Physics Multiple Choice Questions

1. What is the minimum distance (in metres) required to hear an echo?
   (a) 10 (b) 13
   (c) 17 (d) 21
2. Why does a Black board appears black in colour?
   (a) It reflects black colour
   (b) It absorbs black colour
   (c) It reflects all colours
   (d) It absorbs all the colours
3. Which of the following instrument is used to measure Soil Water Tension?
   (a) Photometer (b) Pyrometer
   (c) Psychrometer (d) Tensiometer
4. What is the SI unit of Force?
   (a) Pascal (b) Boyle
   (c) Newton (d) Watt
5. Which one of the following is a bad Thermal Conductor?
   (a) Aluminium (b) Copper
   (c) Glass (d) Silver
6. Who invented first working laser?
   (a) A. H. Taylor (b) W. K. Roentgen
   (c) T. H. Maiman (d) Fred Morrission
7. Meter in a vehicle that calculates distance covered by the vehicle is called _____.
   (a) Speedometer (b) Odometer
   (c) Thermometer (d) Kilometre
8. What is the SI unit of pressure?
   (a) Newton (b) Weber
   (c) Pascal (d) Henry
9. Reflection from a smooth surface like that of a mirror is called _____ reflection.
   (a) Regular (b) Irregular
   (c) Diffused (d) Fused
10. What is the unit of resistance?
    (a) Ohm (b) Farad
    (c) Henry (d) Weber
11. Gravitational force is maximum at which of the following place?
    (a) At equator
    (b) At tropic of cancer
    (c) At tropic of Capricorn
    (d) At poles
12. Which of the following device is used to measure humidity?
    (a) Hydrometer (b) Hygrometer
    (c) Psycho Meter (d) Anemometer
13. Which of the following is not a vector quantity?
    (a) Momentum (b) Displacement
    (c) Torque (d) Speed
14. At what temperature (in Fahrenheit) pure water freezes?
    (a) 32 (b) 0
    (c) 48 (d) 37
15. What is the other name of Galileo's law of falling bodies?
    (a) Law of motion (b) Newton's first law
    (c) Newton's second law (d) Newton's third law
16. Which of the following device is best suited for measuring the temperature inside metallurgical furnaces?
    (a) Pyrometer (b) Thermocouple
    (c) Thermometer (d) Thermistor
17. In a qualitative way, the tendency of undisturbed objects to stay at rest or to keep moving with the same velocity is called _____.
    (a) Force (b)Acceleration
    (c) Friction (d) Inertia
18. The time taken by a pendulum to complete one oscillation is called its?
    (a) Maximum speed (b) Average speed
    (c) Time period (d) Time interval
19. If the mass of an object is 60 kgs, what will be its weight on the moon? (N=Newton)
    (a) 60N (b) 600N
    (c) 100N (d) 10N
20. The side mirrors of vehicles are of which type of mirrors?
    (a) Convex (b) Concave
    (c) Plane (d) Inverted
21. If the speed of an object moving along a straight line is constant, its motion is said to be _____.
    (a) Uniform (b)Periodic
    (c) Circular (d) Non-uniform
22. The strength of a force is usually expressed by its _____.
    (a) Motion (b)Direction
    (c)Interaction (d)Magnitude
23. If objects appear enlarged and inverted in a rear view mirror, then which type of mirror is used?
    (a) Concave (b) Convex
    (c) Cylindrical (d) Plane
24. Soap bubble attains spherical shape due to ___.
    (a) Inertia (b) Pressure
    (c) Surface tension (d) Viscosity
25. Speed of light is maximum in _____.

(a) Vacuum (b) Solids
(c) Liquids (d) Gases

26. What is the SI unit of electric current?
(a) Newton (b) Joule
(c) Ampere (d) Watt

27. Which among the following determines the pitch of a sound?
(a) Amplitude (b) Frequency
(c) Loudness (d) Wavelength

28. Which phenomena shows the particle nature of light?
(a) Diffraction (b) Interference
(c) Photoelectric effect (d) Polarisation

29. Electric Motor converts _____ energy to mechanical energy.
(a) Sound (b) Mechanical
(c) Chemical (d) Electrical

30. Optical fibre works on which of the following principle of light?
(a) Reflection
(b) Refraction
(c) Diffraction
(d) Total internal reflection

31. Why does water tank appear shallower when viewed from the top?
(a) Due to reflection (b) Due to refraction
(c) Due to diffraction (d) Due to total internal reflection

32. Which colour is formed when Red and Green are mixed?
(a) Light blue (b) Yellow
(c) White (d) Grey

33. UV rays coming from Sun, majorly causes which cancer?
(a) Lungs cancer (b) Liver cancer
(c) Mouth cancer (d) Skin cancer

34. Which of the following is not a vector quantity?
(a) Acceleration (b) Electric current
(c) Force (d) Velocity

35. The phenomena of raising the outer edge of the curved roads, above the inner edge to provide necessary centripetal force to the vehicles to take a safe turn is called _____.
(a) Banking of roads (b) Cornering of roads
(c) Elevation of roads (d) Tempering of roads

36. Convex mirror is generally used in _____.
(a) Solar cookers
(b) Opthalmoscope
(c) Reflector for head light
(d) Rear view mirror

37. The bending of light when it passes around a corner or a slit is due to
(a) Reflection
(b) Refraction
(c) Diffraction
(d)Total internal reflection

38. What is the reason for formation of Mirage in desert?
(a) Refraction of light
(b) Reflection of light
(c) Total internal reflection of light
(d) Both Refraction and Total internal reflection of light

39. It is difficult to fix a nail on a freely suspended wooden frame. Which law supports this statement?
(a) Law of inertia
(b) Newton's second law
(c) Newton's third law
(d) Pascal's law

