symbiotic nitrogen fixing bacteria are _____ and _____.

1720) _____ is an agent that acts as an intermediate carrier of the pathogen.

1721) Fungi used in bakeries are _____.

1722) _____ is a species of bacteria that produces a protein called cry protein.

1723) _____ are viral particles which contain only proteins.

1724) Herbal drink _____ is given to dengue patients.

1725) _____ is caused by virus that affects pigs and has started infecting humans as well.

1726) _____ is a process of developing resistance to infections by admlnlsfratlon of antigen or antibodies.

1727) _____ is a Dual antigen. It gives protection from _____ and _____.

1728) Special structure of organ found in Bacteria is _____.

1729) Flagella arranged along the sides of the bacteria are called _____.

1730) _____ do not synthesize their own food.

1731) A simple virus particle is often called a _____.

1732) _____ are viral particle which contain only proteins.

1733) _____ is a species of bacteria that produces a protein called as cry protein.

1734) _____ is a communicable disease.

1735) Father of Bateriology is _____.

1736) Many pathogens secrete poisonous substances called _____.

1737) Varicella zoster virus causes _____ disease.

1738) Vibrio cholerae produces a toxin called _____.

1739) Malaria spreads through the bite of an insect vector _____ Mosquito

1740) Filariasis disease is caused by the nematode _____

1741) Avian influenza is caused by _____.

1742) Neisseria gonorrhoea is an organism which causes _____ disease.

1743) Vaginal discharge is a symptom of _____ disease.

1744) Pasteurisation is discovered by _____.

1745) Globally, morality rate due to _____ is reduced by 7%.

1746) _____ refers to the administration of vaccine.

ABBREVIATION

10 x 1 = 10

1747) ISI

1748) FPO

1749) AGMARK

1750) FCI

1751) FSSAI

1752) ORS

1753) HIV

1754) DPT

1755) WHO

1756) BCG

13 x 1 = 13

1757) Correct the wrong statements.
a. Ionic compounds dissolve in non polar solvents
b. Covalent compounds conduct electricity in molten or solution state.

1758) Correct the mistakes:
a) Washing soda is used for making cakes and bread soft, spongy.
b) Calcium sulphate hemihydrate is used in textile industry.

1759) In the formation of compounds, the inner shell electrons of an atom involve in bonding.

1760) The atom that gains electrons will form cation

1761) Ionic compounds have low melting and boiling point

1762) Non-polar solvents contain bonds between atoms with different electro negativities.

1763) Covalent compounds are soluble in polar solvents

1764) Greater the charge of the cation greater will be the ionic character

1765) An acid is the compound which are capable of forming hydroxyl ions (OH^-) in aqueous solution.

1766) Nitric acid is a constituent of baking powder.

1767) The pH value of the base in lesser than 7.

1768) $Ca(OH)_2$ is a triacidic base.

1769) Magnesium hydroxide is used in white washing of buildings.

ASSERTION REASON

85 x 2 = 170

1770) Assertion(A): The scientifically correct expression is " The mass of the bag is 10 kg"
Reason (R): In everyday life, we use the term weight instead of mass
(a) Both A and R are true but R is not the correct reason
(b) Both A and R are true and R is the correct reason
(c) A is true but R is false
(d) A is false but R is true

1771) Assertion (A): 0 °C = 273.16 K. For our convenience we take °C = 273 K after rounding off the decimal
Reason (R): To convert a temperature on the Celsius scale you have to add 273 to the given temperature
(a) Both A and R are true but R is not the correct reason
(b) Both A and R are true and R is the correct reason
(c) A is true but R is false
(d) A is false but R is true

1772) Assertion (A): The distance between two celestial bodies is measured in the unit of light year
Reason (R): The distance travelled by the light in one year is one light year
(a) Both A and R are true but R is not the correct reason
(b) Both A and R are true and R is the correct reason

(c) A is true but R is false
(d) A is false but R is true

1773) Mark the correct choice as:
(a) Both assertion and reason are true and reason in the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Assertion is false but reason is true.
Assertion: The accelerated motion of an object may be due to change in magnitude of velocity or direction or both of them.
Reason: Acceleration can be produced only by change in magnitude of the velocity it does not depend the direction.

1774) Mark the correct choice as:
(a) Both assertion and reason are true and reason in the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Assertion is false but reason is true.
Assertion: The Speedometer of a car or a motor-cycle measures the average speed of it.
Reason: Average velocity is equal to total displacement divided by total time taken.

1775) Mark the correct choice as:
(a) Both assertion and reason are true and reason in the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Assertion is false but reason is true.
Assertion: Displacement of a body may be zero when distance travelled by it is not zero.
Reason: The displacement is the shortest distance between initial and final position.

