

**STD: X--- INSIDE ONE MARK**

**I. CHOOSE THE BEST ANSWER**

1. **The unit of moment a couple is -----.**  
a) Nm      b) N/m      c) Newton      d) None
2. **The unit is impulsive force is -----.** a)Ns      b) kgm/s      c)both a&b      d)None
3. **The formula of calculate Mass of Earth -----.**  
a) $M=gR^2/G$     b)  $M=G R^2/g$     c)both a&b      d)None
4. **The value of acceleration due to gravity on the surface of the moon is -----.**  
a) $1.625 \text{ ms}^{-2}$     b)  $1.925 \text{ ms}^{-2}$     c)  $1.725 \text{ ms}^{-2}$     d)all the above
5. **calculate the velocity of a moving body of mass 5Kg whose linear momentum is  $2.5\text{Kgms}^{-1}$ .**  
a)  $2 \text{ ms}^{-1}$       b)  $0.5 \text{ ms}^{-1}$       c)  $5 \text{ ms}^{-1}$       d) $2.5 \text{ ms}^{-1}$
6. **----- lenses are used in wide angle spy hole in doors.**  
a) Concave    b) Convex      c) Both a&b      d) Biconcave
7. **Compound microscope has ----- times more magnification power than simple microscope.**  
a) 50—100    b) 50—200      c) 50—250      d) 100—150
8. **Which microscope used in jewelers?**  
a) compound    b) simple      c) cylindrical      d) both a& b
9. **The mass of proton is approximately ----- amu .**  
a) 2 amu      b) 1amu      c)3amu      d) 4 amu
10. **The first scientific theory of the atom was proposed by -----.**  
a)Rutherford    b) J.J. Thomson    c) Neils Bohr      d)None
11. **The Diameter of eye ball is approximately -----?**  
a) 2.5cm      b) 2.3 cm      c) 2.1cm      d) 2.0cm
12. **The value of cubical expansion of mercury is -----**  
a)  $18.2 \times 10^{-5} \text{ k}^{-1}$     b)  $20.7 \times 10^{-5} \text{ k}^{-1}$     c)  $6 \times 10^{-5} \text{ k}^{-1}$     d) None
13. **The unit of ionization energy is -----**  
a) kJ/mol    b)  $\text{kJmol}^{-1}$     c) both a&b      d) kg
14. **The melting point of aluminum -----?**  
a)  $600^{\circ}\text{C}$     b)  $620^{\circ}\text{C}$       c)  $640^{\circ}\text{C}$       d)  $660^{\circ}\text{C}$
15. **Which of the following low density metal?**  
a) Copper    b) Iron      c) aluminum      d) all the above
16. **The blister copper contains ----- % pure copper and -----% of impurities.**  
a) 95.5& 4.5    b) 98& 2      c) 99 & 1      d) 99.5 & 0.5
17. **The diameter of chloroplast is -----.**  
a) 2-10micrometer    b) 2-8 micrometer      c)5-10 micrometer      d)None
18. **The mitochondria shape is -----.**  
a) 0.2-0.5micrometer    b) 0.2-2 micrometer    c) 0.5-2.0micrometer    d)all the above
19. **Mitochondrial memberane size of ----- .**  
a)  $50-70\text{\AA}$     b)  $60-70\text{\AA}$       c)  $50-60\text{\AA}$       d)  $40-50\text{\AA}$
20. **----- is the largest portion of alimentary canal.**  
a) buccal cavity    b) crop      c) anus      d) rectum
21. **Leeches prevent blood clotting by secreting a protein called-----.**  
a) crop      b) hirudin    c) papillae      d) none
22. **The floor of the buccal cavity is occupied by a -----tongue**  
a) muscular      b) caecum    c) tear      d) None
23. **----- teeth are absent in rabbit.**

a) premolar b) incisors c) molar d) canines

**24. Who is the father of modern physiology?**

a) William Harvi b) Bundle of His c) Negamaiah Grew d) None

**25. The body nervous system can transmit signals at speeds of -----?**

a) 350km/h b) 220 c) 220mph d) both a& c

**26. The SI unit of Heat Energy?**

a) Watt b) Joule c) Degree d) Fahrenheit

**27. The SI unit of Temperature?**

a) Watt b) Kelvin c) Degree d) Fahrenheit

**28. The first Telescope was invented by ----- in 1608.**

a) Kepler b) Edison c) Johann Lippershely d) Newton

**29. The value of Boltzmann constant?**

a)  $1.38 \times 10^{-23}$  J/K b)  $1.38 \times 10^{33}$  J/K c)  $1.38 \times 10^{23}$  J/K d)  $1.38 \times 10^{-33}$  J/K

**30 The resistivity of Copper?**

a)  $1.62 \times 10^{-8}$   $\Omega$ m b)  $6.84 \times 10^{-8}$   $\Omega$ m c)  $12.6 \times 10^{-8}$   $\Omega$ m d)  $12.9 \times 10^{-8}$   $\Omega$ m

**31. The molecular formula of Rust?**

a)  $\text{Fe}_2\text{O}_3 \cdot x\text{H}_2\text{O}$  b)  $\text{Fe}_2\text{O}_3 \cdot 4\text{H}_2\text{O}$  c)  $\text{Fe}_2\text{O}_3 \cdot 3\text{H}_2\text{O}$  d)  $\text{Fe}_2\text{O}_3 \cdot 2\text{H}_2\text{O}$

**32. The solubility of Glucose in 100g of water at 25°C?**

a) 30g b) 80g c) 91g d) 95g

**33. The molecular formula of Blue Vitrol is-----?**

a)  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$  b)  $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$  c)  $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$  d)  $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$

**34. Which of the following the example of Hygroscopy?** a)  $\text{CaCl}_2$  b) NaOH c) KOH d)  $\text{SiO}_2$

**35. ----- is the largest portion of alimentary canal.**

a) Crop b) Pharynx c) Caeca d) Sphincters

**36. The gap between the incisors and premolar is called-----?**

a) Teeth b) Heterodont c) Diastema d) Buccalcavity.

**37. The life span of RBC is-----days?**

a) 120 b) 130 c) 140 d) 150

**38. Atrioventricular bundle was discovered by ----?**

a) W.Harvi b) His c) N.Grew d) Darwin

**39. Which of the four chambered heart animal?**

a) Aves b) Reptiles c) Fishes d) Amphibians

**40. Which blood is called 'Universal Donor'?**

a)  $\text{AB}^{+ve}$  b)  $\text{B}^{+ve}$  c)  $\text{O}^{-ve}$  d)  $\text{AB}^{-ve}$