40. Which one of the following is not a property of electromagnetic waves?
(a) Electromagnetic waves do not show interference and diffraction.
(b) Oscillating electric field and magnetic field are perpendicular to each other
(c) Electromagnetic waves are transverse waves
(d) Electromagnetic waves do not require a medium to propagate

41. What was invented by Zacharias Jansen?
(a) Jet Engine (b) Radium
(c) Microscope (d) Electric Lamp

42. Supercooling is cooling of liquid _____.
(a) Below melting point
(b) Below freezing point
(c) At melting point
(d) Above melting point

43. When light passes from one medium to another, this phenomenon of change in its direction is called _____.
(a) Refraction (b) Diffraction
(c) Propagation (d) No option is correct

44. Who invented world's first true radar and demonstrated its use?
(a) Fred Morrison
(b) A. H. Taylor and Leo C. Young
(c) Van Tassel
(d) W. K. Roentgen

45. What is the SI unit of intensity of sound?
(a) Decibel (b) Newton
(c) Hertz (d) Tesla

46. Which colour is formed when Blue and Green are mixed?
(a) Cyan (b) Brown

(c) Black (d) Violet

47. What is the SI unit of Power?
(a) Boyle (b) Watt
(c) Newton (d) Pascal

48. For which of the following game, players must have the knowledge of Pascal's law?
(a) Climbing (b) Paragliding
(c) Rafting (d) Scuba diving

49. What is the value of the Least Distance of Distinct vision (in cm) for a normal human being?
(a) 2.5 (b) 25
(c) 58 (d) 60

50. Who invented the Centigrade scale?
(a) Anders Celsius
(b) Daniel Gabriel Fahrenheit
(c) William Thomson
(d) Wright Brothers

51. On which principle does the hydraulic lift works?
(a) Newton's law (b) Pascal's law
(c) Archimedes's law (d) Joule's law

52. At what temperature (in degree celsius), the numerical values on Celsius and Fahrenheit scales become equal?
(a) –40 (b) 40
(c) 273 (d)–273

53. What is the process of conversion of solid state directly to gaseous state called?
(a) Evaporation (b) Condensation
(c) Sublimation (d) Distillation

54. When a ball is thrown vertically upwards, which of the following quantities remains constant during its motion?
(a) Energy (b) Displacement
(c) Velocity (d) Acceleration

55. What is the SI unit of heat energy?
(a) Joule (b) Newton
(c) Calorie (d) Kelvin

56. If the orbit of a planet is an ellipse then what is the point at which the Sun is located called?
(a) Centre (b) Circumcentre
(c) Incentre (d) Focus

57. The sliding friction is _____ than the static friction.
(a) Double (b) Same
(c) Greater (d) Smaller

58. Kelvin (K) is the unit of measurement of ___.
(a) Density (b) Pressure
(c) Mass (d) Temperature

59. Who invented the electrocardiogram (ECG)?
(a) Willem Einthoven
(b) Edward Jenner
(c) Antonio de Ulloa and Charles Wood
(d) Karl Benz

60. If the speed of an object moving along a straight line keeps changing, its motion is said to be _____.
(a) Uniform (b) Periodic
(c) Circular (d) Non-uniform

61. The substances which reduce friction are called ____.
(a) Irregularities (b) Lubricants
(c) Adhesives (d) Viscous

62. Who invented Space Pen?
(a) Paul C. Fisher (b) Rudolf Diesel
(c) Wright Brothers (d) Alexander Fleming

63. In the formula average velocity = (u + v) /2, u is the _____.
(a) Final velocity (b) Initial displacement
(c) Initial velocity (d) Final displacement

64. If the force applied on the object is in the direction opposite to the direction of motion, the speed of the object _____.
(a) Increases (b) Stops
(c) Decreases (d) No effect

65. The SI unit of acceleration is _____.
(a) Meters per seconds squared
(b) Meters per second
(c) Seconds per meter
(d) Seconds per meter squared

66. Contact force is another name for _____.
(a) Friction (b) Magnetic force
(c) Electrostatic force (d) Muscular force

67. The force of friction between two surfaces will increase if:
(a) A layer of lubricant is kept between the two surfaces
(b) The two surfaces are pressed harder
(c) Air gap is created between the two surfaces
(d) Irregularities on both the surfaces are removed

68. An image formed by a plane mirror, that cannot be obtained on a screen is called _____.
(a) Virtual image (b) Real image
(c) Inverted image (d) Erect image

69. The force exerted by a magnet is an example of _____.
(a) Non-contact force (b) Muscular force
(c) Contact force (d) Electrostatic force

70. During uniform motion of an object along a straight line, the _____ remains constant with time.
(a) Time (b)Velocity
(c) Acceleration (d) Distance