1776) **Assertion:** For observing the traffic at a hairpin bend in mountain paths a plane mirror is preferred over convex mirror and concave mirror.
Reason: A convex mirror has a much larger field of view than a plane mirror or a concave mirror.

1777) **Assertion**: Incident ray is directed towards the centre of curvature of spherical mirror. After reflection it retraces its path.
Reason: Angle of incidence i = Angle of reflection r = 0°.

1778) Assertion: Haemoglobin contains iron.
Reason: Iron deficiency leads to anaemia
(a) If both Assertion and Reason are true and the Reason is the correct explanation of Assertion
(b) If both Assertion and Reason are true but Reason is not the correct explanation of Assertion
(c) If Assertion is true but Reason is false
(d) If both Assertion and Reason is fals

1779) Assertion: AGMARK is a quality control agency
Reason: ISI is a symbol of quality
(a) If both Assertion and Reason are true and the Reason is the correct explanation of Assertion
(b) If both Assertion and Reason are true but Reason is not the correct explanation of Assertion

(c) If Assertion is true but Reason is false
(d) If both Assertion and Reason is false

1780) Mark the correct choice as:
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion.
(c) If assertion is true but reason is false.
(d) If assertion is false but reason is true.
Assertion: Food can be cooked faster in vessels with copper bottom.
Reason: Copper is the best conductor of heat.

1781) Mark the correct choice as:
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion.
(c) If assertion is true but reason is false.
(d) If assertion is false but reason is true.
Assertion: Maximum sunlight reaches earth's surface during the afternoon time.
Reason: Heat from the sun reaches earth's surface by radiation.

1782) Mark the correct choice as:
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion.
(c) If assertion is true but reason is false.
(d) If assertion is false but reason is true.
Assertion: When water is heated up to 100°C, there is no raise in temperature until all water gets converted into water vapour.
Reason: Boiling point of water is 10°C.

1783) **Statement:** Elements in a group generally possess similar properties but elements along a period have different properties.
Reason: The difference in electronic configuration makes the element differ in their chemical properties along a period.
a) Statement is true and reason explains the statement.
b) Statement is false but the reason is correct.

1784) **Assertion:** Urea is excreted out through the kidneys
Reason: Urea is a toxic substance.

1785) **Assertion:** In both the sexes gonads perform dual function
Reason: Gonads are also called primary sex organs

1786) **Assertion**: To float, body must displace liquid whose weight is equal to the actual weight.
Reason: The body will experience no net downward force in that case.
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion.
(c) If assertion is true but reason is false.
(d) If assertion is false but reason is true.

1787) **Assertion**: Pascal's law is the working principle of a hydraulic lift.
Reason: Pressure is thrust per unit area.
(a) If both assertion and reason are true and reason is the correct explanation of assertion.

(b) If both assertion and reason are true but reason is not the correct explanation of assertion.
(c) If assertion is true but reason is false.
(d) If assertion is false but reason is true.

1788) a) If both A and R are true and R is correct explanation of A
b) If both A and R are true but R is not the correct explanation of A
c) If A is true but R is false
d) If both A and R are false.
Assertion: Chicken pox is a disease indicated by scars and marks in the body.
Reason: Chicken pox causes rashes on face and further spreads throughout the body.

1789) a) If both A and R are true and R is correct explanation of A
b) If both A and R are true but R is not the correct explanation of A
c) If A is true but R is false
d) If both A and R are false.
Assertion: Dengue can be treated by intake of antibiotics.
Reason: Antibiotics blocks the multiplication of viruses.

1790) Assertion (A): Digital Vernier Caliper has a digital display on the slides, which calculates and displays the measured value.
Reason (R): The user need not manually calculate the least count, zero error.
(a) Both A and R are true but R is not the correct reason
(b) Both A and R are true and R is the correct reason
(c) A is true but R is false
(d) A is false but R is true

1791) Assertion (A): Temperature is a measure of hotness.
Reason (R): SI unit of tempeature is Celsius.
(a) Both A and R are true but R is not the correct reason
(b) Both A and R are true and R is the correct reason
(c) A is true but R is false.
(d) A is false but R is true

1792) Assertion (A): The SI systems of units is the improved system of units for measurement.
Reason (R): The SI unit of mass is kilogram
(a) Both A and R are true but R is not the correct reason
(b) Both A and R are true and R is the correct reason
(c) A is true but R is false
(d) A is false but R is true

1793) Assertion (A): The skill of estimation is important for all of us in our daily life.
Reason (R): The skill of estimation reduces our consumption of time
(a) Both A and R are true but R is not the correct reason
(b) Both A and R are true and R is the correct reason
(c) A is true but R is false
(d) A is false but R is true

1794) Assertion (A): Our forefathers used to like muzham, furlong, mile to measure length.
Reason (R): Many of the ancient system of measurement were based on the dimension of human body.
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion.
(c) If assertion is true but reason is false.
(d) If assertion is false but reason is true.

