In The Name of Allah, The Most Beneficent, The Most Merciful"

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1. Which is the outermost planet in the solar system?
   A. Mercury
   B. Pluto
   C. Neptune
   D. Uranus

2. The SI unit of charge is _____.
   A. Ampere
   B. Coulomb
   C. Ohm
   D. Volt

3. Very High Frequency (VHF) have _____ wavelengths.
   A. shorter
   B. shortest
   C. longer
   D. longest

4. Long-sight defect could be corrected by using _____ lens.
   A. concave
   B. vonvex
   C. diverging
   D. none of these

5. Deficiency of Vitamin-A results in _____.
   A. night blindness
   B. rickets
   C. scurvy
   D. hair fall

6. For a fixed mass of gass at constant temperature, if we decrease volume, the pressure will _____.
   A. also decrease
   B. increase
   C. remains constant
   D. none of these

7. The lifespan of Red Blood Cells is _____ days.
   A. 60
   B. 120
   C. 180
   D. 240

8. The density of water is _____.
   A. 1 g/cm^3
   B. 1.5 g/cm^3
   C. 2 g/cm^3
   D. none of these

9. Radioactivity was discovered by _____.
   A. Kelvin

B. Thomson
C. Rutherford
D. Bacquerel

10. A device which converts chemical energy into electrical energy is called _____.
A. motor
B. generator
C. moving-coil meter
D. battery

11. The Sun is a _____.
A. Star
B. Planet
C. Asteroid
D. Meteor

12. The average adult has a blood volume of about _____ liters.
A. 4
B. 5
C. 6
D. 7

13. The most abundant element in the universe is _____.
A. Oxygen
B. Hydrogen
C. Carbon Dioxide
D. Silicon

14. The most abundant element in the Earth's crust is _____.
A. Oxygen
B. Hydrogen
C. Carbon Dioxide
D. Silicon

15. Each day human body breathes in _____ liters of air.
A. 5,000 to 10,000
B. 10,000 to 15,000
C. 15,000 to 20,000
D. 20,000 to 25,000

16. Deficiency of Vitamin-D results in _____.
A. night blindness
B. rickets
C. scurvy
D. hair fall

17. The SI unit of "pressure" is _____.
A. Pascal
B. joule
C. tesla
D. henry

18. The densest substance on the Earth is _____.
A. Platinum
B. Copper
C. Steel
D. Osmium

19. A camera uses a _____ to form an image.
   A. convex lens
   B. concave lens
   C. condenser lens
   D. none of these

20. Which from the following is NOT a conductor?
   A. Aluminium
   B. Silicon
   C. Graphite
   D. All are conductors

21. CNG stands for?
   A. Converted Natural Gas
   B. Conduced Natural Gas
   C. Conducted Natural Gas
   D. Compressed Natural Gas

22. Which from the following is true for "Sound"?
   A. Sound cannot travel through a vaccum
   B. Sound cannot travel through gases
   C. Sound cannot travel through liquids
   D. Sound cannot travel through solids
   E.

23. When white light is passed through a prism, it splits into _____ colors.
   A. 5
   B. 6
   C. 7
   D. 8

24. 1 nanometer = ?
   A. 10^{-3} meter
   B. 10^{-6} meter
   C. 10^{-9} meter
   D. 10^{-12} meter

25. Instrument used for measuring very high temperature is _____.
   A. Pyroscope
   B. Pyrometer
   C. Seismograph
   D. Xylometer

26. Sound waves are _____ waves.
   A. Transverse
   B. Electromagnetic
   C. Longitudinal
   D. none of these

27. The lifespan of White Blood Cells is _____ day(s).
   A. 1
   B. 2
   C. 3
   D. 4

28. The fluid part of blood is known as _____.

A. plasma
B. platelets
C. blood cells
D.

29. X-rays were discovered by _____.
A. Rontgen
B. Thomson
C. Rutherford
D. Bacquerel

30. The speed of light is _____.
A. 280,000 km/s
B. 300,000 km/s
C. 320,000 km/s
D. none of these

31. During winter in cold countries, the _____ is mixed to melt the ice on the icy roads.
A. Salt
B. Chlorine
C. Carbon dioxide
D. Water

32. In a very low temperature which from the following will freeze at last?
A. River water
B. Canal water
C. Sea water
D. Water in a lake

33. The nearest planet to the Earth is _____.
A. Venus
B. Mercury
C. Mars
D. Moon

34. The planet that moves round the Sun at the highest speed is?
A. Jupiter
B. Venus
C. Mars
D. Mercury

35. In general, Comets have _____ orbits.
A. Elliptical
B. Highly elliptical
C. Circular
D. Parabolic

36. GPS is an abbreviation for?
A. Global Poles System
B. Global PolySiliconium Store
C. Global Positioning System
D. Global Position Structure

37. Oxidation is a chemical reaction involving the _____.
A. Gain of Electrons
B. Loss of Electrons
C. Gain of Protons

D. Loss of Protons

38. At night, Plants intake _____ and release _____.
A. Oxygen – Carbon dioxide
B. Carbon dioxide – Oxygen
C. Oxygen – Carbon monoxide
D. Carbon monoxide – Oxygen

39. Urine is produced in _____.
A. Kidneys
B. Lungs
C. Large intestine
D. Liver

40. Blood is cleaned by _____.
A. Lungs
B. Liver
C. Heart
D. Kidneys

41. The position of an element in the Periodic Table is determined by its _____ number.
A. Electron
B. Proton
C. Neutron
D. Positron

42. The salinity of sea water is determined by the amount of common salt (Sodium Chloride) in _____ of sea water.
A. 1 gram
B. 10 grams
C. 1 kg
D. 10 kg

43. The planet which is easily visible from the Earth is?
A. Mercury
B. Venus
C. Mars
D. Jupiter

44. The Great Spot is on the planet _____.
A. Saturn
B. Venus
C. Mars
D. Jupiter

45. The Great Spot is a _____.
A. Mountain
B. Desert
C. Frozen Carbon dioxide
D. Storm

46. The bodyguard of the Earth is _____ that save the Earth from many Comets and Asteroids.
A. Mars
B. Saturn
C. Uranus

D. Jupiter

47. 1 light year = ?
A. $9.5x10^6$ km
B. $9.5x10^9$ km
C. $9.5x10^{12}$ km
D. $9.5x10^{18}$ km

48. The planets visible to us without using a telescope are _____.
A. 3
B. 4
C. 5
D. 6

49. According to Big Bang Theory, the Universe began about _____ billion years ago.
A. 10 – 20
B. 20 – 30
C. 30 – 40
D. 40 – 50

50. Biosensor is used to measure?
A. Blood glucose level
B. The body pH value
C. Amount of hemoglobin
D. Salinity in Urine

51. Einstein's famous equation which states that mass and energy are interchangeable is?
A. $E = mc^2$
B. $E = cm^2$
C. $M = ec^2$
D. $M = ce^2$

52. The SI unit of electric current is?
A. Coloumb
B. Ampere
C. Volt
D. Watt

53. The principal constituent of the atmosphere of the Earth is?
A. Oxygen
B. Carbon
C. Hydrogen
D. Nitrogen

54. What is Dry Ice?
A. Solid Oxygen
B. Solid Carbon Dioxide
C. Solid Hydrogen
D. Solid Nitrogen

55. What are the primary colours?

A. White, Black, Blue
B. Red, Yellow, Blue
C. Red, Orange, Blue
D. Red, Green, Blue

56. Digestion of food is completed in the _____.
A. small intestine
B. large intestine
C. stomach
D. Liver

57. Carrot is good source of Vitamin?
A. A
B. B complex
C. C
D. D

58. For proper formation of teeth, _____ is essential.
A. iodine
B. copper
C. fluorine
D. iron

59. Deficiency of _____ causes loss of appetite and poor growth.
A. zinc
B. iodine
C. copper
D. iron

60. Meteorology is the study of?
A. seasons
B. atmosphere
C. air and sounds
D. winds and clouds

61. The Carbon Dioxide in the atmosphere, by volume, is
A. 0.039%
B. 3.9%
C. 13%
D. 30%

62. Diamond is an allotropic form of
A. Carbon
B. Hydrogen
C. Nitrogen
D. Silicon

63. The SI unit of Heat is
A. Watt
B. Volt
C. Joule

D. Newton

64. The good sources of Vitamin-A are
A. green leafy vegetables
B. seeds
C. fresh vegetables and fruits
D. sea foods

65. The good sources of Vitamin-B Complex are
A. green leafy vegetables
B. seeds
C. fresh vegetables and fruits
D. sea foods