71. The impression of an image persists on the retina for about _____ of a second.
(a) 1/10th (b) 1/8th
(c) 1/16th (d) 1/5th
72. According to the Second Law of Motion, for a given force, accelaration is inversely proportional to the ____ of an object.
(a) Density (b) Volume
(c)Force (d)Mass
73. The coil wire in the electric room heater or electric cooking heater is called _____.
(a) Circuit (b) Element
(c) Filament (d) Cells
74. Energy in the form of heat is wasted when a machine is operated. This heat is generated due to _____.
(a) Burning (b) Friction
(c) Combustion (d) Lubrication
75. The incident ray, the _____ at the point of incidence and the reflected ray all lie in the same plane.
(a) Surface (b) Tangent
(c) Normal (d) Angle of reflection
76. An image formed by a concave mirror on a screen is called _____?
(a) Virtual image (b) Real image
(c) Inverted image (d) Erect image
77. The distance-time graph for the motion of an object moving with a constant speed is a _____.
(a) Dot (b)Circle
(c) Straight Line (d) Curve
78. If the force applied on the object is in the direction of its motion, the speed of the object _____.
(a) Increases (b) Stops
(c) Decreases (d) No effect
79. If an object moves in a circular path with uniform _____, its motion is called uniform circular motion.
(a) Speed (b) Time
(c) Velocity (d) Acceleration
80. The reflection formed by the plane mirror is _____.
(a) Vertical inversion (b) A real image
(c) Lateral inversion (d) An Enlarged image
81. A ball rolling along the ground gradually slows down and finally comes to rest is due to _____.
(a) Friction (b) Magnetic force
(c) Electrostatic force (d) Muscular force
82. The angle between the _____and the incident ray is called the angle of incidence.
(a) Surface (b) Normal
(c) Tangent (d) Reflected ray
83. Who invented the thermos flask?
(a) Ray Tomlinson (b) Tim Berners-Lee
(c) William Cullen (d) James Dewar
84. Friction is caused by the _____ on the two surfaces in contact.
(a) Irregularities (b) Smoothness
(c) Densities (d) Gaps
85. The motion of a freely falling body is an example of _____ motion.
(a) Uniformly accelerated
(b) Non-uniformly accelerated
(c) Constant velocity
(d) Constant speed
86. The temperature at which a solid melts to become a liquid at the atmospheric pressure is called its _____.
(a) Crystallisation (b) Melting point
(c) Evaporation (d) Galvanisation
87. For an object, the state of rest is considered to be the state of _____ speed.
(a) Increasing (b) Decreasing
(c) Inverse (d) Zero
88. The laws which govern the motion of planets are called _____.
(a) Newton's Laws (b) Kepler's Laws
(c) Avogadro's Laws (d) De Morgan's Laws
89. Convex and concave mirrors are examples of ?
(a) Plane mirrors (b) Spherical mirrors
(c) Inverted mirror (d) Erect mirror
90. The frictional force exerted by fluids is also called _____.
(a) Drag (b) Buoyancy
(c) Upthrust (d) Convection
91. What is the SI unit of frequency?
(a) Newton (b) Watt
(c) Farad (d) Hertz
92. Which one of the following is an insulator?
(a) Copper (b) Wood
(c) Mercury (d) Aluminium
93. Bubbles of air rise up through liquids due to:
(a) Surface tension and adherence
(b) Viscosity and buoyancy
(c) Air current over the liquid and buoyancy
(d) Up thrust and surface tension
94. Which one of the following is an insulator?
(a) Copper (b) Wood
(c) Mercury (d) Aluminium
95. The remove the defect of long sightedness one uses-
(a) Concave lens (b) Convex mirror

(c) Convex lens (d) Concave mirror

96. Stars twinkle but planets do not twinkle because _
(a) They emit light of a constant intensity
(b) Their distance from the earth does not change with time
(c) They are very far away from the earth resulting in decrease in intensity of light
(d) They are nearer to the earth and hence we receive a greater amount of light and therefore minor variations in intensity are not noticeable.

97. The 'Choke' used with a tube light is basically ____
(a) An inductor (b) A capacitor
(c) A transformer (d) A resistor

98. What is the phenomenon which established the transverse nature of light?
(a) Reflection (b) Interference
(c) Diffraction (d) Polarization

99. What is the name of the device used to convert alternating current into direct current?
(a) Ammeter (b) Galvanometer
(c) Rectifier (d) Transformer

100. Why does ice covered in sawdust not melt quickly?
(a) Sawdust does not allow the air to touch the ice
(b) The water is absorbed by sawdust
(c) Sawdust is a bad conductor of heat
(d) Sawdust is good conductor of heat

101. The washing machine works on the principle of _____
(a) Dialysis (b) Diffusion
(c) Reverse osmosis (d) Centrifugation

102. In the absence of the earth's atmosphere, sky would appear-
(a) Blue (b) Deep red
(c) White (d) Black

103. Temperature of distant luminous bodies can be determined by -
(a) Mercury thermometers
(b) Gas thermometers
(c) Pyrometers
(d) Colour thermometers

104. Energy travels from Sun to Earth through -
(a) Conduction (b) Convection
(c) Radiation (d) Modulation

105. Heat is transmitted from higher temperature to lower temperature through the actual motion of the molecules in -
(a) Conduction (b) Convection
(c) Radiation (d) Both conduction and convection

106. If electric resistance is to be decreased, then the number of resistances should be connected in _____.
(a) Series (b) Parallel
(c) Mixed arrangement (d) None of these

107. Which one among the following components is used as an amplifying device?
(a) Transformer (b) Diode
(c) Capacitor (d) Transistor

108. The unit of measurement of Noise is -
(a) Decibel (b) Hertz
(c) Amplifier (d) Acoustics

109. Which one of the following processes is responsible for the glittering of air bubble rising through water?
(a) Reflection of light
(b) Refraction of light
(c) Total internal reflection of light
(d) Scattering of light

110. In an optical fibre the signal is transmitted -
(a) in a straight line path
(b) In a curved path
(c) due to total internal reflection
(d) Due to refraction

111. When we see an object, the image formed on the retina is _____
(a) Real and inverted (b) Real and erect
(c) Virtual and erect (d) Virtual and inverted

112. Kinetic energy depends on
(a) the velocity or speed of the moving body.
(b) the mass of the moving body
(c) the pressure of the moving body
(d) both mass and velocity of the moving body

113. In which form is the supplied heat energy stored during change in temperature of substance?
(a) Heat energy
(b) Kinetic energy
(c) Potential energy
(d) Both kinetic and potential energy

114. A galvanometer can be converted into a voltmeter by connecting with it a -
(a) high resistance in parallel
(b) low resistance in parallel
(c) high resistance in series
(d) low resistance in series