**41. ----- acts as relay station.**

a) Pons b) Cerebellum c) Hypothalamus d) Thalamus

**42. Which instrument used for records the electrical impulses of brain.**

a) ECG b) EFA c) EEG d) CSF

**43. Which is the first discovered hormone?**

a) Relaxin b) Oxytocin c) Secretin d) Thyroxine

**44. Which is the first plant hormone?**

a) Gibberlins b) Auxin c) Abscisic acid d) Cytokinin

**45. Who is the Father of Endocrinology'?**

a) Harrington b) Thomas Addison c) W.M. Baylis d) None

**46. Which hormone is called life saving hormone?**

a) Cortisol b) Insulin c) Aldosterone d) Thymosin

**47. Which hormone is called Time messenger hormone?**

- a) Melatonin b) Oxytocin c) Insulin d) Thyroxine
- 48. Which country first in world to launch the national wide family planning programme in 1952?**  
a) Russia b) India c) China d) America
- 49. Menstrual Hygiene day is -----?** a) May 31 b) May 21 c) May 30 d) May 22
- 50. Who discovered the basic principles of Heridity?**  
a) Mendel b) Darwin c) Punnet d) Erwin Chargaff
- 51. Which of the following is a homodiatomic molecule?**  
a) Hydrogen b) Helium c)  $\text{CO}_2$  d) Oxygen
- 52. The anticoagular present in saliva of leech is called -----?**  
a) Hirudin b) Heparin c) Iodine d) Ethelene
- 53. Change of momentum is equal to -----?**  
a) Velocity b) Force c) Impulse d) Couple
- 54. The value of Boltzmann Constant?**  
a)  $1.381 \times 10^{-23} \text{mol}^{-1} \text{k}^{-1}$  b)  $8.31 \times 10^{-23} \text{Jk}^{-1}$  c)  $8.31 \times 10^{-23} \text{Jk}^{-1}$  d)  $1.381 \times 10^{23} \text{mol}^{-1} \text{k}^{-1}$
- 55. The unit of specific resistance?**  
a) Ohm b) Ohm.meter c) watt d) ampere
- 56. The gram molar mass of the  $\text{Ca}_3(\text{PO}_4)_2$  is---**  
a) 44g b) 408g c) 308g d) 16g
- 57. Which of the following hygroscopic substance?**  
a) NaOH b)  $\text{FeCl}_3$  c)  $\text{CaCl}_3$  d)  $\text{P}_2\text{O}_5$
- 58. Pith tissue present in -----?**  
a) Monocot stem b) Dicot stem c) both a&b d) none
- 59. Incomplete four chambered heart found in -----?**  
a) Fish b) Aves c) Reptiles d) Amphibians
- 60. Each neuron can transmit ----- nerve impulses per second?** a) 100 b) 1000 c) 10000 d) 10
- 61. The pathway taken by nerve impulse to accomblishe reflex action is called-----?**  
a) Sensory neuron b) Reflex arc c) Spinal cord d) Spinal nerves
- 62. Example of liquid metal?**  
a) Ag b) Hg c) Mg d) Al
- 63. The rate of change of momentum of an object is directly proportional to -----?**  
a) Mass of the body b) Velocity of the body c) Net force of the body d) direction of the body
- 64. A fielder giving a swing while catching a ball is an example of -----?**  
a) Inertia b) Newton's II law c) Newton's I law d) Impulse
- 65. A system can be brought to equilibrium by applying a force which is**  
a) Equal in magnitude and in opposite same direction as that of resultant force  
b) Equal in magnitude but opposite direction as that of resultant force  
c) Greater than the magnitude of resultant force but in opposite direction  
d) Greater than the magnitude of resultant force and in same direction
- 66. Change in momentum can be achieved by,**  
a) A large force acting for a short period of time  
b) A large force acting for a longer period of time  
c) A short force acting for a longer period of time d) Both a and c
- 67. Qualitative definition of force is given by**  
a) Newton's III law of motion b) Newton's II law of motion  
c) Newton's I law of motion d) Newton's law gravitation
- 68. When a lift is moving upward, apparent weight is-----?**

- a) Greater than actual weight      b) Lesser than actual weight  
c) Zero      d) Same as actual weight
- 69. Astronauts feel weightlessness in space because-----?**  
a) There is no gravitational force in space      b) They are under free fall condition  
c) They are floating in space      d) They wear a weightless coat
- 70. Action of a lever is an example of -----?**  
a) Impulse      b) Torque      c) Unbalance force      d) Balanced force
- 71. If lift is falling down freely, apparent weight is equal to-----?**  
a) Greater than actual weight      b) Lesser than actual weight      c) Zero      d) Same as actual weight
- 72. A body will be in equilibrium, if the resultant force of all the forces acting on the body is equal to-----?**  
a) Greater than actual weight      b) Lesser than actual weight  
c) Zero      d) Same as actual weight
- 73. Parallel equal forces are acting in opposite directions in the same line of action, then resultant force is equal to-----?**  
a) Greater than zero      b) Lesser than zero      c) Zero      d) Remains same
- 74. The ----- measures the impact of a force on a body.**  
a) Impulse      b) Torque      c) Linear momentum      d) Balanced force
- 75. The SI unit of gravitational unit of force is -----?**  
a) Kgf      b) Kg      c) Kms      d) None
- 76. If a person whose mass is 60kg stands on the surface of Earth, his weight would be 588 N his weight in moon is -----?** a) 97.5 N      b) 96.5 N      c) 97 N      d) 98 N
- 77. The value of 'g' is ----- at the center of Earth.**  
a) Greater than zero      b) Lesser than zero      c) Zero      d) Remains same
- 78. The acceleration due to gravity on the surface of the moon is about ----- times the acceleration due to gravity of Earth.** a) 1654      b) 0.1654      c) 0.006514      d) 0.01654
- 79. Which of the following is torque application?**  
a) Seasaw      b) Steering wheel      c) Gears      d) All the above
- 80. The SI unit of moment of force-----?** a) N / s      b) Ns      c) Nm      d) None
- 81. The group of rays is-----?** a) Lines      b) Beam      c) Wave length      d) frequency
- 82. Violet light has the ----- wave length. Red light has -----wave length.**  
a) Short, longer      b) Longer, Short      c) Both longer      d) Both shorter
- 83. The velocity of light is more in a ----- medium and less in a ---- medium.**  
a) Rarer, denser      b) Denser, rarer      c) Both Denser      d) None
- 84. When a light travels from rarer to denser medium, the refracted ray is -----the normal.**  
a) Bend away      b) Bend towards      c) Along      d) straight line
- 85. The light which consists of light and various colours or wavelength----?**  
a) Sun      b) Mercury vapour lamp      c) Sodium vapour lamp      d) a and b
- 86. The refractive index of a medium is dependent on the ----- of the light.**  
a) Frequency      b) Wavelength      c) Focal length      d) All the above
- 87. The refractive index of air is -----?** a) Zero      b) Infinity      c) One      d) None
- 88. The lines having lower frequencies than the incident frequency is called -----?**  
a) Stokes line      b) Anti stokes line      c) Raman lines      d) straight line
- 89. The lines having higher frequencies than the incident frequency is called -----?**  
a) Stokes line      b) Anti stokes line      c) Raman lines      d) straight line
- 90. The lines having equal frequencies to the incident frequency is called -----?**

- a) Stokes line    b) Anti Stokes line    c) Raman lines    d) straight line

**91. The convex lens is also called as ----- lens.**

- a) Scattering    b) Diverging    c) Converging    d) Inverting

**92. The concave lens is also called as ----- lens.**

- a) Scattering    b) Diverging    c) Converging    d) Inverting

**93. Which lens is used to make slide projector-----?**

- a) Concave lens    b) Convex lens    c) Bifocal lens    d) a and b

**94. In spherical lenses, all distance are measured from -----?**

- a) Optical centre    b) principal focus    c) Centre of curvature    d) Principal axis

**95. If the magnification is greater than 1, then we get an---- image.**

- a) Enlarged    b) Diminished    c) Real    d) Inverted

**96. If the magnification is less than 1, then we get an---- image.**

- a) Enlarged    b) Diminished    c) Real    d) Inverted

**97. The SI unit of power of a lens----? a) Meter    b) Diopter    c) Kilometer    d) Centimeter**

**98. Whose telescope is similar to the astronomical telescope-----?**

- a) J. Lipperslery    b) Kepler    c) Galileo    d) None

**99. The derivation in the path of light ray is called-----?**

- a) Scattering    b) Reflection    c) Refraction    d) Inverting

**100. The image of simple microscope-----? a) Erect    b) Real    c) a and b    d) Inverting**

**101. The refractive index of eye lens----? a) 1.457    b) 1.347    c) 1.437    d) 1.537**

**102. Power of concave lens is----- and concave lens is-----.**

- a) Positive, negative    b) Negative, positive    c) Negative, zero    d) Zero, positive

**103. Which is an optical instrument used to see the distant object clearly.**

- a) Barometer    b) Telescope    c) Microscope    d) a and b

**104. Which is an instrument used to see the tiny object clearly.**

- a) Barometer    b) Telescope    c) Microscope    d) a and b

**105. The magnifying glass is also called -----.**

- a) Astronomical telescope    b) Simple microscope    c) Compound microscope    d) All the above

**106. Who made a telescope to observe distant stars-----?**

- a) Johann Lipperslery    b) Kepler    c) Galileo    d) None

**107. For a person with Hypermetropia, the near point has moved to 1.5 m. Calculate the focal length of the correction lens in order to make his eyes normal. a) 0.4 m    b) 0.3 m    c) 0.5 m    d) 0.6 m**

**108. Which lenses are used as camera lenses?**

- a) Concave lens    b) Convex lens    c) Bifocal lens    d) a and b

**109. ----- is used to observe finger points in field of forensic science?**

- a) Astronomical telescope    b) Simple microscope  
c) Compound microscope    d) All the above

**110. It is the center part of the Iris?**

- a) Pupil    b) Cornea    c) Retina    d) Eye lense

**111. ----- is the pathway for the light to retina.**

- a) Pupil    b) Cornea    c) Retina    d) Eye lens

**112. It is the main part of human eye. It is convex in nature.**

- a) Pupil    b) Iris    c) Retina    d) Eye lens

**113. Astigmatism can be corrected by using ----- lenses.**

- a) Concave lens    b) Convex lens    c) Biconvex lens    d) Cylindrical lenses

**114. Telescope can be viewed with the ----- intensity of light.**

- a) High b) Low c) a and b d) None

**115. ---- mirror used for reflecting telescope.**

- a) Concave b) Convex c) Parabolic d) Spherical

**116. The temperature measured in relation to absolute zero using the Kelvin scale is called -----?**

- a) Absolute temperature b) Thermodynamic temperature c) Both a and b d) (a) or (b)