66. The good sources of Vitamin-C are
A. green leafy vegetables
B. seeds
C. fresh vegetables and fruits
D. sea foods

67. The good sources of iodine are
A. green leafy vegetables
B. seeds
C. fresh vegetables and fruits
D. sea foods

68. The gas, commonly known as “laughing gas”, is
A. Carbon Dioxide
B. Sulfur Dioxide
C. Nitrous Oxide
D. Sodium Oxide

69. The source of oxygen in photosynthesis is
A. water
B. salts
C. minerals
D. glucose

70. The instrument used to measure wind speed is
A. Anemometer
B. Barometer
C. Hydrometer
D. Hygrometer

71. The natural fats and oils are composed of
A. Carbon, Hydrogen and Oxygen
B. Carbon, Hydrogen and Nitrogen
C. Carbon, Oxygen and Nitrogen
D. Hydrogen, Oxygen and Nitrogen

72. The energy value of food is measured in
A. Joule
B. Calories
C. Tesla
D. Proteins

73. Wind energy is the _____ energy.

A. Potential
B. Transverse
C. Kinetic
D. Mechanical

74. Who is considered the founder of meteorology?
A. Aristotle
B. Plato
C. Einstein
D. Newton

75. Water covers _____ of the Earth's surface.
A. 60%
B. 65%
C. 70%
D. 75%

76. In general, wind speed of 105–137 caused
A. minor or no damage
B. considerable damage
C. severe damage
D. extreme damage

77. Acid rain is mainly caused by emissions of _____ in the atmosphere.
A. Sulfur Dioxide and Potassium Nitrate
B. Sulfur and Charcoal
C. Nitrogen Oxide and Potassium Nitrate
D. Sulfur Dioxide and Nitrogen Oxide

78. About 50% of the Earth's crust, including the waters on the Earth and atmosphere, is
A. Oxygen
B. Cabon Dioxide
C. Silicon
D. Clay

79. The fourth state of matter is
A. Water
B. Salts
C. Vapours
D. Plasma

80. The device used to convert Alternate Current into Direct Current is called
A. Anemometer
B. Battery
C. Galvanometer
D. Rectifier

81. In night, when photosynthesis is stopped, plants
A. take in Carbon Dioxide
B. take in Oxygen
C. give off Carbon Dioxide
D. give off Oxygen

82. During photosynthesis, plants

A. take in Carbon Dioxide
B. take in Oxygen
C. give off Carbon Dioxide
D. give off Oxygen

83. _____ are called the powerhouses of the cell.
A. Mitochondria
B. Vesicles
C. Lungs
D. Liver

84. Mitochondria contain their own supply of
A. DNA
B. Amino acids
C. Vitamins
D. Oxygen

85. The first chemical explosive, Gunpowder, is a mixture of
A. Sulfur, Charcoal and Nitrogen Oxide
B. Sulfur, Charcoal, and Potassium Nitrate
C. Sulfur and Charcoal
D. Charcoal and Potassium Nitrate

86. The number of oscillations per second is called the
A. hertz
B. waves
C. pitch
D. frequency

87. Sound waves from a loudspeaker are caused by
A. frequency
B. vibrations
C. pitch
D. amplitude

88. The guitar has _____ strings.
A. 4
B. 5
C. 6
D. 7

89. The device used to measure movements of the heart is
A. Cardiograph
B. Seismograph
C. Hydrometer
D. Hygrometer

90. The unit used to measure 'Pressure' is
A. pascal

B. newton
C. watt
D. tesla

91. There are _____ methods of heat transfer.
A. 3
B. 4
C. 5
D. 6

92. Which from the following is NOT a method of heat transfer?
A. Conduction
B. Convection
C. Radiation
D. All are methods of heat transfer

93. If we heat one end of metallic rod, the other end gets hot. The method of heat transfer is
A. Conduction
B. Convection
C. Radiation
D. None of these

94. A person seated in front of a fire receives heat by
A. Conduction
B. Convection
C. Radiation
D. None of these

95. The unit used to measure 'magnetic flux' is
A. pascal
B. farad
C. weber
D. henry

96. Battery was invented by
A. Volta
B. Hero
C. Fermi
D. Maiman

97. The most abundant element in the earth's crust is oxygen. The second most abundant element in the earth's crust is
A. Hydrogen
B. Nitrogen
C. Brass
D. Silicon

98. The nearest planet to the Sun is
A. Mercury
B. Venus
C. Mars
D. Jupiter

99. Bronze is an alloy of
A. Iron, Carbon
B. Copper, Tin

C. Nickel, Zinc
D. Mercury, Lead

100. Molecules with identical molecular formulae but with different structural formulae are called
A. Isotopes
B. Isomers
C. Electrode
D. Compound

101. One way of transfer of heat energy is 'convection' which occurs in
A. Liquids only
B. Gasses only
C. Liquids and gasses
D. Liquids, gasses and solids

102. Which from the following is incompressible
A. Solids
B. Liquids
C. Gasses
D. All are compressible

103. The key factor in determining the weather is the quantity of _____ in the atmosphere.
A. Water vapour
B. Oxygen
C. Carbondioxide
D. Hydrogen

104. The entropy of the universe is
A. Increasing
B. Decreasing
C. Constant
D. None of these

105. Which from the following methods of heat transfer can take place in a vaccum?
A. Canduction
B. Convection
C. Radiation
D. All

106. Neutrons were discovered by
A. Einstein
B. James Chadwick
C. F.W. Aston
D. Rutherford

107. Mass Spectrograph was invented by
A. Einstein
B. James Chadwick
C. F.W. Aston
D. Rutherford

108. Nucleus was discovered by
A. Einstein
B. James Chadwick
C. F.W. Aston
D. Rutherford

109. Which is the process of science?
A. Observation > Experiments > Hypothesis
B. Hypothesis > Observations > Experiments
C. Observation > Hypothesis > Experiments
D. Experiments > Observations > Hypothesis

110. Salty water can be made pure by the method of
A. filtration
B. evaporation
C. chromatography
D. distillation

111.
The unit of efficiency is
A. Volt
B. Watt
C. Joules
D. None of these

112. Which from the following is NOT a stored energy?
A. Thermal
B. Gravitational
C. Elastic potential energy
D. Chemical

113. Energy can be converted from one form to another, but all energy ends up as
A. Kinetic energy
B. Potential energy
C. Heat energy
D. Chemical energy

114. A battery converts _____ into electrical energy.
A. Potential energy
B. Chemical energy
C. Nuclear energy
D. Mechanical energy

115. Which from the following is NOT a renewable energy resource?
A. Geothermal
B. Biomass
C. Solar
D. Nuclear

116. Which from the following is NOT a non-renewable energy resource?
A. Coal
B. Natural gas
C. Nuclear
D. Geothermal

117. Current is the flow of
A. Electrons
B. Protons
C. Neutrons
D. Voltage

118. The unit of current is
A. Volt
B. Ampere
C. Ohm
D. Watt

119. To prevent electric shocks, a/an _____ is placed in the circuit.
A. Amneter
B. Voltmeter
C. Fuse
D. Diode

120. Electrons were discovered by
A. James Chadwick
B. J.J. Thomson
C. F.W. Aston
D. Rutherford

121. When molten rock cools and solidifies, the _____ are formed.
A. igneous rocks
B. satimantary rocks
C. metamorphet rocks
D. none of these

122. Molten rock below the surface of the Earth is called?
A. Lava
B. Magma
C. Crystals
D. Granite

123. Molten rock above the surface of the Earth is called?
A. Lava
B. Magma
C. Crystals
D. Granite

124. The metal which is liquid at room temperature is?
A. Zinc
B. Nickol
C. Lead
D. Mercury

125. Between the melting point and boiling point of a substance, the substance is a?
A. Solid
B. Liquid
C. Gas
D. Crystal