115. Even after sunset, the air near the Earth's surface continue to receive heat due to:
(a) Insolation (b) Terrestrial Radiation
(c) Conduction (d) Convection

116. Sun appears red in colour at sunrise and sunset due to -
(a) the fact that sun emits only red colour at that time
(b) red light having longer wave length scatters away

(c) that sun comes out of the mountains
(d) that all other colours scatter away except red

117. At hill stations, the boiling point of water will be -
(a) same as at sea level
(b) less than that at sea level
(c) more than that at sea level
(d) equal to the melting point of ice

118. The component used for tuning a radio is basically a variable _____.
(a) Resistor (b) Capacitor
(c) Rectifier (d) Transformer

119. 0°K is equivalent to -
(a) 273°C (b) – 273°C
(c) 0°C (d) 100°C

120. An air bubble in water will act like a:
(a) Convex mirror (b) Convex lens
(c) Concave mirror (d) Concave lens

121. The frequency of direct current is _____
(a) Zero (b) 50 HZ
(c) 60 HZ (d) 100 HZ

122. The term 'Higgs Boson' is associated with -
(a) Nano Technology (b) Oncology
(c) God Particle (d) Stem Cell Research

123. Which term is not associated with sound wave?
(a) Hertz (b) Decibel
(c) Candela (d) Mach

124. Which one among the following is not an electro-magnetic wave?
(a) X-Ray (b) Radio waves
(c) Cathode Ray (d) Infrared Ray

125. Which one of the following is a good electrical conductor?
(a) Graphite (b) Diamond
(c) Peat (d) Charcoal

126. Which of the following pairing is incorrect -
(a) Hygrometer - Water vapour content of the atmosphere
(b) Lactometer - Specific gravity of liquids
(c) Anemometer - Speed of the wind
(d) Seismograph – Earthquakes

127. Diamond does not conduct electricity, because -
(a) It's structure is very compact
(b) It is of crystalline nature
(c)There are only carbon atoms present in it
(d) No free electrons are present in it

128. Why is weightlessness experienced while orbiting the earth in space ships?
(a) Inertia (b) Acceleration
(c) Zero gravity (d) Orbital motion

129. Sextant is an instrument used in which of the following?
(a) Cloud cover (b) Navigation
(c) Agriculture (d) Medical treatment

130. During the motion of a projectile fired from the earth surface, _____
(a) its kinetic energy remains constant
(b) its momentum remains constant
(c) vertical component of its velocity remains constant
(d) horizontal component of its velocity remains constant

131. Which of the following waves cannot be polarised?
(a) Radio (b) Ultra violet
(c) Infrared (d) Ultrasonic

132. Which of the following is indicated by the colour of a star?
(a) weight (b) distance
(c) temperature (d) size

133. An anemometer measures which of the following
(a) Speed of light
(b) Speed of wind
(c) Speed of water current
(d) Speed of satellites

134. Sphygmomanometer measures the blood pressure in the
(a) Veins (b) Arteries
(c) Eyes (d) Synovial

135. The reverse effect of X-ray emission is
(a) Raman effect (b) Compton effect
(c) Zeeman effect (d) Photo-electric effect

136. The group of solar cells joined together in a definite pattern is called a
(a) Battery (b) Solar Heater
(c) Solar cooker (d) Solar cell panel

137. Which of the following has the lowest frequency?
(a) Visible light (b) Gamma rays
(c) X-rays (d) Ultra violet rays

138. Who discovered theory of relativity?
(a) Isaac Newton (b) Albert Einstein
(c) Niel Bohr (d) Michael Faraday

139. Which device is used to measure the depth of ocean?
(a) Lexometer (b) Nanometer
(c) Fathometer (d) Hydrometer

140. Barograph was invented by -
(a) Lucien Vidi
(b) John Venn
(c) Theophilus Van Kannel
(d) Lewis Urry

141. Which of the following physical quantities is a scalar quantity?

(a) Weight (b) Impulse
(c) Power (d) Acceleration

142. Seismometer was invented by -
(a) Alexander Parkes (b) Luigi Palmieri
(c) Alexey Pajitnov (d) Ransom Eli Olds

143. For every action, there is an equal and opposite reaction, is Newton's
(a) First law (b) Second law
(c) Third law (d) Fourth law

144. Which among the following is false about displacement?
(a) It can be positive, negative or zero
(b) Displacement is never greater than Distance
(c) Its SI unit is meter
(d) It is always positive

145. The study of origin and evolution of universe is known as _____.
(a) Cosmology (b) Astrology
(c) Seismology (d) Limnology

146. If a ball is thrown up, which of the following does not change?
(a) Acceleration due to gravity
(b) Speed
(c) Potential energy
(d) Distance

147. If a body is moving on a circular path, what is its average velocity if it completes one cycle in one second?
(a) Average velocity depends upon time taken to complete one cycle
(b) One
(c) Average velocity is same as average speed
(d) Zero

148. Barometer was invented by
(a) Evangelista Torricelli
(b) Charles Xavier Thomas
(c) Edward Teller
(d) Gustav Tauschek

149. An object at rest will remain at rest and an object in motion will remain in motion until and unless it is acted upon by an external force. This is Newton's
(a) First law (b) Second law
(c) Third law (d) Fourth law

150. What will happen if an object is dropped from a height and there is no air resistance?
(a) It will fall with a constant speed and acceleration
(b) Its acceleration will increase
(c) Both speed and acceleration will increase
(d) Its speed will increase

151. Steam locomotive was invented by?
(a) Simon Stevin (b) George Stephenson
(c) Gary Starkweather (d) Percy Spencer

152. Formula for distance is -
(a) speed x time (b) time / speed
(c) speed x acceleration (d) velocity / speed

153. What is the fundamental unit of amount of a substance?
(a) Mole (b) Candela
(c) Kelvin (d) Meter

154. Arithmometer was invented by -
(a) Evangelista Torricelli
(b) Charles Xavier Thomas
(c) Edward Teller
(d) Charles Babbage