**117. The formula for conversion of temperature from celsius to Kelvin is-----?**

- a)  $K = C - 273$  b)  $K = C + 273$  c)  $K = C + 470$  d)  $K = C - 470$

**118. Thermal expansion at particular temperature is less in -----.**

- a) Solid b) Gas c) Liquid d) All the above

**119. Fundamental laws of gases are-----?**

- a) Boyle's law b) Charles's law c) Avogadro's law d) All the above

**120. The SI unit of the thermal energy-----? a) Joule b) Watt c) Kelvin d) Calorie**

**121. Which of the following vector Quantity?**

- a) Temperature b) Force c) Thermal energy d) All the above

**122. Linear expansion is also called as-----?**

- a) Longitudinal expansion b) Aerial expansion  
c) Volumetric expansion d) Thermal expansion

**123. Superficial expansion is also called as-----?**

- a) Longitudinal expansion b) Aerial expansion  
c) Volumetric expansion d) Thermal expansion

**124. Cubic expansion is also called as-----?**

- a) Longitudinal expansion b) Aerial expansion  
c) Volumetric expansion d) Thermal expansion

**125. The change in the dimension due to rise in temperature is called-----?**

- a) Longitudinal expansion b) Aerial expansion  
c) Volumetric expansion d) Thermal expansion

**126. The coefficient of cubic expansion of aluminum is-----?**

- a)  $7 \times 10^{-5} \text{ K}^{-1}$  b)  $6 \times 10^{-5} \text{ K}^{-1}$  c)  $2.5 \times 10^{-5} \text{ K}^{-1}$  d)  $20.7 \times 10^{-5} \text{ K}^{-1}$

**127. The coefficient of cubic expansion of Brass is-----?**

- a)  $7 \times 10^{-5} \text{ K}^{-1}$  b)  $6 \times 10^{-5} \text{ K}^{-1}$  c)  $2.5 \times 10^{-5} \text{ K}^{-1}$  d)  $20.7 \times 10^{-5} \text{ K}^{-1}$

**128. The coefficient of cubic expansion of Water is-----?**

- a)  $7 \times 10^{-5} \text{ K}^{-1}$  b)  $6 \times 10^{-5} \text{ K}^{-1}$  c)  $2.5 \times 10^{-5} \text{ K}^{-1}$  d)  $20.7 \times 10^{-5} \text{ K}^{-1}$

**129. The coefficient of cubic expansion of water is-----?**

- a)  $7 \times 10^{-5} \text{ K}^{-1}$  b)  $6 \times 10^{-5} \text{ K}^{-1}$  c)  $2.5 \times 10^{-5} \text{ K}^{-1}$  d)  $20.7 \times 10^{-5} \text{ K}^{-1}$

**130. 0 K is equal to ----? a)  $273^{\circ} \text{ C}$  b)  $- 273^{\circ} \text{ C}$  c)  $323^{\circ} \text{ C}$  d)  $316^{\circ} \text{ C}$**

**131. The motion of electric charge through a conductor will constitute an -----?**

- a) Electric charge b) Electric current c) Electric potential d) Electric resistance

**132. The closed conducting loop, which has a network of electrical components through which electron are able to flow-----?**

- a) Electric charge b) Electric current c) Electric voltage d) Electric circuit

**133. In the circuit, if the switch is on the bulb-----?**

- a) Glow b) Does not glow c) No change d) None of these

**134. In the circuit, if the switch is OFF the bulb-----?**

- a) Glow b) Does not glow c) No change d) None of these

**135. Which instrument is used to measure potential difference-----?**

- a) Ammeter b) Voltmeter c) Galvanometer d) Diode

**136. Which instrument is used to measure current-----?**

- a) Ammeter    b) Voltmeter    c) Galvanometer    d) Diode

**137. Which instrument is used to indicate the direction of current----?**

- a) Ammeter    b) Voltmeter    c) Galvanometer    d) Diode

**138. The SI unit of electric potential----?** a) Volt    b) Joule    c) Ampere    d) Watt

**139. The amount of work done in moving a unit positive charge from infinity to that point against electric force-----?**

- a) Electric charge    b) Electric current    c) Electric potential    d) Electric resistance

**140. The reciprocal of electric resistivity is called-----?**

- a) Electric charge    b) Electric potential    c) Electrical conductivity    d) Electric resistance

**141. The SI unit of electric power----?**

- a) Volt    b) Joule    c) Ampere    d) Watt

**142. The unit of conductance----?**

- a) Ohm    b) Joule    c) Ampere    d) mho

**143. One horse power is equal to -----?** a) 766W    b) 746W    c) 767W    d) 726W

**144. Which of the conductor with highest resistivity?**

- a) Aluminum    b) Copper    c) Nichrome    d) Tungston

**145. Conductivity is ----for conductor than for insulator.** a) Less    b) More    c) Same    d) None

**146. The resistivity is ----for conductor than for insulator.** a) Less    b) More    c) Same    d) None

**147. ----- instrument connected in series.**

- a) Ammeter    b) Voltmeter    c) Both a and b    d) Diode

**148. How many electrons are passing per second in a circuit in which there is a current of 5A?**

- a)  $n = 3.125 \times 10^{19}$  electrons    b)  $n = 3.525 \times 10^{19}$  electrons  
c)  $n = 3.145 \times 10^{19}$  electrons    d) None

**149. A piece of wire of resistance 10 Ohm is drawn out so that its length is increased to three times its original length. Calculate the new resistance?**

- a) 60 Ohm    b) 80 Ohm    c) 90 Ohm    d) 70 Ohm

**150. A torch bulb is rated at 3 V and 600 mA. Calculate its resistance, -----?**

- a) 6 Ohm    b) 8 Ohm    c) 5 Ohm    d) 7 Ohm

**151. What chemical compounds are used to produce LED bulb?**

- a) GaAs    b) GaP    c) Both a and b    d) AlGaP

**152. The work done in moving a charge of 10 c across two points in a circuit is 100J. What is the potential difference between the points?** a) 15 V    b) 10 V    c) 25 V    d) 5 V

**153. ----- is the commonly used material to make the filament in bulb.**

- a) Aluminum    b) Copper    c) Nichrome    d) Tungsten

**154. Used to fix the magnitude of the current through a circuit?**

- a) Resistance    b) Resistor    c) Conductor    d) Voltmeter

**155. Calculate the current and the resistance of a 100 W, 200 V electric bulb in an electric circuit?**

- a) 100 Ohm    b) 200 Ohm    c) 300 Ohm    d) 400 Ohm

**156. What is the minimum distance needed for an echo?** a) 15 m    b) 15.2 m    c) 17 m    d) 17.2 m

**157. What will be the frequency sound having 0.20 m as its wavelength when it travels with a speed of  $331\text{ms}^{-1}$ ?** a) 1565 Hz    b) 1655 Hz    c) 1665 Hz    d) 1765 Hz

**158. Air temperature in the Rajasthan desert can reach  $46^{\circ}\text{C}$ . What is the velocity of sound in air temperature? ( $V = 331\text{ms}^{-1}$ )**

- a)  $357.5 \text{ms}^{-1}$     b)  $357.2 \text{ms}^{-1}$     c)  $337.5 \text{ms}^{-1}$     d)  $327.5\text{ms}^{-1}$

**159. A sound wave has a frequency of 200 Hz and a speed of  $400 \text{ms}^{-1}$  in a medium. Find the wavelength of the sound wave?** a) 3 m    b) 4 m    c) 1 m    d) 2 m

**160. Two observers are stationed in two boats 4.5 km apart. A sound signal sent by one, under water, reaches the other after 3 seconds. What is the speed of sound in the water?**

- a)  $1500 \text{ ms}^{-1}$    b)  $1700 \text{ ms}^{-1}$    c)  $1900 \text{ ms}^{-1}$    d)  $1300 \text{ ms}^{-1}$

**161. Sound waves are-----?**

- a) Transverse   b) Longitudinal   c) Both a and b   d) None

**162. More elastic in nature is -----?**

- a) Solid   b) Gas   c) Liquid   d) All of these

**163. Wave compare to air, water is -----?**

- a) Denser medium for sound   b) Rarer medium for sound  
c) Denser medium for light   d) both b and c

**164. The velocity of sound in air is not affected by change in :**

- a) Moisture content of air   b) Temperature of air  
c) Atmospheric pressure   d) Density of air

**165. Sound cannot travel through-----?**

- a) Solid   b) Gas   c) Liquid   d) Vacuum

**166. Light wave is a ----?**

- a) Transverse   b) Longitudinal   c) Both a and b   d) None

**167. \_\_\_\_\_ is used to determined velocity of sound waves in any medium.**

- a) SONAR   b) RADAR   c) Echo   d) All the above

**168. The frequency of a sound wave is 200Hz. Find its time period?**

- a) 0.05s   b) 0.005s   c) 0.5s   d) 0.005s

**169. Sound waves travel in air with a speed of about ----- at NTP.**

- a)  $340 \text{ ms}^{-1}$    b)  $170 \text{ ms}^{-1}$    c)  $331 \text{ ms}^{-1}$    d)  $343 \text{ ms}^{-1}$

**170. Find the velocity of source of sound, when the frequency appears to be double to a stationary observer velocity of sound in  $330 \text{ ms}^{-1}$ ?**