1795) Assertion (A): Unit of acceleration is ms^{-2}.
Reason (R): Acceleration can be calculated by the formula = length x breadth.
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion.
(c) If assertion is true but reason is false.
(d) If assertion is false but reason is true.

1796) Assertion (A): Mass of the sub atomic particles can be determined using atornic mass unit.
Reason (R): One atomic mass unit is equal to $1/12^{th}$ of the mass of carbon 12 atom.
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion.
(c) If assertion is true but reason is false.
(d) If assertion is false but reason is true.

1797) Assertion (A): Vernier caliper cannot measure the inner and outer diameters of objects.
Reason (R): Thickness of hollow objects like pen cap, Tea cup cannot be measured with the meter scale.
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion.
(c) If assertion is true but reason is false.
(d) If assertion is false but reason is true.

1798) Assertion (A): Physical balance is used in laboratory.
Reason (R): Physical balance is a lot more sensitive and can measure mass of an object correct to a milligram.
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion.
(c) If assertion is true but reason is false.
(d) If assertion is false but reason is true.

1799) Assertion (A): Mass has magnitude alone so it is a scalar quantity.
Reason (R): It is measured using spring balance.
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion.
(c) If assertion is true but reason is false.
(d) If assertion is false but reason is true.

1800) Mark the correct choice as:
(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Assertion is false but reason is true.
Assertion: One can determine the distance moved by the car from its velocity-time graph.

Reason: The area under the velocity-time graph gives the distance moved by the car in a given interval of time.

1801) Mark the correct choice as:
(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Assertion is false but reason is true.
Assertion: When an object moves with constant speed along a circular path, the motion is called uniform motion.
Reason: When an object is moving with a constant speed along a circular path, the velocity changes due to the change in direction.

1802) Mark the correct choice as:
(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Assertion is false but reason is true.
Assertion: Force acting on a body away from the centre of circular path is called centrifugal force.
Reason: Centrifugal force is in the same direction of centripetal force.

1803) Mark the correct choice as:
(a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Assertion is false but reason is true.
Assertion: A spin dryer removes excess water from clothing by rotating a perforated drum at high speed.
Reason: Cream is lighter than other components in milk. Therefore skimmed milk which is denser than cream is collected at outer wall of the ball.

1804) Assertion (A): Where the object moves along a straight line is called Linear motion.
Reason (R): A bus moves along a straight line is Linear motion.
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion
(c) If assertion is true but reason is false
(d) If assertion is false but reason is true.
(e) If both assertion and reason is false.

1805) Assertion (A): Distance is a scalar quantity.
Reason (R): Scalar quantity having both magnitude and direction.
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion
(c) If assertion is true but reason is false
(d) If assertion is false but reason is true.
(e) If both assertion and reason is false.

1806) Assertion (A): In sometimes the acceleration is zero.
Reason (R): This means the initial velocity is equal to final velocity.
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion
(c) If assertion is true but reason is false
(d) If assertion is false but reason is true.
(e) If both assertion and reason is false.

1807) Assertion (A): In uniform motion it covers unequal distances in unequal intervals of time.
Reason (R): If the speed increases the distance will be decreses.
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion
(c) If assertion is true but reason is false
(d) If assertion is false but reason is true.
(e) If both assertion and reason is false.

1808) Assertion (A): A spin dryer removes excess water from the clothing a perforated drum at high speed.
Reason (R): The water is thrown out the holes.
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion
(c) If assertion is true but reason is false
(d) If assertion is false but reason is true.
(e) If both assertion and reason is false.

1809) **Assertion:** Light bends due to varying densities and temperature of atmosphere. The light which reaches us appears to come from different points.
Reason: This gives the impression that stars are twinkling. If you go above the atmosphere the stars do not twinkle.

1810) **Assertion**: A ray of light from an object successively bends away from the normal and undergo total internal reflection.
Reason: If the angle of reflection for the air near the ground reduces the critical angle.

1811) **Assertion**: Concave mirrors are installed on public roads as traffic safety device.
Reason: Traffic safety devices are used in acute bends in mountain passes where direct view of oncoming vehicles is restricted.

1812) **Assertion:** If the light rays coming from an object actually meet after reflection, the image formed will be a real image.
Reason: It is always inverted and can be produced on a screen.