155. If an object is thrown upwards, what will be its velocity, when it reaches its maximum height?
(a) 0 m/s (b) 4.9 m/s
(c) 14.7 m/s (d) 20 m/s

156. If a force acts upon two objects at rest, and having different masses for the same amount of time, then which one of the following will be the same for both the objects?
(a) Acceleration (b) Kinetic Energy
(c) Velocity (d) Momentum

157. Telephone exchange was invented by?
(a) Tivadar Puskas
(b) Joseph Priestley
(c) Petrache Poenaru
(d) James Leonard Plimpton

158. What will happen to the force between the two positive charges which are released after being held near each other?
(a) Force will increase
(b) Force will decrease
(c) Force will stay the same
(d) Force first increases to reach maximum before starting to decrease

159. Which device is used to measure earthquakes?
(a) Endoscope (b) Thermometer
(c) Sonograph (d) Seismograph

160. Sea seems blue due to-
(a) Excess deepness
(b) Reflection of sky and scattering of light by the drops of water
(c) Blue colour of water
(d) Upper layer of water

161. Who invented Television?
(a) J L Baird (b) Aristotle
(c) James Clerk Maxwell (d) Nikola Tesla

162. Electroscope was invented by -
(a) William Gilbert
(b) Alfred Nobel
(c) Joseph Nicephore Niepce
(d) Ted Nelson

163. The light with the shortest wavelength is
(a) Red (b) Yellow
(c) Blue (d) Violet
164. Glass is also called _____.
(a) Supercooled liquid (b) Super liquid
(c) Ideal liquid (d) Distilled liquid
165. If a body slides over a surface, the force resisting the motion between them is called _____.
(a) Centripetal force (b) Friction
(c) Centrifugal force (d) Inertia
166. In a streamline flow, _____ at every point in the fluid remains same.
(a) Force (b) Pressure
(c) Velocity (d) Speed
167. Postage Meter was invented by -
(a) Fyodor Pirotsky (b) Arthur Pitney
(c) Fritz Pfleumer (d) Stephen Perry
168. Who invented Helicopter?
(a) Copernicus (b) Sikorsky
(c) Cockrell (d) Drinker
169. If ice floating on water in a vessel melts, the water level in the vessel _____.
(a) increases
(b) does not change
(c) first increases before decreasing
(d) decreases
170. Physical quantities, which have _____ only and no _____ are called scalar quantities.
(a) direction, magnitude (b) magnitude, direction
(c) speed, velocity (d) velocity, speed
171. Which among the following is a vector quantity?
(a) Heat (b) Angular momentum
(c) Work (d) Time
172. Density of water is maximum at _____.
(a) 12 degree Celsius (b) 8 degree Celsius
(c) 4 degree Celsius (d) 0 degree Celsius
173. Which of the following is not a vector quantity?
(a) Work done (b) Force
(c) Displacement (d) Velocity
174. Terminal velocity _____.
(a) first increases before decreasing
(b) is constant
(c) first decreases before increasing
(d) always keeps on increasing
175. Sewing machine was first patented by -
(a) Alfred P. Southwick (b) Elias Howe
(c) Murasaki Shikibu (d) Hanaoka Seishu
176. What is impulse equal to?
(a) Change in momentum
(b) Change in force
(c) Change in velocity
(d) Change in acceleration
177. ISRO built India's first satellite known as _____.
(a) Aryabhatta (b) Bhaskara
(c) Rohini (d) Insat 1A
178. The value of acceleration due to gravity (g) at a distance of 2R from the surface of earth, where R is the radius of earth is _____.
(a) g/3 (b) g/4
(c) g/9 (d) g/2
179. The unit of which physical quantity is not pascal?
(a) Moment of inertia (b) Pressure
(c) Stress (d) Young's modulus
180. Atmospheric pressure is measured by _____.
(a) Barometer (b) Hexameter
(c) Nanometer (d) Glaxometer
181. Instrument for measuring rainfall is called -
(a) Lucimeter (b) Galactometer
(c) Hyetometer (d) Hygrometer
182. Who established the foundations of the quantum theory?
(a) Max Planck (b) Mark Nicholas
(c) Albert Einstein (d) Alfred Hitchcock
183. If in a motion, the axis of the rotation passes through an object, the motion is called _____.
(a) Orbital motion (b) Circulatory motion
(c) Spin motion (d) Oscillatory motion
184. If an object, on a free fall from a certain height, reaches the ground in 1 second, what is its velocity on the impact with the ground?
(a) 4.9 m/s (b) 9.8 m/s
(c) 14.7 m/s (d) 19.6 m/s
185. If in a motion, the axis of the rotation does not pass through the object, then the motion is called _____.
(a) Spin motion (b) Oscillatory motion
(c) Translatory motion (d) Orbital motion
186. What are the two kinds of Rotatory motion?
(a) Spin and Vibrational motion
(b) Spin and Orbital motion
(c) Spin and Translatory motion
(d) Spin and Projectile motion
187. _____ is the perpendicular distance between point of application of force and axis of rotation.
(a) Moment arm (b) Moment of Inertia
(c) Altitude (d) Base
188. Which among the following is not a unit of distance?
(a) Light year (b) Longsec
(c) Astronomical unit (d) Parsec

189. The apparent weight of a person in a lift which is moving down with uniform acceleration is _____.
(a) greater than the weight when the person is stationary
(b) twice the weight when the person is stationary
(c) less than the weight when the person is stationary
(d) same as the weight when the person is stationary