- a)  $150 \text{ ms}^{-1}$    b)  $170 \text{ ms}^{-1}$    c)  $190 \text{ ms}^{-1}$    d)  $165 \text{ ms}^{-1}$

**171. Which radioactive material is present in the ore of pitchblende?**

- a) Boron   b) Aluminum   c) Radium   d) Both a and c

**172. Which element are used for inducing radioactivity?**

- a) Boron   b) Aluminum   c) Radium   d) Both a and b

**173. What is the amount of radiation that may cause death of a person when exposed to it?**

- a) 100 R   b) 300 R   c) 400 R   d) 600 R

**174. Which hazardous radiation is the cause for genetic disease?**

- a) Alpha   b) Beta   c) Gamma   d) All of these

**175. ----- isotope is used for the treatment of skin cancer**

- a) Radio gold   b) Radio Iodine   c) Radio carbon   d) Radio Nickel

**176. What is the amount of radiation that may cause cancer of a person when exposed to it?**

- a) 100 R   b) 300 R   c) 400 R   d) 600 R

**177. What is the amount of radiation safe limit per week of a person when exposed to it?**

- a) 100 mR   b) 300 mR   c) 400 mR   d) 600 mR

**178. ----- isotope is used for the treatment of skin cancer**

- a) Radio gold   b) Americium   c) Californium   d) Radio Iron

**179. Which material protects us from radiation?**

- a) Lead   b) Uranium   c) Thorium   d) Boron

**180. Which element used for artificial radioactivity?**

- a) Uranium   b) Lead   c) polonium   d) Radium

**181. Which is used for measuring for ionization radiation?**

- a) Dosimeter   b) Barometer   c) Anemometer   d) Ammeter



**182. The SI unit of Radioactivity?**

- a) Roentgen    b) Becquerel    c) Curie    d) All of these

**183. Radioactive substances do not emit-----?**

- a) Electron    b) Proton    c) Neutron    d) All the above

**184. during the beta decay----?**

- a) An atomic electron is ejected  
b) An electron, which is already present with in the nucleus is ejected  
c) A neutron in the nucleus decays emitting an electron  
d) A part of K.E is converted in to electron

**185. Nuclear fission was discovered by ----?**

- a) Rutherford    b) Chadwick    c) Becquerel    d) Otto hahn & F.Strssman

**186. When neutrons are bombarded on nucleus Uranium -235, number of emitted neutrons will be--?**

- a) One    b) Two    c) Three    d) Four

**187. of the following particles, the one which penetrates the atomic nucleus easily is----?**

- a) Electron    b) Proton    c) Neutron    d) Alpha particle

**188. Neutron absorber is ----?**

- a) Lead    b) Cadmium    c) Copper    d) Silver

**189. ----- does not undergo fission.**

- a) Uranium-235    b) Uranium-238    c) Both a&b    d) None

**190. Which number of nuclear reactor operating in India?**

- a) 20    b) 22    c) 24    d) 26

**191. ----- rule is used to determine the direction of deflection for alpha, beta.**

- a) Fleming left hand    b) Fleming Right hand    c) Fleming screw    d) None

**192. Uncontrolled chain reaction is called -----?**

- a) Atom bomb    b) Nuclear reactor    c) Both a and b    d) None

**193. 1eV is equal to-----?**

- a)  $7 \times 10^{-6} \text{J}$     b)  $1.6 \times 10^{-6} \text{J}$     c)  $2.5 \times 10^{-6} \text{J}$     d)  $20.7 \times 10^{-6} \text{J}$

**194. 1 g of hydrogen isotope gives ----- energy than 1g of uranium isotope.**

- a) Less    b) More    c) Same    d) Zero

**195. Which is not ionise the gas.**

- a) Alpha particle    b) Beta particle    c) Gamma particle    d) Neutron

**196. In the controlled chain reaction the number of neutrons released is maintained to be ---?**

- a) One    b) Two    c) Three    d) Four

**197. Which is the ore of radium?**

- a) Pitch blende    b) Platinum    c) Marble    d) All the above

**198. Which is the place India's first nuclear power station in India?**

- a) Koodankulam    b) Kalpakkam    c) Tarapur    d) Kerala

**199. ----- isotope is used for the treatment of goiter.**

- a) Radio gold    b) Americium    c) Californium    d) Radio Iodine

**200. Which is the used for coolant material in nuclear reactor.**

- a) Lead    b) Heavy water    c) Cadmium rods    d) Uranium

**201. Atomic mass of Lithium-----?**

- a) 6.941    b) 9.012    c) 4.003    d) 10.811

**202. Atomic mass of Beryllium-----?**

- a) 6.941    b) 9.012    c) 4.003    d) 10.811

**203. Atomic mass of Boron-----?**

- a) 6.941    b) 9.012    c) 4.003    d) 10.811

**204. Which of the following Diatomic molecule?**

- a) Nitrogen    b) Hydrogen    c) Fluorine    d) All the above

**205. Gram Molecular mass of HCl is -----?**

- a) 33.5g    b) 36.5g    c) 17.5g    d) 18g

206. **Relative Molecular Mass of Sulphuric Acid -----**  
a) 68g    b) 78g    c) 88g    d) 98g
207. **Gram Molecular mass of CO<sub>2</sub> is -----?**  
a) 44g    b) 17g    c) 36.5g    d) 18g
209. **The ionization enthalpy of 18<sup>th</sup> group elements is -----?** a) 0 b) 1 c) 2 d) 3
210. **Identify the nature of bond present in NaH-----?**  
a) Ionic bond    b) Covalent bond    c) Hydrogen bond    d) 50% covalent 50% ionic bond
211. **Which one of the following is not a periodic property in the modern periodic table-----?**  
a) Ionization    b) Electronegativity    c) Electron affinity    d) Bond energy
212. **The physical and chemical properties of the elements are based on their-----?**  
a) Atomic mass    b) Atomic number    c) Atomic radii    d) Ionization energy
212. **Which is used to reduce the fusion temperature of the ore?**  
a) Slag    b) Flux    c) Ore    d) Clay
213. **Which is used to make electromagnets?**  
a) Pig Iron    b) Steel    c) Wrought Iron    d) Magnetite
214. **Which group of elements have zero oxidation state?**  
a) 16    b) 17    c) 18    d) 15
215. **The periodic property of Ionization energy in period of -----?**  
a) Increases    b) Decreases    c) Remains same    d) Zero
216. **The periodic property of Ionization energy in group of -----?**  
a) Increases    b) Decreases    c) Remains same    d) Zero
217. **The periodic property of Electron affinity in periods of -----?**  
a) Increases    b) Decreases    c) Remains same    d) Zero
218. **The periodic property of Electronegativity in period of -----?**  
a) Increases    b) Decreases    c) Remains same    d) Zero
219. **The periodic property of Ionic radius in period of -----?**  
a) Increases    b) Decreases    c) Remains same    d) Zero
220. **The periodic property of Ionic radius in group of -----?**  
a) Increases    b) Decreases    c) Remains same    d) Zero
221. **The periodic property of Electronegativity in group of -----?**  
a) Increases    b) Decreases    c) Remains same    d) Zero
222. **The periodic property of Electron affinity in group of -----?**  
a) Increases    b) Decreases    c) Remains same    d) Zero
223. **Which of the following pair more reactive metals?**  
a) Na, K, Ca, Mg, Al    b) Zn, Fe, Pb, Cu    c) Ag, Hg    d) All the above
224. **Which of the following pair medium reactive metals?**  
a) Na, K, Ca, Mg, Al    b) Zn, Fe, Pb, Cu    c) Ag, Hg    d) All the above
225. **Which of the following pair less reactive metals?**  
a) Na, K, Ca, Mg, Al    b) Zn, Fe, Pb, Cu    c) Ag, Hg    d) All the above
226. **Which is the Chief ore of Aluminium -----?**  
a) Cryolite    b) Corundum    c) Bauxite    d) Glance
227. **Which is the Chief ore of Copper -----?**  
a) Copper glance    b) Ruby copper    c) Bauxite    d) Copper Pyrites
228. **Which is the Chief ore of Iron -----?**  
a) Cryolite    b) Corundum    c) Bauxite    d) Haemetite
229. **Which of the following not attack to Aluminium**  
a) Dilute or Concentrated H<sub>2</sub> SO<sub>4</sub>    b) Dilute or Concentrated HCl

c) Dilute or Concentrated  $\text{HNO}_3$

d) Dilute or Concentrated  $\text{CH}_3\text{COOH}$

**230. Which of the following not ferrous alloys----**?

- a) Stainless steel   b) Nickel steel   c) Aluminium alloys   d) both a and b

**231. Which Alloys used to Aircraft, Scientific instruments -----?**

- a) Magnalium   b) Duralumin   c) Bronze   d) Brass

**232. Which Alloys used to Electrical fitting, Medal -----?**

- a) Magnalium   b) Duralumin   c) Bronze   d) Brass

**233. Which Alloys used to Utensils, tools, pressure cookers -----?**

- a) Magnalium   b) Duralumin   c) Bronze   d) Brass

**234. Which Alloys used to Statues, coins, bells, gongs -----?**

- a) Magnalium   b) Duralumin   c) Bronze   d) Brass

**235. The charge used in the metallurgy of iron consist of roasted ore, coke, and limestone in the ratio of -----?**

- a) 8:4:2   b) 8:4:2   c) 8:2:4   d) 4:8:2

**235. The mixture of sand and water can be extracted by -----?**

- a) Sieving   b) Winnowing   c) Filtration   d) Recrystallization

**236. Which is a gaseous solution -----?**

- a)  $\text{CO}_2$  dissolved in  $\text{H}_2\text{O}$    b) Cloud   c) Ethyl alcohol in water   d)  $\text{NaCl}$  in  $\text{H}_2\text{O}$