126. The boiling point of alcohol is
A. 78 oc
B. 86 oc
C. 94 oc
D. 100 oc

127. The visible cloud of dust and gas in space is called?
A. White Dwarf
B. Supernova
C. Nebula
D. Galaxy

128. The average salinity of the Earth's oceans in 1 kilogram of sea water is about _____ grams of salt.
A. 90
B. 25
C. 30
D. 35

129. The most abundant substance that constitutes the mass of the Earth is?
A. Iron
B. Oxygen
C. Nitrogen
D. Silicon

130. The Earth's atmosphere is divided into _____ main layers.
A. 4
B. 5
C. 6
D. 7

131. Rocks which are formed by high temperature and pressure on existing rocks over a period of time are called _____ rocks.
A. igneous
B. metamorphic
C. sedimentary
D. crystal

132. Marble and slate are examples of
A. igneous rocks
B. metamorphic rocks
C. sedimentary rocks
D. crystals

133. Sandstone and limestone are examples of
A. igneous rocks
B. metamorphic rocks
C. sedimentary rocks
D. crystals

134. Absolute zero, which is the lower limit of the thermodynamic temperature scale, is equivalent to _____ on the celsius scale.
A. -273 oc
B. 0 oc
C. 100 oc
D. 973 oc

135. The diameter of the Earth's equator is larger than the pole-to-pole diameter by
A. 40 km
B. 43 km
C. 46 km
D. 49 km

136. The Tectonic Plates of the Earth lies in

A. Inner Core
B. Outer Core
C. Lithosphere
D. Asthenosphere

137. There are _____ major tectonic plates.
A. 4
B. 5
C. 6
D. 7

138. The fresh water on the Earth is _____ of the total water.
A. 2.5%
B. 5%
C. 7.5%
D. 10%

139. The Ozone Layer lies in the
A. troposphere
B. stratosphere
C. mesosphere
D. thermosphere

140. The Earth's atmosphere is divided into _____ layers.
A. 4
B. 5
C. 6
D. 7

141. Which type of rock may contain fossils?
A. Igneous
B. Metamorphic
C. Sedimentary
D. Crystals

142. The mass is highly concentrated form of
A. Weight
B. Energy
C. Force
D. Momentum

143. The whole Earth can be covered by _____ geo-stationary satellites.
A. 3
B. 4
C. 5
D. 6

144. The ozone layer is at height of _____ kilometers from the surface of the Earth.
A. 10 to 20
B. 20 to 30
C. 30 to 40
D. 40 to 50

145. The ozone layer was discovered by
A. F.W. Aston and J.J Thomson
B. Albert Einstein
C. Rutherford
D. Charles Fabry and Henri Buisson

146. The interior structure of the Earth is divided into _____ layers.
A. 4
B. 5
C. 6
D. 7

147. We live on the Earth's
A. Inner core
B. Outer core
C. Crust
D. Mantle

148. The thickest layer of the Earth is
A. Crust
B. Inner core
C. Outer core
D. Mantle

149. The outermost layer of the Earth is
A. Crust
B. Inner mantle
C. Outer mantle
D. Core

150. The Earth's crust ranges from _____ km in depth.
A. 0-5
B. 5-10
C. 5-70
D. 10-70

151. The Earth's internal heat mainly comes from
A. Liquid hydrogen
B. Chemical reactions
C. Radioactive decay
D. Molecular kinetic energy

152. There are different reasons on the Earth because of
A. Rotation of the Earth
B. Revolution of the Earth
C. The Earth's axis is tilted
D. The Earth's distance from the Sun

153. On average, Air contains _____ % of water vapour.
A. 1
B. 3
C. 5
D. 7

154. Earth's troposphere extends from the Earth's surface to an average height of about _____ km.
A. 10
B. 12
C. 15
D. 17

155. The science of lightning is called
A. Aerology
B. Meteorology
C. Electeorology
D. Fulminology

156. Ships use _____ to find the depth of the ocean beneath them.
A. Pictches
B. Echoes
C. Frequencies
D. None of these

157. Molecules with identical molecular formulae but with different structural formulae are called
A. Isomers
B. Isotopes
C. Atomic number
D. Mass number

158. The anode is the electrode connected to the _____ terminal of a battery.
A. Positive
B. Negative
C. Neutral
D. Free

159. The unit used to measure humidity is
A. Barometer
B. Hydrometer
C. Hygrometer
D. Galvanometer

160. Laser was invented by
A. Volta
B. Sturgeon
C. Hero
D. Maiman

161. The vernier calipers is used to measure
A. Length
B. Time
C. Temperature
D. Viscority

162. Atomic clock is used to measure _____ intervals of time.
A. Very short
B. Short
C. Very long
D. Long

163. 1 tonne = _____ kg
A. 100
B. 400
C. 1000
D. 4000

164. An instrument used to measure atmospheric pressure is
A. Ammeter
B. Manometer
C. Galvanometer
D. Barometer

165. An instrument used to measure gas pressure is
A. Ammeter
B. Manometer
C. Galvanometer
D. Barometer

166. Which electromagnetic wave has the longest wavelength?
A. Gamma rays
B. X-rays
C. Microwaves
D. Radio waves

167. Which electromagnetic wave has the shortest wavelength?
A. Gamma rays
B. X-rays
C. Microwaves
D. Radio waves

168. All electromagnetic waves have the same
A. Frequency
B. Amplitude
C. Wavelength in vaccum
D. Speed in vaccum

169. The reflection of sound is called
A. Frequency
B. Vibration
C. Echo
D. Wave

170. An instrument used to measure electric current is called
A. Ammeter
B. Barometer
C. Galvanometer
D. Manomete

171. The SI unit of thermodynamic temperature is
A. Celsius
B. Fahrenheight
C. Kelvin
D. None of these

172. The shortest distance between crest to crest is called
A. Phare
B. thoughs
C. Amplitude
D. Wavelength

173. The speed of sound is fastest in
A. Solids
B. Liquids
C. Gasses
D. Vaccum

174. The speed of sound is slowest in
A. Solids
B. Liquids
C. Gasses
D. Vaccum

175. Radioactivity was discovered by
A. Henri Becquerel
B. Pierre Curie
C. Marie Curie
D. Rutherford

176. Which from the following has the greatest ionising power?
A. Alpha particles
B. Beta particles
C. Gamma rays
D. All three has same ionising power

177. Which from the following has the greatest penetrating power?
A. Alpha particles
B. Beta particles
C. Gamma rays
D. All three have same penetrating power

178. Which from the following has the greatest speed?
A. Alpha
B. Beta
C. Gamma
D. None

179. At night
A. The land cools faster than the water in the sea
B. The water in the sea cools faster than the land
C. The land and the water in the sea cools together
D. None of these

180. The chemical name of chalk is
A. Sodium nitrate
B. Zinc sulfate
C. Sulphuric acid
D. Calcium carbonate

181. The branch of science which study the interaction between matter and radian energy is called
A. Thermochemistry
B. Polymer chemistry
C. Spectroscopy
D. Electrochemistry

182. The horizontal rows of the periodic table are called
A. Groups
B. Periods
C. Sets
D. Matrices

183. The vertical coloumns of the periodic table are called
A. Groups
B. Periods
C. Sets
D. Matrices

184. Which metallic element is liquid at room temperature?
A. Zinc
B. Nickel
C. Lead
D. Mercury

185. Which non-metallic element is liquid at room temperature?
A. Bromine
B. Flourine
C. Chlorine
D. Phosphorous

186. Battery charger converts electrical energy into _____ energy.
A. Kinetic
B. Potential
C. Chemical
D. Nuclear

187. A loudspeaker changes _____ energy into sound energy.
A. Chemical
B. Electrical
C. Light
D. Kinetic

188. The strongest part(s) of a magnet is/are
A. North pole
B. South pole
C. North and south pole
D. Median of north and south pole