190. Who invented Rocket?
(a) Rich K Goyle (b) E M Forster
(c) Robert Goddard (d) James Anderson

191. Weight of a person at a height of 2R from the centre of the earth, where R is the radius of the earth _____.
(a) remains same (b) becomes half
(c) becomes twice (d) becomes one fourth

192. How can we measure specific gravity of milk?
(a) Using a viscometer (b) Using an odometer
(c) Using a hygrometer (d) Using a hydrometer

193. Who invented the nuclear reactor?
(a) Enrico Fermi
(b) Adolf Gaston Eugen Fick
(c) Sandford Fleming
(d) Benoit Fourneyron

194. What is the angle between centripetal acceleration and tangential acceleration?
(a) 90° (b) 45°
(c) 0° (d) 180°

195. Rectifiers convert _____.
(a) high voltage to low voltage
(b) low voltage to high voltage
(c) AC to DC
(d) DC to AC

196. Name the first Indian who got Nobel Prize in physics.
(a) C K Naidu (b) Rangnath Mishra
(c) Amartya Sen (d) C V Raman

197. Which physical quantity is measured in 'siemens'?
(a) Electric potential
(b) Electrical conductance
(c) Magnetic flux
(d) Refractive index

198. Rate of change of momentum is -
(a) Area (b) Pressure
(c) Force (d) Velocity

199. What did J B Dunlop invent?
(a) Pneumatic rubber tire
(b) Car Music System
(c) Steering Wheel
(d) Diesel Engine

200. When net torque is zero, _____ will be constant.
(a) force (b) angular momentum
(c) linear momentum (d) acceleration

201. Newton's first law is also known as _____.
(a) Law of friction (b) Law of moments
(c) Law of Inertia (d) Law of motion

202. The cooling by a desert cooler is based on-
(a) Hot air replacement (b) Air dehydration
(c) Evaporative cooling (d) Air rehydration

203. Cooling is done by-
(a) Flow of water
(b) Release of compressed gas
(c) Cooking gas
(d) Melting the solid

204. On adding common salt to water, the boiling point and freezing point of water will:
(a) Increase
(b) Decrease
(c) Decrease and increase respectively
(d) Increase and decrease respectively

205. Who invented Universal Standard Time?
(a) Enrico Fermi
(b) Adolf Gaston Eugen Fick
(c) Sandford Fleming
(d) Benoit Fourneyron

206. _____ states that the total current entering a junction is equal to the total current leaving the junction.
(a) Lenz's Law (b) Hooke's Law
(c) Ohm's Law (d) Kirchhoff's First Law

207. Acceleration due to gravity on a planet decreases with _____.
(a) decrease in radius of the planet
(b) increase in mass of the planet
(c) decrease in mass of the body
(d) increase in altitude from surface of the planet

208. _____ is same on every point on a rotating body.
(a) Linear velocity (b) Linear momentum
(c) Angular torque (d) Angular velocity

209. The path of a projectile is called its _____.
(a) Altitude (b) Range
(c) Trajectory (d) Flight

210. Who invented the Contact Lens?
(a) Enrico Fermi
(b) Adolf Gaston Eugen Fick
(c) Sandford Fleming
(d) Benoit Fourneyron

211. Electrons move around the nucleus in _____ motion.
(a) Translatory (b) Spin
(c) Orbital (d) Vibrational

212. Blood pressure is measured by _____.
(a) Barometer
(b) Sphygmomanometer
(c) Hydrometer
(d) Thermometer

213. Isaac Newton invented _____.
(a) Thermometer
(b) Reflecting Telescope
(c) Hydraulic Accumulator
(d) Transistor

214. Which among the following in false about work?
(a) If displacement is zero, work is zero
(b) Work done can be negative
(c) It is a vector quantity
(d) Its unit is Joule

215. What is Inertia?
(a) Tendency to resist change in the current state
(b) Tendency to impart acceleration to a body
(c) Tendency to bring a body to rest
(d) Tendency to change its current state

216. Why does a fountain pen leak in aeroplane flying at a height?
(a) Because of reduced viscosity of the ink in the pen
(b) Because of increased viscosity of the ink in the pen
(c) Because of higher atmospheric pressure outside the pen
(d) Because of lower atmospheric pressure outside the pen

217. Instrument for measuring wind velocity is called -
(a) Coulombmeter (b) Anemometer
(c) Cyanometer (d) Chronometer

218. Who was the first Indian astronaut to travel in space?
(a) Rakesh Sharma
(b) Ravish Malhotra
(c) Kalpana Chawla
(d) Sheikh Muszaphar Shukor

219. AV= constant, where A= area of cross-section and V= velocity of fluid. This equation is called _____.
(a) Equation of discontinuity
(b) Equation of continuity
(c) Equation of sustenance
(d) Equation of parallelism

220. A body in equilibrium _____.
(a) can move with constant acceleration
(b) is always at rest
(c) can move with constant velocity
(d) can move with variable acceleration

221. What is the viscosity of an ideal fluid?
(a) Equal to its mass (b) Equal to its weight
(c) Zero (d) One

222. The SI unit of intensity of sound is _____.
(a) watt per square meter
(b) joule per square meter
(c) newton per square meter
(d) tesla per square meter

223. To keep drinks at the same temperature for quite sometime, the walls of thermos bottle are coated with:
(a) Aluminium paint (b) Lead Powder
(c) Silver layer (d) Mercury Layer

224. The atmosphere exerts enormous pressure on us. But, we do not feel it because
(a) Our blood exerts a pressure slightly more than that of the atmosphere.
(b) We are used to it.
(c) Our bones are very strong and can withstand the pressure.
(d) The surface are of our head is very small.