**237. The green layer found on the copper vessel is due to the formation of ---?**

- a) Basic copper carbonate   b) Cupric acid   c) Cuprus Oxide   d) Copper Chloride

**238. Which of the following has an equal number of neutrons and protons?**

- a) Protium   b) Deuterium   c) Tritium   d) Magnesium

**239. Atomicity of Sulphur-----?**   a) 1   b) 2   c) 8   d) 4

**240. Find the number of moles in 128g of  $\text{O}_2$ -----?**

- a) 4 moles   b) 10 moles   c) 2 moles   d) 5 moles

**241. Which of the following is called 'Law of Force' -----?**

- a) Newton's first law   b) Newton's second law   c) Impulse   d) Newton's third law

**242. Power of convex lens is ----?**   a) Positive   b) Negative   c) Zero   d) Both a & b

**243. The rate of flow of charges in a conductor is called -----?**

- a) Electric Circuit   b) Electric Charge   c) Electric Current   d) Electric Potential

**234. The velocity of sound changes by -----  $\text{ms}^{-1}$  when the temperature changes by one degree Celsius.**

- a) 0.51   b) 0.31   c) 0.41   d) 0.61

**245. Who is discovered by Charge less particle?**

- a) J.J. Thomson   b) John Dalton   c) Chadwick   d) Rutherford

**246. The covalent radius of Hydrogen is -----?**

- a)  $0.74 \text{ \AA}$    b)  $0.37 \text{ \AA}$    c)  $0.64 \text{ \AA}$    d)  $0.32 \text{ \AA}$

**247. Mass percentage of solution is independent of ----?**

- a) Volume   b) Mass   c) Weight   d) Temperature

**248. The  $\text{P}^{\text{H}}$  value of baking Soda is -----?**   a) 8   b) 9   c) 6   d) 5

**249. The Boiling point of Ethene -----?**   a) 351K   b) 151K   c) 184K   d) 354K

**250. Which of the following affecting factors of photosynthesis?**

- a) Light   b) Hormones   c) Leaf age   d) All the above

**251. The floor of buccal cavity is occupied by a -----?**

- a) Muscular Pharynx   b) Muscular Tongue   c) Oesophagus   d) Caecum

**252. The concept of Blood grouping was developed by ----?**

- a) Decastello    b) Wiener    c) Karl Landsteiner    d) Steini

**253. Which Neuron not present in Adult stage?**

- a) Unipolar    b) Bipolar    c) Multipolar    d) Association

**254. Which is called stress Hormone----?**

- a) Ethylene    b) Cytokinin    c) Abscisic Acid    d) Gibberlins

**255. The pollination by insects -----?**

- a) Anemophily    b) Entomophily    c) Zoophily    d) Hydrophily

**256. The Dyhybrid ratio is -----?**    a) 9:3:1:3    b) 9:3:3:1    c) 3:1    d) 1:2:1

**257. R.C Punnet study of -----?**

- a) Evolution    b) Genetics    c) Biogenesis    d) Chemical Evolution

**258. Mutation theory was proposed by -----?**

- a) Oparin    b) De vries    c) Charles Darwin    d) Louis Posteur

**259. Who is the “Father of Green Revolution”?**

- a) Dr. M. S. Swami Nathan    b) Dr. G. Nammalvar    c) Dr. Ian Wilmut    d) Dr. Norman E. Borlaug

**260. Which of the following “International day against Drug Abuse and Illicit Trafficking” is-----?**

- a) May 31    b) June 26    c) June 31    d) May 26

**261. Monosomy is ----?**    a)  $2n-2$     b)  $2n+1$     c)  $2n-1$     d)  $2n+2$

**262. Which mineral is not remobilized?** a) Phosphorous    b) Potassium    c) Nitrogen    d) Calcium

**263. ----- is used to killing microorganism like bacteria, fungi.**

- a) Ethanol    b) Ethanoic Acid    c) Acetic Acid    d) Both a & b

**264. World Cancer day is -----?**    a) March - 22    b) Feb - 22    c) March – 4    d) Feb - 4

**265. Assertion: The world largest and tallest wind turbine is situated in Hawaii.**

**Reason : One wind turbine can produce electricity for 300 homes**

- a) Both A and R is true and the reason is the correct explanation of the assertion  
b) Both A and R is true and the reason is not the correct explanation of the assertion  
c) Assertion is true but reason is false    d) Assertion is false but reason is true

**266. Identify the nature of band present in NaH-----?**

- a) Ionic Bond    b) Covalent bond    c) Hydrogen bond    d) 50% covalent 50%ionic bond

**267. The solubility of Sodium Chloride in 100g of water is ----?**

- a) 48g    b) 308g    c) 36g    d) 91g

**268. Haematite ore is concentrated by -----?**

- a) Gravity separation    b) Froth flotation    c) Leaching    d) Magnetic separation

**269. The solubility of Ammonia in 100g of water is -----?**

- a) 48g    b) 308g    c) 36g    d) 91g

**270. The solubility of Sodium hydroxide in 100g of water is -----?**

- a) 48g    b) 184g    c) 95g    d) 80g

**271. The solubility of Sodium Iodide in 100g of water is -----?**

- a) 48g    b) 184g    c) 36g    d) 91g

**272. The solubility of Sodium bromide in 100g of water is -----?**

- a) 48g    b) 184g    c) 95g    d) 80g

**273. The solubility of Calcium carbonate in 100g of water is -----?**

- a) 0.00048g    b) 0.04g    c) 0.0013g    d) 0.0080g

**274. The effect of pressure on the solubility of a gas in liquid is given by-----?**

- a) Hendry's law    b) Avogadro law    c) Tyndall effect    d) Mass percentage

**275. Sodium chloride decomposes in the sodium metal and chloride gas by electricity is termed as-----?**

- a) Electrolysis    b) Thermolysis    c) Decomposition    d) Photolysis

**276. Aqueous solutions of potassium iodide and lead II nitrate reacts with each other to form lead II iodide this reaction is -----?**

- a) Precipitation reaction    b) Neutralization reaction    c) Composition    d) Combustion reaction

**277.  $C + O_2 \rightarrow CO_2 + \text{Heat}$  in the reaction is ----?**

- a) Reversible reaction    b) Irreversible reaction    c) Neutralization reaction    d) Composition

**278. Exothermic oxidation reaction also called as -----?**

- a) Precipitation reaction    b) Neutralization reaction    c) Composition    d) Combustion reaction

**279. Consider the following reaction which one is faster than other -----?**

- a) Rusting iron    b) Digestion food    c) Burning of petrol    d) Weathering of rock

**280. In agriculture field citrus fruits require -----?**

- a) Slightly alkaline    b) Slightly acidic    c) Acidic soil    d) Neutral soil

**281. If the reaction is gaseous phase when pressure is increased on the same time the rate of reaction is -----?**

- a) Increase    b) Decrease    c) Constant    d) Zero

**282. In physical equilibrium the volume of liquid and gaseous phases are -----?**

- a) Increase    b) Decrease    c) Constant    d) Zero

**283. Granulated zinc reacts with Hydrochloric acid to give corresponding handides. Which one of the following concentration is increases the rate of reaction -----?**

- a) 1 M HCl    b) 2 M HCl    c) 3 M HCl    d) 4 M HCl

**284. Most of the combination reaction are ----- in nature.**

- a) Endothermic    b) Exothermic    c) Displacement reaction    d) Both a and b

**285. Which one of the metal displaces hydrogen gas from hydrochloric acid?**

- a) Silver    b) Zinc    c) Sodium    d) All the above

**286. If the  $p^H$  of a solution is 4.5 what is its  $p^{OH}$ ?    a) 8.5    b) 9.5    c) 10.5    d) 11.5**

**287. Most reaction in chemistry are-----?**

- a) Reversible reaction    b) Irreversible reaction    c) Neutralization reaction    d) Composition