189. Electromagnetic induction was discovered by
A. Carnot
B. Volta
C. Faraday
D. Bessel

190. Battery was invented by
A. Carnot
B. Volta
C. Faraday
D. Bessel
‘

191. The most abundant form of matter in the universe is
A. Solid
B. Liquid
C. Gas
D. Plasma

192. When gas is ionized, _____ forms.
A. Molecule
B. Element
C. Plasma
D. Current

193. Wind is caused by
A. Difference in atmospheric pressure
B. Difference in atmospheric temperature
C. Rotation of the Earth
D. Revolution of the Earth

194. Wind speed is measured by
A. Anemometer
B. Barometer
C. Ceilometer
D. Galvanometer

195. The fact that universe is expanding was discovered by
A. Hahn
B. Hubble
C. Rontgen
D. Rutherford

196. X-rays were discovered by
A. Hahn
B. Hubble
C. Rontgen
D. Rutherford

197. The Nobel prize in physics for the discovery of the law of photoelectric effect was awarded to
A. Newton
B. Einstein
C. Rontgen
D. Rutherford

198. The symbol of gold is
A. Au
B. Ag
C. Fe
D. Sg

199. Plaster of Paris is produced by heating
A. Graphite
B. Gypsum
C. Zinc
D. Lead

200. Which from the following is NOT true about Helium gas
A. Colourless
B. Odorless
C. Tasteless
D. Toxic

201. Which is the largest excretory organ of the body
A. lungs
B. skin
C. liver
D. none of these

202. The brain is enclosed in a bony case called
A. diaphragam
B. vertebral column
C. cranium
D. vertebrae

203. Which is the bone that is present in forelimb
A. radius
B. femur
C. ribs
D. sternum

204. Which one is herbivore
A. cat
B. dog
C. cow
D. lion

205. Which structure helps in transport of water in plants
A. phloem
B. leaf
C. bark
D. xylem

206. The organisms that can make their own food are called
A. producers
B. consumers
C. secondary consumers
D. decomposers

207. Bacteria are
A. eukaryotes
B. prokaryotes
C. non-living
D. none of these

208. Bile juice is secreted by

A. pancreas
B. stomach
C. intestine
D. gall bladder

209. Which part of the blood cells provide immunity
A. RBC
B. WBC
C. platelet
D. blood plasma

210. Which structure prevent water loss in plants
A. cuticle
B. bark
C. mesophyll
D. leaf

211. DNA structure was first described by
A. Pasteur
B. Robert Koch
C. Watson and Crick
D. Carlous Linnaues

212. Pollination is best defined as
A. germination of pollen grains
B. transfer of pollen from anther to stigma
C. formation of pollen grains
D. none of these

213. Movement of cell against concentration gradient is called
A. active transport
B. osmosis
C. diffusion
D. both b and c

214. One of the following is not a function of bones
A. support
B. production of blood cells
C. protein synthesis
D. muscle attachment

215. Plants absorb most part of water needed by them through their
A. stem
B. root hairs
C. leaf
D. bark

216. Highly intelligent mammals are
A. rat
B. bat
C. dolphin
D. elephant

217. Process of cell division take place by
A. mitosis
B. fertilization
C. reproduction
D. none of these

218. Prokaryotic cell lack
A. nucleolus
B. nuclear membrane
C. both a and b
D. none of these

219. Pulses are a good source of
A. proteins
B. carbohydrates
C. vitamins
D. minerals

220. Plants that grow in dry habitat are called
A. hydrophytes
B. xerophytes
C. shrubs
D. herbs

221. Oxygen released in the process of photosynthesis comes from
A. water
B. oxygen
C. carbon dioxide
D. nitrogen dioxide

222. Phloem tissue is found in
A. liver
B. placenta
C. plants
D. none of these

223. Plant bends towards the source of light on account of the movement known as
A. geotropism
B. hydrotropism
C. chemotropism
D. phototropism

224. Animal lacks
A. starch
B. cellulose
C. protein
D. lipids

225. On which of the following plants did Gregor Mendal perform his classical experiment
A. corn
B. mustard
C. pea
D. sunflower

226. Among the biotic components of the ecosystem, the producer system is
A. carnivores
B. herbivores
C. plants
D. animals

227. Breeding and management of bees is known
A. agriculture
B. sericulture
C. horticulture
D. apiculture

228. Study of fossils is called
A. psychology
B. paleontology
C. biodiversity
D. haematology

229. Which is an example of fungi
A. paramecium
B. euglena
C. penicillium
D. octopus

230. The scientific name of human is
A. Homo sapiens
B. Homo habiscus
C. Oriza sativa
D. none of these

231. Thread like structures in fungi are called
A. mycelium
B. hyphae
C. sporangium
D. spores

232. The smallest bacteria on earth is
A. mycoplasma
B. E.coli
C. salmonella
D. clostridium

233. Vaccine for rabies was developed by
A. Robert Koch
B. Robert Brown
C. Pasteur
D. none of these

234. Malaria is caused by
A. mosquito
B. plasmodium
C. virus
D. bacteria

235. Hepatitis is inflammation of
A. stomach
B. kidney
C. lungs
D. liver

236. Penicillin is obtained from
A. soil
B. bacteria
C. fungi
D. virus

237. Which one is endoparasite
A. lice
B. ticks
C. virus
D. tape worm

238. Fructose is
A. pentose sugar
B. hexose sugar
C. heptose sugar
D. none of these

239. Peptide bond is a
A. C-N link
B. N-H link
C. C-O link
D. N-O link

240. Which is correct about enzymes
A. protein in nature
B. speed up reaction
C. denature at high temperature
D. all of these

241. Which is called power house of the cell
A. golgi complex
B. mitochondria
C. nucleus
D. endoplasmic reticulum

242. The structure that is absent in animal cell
A. cell wall
B. nulcleus
C. centriole
D. mitochondria

243. The non-protein part of enzyme is called
A. co-enzyme
B. activator
C. cofactor
D. substrate

244. Nucleic acid were first isolated by
A. Erwin Chargaff
B. Friedrich Miescher
C. Rosalind Franklin
D. none of these

245. One of the following is not pyrimidine
A. thymine
B. cytosine
C. guanine

D. uracil

246. Fructose is
A. milk sugar
B. cereal sugar
C. aldo sugar
D. keto sugar

247. Group of tissues doing a particular job
A. organ
B. system
C. organelle
D. individual

248. Members of the same species living in the same place at the same time make
A. population
B. ecosystem
C. community
D. trophic level

249. Which one is a leukocyte
A. red blood cell
B. plasma cell
C. monocyte
D. all of these

250. Which one of the following contain deoxygenated blood
A. pulmonary artery
B. hepatic artery
C. left atrium
D. none of these

251. In most plants the food is transported in form of
A. fructose
B. sucrose
C. starch
D. glucose

252. How many molecules of carbon dioxide are formed in one Kreb's cycle
A. 2
B. 4
C. 6
D. 1

253. Which enzyme digest carbohydrates
A. lipase
B. proteases
C. amylases
D. none of these

254. The pancreas produce digestive enzymes and release in the
A. stomach
B. esophagus
C. large intestine
D. small intestine

255. Detail study of internal organs at level of tissue with the help of microscope is called

A. histology
B. anatomy
C. physiology
D. embryology

256. The exchange of chromosal segments i.e.crossing over occurs during
A. first meiotic division
B. mitotic division
C. second meiotic division
D. none of these

257. Many bacteria in our digestive system synthesize vitamins for example vitamin
A. B1
B. B2
C. B12
D. B6

258. It is very serious disease of brain which is caused by fungi
A. ring worm
B. meningitis
C. hepatitis
D. none of these

259. They are widespread as protective coatings on fruits and leaves
A. cholesterol
B. waxes
C. chitin
D. all of these

260. They are present in the underground parts of the plants and stored food
A. leucoplast
B. chromoplast
C. chloroplast
D. stem

261. The simplest amino acid is
A. alanine
B. glycine
C. valine
D. phenylalanine

262. Accumulation of lipid molecules in brain cells lead to
A. paralysis
B. oedema
C. mental retardation
D. all of these

263. The life and activities of a cell is controlled by
A. cytoplasm
B. nucleus
C. vacuole
D. mitochondria

264. Flagella are composed of
A. micro tubules
B. micro filaments
C. intermediate filaments
D. glycoproteins

265. Tobacco mosaic virus was crystallized by
    A. Pasteur
    B. Chamberland
    C. Stanely
    D. Ivanowski

266. Non-enveloped naked viruses are known as
    A. prions
    B. bacteriophages
    C. oncoviruses
    D. virions

267. Gram +ve bacteria on treatment with crystal violet dye give colour
    A. red
    B. green
    C. purple
    D. pink