1813) **Assertion:** If the light rays coming from an object do not actually meet, but appear to meet when produced backward that image will be virtual image.
Reason: The virtual image is always erect and cannot be caught on a screen.

1814) **Assertion:** When the object is far away (Infinity) the rays of light reaching the concave mirror are parallel to each other.
Reason: Position of image is principal focus(f).

1815) **Assertion:** Convex mirror is used to dentist.
Reason: A light is made fall on the concave mirror it focuses the small area of the body.

1816) **Assertion:** The bending of light ray when they pass obliquely from one medium to another medium.
Reason: Due to total internal reflection.

1817) Assertion: The hydra is a diploblastic organism.
Reason: They have two germ layers.
(a) Assertion is correct and the reason is wrong.
(b) Reason is correct and the assertion is wrong.
(c) Both assertion and reason is correct.
(d) Both assertion and reason is wrong.

1818) Assertion: The prochordate are grouped under Acrania.
Reason: They have well defined cranium.
(a) Assertion is correct and the reason is wrong
(b) Reason is correct and the assertion is wrong
(c) Both assertion and reason is correct
(d) Both assertion and reason is wrong

1819) **Assertion:** A true body cavity is located within the mesoderm.
Reason: Earthworms are called Pseudocoelomates.
(a) Assertion is wrong and reason is correct.
(b) Reason is correct and assertion is wrong.
(c) Both Assertion and Reason are correct.
(d) Assertion is correct and Reason is wrong.

1820) **Assertion:** Pinna is absent in mammals.
Reason: Heart is three chambered in mammals.
(a) Assertion is correct and Reason is correct.
(b) Reason is wrong and Assertion is correct.
(c) Assertion and Reason are wrong.
(d) Both are correct.

1821) **Assertion:** In Urochordates the body is enveloped by a tunic.
Reason: Amphioxus is an example.
(a) Assertion is wrong Reason is right.
(b) Reason is wrong and Assertion is partially correct.
(c) Both Assertion and Reason are correct.
(d) Assertion is correct and Reason is wrong.

1822) **Assertion:** Fishes are Poikilothermic, terrestrial vertebrates.
Reason: Locomotion is with the help of Pseudopodia.
(a) Assertion is correct and Reason is wrong.
(b) Assertion is wrong and Reason is correct.
(c) Both Assertion and Reason are correct.
(d) Both Assertion and Reason and wrong.

1823) **Assertion:** In birds the bones are Pneumatic and light weight.
Reason: Their eggs are yolk laden.
(a) Assertion is wrong and Reason is correct.
(b) Both Assertion and Reason are correct.
(c) Reason is correct Assertion is wrong.
(d) Assertion is correct Reason is wrong:

1824) Assertion: Starfish is a radial symmetry living organism.
Reason: If we cut through the central axis in any direction it can be divided into similar halves.

1825) Assertion: Earth worms are ring like structure jointed together.
Reason: Earth worms are locomoted without setae.

1826) Assertion: Molluscans are excreted through malpighian tubules.
Reason: Molluscans have green glands.

1827) Assertion: In fishes respiration is performed by gills.
Reason: In fishes have gill slits are 5 - 7 pairs.

1828) **Assertion**: Fats also known as monoglycerides are esters of free fatty acid chains and glyceraldehyde.
Reason: Fat is an important food stuff for many forms of life.
(a) If both A and R are true and R is the correct explanation of A.
(b) If both A and R are true but R is not the correct explanation of A.
(c) If A is false and R is correct.
(d) Both A and R is false

1829) **Assertion**: Vitamin E is otherwise known as Tocophenol.
Reason: Sterility is the disorder caused by the deficiency of vitamin E.
(a) Both A and R is correct.
(b) A is correct R is wrong.
(c) A is wrong R is correct.
(d) Both A and R are wrong.

1830) **Assertion**: Potassium maintains fluid balance and is involved in neuro transmission.
Reason: It is rich in Table salt.
(a) A is wrong and R is correct.
(b) Both A and R are wrong.
(c) A is correct and R is wrong.
(d) Both A and R are correct

1831) **Assertion**: Synthetic food preservatives like sodium benzoate, citric acid, vinegar, sodium meta bisulphate are added to food products.
Reason: These preservatives stimulates the microbial growth.
(a) A is not correct but R is correct.
(b) Both A and R are correct.
(c) A is correct R is wrong.
(d) Both assertion and reason are wrong.

1832) Assertion: Some fatty acids are called as essential fatty acids.
Reason: Essential fatty acids cannot be synthesized in the body.

1833) Assertion: Deficiency of calciferol in children to produce rickets.
Reason: Symptom of rickets is delayed blood clotting.