**288. Electrolytic decomposition reaction may occur in the presence of -----?**

- a) Heat    b) Light    c) Both a and b    d) None

**289. Equilibrium is possible in a ----- system.**

- a) Open    b) Closed    c) Thermodynamic    d) Both a and b

**290. Which is the weak Electrolyte.**

- a) Acetone    b) Water    c) Alcohol    d) All the above

**291. Organic compounds are mostly soluble in -----?**

- a) Water    b) Ether    c) Ethanoic acid    d) HCl

292. The molecular formula of compound is  $C_3H_8$ . The name of the compound is -----?  
a) Propane    b) Methane    c) Ethane    d) Propene
293. A compound having  $-OH$  group in its carbon chain that compound is -----?  
a) Ketone    b) Acid    c) Alcohol    d) Ether
294. Ethanol is manufactured by the fermentation of molasses. This molasses contain ----- % of sucrose.    a) 10%    b) 20%    c) 30%    d) 40%
295. Ethanol reacts with oxygen to form  $CO_2$  and water. This reaction is called ----?  
a) Reversible reaction    b) Irreversible reaction    c) Neutralization reaction    d) Combustion
296. The term is used assess the quality of soap.  
a) Enzyme    b) TFM    c) Miscelles    d) Sodium salt of Salphuric acid
297. A hydrocarbon contains triple bond between the carbon atom it compound is -----?  
a) Alkenes    b) Alkynes    c) Alcohol    d) Carboxylic acid
298. A hydrocarbon contains triple bond between the carbon atom it compound is -----?  
a) Alkenes    b) Alkynes    c) Alcohol    d) Carboxylic acid
299. Glucose converted into ethanol by the action of -----?  
a) Enzyme    b) Zymase    c) Invertase    d) Glacial
300. Sugar is converted into glucose and fructose by the action of -----?  
a) Enzyme    b) Zymase    c) Invertase    d) Glacial
301. The longest cell of the human body ----?  
a) Sperm    b) Nerve cell    c) Brain cell    d) Ovum
302. The numeorous branched that project from the surface of the cell body is-----?  
a) Cyton    b) Dendrites    c) Axon    d) Synapse
303. The neuron found only in early embryos is-----?  
a) Multipolar neurons    b) Bipolar neurons    c) Unipolar neurons    d) Synaps
304. The neuron found only in cerebral cortex is----?  
a) Multipolar neurons    b) Bipolar neurons    c) Unipolar neurons    d) Synaps
305. The no. of pairs of cranial nerves are----?  
a) 15 pairs    b) 31 pairs    c) 12 pairs    c) 21 pairs
306. The no, pairs of spinal nerves are-----?  
a) 15 pairs    b) 31 pairs    c) 12 pairs    c) 21 pairs
307. neurons are also called----?
308. The longest cell of the human body is---?
309. The length of the nerve cell is---?
310. Neuroglia are also called---?
311. Perikaryon is also called---?
312. Information from one neuron can pass to another neuron throught these junctions with the releas of chemicals known as---?
313. Myelinated nerve fibres form the---?
314. Non-myelinated nerve fibres from the---?
315. Nerve transmitters are also called---?
316. Each neuron can transmit nerve impulses per second---?
317. The important neurotransmitter released by neurons is---?
318. Central nervous system has and delicate vital structures---?
319. Which is called Thermoregularity centre ---?  
a) Cerebrum    b) Hypothalamus    c) Thalamus    d) Cerebellum
320. Promote the elongation of stems and coleoptiles---?  
a) Cytokinin    b) Auxin    c) Gibberellin    d) Ethylene

- 321. Causes cell enlargement----?**  
a) Cytokinin    b) Auxin    c) Gibberellin    d) Ethylene
- 322. On plants stimulate extraordinary elongation of internode----?**  
a) Cytokinin    b) Auxin    c) Gibberellin    d) Ethylene
- 323. Promotes senescens of leaves by causing loss of chlorophyll----?**  
a) Cytokinin    b) Absciscic acid    c) Gibberellin    d) Ethylene
- 324. Promotes separation of leaves, flowers and fruits from the branch----?**  
a) Cytokinin    b) Absciscic acid    c) Gibberellin    d) Ethylene
- 325. Promotes the reopening of fruits-----?**  
a) Cytokinin    b) Absciscic acid    c) Gibberellin    d) Ethylene
- 326. Stimulates formation of abscission zone in leaves, flowers and fruits-----?**  
a) Cytokinin    b) Absciscic acid    c) Ethylene    d) Gibberellin
- 327. Which of the following is the exocrine gland-----?**  
a) Pituitary    b) Thyroid    c) Salivary glands    d) Thymus
- 328. Hormones secreted by the posterior lobe of pituitary is----?**  
a) Growth hormone    b) Thyroid stimulating hormone    c) Prolactin    d) Oxytocin
- 329. Is called personality hormone----?**  
a) Pituitary    b) Thyroid    c) Salivary glands    d) Thymus
- 330. Excess secretion of the thyroid hormones leads to disease----?**  
a) Goitre    b) Grave's    c) Cretinism    d) Myxoedema
- 331. Sustained contraction of muscles in face, larynx, hands and feet is called----?**  
a) Goitre    b) Tetany    c) Cretinism    d) Myxoedema
- 332. Is an elongated, yellowish glands situated in the loop of stomach and duodenum----?**  
a) Pituitary    b) Thyroid    c) Pancreas    d) Thymus
- 333. Is exocrine and endocrine in nature----?**  
a) Pituitary    b) Thyroid    c) Pancreas    d) Thymus
- 334. The alpha cells secrete hormones----?**  
a) Adrenalin    b) Insulin    c) Glucagon    d) Cortisol
- 335. The beta cells secrete hormones-----?**  
a) Adrenalin    b) Insulin    c) Glucagon    d) Cortisol
- 336. Decreases the concentration of glucose in blood-----?**  
a) Adrenalin    b) Insulin    c) Glucagon    d) Cortisol
- 337. Increases the concentration of glucose in blood----?**  
a) Adrenalin    b) Insulin    c) Glucagon    d) Cortisol
- 338. Increases in blood sugar level is called----?**  
a) Hyperglyperglcemia    b) Glycosuria    c) Poly urea    d) Polydipsia
- 339. Excretion of excess glucose in the urine is called----?**  
a) Hyperglyperglcemia    b) Glycosuria    c) Poly urea    d) Polydipsia
- 340. Frequent urination is called----?**  
a) Hyperglyperglcemia    b) Glycosuria    c) Poly urea    d) Polydipsia
- 341. Increased thirst is called----?**  
a) Hyperglyperglcemia    b) Glycosuria    c) Poly urea    d) Polydipsia
- 342. Increase in appetite is called----?**  
a) Polyphagia    b) Glycosuria    c) Poly urea    d) Polydipsia
- 343. Helps to reabsorb sodium ions from the renal tubules----?**  
a) Adrenalin    b) Insulin    c) Aldosterone    d) Cortisol

345. Is called as life – saving hormone----?  
 a) Adrenalin            b) Insulin                            c) Aldosterone      d) Cortisol
346. Is the male sex hormone----?  
 a) Testosterone            b) Insulin                            c) Aldosterone      d) Cortisol
347. Is produced by the Graafian follicles of the ovary----?  
 a) Testosterone            b) Insulin                            c) Aldosterone      d) Cortisol
348. From the corpus luteum that is formed in the ovary from the ruptured follicle during ovulation----?  
 a) Testosterone            b) Estrogen                            c) Progesterone      d) Cortisol
349. Stimulates the production and differentiation of lymphocytes----?  
 a) Pituitary                    b) Thyroid                            c) Pancreas                    d) Thymosin
350. The endocrine system acts through hemical messengers known as----?
351. Auxins, cytokonins and gibberellins plant growth----?
352. Absciscic acid and ethylene plant growth----?
353. Charles Darwin observed unilateral growth and curvature of coleoptiles----?
354. Went did a series of experiments in plant----?
355. The auxins produced by the apical buds suppress growth of lateral buds is called----?
356. Examples for parthenocarpy are ----?
357. Phenyl Acetic Acid and Indole 3 Acetonitrile are examples of----?
358. Are the plant hormones that promote cell division or cytokinesis----?
359. Zeatin was the cytokinin isolated from----?
360. Application of cytokinin delays the process of ageing in plants is called----?
361. Internodal elongation in rice was caused by----?
362. which is called stress hormone----?
363. A growth inhibitor which regulates abscission and dormancy----?
364. ABA is a powerful inhibitor of in tomato----?
365. Ethylene is a plants hormone----?
366. Hastens the senescence of leaves and flowers----?
367. The branch of biology which deals with the study of the endocrine glands and its physiology is known as----
368. Introduced the term hormone----?
369. The first discovered hormone is----?
370. Examples for exocrine glands are----?
371. Is called as the Master gland----?
372. Is excess secretion of growth hormone in adults----?
372. In male, stimulates the germinal epithelium of testes for formation of sperms----?
373. In male, LH promotes the of the testes to secrete male sex hormone testosterone----?
374. Hormone initiates development of mammary glands during pregnancy and stimulates production of milk after childbirth ----?
375. Helps in the contraction of the smooth muscles of uterus at the time of child birth----?
376. An amino acid and iodine are involved in the formation of thyroid hormone----?
377. Is known as a ‘time messenger’----?
378. Is known as personality hormone----?
379. In 1914 first crystallized thyroxine hormone----?
380. Harrington and George Barger identified the molecular structure of thyroxine in year----?
381. Thyroid gland requires “120 ug” of iodine every day for the production of thyroxine----?
382. Is caused due to decreased secretion of the thyroid hormone in children ----?