268. Malarial parasite is injected into man as
    A. sporozoites
    B. merozoites
    C. zygote
    D. none of these

269. The terms procariotique and eucariotique were proposed by
    A. Whittaker
    B. Chatton
    C. Haeckel
    D. Margulis and Schwartz

270. The most common type of asexual reproduction in the fungi is
    A. fragmentation
    B. spore production
    C. budding
    D. binary fission

271. Outside the thallus of Marchantia there are special structures called
    A. stem tuber
    B. rhizoids
    C. sporangium
    D. none of these

272. The vascular plants are termed as
    A. tracheophytes
    B. bryophytes
    C. pteridophytes
    D. all of these

273. In human beings influenza is caused by
    A. bacteria
    B. protist
    C. virus
    D. fungi

274. In many which phylum the body of an organisms is usually divided in there regions called head, thorax and abdomen
    A. echinodermata

B. mollusca
C. nematoda
D. arthropoda

275. Snails belong to
A. gastropods
B. bivalves
C. arthropods
D. platyhelminthes

276. Amoeba moves in water with the help of locomotory organs called
A. tube feet
B. cilia
C. pseudopodia
D. flagella

277. Liver fluke is parasite in the liver of
A. cattle
B. sheep
C. goat
D. all of these

278. In all coelentrates endoderm give rise to
A. nervous system
B. digestive system
C. reproductive system
D. circulatory system

279. Higher vascular plants are also called
A. flowering plants
B. seed plants
C. ferns
D. none of these

280. The plants which produce embryo but lack vascular tissues and seeds are placed in
A. bryophytes
B. pteridophytes
C. tracheophytes
D. all of these

281. Which bone is called beauty bone in women
A. sternum
B. clavicle
C. maxilla
D. radius

282. Detachment of myosin head and actin in rigor mortis occurs due to
A. stored ATP in body
B. hypercalcemia
C. autolysis in body
D. hyperactivity of mitochondria

283. Release of the ovum from ovary is called
A. fertilization
B. ovulation
C. implantation
D. none of these

284. The foetus is protected from the mechanical damage by the
   A. cervix
   B. vagina
   C. uterus
   D. amniotic fluid

285. Rich source of energy in seimen is
   A. glucose
   B. fructose
   C. lactose
   D. sacrose

286. Sickle cell anemia was discovered by
   A. Vernon Ingram
   B. Sanger
   C. Miescher
   D. none of these

287. Earthworm lives in
   A. sea water
   B. moist soil
   C. fresh water
   D. none of these

288. Kangaroo has an abdominal pouch known as
   A. placenta
   B. guttural pouch
   C. marsupial
   D. all of these

289. The utilization of the products of digestion is called
   A. ingestion
   B. absorption
   C. assimilation
   D. both a and b

290. Parabronchi are present in
   A. cockroach
   B. frog
   C. fish
   D. birds

291. The respiratory problem most common in smokers is
   A. tuberculosis
   B. emphysema
   C. asthma
   D. cancer

292. Water potential of pure water is
   A. zero
   B. one
   C. negative
   D. two

293. Bean shaped cells in plants are
   A. mesophyll cells
   B. xylem cells

C. phloem cells
D. guard cells

294. The normal pH of human blood is
A. 6.4
B. 7.0
C. 7.4
D. 7.5

295. Shrinkage of protoplast due to exosmosis of water is
A. imbibition
B. plasmolysis
C. deplasmolysis
D. adhesion

296. Artherosclerosis is a major condition leading to
A. heart attack
B. hypertension
C. stroke
D. tumor

297. Villi and microvilli increase
A. digestion
B. assimilation
C. absorption
D. ingestion

298. Splitting of glucose relates to
A. respiration
B. photorespiration
C. glycolysis
D. pyruvic acid

299. Reptiles hibernate during
A. summer
B. winter
C. spring
D. autumn

300. Which of the following plants are called arthrophytes
A. sphenopsids
B. lycopsids
C. psilopsids
D. pteropsids

CSS PAPER

1. What is the body temperature of a normal man?
A. 81.1oC
B. 36.9oC
C. 98.6oC
D. 21.7oC

2. Which of the following helps in clotting of blood?
A. Vitamin B1
B. Vitamin B2
C. Vitamin D
D. Vitamin K

3. Total volume of blood in a normal adult human being is
A. 5-6 liters
B. 3-4 liters
C. 8-10 liters
D. 10-12 liters

4. Red blood corpuscles are formed in the
A. Liver
B. Bone marrow
C. Kidneys
D. Heart

5. How many bones are there in an adult human being?
A. 210
B. 260
C. 206
D. 300

6. The pancreas secretes

A. **Insulin**
B. Bile juice
C. Peptic juice
D. None of these

7. Tibia is a bone found in the
A. Skull
B. Arm
C. **Leg**
D. Face

8. The largest part of the human brain is the
A. Medulla oblongata
B. Cerebellum
C. **Cerebrum**
D. None of these

9. What is the main component of bones and teeth?
A. Calcium carbonate
B. Calcium phosphate
C. Calcium sulphate
D. Calcium nitrate

10. The main constituent of hemoglobin is
A. Chlorine
B. Iron
C. Calcium
D. None of these

11. The main function of the kidney is
A. To control blood pressure
B. To control body temperature
C. To remove waste product from the body
D. To help in digestion of food