1834) Assertion: Pasteurization process involves boiling of milk to a temperature of 100°C for about 30 minutes.
Reason: To destroy the microbes present in the milk.

1835) Assertion: Addition of salt is one of the oldest methods of preserving food.
Reason: Addition of salt removes the moisture content in the food by the process of osmosis.

1836) Assertion: Synthetic food preservatives like sodium benzoate to increase the microbial growth.
Reason: These preservative increase the microbial growth and keep the food safe for long time.

1837) Mark the correct choice as:
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion.
(c) If assertion is true but reason is false.
(d) If assertion is false but reason is true.
Assertion: Aluminium conducts heat faster than copper.
Reason: Specific heat capacity of aluminium is higher than that of copper.

1838) **Assertion (A):** Temperature is the measure of the heat energy.
Reason (R): Energy is the capacity to do work.
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion.
(c) If assertion is true but reason is false.
(d) If assertion is false but reason is true.

1839) Assertion: In summer the railway tracks are expanded.
Reason: Solids expands on heating.

1840) Assertion: Take some ice cubes and put them in a glass of water the ice cubes disappear.
Reason: Heat energy is transferred from the atmosphere to ice cubes.

1841) Assertion: Woollen clothes are not worn in winter season.
Reason: Woollen clothes are bad conductor of heat.

1842) Assertion: The amount of heat energy absorbed or lost in a body.
Reason: It is determined by the factor change in temperature of the body.

1843) Assertion: The temperature at which a vapour changes its state to liquid is called condensation point.
Reason: Boiling point as well as condensation point of water is 100°C.

1844) **Assertion**: The force acting on the surface of a liquid at rest, under gravity, in a container is always horizontal.
Reason: The forces acting on a fluid at rest have to be normal to the surface.
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion.
(c) If assertion is true but reason is false.
(d) If assertion is false but reason is true.

1845) **Assertion**: A sleeping mattress is so designed that when you lie on it, a large area of your body comes in its contact.
Reason: This reduces the pressure on the body and sleeping becomes comfortable.
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion.
(c) If assertion is true but reason is false.
(d) If assertion is false but reason is true.

1846) **Assertion**: Wide wooden sleepers are kept below railway lines to reduce pressure on the railway tracks and prevent them from sinking in the ground.
Reason: Pressure is directly proportional to the area in which it is acting.
(a) If both assertion and reason are true and reason is the correct explanation of assertion.
(b) If both assertion and reason are true but reason is not the correct explanation of assertion.
(c) If assertion is true but reason is false.
(d) If assertion is false but reason is true.

1847) Assertion: A block of wood is floating in a pond of water and it's apparent weight is zero.
Reason: The weight of water displaced (buoyant force) acting vertically upwards is just equal to the weight of the body which acts vertically downwards.
a) Both assertion and reason are correct and reason is the correct explanation of-the

assertion.
b) Both assertion and reason are correct but reason is not the correct explanation for assertion.
c) Assertion is correct but reason is incorrect.
d) Both assertion and Reason are incorrect.

1848) Assertion: It is better to use a sharp tipped nail than a blunt nail.
Reason: A sharp tipped nail needs a larger force to drive it into the wooden surface.
a) Both reason and assertion are true and reason is the correct explanation of assertion.
b) Both assertion and reason are correct but reason is not the correct explanation for assertion.
c) Assertion is correct but reason is incorrect.
d) Both assertion and Reason are incorrect.

1849) Assertion: Hydroponics can be defined as a soilless growing system in which plants grow in water.
Reason: If a plant is provided with water, minerals and required nutrients, it will grow well and yield more even in the absence of soil.
a. If both Assertion and Reason are true and Reason is the correct explanation of Assertion.
b. If both Assertion and Reason are true and Reason is not the correct explanation of Asssertion.
c. If Assertion is true but Reason is false.
d. If both Assertion and Reason are false.

1850) Assertion: Fish and other varieties of aquatic animals are used as food.
Reason: Fish and other varieties of sea food constitute good source of nutrition.
a. If both Assertion and Reason are true and Reason is the correct explanation of Assertion.
b. If both Assertion and Reason are true and Reason is not the correct explanation of Asssertion.
c. If Assertion is true but Reason is false.
d. If both Assertion and Reason are false.

1851) Assertion: The production of food from animal sources has increased greatly in the last few decades.
Reason: Operation flood and blue revolution production has increased in the recent years.
a. If both Assertion and Reason are true and Reason is the correct explanation of Assertion.
b. If both Assertion and Reason are true and Reason is not the correct explanation of Asssertion.
c. If Assertion is true but Reason is false.
d. If both Assertion and Reason are false.