225. **Assertion (A):** With the increase of temperature, the viscosity of glycerin increases.
Reason (R): Rise of temperature increases kinetic energy of molecules.
Code:
(a) Both (A) and (R) are true, and (R) is the correct explanation of (A).
(b) Both (A) and (R) are true, but (R) is not the correct explanation of (A).
(c) (A) is true, but (R) is false.
(d) (A) is false, but (R) is true.

226. Food gets cooked faster in a pressure cooker because-
(a) Water starts boiling at a lower temperature due to high pressure
(b) Water starts boiling at a higher temperature due to high pressure
(c) Water boils only at 100° C but the heat content is higher at high pressure
(d) Convection currents are set inside the cooker

227. When a piece of ice floating in a glass of water melts, the level of water will:
(a) Fall
(b) Rise
(c) Remain same

(d) Fall or rise depends on the temperature of water

228. If a gas is compressed to half of its original volume at 27°C, to what temperature should it be heated to make it occupy is original, volume?
(a) 327°C (b) 600°C
(c) 54°C (d) 300°C

229. Who Invented water turbine?
(a) Enrico Fermi
(b) Adolf Gaston Eugen Fick
(c) Sandford Fleming
(d) Benoit Fourneyron

230. _____ of a wave is the rate of transfer of energy per unit area perpendicular to the direction of travel of the wave.
(a) Interference (b) Rectification
(c) Intensity (d) Diffraction

231. Motion of a train is an example of _____.
(a) Rotatory motion (b) Spin motion
(c) Projectile motion (d) Translatory motion

232. Who invented PlayStation?
(a) Wright brothers (b) Reynold B. Johnson
(c) Assen Jordanoff (d) Ken Kutaragi

233. Instrument for measuring light intensity is called
(a) Lucimeter (b) Cryometer
(c) Cyanometer (d) Barometer

234. With reference to gravity, what is G called?
(a) Gravitational constant
(b) Gravitational attraction
(c) Gravitational force
(d) Acceleration due to gravity

235. In a projectile motion, a large angle with the horizontal produces _____.
(a) Flat trajectory (b) Curve trajectory
(c) Straight trajectory (d) High trajectory

236. A device which converts electrical energy into mechanical energy is-
(a) Dynamo (b) Transformer
(c) Electric motor (d) Inductor

237. Electric motors operating at low voltages tend to burn out because-
(a) They draw more current which is inversely proportional to the voltage.
(b) They draw more current which is inversely proportional to the square root of the voltage.
(c) They draw heat proportional to V^2.
(d) Low voltage sets in electrical discharge.

238. What is the SI unit of atmospheric pressure?
(a) Pascal (b) Knot
(c) Joule (d) Ohm

239. The absorption of ink by blotting paper involves
(a) Viscosity of ink
(b) Capillary action phenomenon
(c) Diffusion of ink through the blotting
(d) Siphon action

240. Who invented Neon Lamp?
(a) Vint Cerf (b) David Chaum
(c) Georges Claude (d) Josephine Cochrane

241. Instrument for measuring time is called _____ .
(a) Diagometer (b) Anemometer
(c) Durometer (d) Chronometer

242. If the radius of the earth decreases and its mass remains the same, then the value of "acceleration due to gravity" will _____ .
(a) decrease (b) increase
(c) remain the same (d) become zero

243. Earth revolves around Sun. Who was the 1st one to present this theory?
(a) Albert Einstein (b) Galileo
(c) Copernicus (d) Newton

244. _____ is same on every point on a rotating body.
(a) Linear velocity (b) Linear momentum
(c) Angular torque (d) Angular velocity

245. The SI unit of electric charge is -
(a) Ampere (b) Coulomb
(c) Esu (d) Kelvin

246. When a running car stops suddenly, the passengers tends to lean forward because of -
(a) Centrifugal force (b) Inertia of rest
(c) Inertia of motion (d) Gravitation force

247. If a boy is sitting in a train, which is moving at a constant velocity throws a ball straight up into the air, the ball will -
(a) fall in front of him (b) fall behind him
(c) fall into hand (d) None of the above

248. A person is hurt on kicking a stone due to -
(a) Inertia (b) Velocity
(c) Reaction (d) Momentum

249. For a body moving with non-uniform acceleration -
(a) Displacement-time graph is linear
(b) Displacement-time graph is non-linear
(c) Velocity-time graph is non-linear
(d) Velocity-time graph is linear

250. A parachute descends slowly whereas a stone dropped from the same height falls rapidly, because -
(a) Stone is heavier than parachute
(b) Special mechanisms are present in parachute
(c) A parachute has a larger surface area and air resistance is more
(d) None of the above

251. Shaving mirror is -

(a) Convex (b) Concave
(c) Plane (d) Parabolic

252. The spoon dropped by an astronaut in a satellite will -
(a) Fall to the floor
(b) Remain stationary
(c) Continue to follow the motion of the satellite
(d) Move tangentially away

253. The sensation of weightlessness in a spacecraft in an orbit is due to the -
(a) Absence of gravity outside
(b) Acceleration in the orbit which is equal to the acceleration due to gravity outside
(c) Presence of gravity outside but not inside the spacecraft
(d) Fact that spacecraft in the orbit has no energy

254. It is easier to carry two buckets of water in one hand each, than to carry only one in one hand because -
(a) weight of buckets are balanced
(b) centre of gravity falls within the body
(c) centre of gravity and centre of equilibrium fall within the feet (d) resultant weight of buckets is zero

255. In a nuclear reactor, one of the following is used as a fuel?
(a) Coal (b) Uranium
(c) Radium (d) Diesel

256. The device used for locating submerged objects under sea is -
(a) Sonar (b) Radar
(c) Laser (d) Maser

257. The hair of shaving brush clings together when removed from water due to -
(a) Surface tension (b) Viscosity
(c) Elasticity (d) Friction