12. The function of hemoglobin is
A. Transportation of oxygen
B. Destruction of bacteria

C. Prevention of anemia
D. Utilization of energy

13. Which of the following glands secrete tears?
A. Lachrymal
B. Pituitary
C. Thyroid
D. Pancreas

14. Which is the largest gland in the human body?
A. Thyroid
B. Liver
C. Pancreas
D. None of these

15. Which is the largest organ in the human body?
A. Liver
B. Heart
C. Skin
D. Kidney

16. A person of which of the following blood groups is called a universal donor?
A. O
B. AB
C. A
D. B

17. Which gland in the human body is called the master gland?
A. Pancreas
B. Thyroid
C. Pituitary
D. Spleen

18. How many bones are there in a newly born infant?
A. 206
B. 230
C. 280
D. 300

19. Which of the following have maximum calorific value?

A. Carbohydrates

B. Fats

C. Proteins

D. Vitamins

20. Which of the following vitamins promote healthy functioning of eyes in human beings?

A. Vitamin B

B. Vitamin C

C. Vitamin A

D. Vitamin D

21. The average heartbeat per minute in a normal man is

A. 50

B. 70

C. 80

D. 100

22. A person with which of the following blood groups can receive blood of any group?

A. A

B. AB

C. B

D. O

23. Malaria is a disease which effects the

A. Heart

B. Lungs

C. Spleen

D. Kidneys

24. Which of the following diseases is caused by virus?

A. Small pox

B. Tuberculosis

C. Malaria

D. Cholera

25. Medulla oblongata is a part of human

A. Heart

B. Brain

C. Liver
D. Sex organ

26. Myopia is a disease connected with

A. Ears

B. Eyes

C. Lungs

D. Brain

27. Leukemia is a disease of the

A. Lungs

B**. Blood**

C. Skin

D. Nerves

28. Short-sightedness can be corrected by using

A. Convex lens

B. **Concave lens**

C. Convex-concave lens

D. Concave-convex lens

29. Trachoma is a disease of the

A. Liver

B. **Eyes**

C. Lungs

D. Kidneys

30. Match the following

Column I Column II

A. Beriberi 1. Vitamin A

B. Scurvy 2. Vitamin B

C. Rickets 3. Vitamin D

D. Night Blindness 4. Vitamin C

31. Typhoid and cholera are typical examples of

A**. Infectious diseases**

B. Air-borne disease

C. Water-borne disease

D. None of these

32. Pyorrhea is a disease of the

A. Nose

B. **Gums**

C. Heart

D. Lungs

33. Lack of what causes diabetes.

A. Sugar

B. **Insulin**

C. Calcium

D. Vitamins

34. Appendix is appendix is a part of

A. Small intestine

B**. Large intestine**

C. Stomach

D. Liver

35. Match the following columns

Column I Column II

A. Cataract 1. Bones

B. Jaundice 2. Eyes

C. Diabetes 3. Liver

D. Arthritis 4. Pancreas

A B C D

(a) 2 3 4 1

(b) 2 3 1 4

(c) 1 3 4 2

(d) 3 2 4 1

36. Bronchitis is a disease of which of the following organs?

A. Blood

B. Bladder

C. Liver

D**. Respiratory tract**

37. ECG is used for the diagnosis of aliments of

A. Brain

B. **Heart**

C. Kidneys

D. Lungs

38. Biopsy is done on

A. Tissues taken from a dead body

B. **Tissues taken form a living body**

C. Blood from veins

D. Blood from arteries

39. Barium is used for

A. Checking blood group

B**. X-ray of alimentary canal**

C. X-ray of brain

D. None of these

40. Dialysis is used for the treatment of

A. **Kidney failure**

B. Heart weakness

C. Brain diseases

D. None of these

41. Insulin is injected into the intestines by

A. **Pancreas**

B. Liver

C. Stomach

D. Gall bladder

42. Lock Jaw, i.e., difficulty in opening the mouth is a symptom of

A. Cholera

B. Plague

C**. Tetanus**

D. Diphtheria

43. Which of the following pairs is incorrect?

A. Plague-rats

B. Rabies-dog

C. Tapeworm-pig

D. **Poliomyelitis-monkey**

44. Match the following columns

Column I Column II

A. Air-borne 1. Tetanus

B. Water-borne 2. Tuberculosis

C. Contact 3. Cholera

D. Wound 4. Syphilis

A B C D

(a) 2 3 1 4

(b) 2 3 4 1

(c) 3 2 4 1

(d) 4 3 2 1

45. Ricketts is a disease of the

A. **Bones**

B. Tissue

C. Muscles

D. Blood

46. Which of the following statements is correct?

A. Pulmonary artery carries pure blood

B**. Pulmonary artery carries impure blood**

C. Pulmonary vein carries impure blood

D. None of these

47. Lungs are situated in the

A. Abdominal cavity

B. Pericardial cavity

C. Buckle cavity

D. **Thoracic cavity**

48. The human cell contains

A. 44 chromosomes

B. 48 chromosomes

C. **46 chromosomes**

D. 23 chromosomes

49. Enzymes help in

A. Respiration

B. **Digestion of food**

C. Immune system

D. Reproduction

50. Food is normally digested in the

A. Liver

B. Stomach

C**. Small intestines**

D. Large intestines

MOST IMPORTANT MCQs:

.

1. Which is known as 'River of Life'?
Answer: Blood
2. Blood circulation was discovered by?
Answer: William Harvey
3. The total blood volume in an adult?
Answer: 5-6 Liters
4. The pH value of Human blood?
Answer: 7.35-7.45
5. The normal blood cholesterol level?
Answer: 150-250 mg/100 ml
6. The fluid part of blood?
Answer: Plasma
7. Plasma protein fibrinogen has an active role in?
Answer: Clotting of blood.
8. Plasma protein globulins functions as?
Answer: Antibodies
9. Plasma proteins maintain the blood pH?
Answer: Albumins
10. Biconcave discs shaped blood cell?
Answer: RBC (Erythrocytes)
11. Non nucleated blood cell?
Answer: RBC (Erythrocytes)
12. Respiratory pigments present in RBC?
Answer: Haemoglobin
13. Red pigment present in RBC?
Answer: Haemoglobin
14. RBC produced in the?
Answer: Bone marrow
15. Iron containing pigment of Haemoglobin?
Answer: Haem
16. Protein containing pigment of Haemoglobin?
Answer: Globin
17. Graveyard of RBC?
Answer: Spleen
18. Blood bank in the body?
Answer: Spleen

19. Life span of RBC?
Answer: 120 Days
20. Total count is measured by an instrument known as?
Answer: Haemocytometer
21. A decrease in RBC count is known as?
Answer: Anemia
22. An increase in RBC count is known as?
Answer: Polycythemia
23. A high concentration of bilirubin in the blood causes?
Answer: Jaundice
24. The disease resistant blood cell?
Answer: WBC (leucocytes)
25. Which WBC is known as soldiers of the body?
Answer: Neutrophils
26. Largest WBC?
Answer: Monocyes
27. Smallest WBC?
Answer: Lymphocytes
28. Antibodies producing WBC?
Answer: Lymphocytes
29. Life span of WBC?
Answer: 10-15 days
30. Blood cell performs an important role in blood clotting?
Answer: Thrombocytes (Platelets)
31. Vessels is called?
Answer: Thrombus
32. Anticoagulant present in Blood?
Answer: Heparin
33. A hereditary bleeding disease?
Answer: Haemophilia
34. Bleeder's disease?
Answer: Haemophilia
35. Christmas disease?
Answer: Haemophilia

MCQS ABOUT EVERY DAY SCIENCE

1. Which instrument is used to measure pressure?
   Manometer.

   2. What does Angstrom measure?
   Speed of ships

   3. Light year is related to
2. **. Distance**

   5. Which of the following instruments is used to measure pressure of gases?.
   Manometer

   6. Joule is the unit of
   Energy

   7. How many Dynes are there in one gram weight?
   . **981**

   8. How many Ergs are these in 1 Joule?
3. **107**

   9. The unit of current is
   Ampere
   10. The unit of energy in MKS system is.
4. **Joule**

   11. The intensity of an earthquake is measured with a
   Seismograph

   12. Centigrade & Fahrenheit scales give same reading at
   400o

   14. Who among the following described protoplasm as the physical basis of life?. **T. H. Huxley**

   15. The scientist who first discovered that the earth revolves round the sun was

Copernicus

16. Alexander Fleming discovered.

Penicillin

17. Who among following invented the steam engine?

James Watt

18. Who invented typewriter?

Sholes

20. Who discovered circulation of blood in human body?

William Harvey

Hypochondria is a ——

"State of morbid anxiety about on he's health with complaint of imaginary disorders."

. Aspirin is a ———

Pain reliever

. The message received by and transmitted from the brain to various parts of the body take form of

Ans Nervous impulses

. Hormones, which are necessary for the development of human body, are secreted by

Ans Pituitary gland

The green colour of water in a lake is due to

Ans Excessive growth of sea weeds

. 14 carat gold means

Ans An alloy containing 14 parts of gold and 10 parts of copper

. The stars are not visible in the day time because

Ans of sun`s brightness during day time

" Biopsy" is ———

Medical diagnosis technique using cells and tissues

In typhoid, which of the following drugs is administered?

Ans Chloromcetin

Soap and detergents remove the dirt from clothes due to

Ans Osmosis

Wave length of Ultra violet light is
Ans 5500 A

The green colour of water in a lake is due to
Ans Excessive growth of sea weeds

Diamond and Emerald contain

Ans Carbon and silicon

Cloudy nights are warmer than clear nights due to
Ans Prevention of heat radiated out by the earth from escaping into the sky

Which of the following semi-conductor?
Ans Copper

A camera forms
Ans Real but inverted images

The gas used in Soda water is
Ans Carbon dioxide

A red flower placed in green light appears

Ans black

The metal used in storage batteries is

Ans Lead

Anaemia is caused in man due to the deficiency of

a. Folic acid
b. Vitamin A
c. Vitamin B 12
Ans None of these

. Which of the following situations will be fatal to the first foetus ?

Ans Rh positive male marries Rh negative woman

. The most important function of perspiration is to

Ans Regulate the body temperature

The main function of white blood cell in body is to

Ans Protect body against diseases

. The cranial nerve which supplies regions of the body is

Ans Vagus

The number of chromosomes in the human body is

Ans 46

One micron is equal to

Ans One- thousandth of a millimeter

The innermost linning which wraps the brain and spinal card in vertebrates is called

Ans Piamater

The internal antenna of transistor set is made of ?