1852) Assertion: Earth worm is called farmers friend
Reason: It is eco-friendly, non toxic consumes low energy input for composting.
a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.
b) If both Assertion and Reason are true and Reason is not the correct explanation of Asssertion.
c) If Assertion is true but Reason is false.
d) If both Assertion and Reason are false.

1853) Assertion: Organic farming is very beneficial for farmers to increase crop production.
Reason: Bacteria, fungi, mycorrhiza cyanobacteria are better biofertilizer which fixes nitrogen and increase soil fertility.

a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.
b) If both Assertion and Reason are true and Reason is not the correct explanation of Asssertion.
c) If Assertion is true but Reason is false.
d) If both Assertion and Reason are false.

1854) a) If both A and R are true and R is correct explanation of A
b) If both A and R are true but R is not the correct explanation of A
c) If A is true but R is false
d) If both A and R are false.
Assertion : A patient with cholera is given oral rehydration therapy for rapid replacement of fluid and electrolytes.
Reason : Cholera can be diagnosed by the microscopic examination of the stool to identify the bacteria.

65 x 2 = 130

1855) Inian and Ezhilan argue about the light year. Inian tells that it is 9.46×10^{15} m and Ezhilan argues that it is 9.46×10^{12} km. Who is right? Justify your answer.

1856) The main scale reading while measuring the thickness of a rubber ball using Vernier caliper is 7 cm and the Vernier scale coincidence is 6. Find the radius of the ball.

1857) Find the thickness of a five rupee coin with the screw gauge, if the pitch scale reading is 1 mm and its head scale coincidence is 68.

1858) Find the mass of an object weighing 98 N.

1859) Calculate the correct reading, if the main scale reading is 8 cm, vernier coincidence is 4 and positive zero error is 0.05 cm.

1860) The main scale reading is 8 cm and vernier coincidence is 4 and negative zero error is 0.02 cm. Then calculate the correct reading:

1861) If a man has a mass 50 kg on the earth, then what is his weight?

1862) A ball is gently dropped from a height of 20 m. If its velocity increases uniformly at the rate of 10 ms^{-2} with what velocity will it strike the ground? After what time will it strike the ground?

1863) An Athlete completes one round of a circular track of diameter 200 m in 40 s. What will be the distance covered and the displacement at the end of 2 m and 20 s?

1864) A racing car has a uniform acceleration of 4 ms^{-2}. What distance it covers in 10 s after start?

1865) An object travels 16 m in 4 s and then another 16 m in 2 s. What is the average speed of the object?

1866) A sound is heard 5 s later than the lightning is seen in the sky on a rainy day. Find the distance of location of lightning? Given the speed of sound = 346 ms^{-1}

1867) The brakes applied to a car produce an acceleration of 6 ms^{-2} in the opposite direction to the motion. If the car takes 2 s to stop after the application of brakes, calculate the distance traveled during this time.

1868) A 900 kg car moving at 10 ms^{-1} takes a turn around a circle with a radius of 25 m. Determine the acceleration and the net force acting upon the car.

1869) A concave mirror produces three times magnified real image of an object placed at 7 cm in front of it. Where is the image located?

1870) Light enters from air into a glass plate having refractive index 1.5. What is the speed of light in glass? (Speed of light in vacuum is 3×10^8 ms^{-1}).

1871) The speed of light in water is 2.25×10^8 ms^{-1}. If the speed of light in vacuum is 3×10^8 ms^{-1}, calculate the refractive index of water.

1872) Find the size, nature and position of the image formed when an object of size 1 cm is placed at a distance of 15 cm from a concave mirror of focal length 10 cm.

1873) An object 2 cm high is placed at a distance of 16 cm from a concave mirror which produces a real image 3 cm high. Find the position of the image.

1874) A car is fitted with a convex mirror of focal length 20 cm. Another car is 6 m away from the first car. Find the position of the second car as seen in the mirror of the first. What is the size of the image if the second car is 2 m broad and 1.6 m high?

1875) The speed of light in air is 3×10^8 ms^{-1} and in glass it is 2×10^8 ms^{-1}. What is the refractive index of glass?

1876) Light travels from a rarer medium to a denser medium. The angles of incidence and refraction are respectively 45° and 30°. Calculate the refractive index of the second medium with respect to the first medium.

1877) Calculate the atomic number of an element whose mass number is 39 and number of neutrons is 20. Also find the name of the element.

1878) What is the Electronic configuration of Aluminium?

1879) Find the valency of Magnesium and Sulphur.