383. Is caused due to deficiency of the thyroid hormone in adults. ----?
384. Human insulin was first discovered by in ----?
385. The Islets of Langerhans consists of two types of cells namely----?
386. Is also known as life-saving hormone----?
387. Is called emergency hormones, flight, fright and fight hormone----?
388. Which is a gaseous solution----?  
a) CO<sub>2</sub>dissolved in H<sub>2</sub>O    b) Ethyl alcohol in water    c) Cloud    d) NaCl in H<sub>2</sub>O
389. Example for vegetative reproduction takes place through stem is----?  
a) Strawberry    b) Asparagus    c) Agave    d) Bryophyllum
390. Example for vegetative reproduction takes takes through leaves is----?  
a) Strawberry    b) Asparagus    c) Agave    d) Bryophyllum
391. Is a modified shoot with limited growth to carry out sexual reproduction----?  
a) Stem    b) Flower    c) Fruit    d) Bud
392. Essential whorls of a flowers are----?  
a) Calyx    b) Corolla    c) Androecium    d) Gynoecium
393. The maim part of the ovule is the----?  
a) Funiculus    b) nucleus    c) stigma    d) chalaza
394. Example for pollination by wind is----?  
a) Grass    b) Jasmine    c) Hydrilla    d) Canna
395. Asexual reproduction occurs by----?
396. The spores are liberated and they develop into new after reaching the ground or substratum.
397. Androecium is the of flower----?
398. Three cells at the chalaza end are the----?
399. In the egg apparatus one is the egg cell the remaining two cells are the----?
400. Self-pollination is also known as----?
401. Cross pollination uis also known as----?
402. Mendel had chosen pairs of contrasting traits in pea----?  
a) 5    b) 6    c) 7    d) 8
403. Punnett square is a checker board form devised by R.C.Punnett, which explains----?  
a) Morphological characters    b) Anatomical characters    c) Type of hybridization  
d) To calculate the probability of all possible genotypes of offspring's in a genetic cross
404. Which law is called as Mendel's Laws of Heredity----?  
a) Law of Dominance    b) Law of Segregation  
c) Law of independent assortment    d) All of the above
405. The end of the chromosome is called----?  
a) Telomere    b) Primary constriction    c) Secondary constriction    d) Satellite
406. Who is' Indian Father of Green Revolution'?  
a) Norman E.Brolaug    b) M.S.Swaminathan    c) George    d) Meclevoid
407. Approximately how many billion years ago, the universe have originated----?  
a) 3.5    b) 4    c) 4.5    d) 5
408. Who proposed the chemical evolution of lofe----?  
a) Oparin    b) Haldane    c) Both of them    d) None of them
409. In the year 1809, in 'Philosophic Zoologique'----?  
a) Lamarckism    b) Darwinium    c) Neo Darwinium    d) Natural selection theory
410. Who is the Father of Indian Paleobotany----?  
a) Charles Darwin    b) Birbal sahani    c) W.F. Libby    d) Louis Pasteur
411. Ethnobotany is the study of a region's plants through the knowledge----?

- a) Scientific    b) Evolutionary    c) General    d) Traditional
- 411. Who is called “Father of Green Revolution” ----?**  
a) Dr. M.S. Swaminathan    b) Dr. Normal E. Borlang    c) Both of them    d) None of them
- 412. Select the method of selection----?**  
a) Mass    b) Pure line    c) Clonal    d) All of them
- 413. Which is called physical mutagens----?**  
a) Mustard gas    b) Nitrous acid    c) Ethyl methane    d) Temperature
- 414. The first man – made cereal----?**  
a) Paddy    b) Wheat    c) Maize    d) Triticale
- 415. Male Donkey and female horse produce----?**  
a) Mule    b) Donkey    c) Horse    d) Dog
- 416. Narcotic drugs and psychotropic substances act was introduced in----?**  
a) 1982    b) 1983    c) 1984    d) 1985
- 417. The scientific name of tobacco**  
a) Nicotiana rustica    b) Nicotiana tobaccum    c) Both of them    d) None of them
- 418. Increased urine output leading to dehydration----?**  
a) polyuria    b) Polydipsia    c) Polyphagia    d) Hyperglycemia
- 419. Weight (kg) / height (m<sup>2</sup>)**  
a) BSI    b) BIS    c) BMI    d) BIM
- 420. Treatment of cancer----?**  
a) Surgery    b) Radiation therapy    c) Chemotherapy    d) All of them
- 421. The psychotropic drugs are referred as drugs----?**
- 422. When powdered tobacco is taken through nose, is called----?**
- 423. Diet rich in saturated fat and cholesterol leads to----?**
- 424. 4<sup>th</sup> February is----?**
- 425. The presence of HIV virus can be confirmed by analysis----?**
- 426. In strategy for saving the environment----?**
- 427. Are ‘ biodiversity hotspots’ ----?**
- 428. Forests are source of for many industries----?**
- 429. Is basic necessity for all terrestrial forms of life----?**
- 430. Petroleum also known as----?**
- 431. Is speed and the ability to store data----?**  
a) Scanner    b) Computer    c) Keyboard    d) Mouse
- 432. The output was get from any application is commonly referred as----?**  
a) Paint    b) Box    c) Pai    d) Scanner
- 433. App we can draw and edit pictures----?**  
a) Paint    b) Block palette    c) Stage    d) Sprite
- 434. The Scratch editor has parts----?**  
a) Two    b) Three    c) One    d) Four
- 434. Cinema is a good example for----?**  
a) Visual Communication    b) Block menu    c) Script area    d) Sprite
- 435. Which is called stain Remover?**  
a) Aldehyde    b) Ketone    c) Ether    d) Ester.
- 436. ----- element emits its radiation spontaneously.**  
a) Ni    b) Pd    c) Pt    d) U