Ans Ferror Chrome

Gerontology is the study of ?

Ans Process of ageing

Helium is used for respiration in deep water instead of nitrogen because

Ans It is heavier than nitrogen

In a fluorescent tube which of the following components are found?

Ans Mercury vapour

The common ore of aluminium is ?

Ans Chromit

- The food which contains largest amount of Vitamin C is tomato
  - Cod liver oil contains Vitamin D
  - Collagen is the substance that gives elasticity to skin
  - Vitamin E promotes oxygenation and acts as anti aging
  - Carbon dioxide we release comes from food we eat
  - Vitamin B2 has what other name Riboflavin
  - Fats are made of carbon, hydrogen and oxygen
  - Vitamin E is called anti-aging agent
  - Vitamin E helps in fertility process

• Vitamin B helps maintain normal appetite and good digestion
• Protein found in milk is Casein, in beans is Legumes, in meat is myosin and in eggs isalbumin
• Water soluble vitamin are B and C and all other are fat soluble
• Vitamin A is stored as Ester in liver
• Vitamin A is found in carotene bearing plants
• Vitamin K helps to form prothrobin (fibro gin) one of the enzymes helpful in blood clotting
• Vitamin E is necessary for iron utilization; normal reproductive function. Vitamin E is for reproduction.
• Vitamin A is found in Dairy products
• Deficiency of Vitamin A causes Night blindness.
• Too much presence of the Potassium salt in human blood increase the risk of heart attack.
• The lack of calcium in the diet causes what condition-Rickets
• Celluloses are carbohydrates.
• Milk contains lactose.
• Vitamin C is a preventor of infectious disease
• Vitamin C is also called Skin food
• Vitamin C can easily be lost in cooking and food storage
• Vitamin D is essential for calcium metabolism.
• Vitamin C hastens healing of wounds
• Vitamin capable of formation of blood is B12
• Riches source of Vitamin D is code liver oil
• Riches source of Vitamin A is eggs
• Deficiency of Calcium leads to rickets
• Vitamin B1 is available is yeast.
• Scury, arising due to deficiency of vitamin C, it is related to Gastro-intestinal disorder.
• Sodium is necessary of nervous system.
• Vitamin D is essential for calcium metabolism.
• Cheese contains vitamin D.
• Vitamin C can not be stored in human body.
• Scurvy, arising due to deficiency of vitamin C, it is related to Gastro-intestinal disorder.
• Sodium is necessary of nervous system.
• Ground nut has maximum protein
• Digestion of fat in intestine is aided by Emulsification
• Hair, finger nails, hoofs, etc are all make of protein
• Deficiency of sodium and potassium causes muscular cramps, headache and diahrae

- Milk contains 80% water
- Milk is a complete food.
- Cheese contains vitamin D.
- Vitamin E is for reproduction.
- Deficiency of Thiamine causes Beri Beri.
- Glucose is the source of energy for human brain.
- Major component of honey is Glucose
- Three main food nutrients are carbohydrates, protein and fats. Other are vitamins and minerals
- Meat is rich in iron we need to make blood cells
- Eating of coconut increases man's mental faculties
- Food poisoning can result from the eating of too much toadstools.
- Vitamin c is also known as Ascorbic Acid.
- Celluloses are carbohydrates.
- Milk contains lactose
- Ascorbic acid is essential for the formation of bones and teeth.
- Citric acid is a good substitution for ascorbic acid in our nutrition.
- A guava contains more vitamin C than an orange
- Vitamin not stored in human body…..

Scientific Abbreviations

➢ Scientific Abbreviations / Scientific Acronyms

following are the list of frequently asked Scientific Abbreviations / Acronyms.

FREQUENTLY ASKED SCIENTIFIC ABBREVIATIONS / ACRONYMS

Abbreviation	Definition
CCTV	Closed-Circuit Television
LCD	Liquid Crystal Display
CRT	Cathode Ray Tube
LED	Liquid Emitting Diode
RADAR	Radio Detection and Ranging
SONAR	Sound Navigation and Ranging
LASER	Light Amplification by Stimulated Emission of Radiation
MASER	Microwave Amplification by Stimulated Emission of Radiation
AIDS	Acquired Immune Deficiency Syndrome
SARS	Severe Acute Respiratory Syndrome
BASIC	Beginner's All Purpose Symbolic Instruction Code
DNA	Deoxyribonucleic Acid
PVC	Polyvinyl Chloride

CNG	Compressed Natural Gas
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
TB	Tuberculosis
BCG	Bacillus Calmette-Guerin
LORAN	Long Range Navigation
AWACS	Airborne Warning and Control System
AMU	Atomic Mass Unit
CRO	Cathode-Ray Oscilloscope
STP	Standard Temperature and Pressure
EMF	Electromotive Force
ADH	Antidiuretic Hormone
BTU	British Thermal Unit
CFC	Chloro Fluoro Carbon
CNS	Central Nervous System
DDT	Dichloro Diphenyl Trichloroethane
FBTR	Fast Breeder Test Reactor
ICU	Intensive Care Unit
RNA	Ribose Nucleic Acid
STAR	Satellite for Telecommunication Applications and Research
TFT	Thin Film Transistor
TNT	Tri Nitro Toulene

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- **COMPUTER SCIENCE & INTERNET RELATED ABBREVIATIONS**
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Abbreviation	**Definition**
WWW	World Wide Web
HTTP	Hypertext Transfer Protocol
HTTPS	Hypertext Transfer Protocol Secure
LAN	Local Area Network
WLAN	Wireless Local Area Network
WAN	Wide Area Network
FTP	File Transfer Protocol
PDF	Portable Document Format
CPU	Central Processing Unit
HTML	Hypertext Markup Language
CSS	Cascading Style Sheets
RAM	Random Access Memory
ROM	Read only Memory
ALU	Arithmetic and Logic Unit
MICR	Magnetic-Ink Character Recongnition

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- **FREQUENCY RELATED ABBREVIATIONS / ACRONYMS**

Abbreviation	Definition
FM	Frequency Modulator
HF	High Frequency
LF	Low Frequency
MD	Medium Frequency
UHF	Ultra High Frequency
VHF	Very High Frequency
VLF	Very Low Frequency
RF	Radio Frequency

- **SCIENTIFIC INSTITUTES & SOCIETIES ABBREVIATIONS / ACRONYMS**

Abbreviation	Definition
NASA	National Aeronautic & Space Administration
SUPARCO	Space of Upper Atmosphere Research Committee
IUPAC	International Union of Pure & Applied Chemistry
KaNuPP	Karachi Nuclear Power Plant
SHEIR	Society of Higher Education & Industrial Research
PIEAS	Pakistan Institute of Engineering & Appliead Sciences
NUST	National University of Science and Technology

Scientific Inventions and Discoveries

SCIENTIFIC INVENTIONS AND THEIR INVENTORS

Following is the list of Important Scientific Inventions and their Inventors.

TIMELINE / SCIENTIFIC INVENTIONS AND INVENTORS

Year	Scientific Invention	Inventor
60	A small turbine driven by jets of stream	Hero
1644	Mercury barometer	Torricelli
1714	Mercury Thermometer	Fahrenheit
1800	Battery	Volta
1821	Electric motor	Faraday
1832	Moving coil-meter	Sturgeon
1879	Electric Light Bulbs	Swan and Edison
1928	Radiation Detector	Geiger and Muller
1942	Nuclear Reactor	Fermi
1947	Transistor	Bardeen, Brattain and Shockley
1960	Laser	Maiman
	Aeroplane	Wright Brothers
	Barometer	Jorricilli

	Galvanometer	Sweigger
	Glass	Egypt & Mosopotamia
	Maps	Evatosthens
	Motor A.c	Tesla
	Motor D.c	Davenport
	Refrigerator	Harrison
	Sub Marine	Holland
	Television	J. Baird
	Tractor	Froelich
	Radio	Marconi
	Telephone	Graham Bell
	Steam Boat	Fulton
	Steam Engine	Savery
	Telescope	Lippershey
	Transformer	William Stanley
	Radar	Watson Watt
	Sewing Machine	Home
	Washing Machine	Hurdy Machine
1958	Integrated Circuit	St Clair Kilby

SCIENTIFIC DISCOVERIES AND THEIR DISCOVERERS

Following is the list of Important Scientific discoveries and their discoverers.