1880) What is the heat in joules required to raise the temperature of 25 grams of water from 0°C to 100°C? What is the heat in Calories? (Specific heat of water = 4.18 J/g°C).

1881) What could be the final temperature of a mixture of 100 g of water at 90°C and 600 g of water at 20°C?

1882) How much heat energy is required to change 2 kg of ice at 0°C into water at 20°C? (Specific latent heat of fusion of water =3,34,000 J/ kg, Specific heat capacity of water $= 4200 Jkg^{-1}\ K^{-1}$).

1883) Convert the following
i. 25 °C to Kelvin
ii. 200 K to °C

1884) Convert the following
i. 35° C to Fahrenheit (°F)
ii. 14 °F to °C

1885) Calculate the heat energy required to raise the temperature of 2 kg of water from 10°C to 50°C. Specific heat capacity of water is 4200 $JKg^{-1}\ K^{-1}$.

1886) An iron ball requires 5000 J heat energy to raise its temperature by 20 K. Calculate the heat capacity of the iron ball.

1887) How much heat energy is required to melt 5 kg of ice? (Specific latent heat of ice = 336 Jg^{-1})

1888) How much boiling water at 100°C is needed to melt 2 kg of ice so that the mixture which is all water is at 0°C?

1889) Calculate the amount of charge that would flow in 2 hours through an element of an electric bulb drawing a current of 2.5A.

1890) The values of current I flowing through a resistor for various potential differences V across the resistor are given below. What is the value of resistor?

I (ampere)	0.5	1.0	2.0	3.0	4.0
V (volt)	1.6	3.4	6.7	10.2	13.2

[Hint: plot V-I a graph and take slope]

1891) Rubbing a comb on hair makes the comb get - 0.4C. (a) Find which material has lost electron and which one gained it. (b) Find how many electrons are transferred in this process.

1892) How many electrons will be there in one coulomb of charge?

1893) If, 25 C of charge is determined to pass through a wire of any cross section in 50 s, what is the measure of current?

1894) The current flowing through a lamp is 0.2A. If the lamp is switched on for one hour, what is the total electric charge that passes through the lamp?

1895) The e.m.f of a cell is 1.5 V. What is the energy provided by the cell to drive 0.5 C of charge around the circuit?

1896) A charge of 2×10^4 C flows through an electric heater. The amount of electrical energy converted into thermal energy is 5×10^6 J. Compute the potential difference across the ends of the heater.

1897) A conductor of length 50 cm carrying a current of 5 A is placed perpendicular to a magnetic field of induction 2×10^{-3} T. Find the force on the conductor.

1898) A current carrying conductor of certain length, kept perpendicular to the magnetic field experiences a force F. What will be the force if the current is increased four times, length is halved and magnetic field is tripled?

1899) The primary coil of a transformer has 800 turns and the secondary coil has 8 turns. It is connected to a 220 V ac supply. What will be the output voltage?

1900) Find the oxidation number of the elements in the following compounds.
a. C in CO_2
b. Mn in $MnSO_4$
c. N in HNO_3

1901) A block of wood of weight 200 g floats on the surface of water. If the volume of block is 300 cm^3 calculate the upthrust due to water.

1902) Density of mercury is 13600 kg m^{-3}. Calculate the relative density.

1903) The density of water is 1g cm^{-3}. What is its density in S.I. units?

1904) Calculate the apparent weight of wood floating on water if it weighs 100g in air.

1905) A man whose mass is 90 kg stands on his feet on a floor. The total area of contact of his two feet with the floor is 0.036 m^2 (Take, g = 10 ms^{-2}). How much is the pressure exerted by him on the floor?

1906) Calculate the pressure exerted by a column of water of height 0.85 m (density of water, ρ_w = 1000 kg m^{-3}) and kerosene of same height (density of kerosene, ρ_k = 800 kg m^{-3})

1907) A mercury barometer in a physics laboratory shows a 732 mm vertical column of mercury. Calculate the atmospheric pressure in pascal. [Given density of mercury, $\rho = 1.36 \times 10^4$ kg m^{-3}, g = 9.8 m s^{-2}]

1908) A hydraulic system is used to lift a 2000 kg vehicle in an auto garage. If the vehicle sits on a piston of area 0.5 m^2, and a force is applied to a piston of area 0.03 m^2, what is the minimum force that must be applied to lift the vehicle?
Given: Area covered by the vehicle on the piston A_1 = 0.5 m^2
Weight of the vehicle, F_1 = 2000 kg × 9.8 m s^{-2} Area on which force F_2 is applied, A_2 = 0.03 m^2

1909) You have a block of a mystery material, 12 cm long, 11 cm wide and 3.5 cm thick. Its mass is 1155 grams. (a) What is its density? (b) Will it float in a tank of water, or sink?