437. The soft finely stratified sedimentary rock refers to -----?  
a) Shale b) Petroleum c) Methane d) Coal
438. First Phase treatment in drug deaddiction is -----?  
a) Rehabilitation b) Psychotheraphy c) Detoxification d) Counsiling
439. The innermost layer of cortex -----?  
a) Stele b) Pith c) Endodermis d) Epithermis
440. Deficient blood supply to heart muscle is called -----?  
a) Cirrhosis of liver b) Ischemia c) Malignant d) Polydipsia
441. The device which helps in explaining the concepts easily through pictures is -----?  
a) Visual communication device b) Visual cinema device  
c) Visual camera device d) Visual audio device
442. When resistors are connected in series the current passes through each resistor is ----?  
a) Different b) Same c) Constant d) None of these
443. Child help line is -----? a) 1078 b) 1098 c) 1058 d) 1198
444. Matrix present inside the chloroplast is -----?  
a) Thylakoid b) Granum c) Crista d) Stroma
445. Transgenic plants are developed by -----?  
a) Introduction foreign genes b) Introduction gene mutation  
c) Deleting certain chromosomes part d) Stopping spindle formation
446. The inner mitochondrial membarane gives rice to finger like projection called -----?  
a) Matrix b) F<sub>1</sub> particle c) Grana d) Cristae
447. Which one of the following movement was carried out for the conservation of forests -----?  
a) Forest movement b) Chipko movement c) Ganga action plan d) Fehri andolan
448. Roots hair ----?  
a) Cortical cell b) Unicellular c) Projection of epithermal cell d) both b& c
449. The green layer formed on the copper vessel is due to the formation of -----?  
a) Basic copper carbonate b) Cupric acid c) Cuprus oxide d) Copper chloride
450. Drawing water from a well is an example of -----?  
a) Balanced force b) Unbalanced force c) Like parallel force d) Unlike parallel force
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1. \_\_\_\_\_ is the measure of inertia.  
a. Mass                      b. velocity                      c. work                      d. vector
2. The value occupied by mole of a diatomic gas at S.T.P is \_\_\_\_\_.  
a. 11.2 litre              b. 5.5 litre              c. 22.4 litre              d. 44.8 litre
3. Mass of 1 mole of nitrogen atom is \_\_\_\_\_.  
a. 28amu              b. 14amu              c. 28g              d. 14g
4. Atomicity of ozone is \_\_\_\_\_.  
a. 2              b. 3              c. 4              d. 8
5. SI unit of conductance is  
a. mho              b. joule              c. ohm              d. ohm meter
6. 100 % pure ethanol is called \_\_\_\_\_.  
a. rectified spirit              b. methylated spirit  
c. denatured spirit              d. absolute alcohol.
7. Photolysis is a decomposition reaction caused by \_\_\_\_\_.  
a. heat              b. electricity              c. light              d. mechanical energy
8. The pH of a solution is 3. Its [OH<sup>-</sup>] concentration is  
a.  $1 \times 10^{-3}$  M              b. 3 M              c.  $1 \times 10^{-11}$  M              d. 11 M
9. All files are stored in the \_\_\_\_\_.  
a. folder              b. box              c. pai              d. scanner
10. An inexhaustible resource is \_\_\_\_\_.  
a. wind power              b. soil fertility              c. wild life              d. all of the above
11. Metastasis is associated with \_\_\_\_\_.  
a. malignant tumour              b. benign tumour  
c. both (a) and (b)              d. crown all tumour
12. Pusa komal is a disease resistant variety of \_\_\_\_\_.  
a. sugarcane              b. rice              c. cowpea              d. maize
13. Anti Tobacco Act was passed on \_\_\_\_\_.  
a. may 1st              b. may 31st              c. may 20th              d. may 14th
14. Biogenesis was speculated by \_\_\_\_\_.  
a. Haldane              b. Pasteur              c. Darwin              d. Lamarck
15. \_\_\_\_\_ is a hybrid of wheat and rye.  
a. triticale              b. raphano brassica              c. bananas              d. water melons
16. Cancer of the epithelial cells is called \_\_\_\_\_.  
a. leukemia              b. sarcoma              c. carninoama              d. lipoma
17. point to another against the electric force it is equal to  
a. 1. Ampere              b. 1 ohm              c. 1 volt              d. 1 mho
18. The sound waves are reflected from an obstacle into the same medium from which they were incident. Which of the following changes?  
a. speed              b. frequency              c. wavelength              d. none of these
19. The chemical equation  $\text{Na}_2\text{SO}_4(\text{aq}) + \text{BaCl}_2(\text{aq}) \rightarrow \text{BaSO}_4(\text{s})\downarrow + 2\text{NaCl}(\text{aq})$  represents which of the following types of reaction?  
a. neutralisation              b. combustion              c. precipitation              d. single displacemen
20. Photolysis is a decomposition reaction caused by \_\_\_\_\_.  
a. heat              b. electricity              c. light              d. mechanical energy
21. \_\_\_\_\_ is the diagrammatic representation of karyotype of a species.  
a. Ideogram              b. mutation              c. sex determination              d. punnet square

22. Sickle cell anaemia is caused by the mutation of \_\_\_\_\_ gene.  
 a. single      b. double      c. triple      d. none of the above
23. According to \_\_\_\_\_ theory life originated from lifeless matter.  
 a. Biogenesis    b. abiogenesis    c. cosmic      d. special creation.
24. The number of chromosomes found in human beings are \_\_\_\_\_.  
 a. 22 pairs of autosomes and 1 pairs of allosomes  
 b. 22 autosomes and 1 allosome  
 c. 46 autosomes  
 d. 46 pairs of autosomes and I pair of allosomes.
25. How does the electron affinity change when we move from left to right in a period in the periodic table?  
 a. Increase      b. decrease    c. remains unchanged. d. first increase and decrease
26. The number of grams of solute necessary to saturate 100g of solvent at that temperature is called \_\_\_\_\_.  
 a. Normality      b. Molarity      c. Solubility      d. dissolution
27. \_\_\_\_\_ group contains the member of halogen family.  
 a. 17th      b. 15th      c. 18th      d. 16th
28. Vomiting centre is located in  
 a. Medulla oblongata    b. Stomach      c. Cerebrum      d. Hypothalamus
29. \_\_\_\_\_ is an inflammation of the meninges.  
 a. Myelin sheath      b. Piameter      c. Meningitis      d. Arachnoid membrane
30. Asexual reproduction takes place through budding in \_\_\_\_\_.  
 a. Amoeba      b. Yeast      c. Plasmodium      d. Bacteria
31. The large elongated cells that provide nutrition to developing sperms are \_\_\_\_\_.  
 a. Primary germ cells    b. Sertoli cells    c. Leydig cells      d. Spermatogonia
32. The deficiency of insulin causes \_\_\_\_\_.  
 a. Diabetes mellitus      b. Tetany      c. Thyroid dysfunction    d. Cretinism
33. The hormone which has positive effect on apical dominance is  
 a. Cyfokinin      b. Auxin      c. Gibberellin      d. Ethylene
34. Changes in the ovary and the uterus are induced by the \_\_\_\_\_.  
 a. LH & FSH      b. TRH & TSH      c. MSH & TRH      d. GH & PRH
35. Squirrels pollinate flowers of \_\_\_\_\_.  
 a. Canna      b. Gladioli      c. Silk cotton tree      d. Hydrilla
36. Which of the following is/are correct?  
 i. Chain reaction takes place in a nuclear reactor and an atomic bomb.  
 ii. The chain reaction in a nuclear reactor is controlled  
 iii. The chain reaction in a nuclear reactor is not controlled  
 iv. No chain reaction takes place in an atom bomb  
 a. (i) only correct      c. (i) & (ii) are correct  
 b. (iv) only correct      d. (iii) & (iv) are correct
37. The radio isotope of \_\_\_\_\_ helps to increase the productivity of crops.  
 a. radio Iodine      b. radio phosphorus  
 b. radio Carbon      d. radio Nickel



55. Two cerebral hemispheres of the brain are interconnected by thick band of nerve fibres called \_\_\_\_\_.
56. The human brain constitutes nearly \_\_\_\_\_% of fat
57. \_\_\_\_\_ radioactive substance discovered so far.  
 a. 29                      b. 35                      c. 28                      d. 90
58. Helium nucleus consisting of \_\_\_\_\_ protons and \_\_\_\_\_ neutrons  
 a. 2,2                      b. 2,4                      c. 1,1                      d. 1, 2
59.  ${}^1\text{H}_2$  represents an isotope of hydrogen known as \_\_\_\_\_.  
 a. tritium                      b. deuterium                      c. mono                      d. helium
60. The general formula of alkyne is \_\_\_\_\_.  
 a.  $\text{C}_n\text{H}_{2n}$                       b.  $\text{C}_n\text{H}_{2n-2}$                       c.  $\text{C}_n\text{H}_{2n+2}$                       d. None
61. TFM in soaps represents \_\_\_\_\_ content in soap.  
 a. Fatty acid                      b. Vitamin                      c. Mineral                      d. Carbohydrate
62. Biodegradable detergents are made of \_\_\_\_\_ chain hydro carbons.  
 a. Branched                      b. straight                      c. Both a and b                      d. None
63. World "No Tobacco Day" is observed on \_\_\_\_\_.  
 a. May 31                      b. June 6                      c. April 22                      d. Octobe
64. The prevalence of Type Diabetes is \_\_\_\_\_.  
 a. 1-2%                      b. 10-25%                      c. 80-90%                      d. 10-20%
65. \_\_\_\_\_ % of e- wastes produced are recycled.  
 a. 5%                      b. 50%                      c. .5%                      d. 55%.
66. \_\_\_\_\_ damages the central and peripheral nervous system.  
 a. Chromium                      b. Mercury                      c. Cadmium                      d. Lead
67. Chipko movement is initiated against \_\_\_\_\_.  
 a. Soil erosion                      b. Nilgiris                      c. Deforestation                      d. Fossil
68. Which is used to build scripts?  
 a. Script area                      b. Block palette                      c. Stage                      d. Script area.
69. Where you will create category of blocks?  
 a. Block palette                      b. Block menu                      c. Script area                      d. Sprit
70. \_\_\_\_\_ is essential for morphogenesis  
 a. Auxin and Gibberellin                      b. Ethylene  
 c. Auxin and Cytokinin                      d. Cytokinin and Abscissic acid
71. Premature shedding of leaves is caused by \_\_\_\_\_.  
 a. Auxin                      b. Ethylene                      c. ABA                      d. Gibberelin
72. Examples of myogenic heart beat is \_\_\_\_\_.  
 a. mollusca and Vertebrate                      b. annelids and Arthropods  
 c. porifera and Mollusca                      d. arthropods and mammalia.
73. \_\_\_\_\_ is a technique of bleeding in a patient remove toxic impurities from the body.  
 a. Blood clotting                      b. Blood letting                      c. Bleeding time                      d. Haemophilia
74. The segment of leech are known as \_\_\_\_\_.  
 a. metamere                      b. proglottis                      c. strobili                      d. all the above
75. \_\_\_\_\_ helps in transpiration.  
 a. Stomata                      b. Epidermis                      c. Periderm                      d. Skin