TIMELINE / SCIENTIFIC DISCOVERIES AND DISCOVERERS

Year	Scientific Discovery	Discoverer
1790	Shape of our galaxy	Herschel
1895	X-Rays	Rontgen
1896	Radioactivity	Bacquerel
1897	Electron	Thomson
1898	Radium and Polonium	M. Curie
1899	Alpha and Beta rays	Rutherford
1919	Proton	Rutherford
1929	Universe is expanding	Hubble
1932	Neutron	Chadwick
1938	Nuclear Fission	Hahn

KEY DEVELOPMENTS IN SCIENCE

- 240 BC - Eratosthenes estimates the diameter of the Earth by comparing shadow angles in different places
- 1543 - Copernicus suggests that the Sun is at the centre of the Universe, with the Earth and planets moving around it
- 1600 - Gilbert suggests that the Earth acts like a giant bar magnet
- 1604 - Galileo shows that all falling objects should have the same, steady acceleration
- 1621 - Snell states his law of refraction
- 1654 - Guericke demonstrates atmospheric pressure
- 1662 - Boyle states his law of gases
- 1678 - Huyghens puts forward his wave theory of light
- 1679 - Hooke states his law for elastic materials
- 1687 - Newton publishes his theory of gravity and laws of motion
- 1752 - Franklin performs a hazardous experiment with a kite to show that lightning is electricity
- 1803 - Dalton suggests that matter is made up of atoms
- 1803 - Young demonstrates the wave nature of light
- 1825 - Ampere works out a law for the force between current-carrying conductors
- 1827 - Ohm states his law for metal conductors
- 1832 - Faraday demonstrates electromagnetic induction
- 1849 - Fizeau measures the speed of light
- 1852 - Kelvin states the law of conservation of energy
- 1864 - Maxwell predicts the existence of radio waves and other electromagnetic waves
- 1877 - Cailletet liquefies oxygen
- 1888 - Hertz demonstrates the existence of radio waves
- 1894 - Marconi transmits the first radio signals
- 1900 - Plank proposes the Quantum theory
- 1905 - Einstein uses the quantum theory to explain the photoelectric effect, and publishes his special theory of relativity
- 1911 - Rutherford proposes a nuclear model of the atom
- 1913 - Bohr uses the quantum theory to modify Rutherford's model of the atom
- 1916 - Einstein publishes his general theory of relativity
- 1924 - De Broglie suggests that particles can behave as waves
- 1925 - Schrodinger develops a wave-machine model of the atom
- 1927 - Lemaitre suggests the possibility of the Big Bang
- 1929 - Hubble discovers that the Universe is expanding
- 1932 - Cockcroft and Walton produce the first nuclear change using a particle accelerator
- 1957 - First artificial satellite, Sputnik I, put into orbit
- 1963 - First geostationary communications satellite
- 1969 - First manned landing on the Moon
- 1971 - Intel Corporation makes the first microprocessor
- 1977 - First experimental evidence of quarks
- 1990 - Hubble Space Telescope launched

DIFFERENCE BETWEEN SCIENTIFIC TERMS

Scalars	Vectors
Quantities which have magnitude only, and no direction are called *Scalars*. For example, Speed, Temperature, Mass etc.	Quantities which have a direction as well as a magnitude are called *Vectors*. For example, Velocity, Weight, Force etc.
Speed	**Velocity**
Rate of change of distance is called *Speed*. For example, This car can travel with speed 80m/s. Speed can be calculated as: Speed = Distance / Time	Velocity means the speed of something and its direction of travel. For example, A car is moving with velocity 80m/s towards East.
Heat	**Temperature**
Heat is the energy an object has because of the movement of its atoms and molecules. Heat depends on the size or type of object. For example, A 1000 watt light bulb will give off more heat as compare to 100 watt light bulb.	Temperature is not energy, but a measure of it. Temperature does not depend on the size or type of object. For example, the temperature of a small cup of boiling water is the same as the temperature of a large pot of boiling water.
Periscope / Telemeter	**Perimeter**
Periscope: A *Periscope* is a scientific instrument for observation from a concealed position. ***Telemeter:*** A *Telemeter* is a scientific instrument for measuring distance from observer.	A perimeter is the length of boundaries or outer lines of an object. For example, The perimeter of this rectangle is: Perimeter = 4 + 4 + 2 + 2 = 12 inches
Microscope	**Telescope**
Microscope is a scientific instrument for magnifying small objects.	Telescope is a scientific instrument for viewing objects at great distances.
Element	***Molecule***
An *Element* is a single substance which cannot be split into two or more simpler substances by chemical means.	A *Molecule* is the smallest particle of a compond. Molecules are made up of two or more atoms.
Mixture	**Compound**
When two or more atoms or molecules combine together, they form *Mixture*. For example, Alloys are mixture of two or more metals, so they contain two or more different types of atoms. ***Other Differences:*** 1. It can be separated by physical means. 2. Its physical properties are intermediate between those of the substances in it. 3. A mixture's composition can vary. 4. Its chemical properties are the result of the substances in the mixture.	When two or more elements chemically combine together, they form *Compounds*. Compounds are pure substances as they contain only one type of molecules, e.g. Water, Carbon dioxide. ***Other Differences:*** 1. It cannot be separated by physical means. 2. Its physical properties are individual and not the result of its elements. 3. A compound's composition cannot vary. 4. Its chemical properties are quite different from those of its elements.

Atomic Number	Mass Number
The *atomic number* of an element is the number of protons or electrons in its atom.	The *mass number* of an element is the total number of protons and neutron in its atom.
Isotopes	**Isomers**
Isotopes are atoms of the same element with different numbers of neutrons. As they contain same number of protons or electrons, so chemically they are identical. But, as they have different number of neutrons, so they have different masses. For example, Deuterium is isotopes of Hydrogen. Both have same atomic number (1). But different mass number: Hydrogen = 1; Deuterium = 2	Molecules with identical molecular formulae but with different structural formulae are called *Isomers*. For example, Butane and Isobutane are isomers because they have same molecular formulae, but different structure. As they have different structures, so they have different physical properties. And, as they have identical molecular formulae, so they react in a similar way.
Reversible Reaction	**Irreversible Reaction**
A chemical reaction that can proceed in both directions; from reactants to products, and from products to reactants, is called *Reversible Reaction*.	A chemical reaction that can proceed in one direction only; from reactants to products, and NOT from products to reactants, is called *Irreversible Reaction*.
Endothermic Reaction	**Exothermic Reaction**
A chemical reaction which takes in energy (heat) and involves bond breaking is called *Endothermic Reaction*.	A chemical reaction which gives out energy (heat) and involves bond making is called *Exothermic Reaction*.
Oxidation	**Reduction**
Oxidation is a/an: ▪ gain of oxygen ▪ loss of hydrogen ▪ loss of electron ▪ increase in oxidation state	Reduction is a: ▪ loss of oxygen ▪ gain of hydrogen ▪ gain of electron ▪ decease in oxidation state
Anode	**Cathode**
The anode is the electrode connected to the positive terminal of a cell (battery).	The cathode is the electrode connected to the negative terminal of a cell (battery).

Science Facts

Everyday Science (or general Science) Key Facts.

- The temperature at which all of solid becomes a liquid is called its melting point.
- The temperature at which all of a liquid becomes a gas is called its boiling point.
- Only 2% of the world's water is in the form of ice.
- The heavies solid is the element osmium.
- The lightest gas is hydrogen. About 99.99% of the volume of hydrogen gas is empty space.
- The average adult has a blood volume of about 5 liters.
- Each day human body breathes in 15000 to 20000 liters of air.
- The average human body contains about 250g of sodium chloride.
- The most abundant element in the universe is hydrogen.
- The most abundant element in the earth's crust is oxygen.

- The second most abundant element in the earth's crust is silicon.
- The deepest place on Earth is Mariana Trench.
- Bond making is Exothermic Reaction, and Bond breaking is Endothermic Reaction.

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