1910) The frequency of a source of sound is 600 Hz. How many times does it vibrate in a minute?

1911) A stone is dropped from the top of a tower 750 m high into a pond of water at the base of the tower. When is the splash heard at the top?
(Given g = 10 m s^{-2} and speed of sound = 340 m s^{-1})

1912) 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?

1913) What is the wavelength of a sound wave in air at 20° C with a frequency of 22 MHz?

1914) A man fires a gun and hears its echo after 5 s. The man then moves 310 m towards the hill and fires his gun again. If he hears the echo after 3 s, calculate the speed of sound.

1915) A ship sends out ultrasound that returns from the seabed and is detected after 3.42 s. If the speed of ultrasound through sea water is 1531m s^{-1}, what is the distance of the seabed from the ship?

1916) Calculate the speed with which a satellite moves if it is at a height of 36,000 km from the Earth's surface and has an orbital period of 24 hr (Take R = 6370 km)
[Hint: Convert hr into seconds before doing calculation]

1917) At an orbital height of 400 km, find the orbital period of the satellite.

1918) Can you calculate the orbital velocity of a satellite orbiting at an altitude of 500 km?
Data: G = 6.673 × 10^{-11} SI units;
M = 5.972 × 10^{24} kg; R = 6371000 m; h = 500000 m.

1919) At an orbital height of 500 km, find the orbital period of the satellite.

ARRANGE JUMBLED LETTERS

11 x 2 = 22

1920) 1. We are a family of five and lies in 17th group of periodic table (7 letters)
2. I am being stored in kerosene and be cut by knife (6 letters)
3. I am the most corrosion resistant silvery-white metal and lies in group 9 (7 letters)
4. I am being used as refrigerant in liquid form with atomic number 7 (8 letters)
5. I am in your blood as hemoglobin and without me no buildings are possible (4 letters)
6. I am the highly radioactive and newly designated element in the modern periodic table with atomic number 113 (8 letters)
7. I am used as a disinfectant for drinking water. (8 letters)
8. I am mixed with salt and used for thyroid health (6 letters)
9. I am the key part of biological molecules and have the valency of four. (5 letters)
10. I am the first in the noble gas group and used to fill balloons (6 letters)

1921) It is the hardest allotrope of carbon Monday

1922) Organic compounds having double bond between carbon atoms are knelaes

1923) Reaction of carbon with oxygen gives osdiexs

1924) In this molecule, carbon is attached with four hydrogen atoms. emathen

1925) Carbon combines with other elements through _____ bond. lnaocvet

1926) It is used as gun powder. ocahrcla

1927) Plastics made of _____ are represented by resin code # 6. sytlopynere

1928) One-time use plastics are also known as _____ plastics. awyrhotwa

1929) One-time use plastics cause _____ damage. trnvomenialne

1930) Expanded polystyrene is commercially known as mthreolco

CONCEPTUAL QUESTIONS

12 x 2 = 24

1931) A bird sitting on a high power electric line is still safe. How?

1932) Does a solar cell always maintain the potential across its terminals constant? Discuss.

1933) Can electroplating be possible with alternating current?

1934) Why do some stars appear blue and some red?

1935) How is a satellite maintained in nearly circular orbit?

1936) Why are some satellites called geostationary?

1937) A man weighing 60 kg in the Earth will weigh 1680 kg in the Sun. Why?

1938) Why are we able to see the Moon even though it is not a luminous body?

1939) When do Astronomers realize that Sun is one of the billions of stars?

1940) Is it true that the Sun emits yellow colour radiation? Why sky appears blue in colour?

1941) What type of galaxy is Miiky Way? why is it termed so?

1942) All the stars appear to us as moving from east to west. But one star appears to be stationary? What is the name of the star? How does it appear like that?

ODD OUT

10 x 2 = 20

1943) AIDS, Retrovirus, Lymphocytes, BCG

1944) Bacterial disease, Rabies, Cholera, Common cold and Influenza

1945) HCl, HNO_3, HCOOH, H_3PO_4.

1946) Acetic acid, formic acid, tartaric acid, sulphuric acid.

1947) CaO, Na_2O, ZnO, NaOH

1948) Bitter taste, soupy to touch, turns red litmus to blue produce pink colour with methyl orange.

1949) Litmus paper, phenolphthalein, methyl orange, Aquaregia.

1950) Rain water harvesting, farm pond, water recycling, condensation.

1951) Nocturnality, Aestivation, Echolocation, Flight adaptation.

1952) Sporozoites, Merozoites, Trophozoites, Gametocytes (Infective stages of plasmodium in human)

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