258. When pressure is increased, the melting point of ice -
(a) Increases
(b) Does not change
(c) Decreases
(d) Depends on the impurities in the ice

259. Sprayer functions are based on -
(a) Bernoulli's principle
(b) Archimedes' principle
(c) Pascal's law
(d) Floatation principle

260. The material used in the fabrication of a transistor is -
(a) Aluminum (b) Copper
(c) Silicon (d) Silver

261. In which of the following processes is energy released?
(a) Respiration (b) Photosynthesis
(c) Ingestion (d) Absorption

262. The technique of collecting information about an object from a distance without making physical contact with it is -
(a) Remote sensing (b) Remote control
(c) Remote accessing (d) Space Shuttleg

263. "Curie" is the unit of -
(a) Radioactivity (b) Temperature
(c) Heat (d) Energy

264. The Source of the sun's energy, is the process of-
(a) Photoelectric emission
(b) Nuclear fission
(c) Nuclear fusion
(d) Thermionic emission

265. The strongest force in nature is -
(a) Electrical force (b) Gravitational force
(c) Nuclear force (d) Magnetic force

266. In nuclear reactor, heavy water is used as -
(a) Coolant (b) Fuel
(c) Moderator (d) Atomic smasher

267. Electric current in a metal wire is due to the flow of -
(a) Electrons (b) Protons
(c) Ions (d) Holes

268. The nature of fuse wire is -
(a) Low melting point (b) High melting point
(c) High conductivity (d) None of these

269. A transformer -
(a) converts DC to AC
(b) is used to decrease or increase AC voltage
(c) converts AC voltage to DC voltage
(d) converts electrical energy into mechanical energy

270. Good conductor of electricity is -
(a) dry air (b) paper
(c) kerosene (d) graphite

271. Tungsten is used for the manufacture of the filament of an electric bulb, because -
(a) it is a good conductor
(b) it is economical
(c) it is malleable
(d) it has a very high melting point

272. Moving Electric Charge produces -
(a) Magnetic field (b) Sound waves
(c) Light rays (d) Heat waves

273. Which of the following material is used in the solar panel ?
(a) Silicon (b) Copper
(c) Nichrome (d) Platinum

274. Red is used an as emergency or danger signal because -

(a) it is a striking colour
(b) its wavelength is the longest
(c) its low wavelength
(d) it has very high energy

275. Which one of the following SI unit is not correctly matched?
(a) Work-Joule (b) Force-Newton
(c) Mass-kg (d) Pressure-Dyne

276. Which one of the following is the unit of measure of the thickness of the ozone layer of the atmosphere?
(a) Knot (b) Dobson
(c) Poise (d) Maxwell

277. The density of milk can be obtained by the use of:
(a) Hydrometer (b) Butyrometer
(c) Lactometer (d) Thermometer

278. It is difficult to walk on the ice than on the road because:
(a) Ice is harder than the road.
(b) Road is harder than the ice.
(c) Ice does not offer any reaction when we push it with our foot.
(d) Ice has a lesser friction than the road.

279. Satellite is kept moving in its orbit around the Earth; it is due to
(a) Centrifugal force
(b) Centripetal force
(c) Gravitational force or lack of it
(d) Some other forces

280. Earth's escape velocity is-
(a) 15.0km/sec. (b) 21.1km/sec.
(c) 7.0km/sec (d) 11.2km/sec

281. Kerosene rises in the wick of the stove is due to-
(a) Osmosis (b) diffusion
(c) surface tension (d) biogen contraction

282. The reason of mirage is
(a) Interference of light
(b) Diffraction of light
(c) Polarization of light
(d) Total internal reflection of light

283. Red light is used in traffic signals because
(a) It has the longest wavelength.
(b) It is beautiful
(c) It is visible to people even with bad eyesight.
(d) None of the above reasons.

284. 'The National Science Day' is observed on
(a) January, 28 (b) February, 28
(c) March, 28 (d) April, 28

285. Alfred Nobel invented-
(a) Microphone (b) Typewriter
(c) Dynamite (d) Gramophone

286. The half life of a radioactive substance is 10 day; it means there will be:
(a) complete decay of substance in 20 days
(b) complete decay of substance of 40 days
(c) decay of ¾ part of substance in 20 days(d) decay of ¼ part of substance in 5 days

287. At absolute temperature, the electric resistance in semiconductor is-
(a) Infinite (b) Small
(c) High (d) Zero

288. Which elements is the best conductor of electricity?
(a) Silver (b) Copper
(c) Alminium (d) Iron

289. The velocity of sound is maximum in-
(a) Air (b) Liquid
(c) Metal (d) vacuum

290. Which one of the following is not correctly matched?
(a) Knot- Unit to Measure speed of ship
(b) Nautical mile- Unit of distance used in navigation
(c) Angstrom- Unit of length
(d) Light year- Unit of measuring time

291. Which one of the following is not the unit of heat?
(a) Calorie (b) Kilocalorie
(c) Kilojoule (d) Watt

292. The name of the equipment used for measuring blood pressure is :
(a) Teachometer (b) Sphygmomanometer
(c) Actiometer (d) Barometer

293. Which one of the following is a vector quantity?
(a) Momentum (b) Pressure
(c) Energy (d) Work

294. If the gravitational force of the earth suddenly disappears, which are of the following will be the correct consequence?
(a) The weight of an object will become zero but the mass will remain the same.
(b) The mass of the object will become zero but the weight will remain the same.
(c) Both the mass and the weight of the object will become zero.
(d) The mass of the object will increase.

295. Static science is associated with-
(a) Dynamic situation (b) Situation of rest
(c) Mental situation (d) Data analyzing

296. The colour of the star is an indication of its:
(a) Distance from the earth
(b) Temperature
(c) Luminosity

(d) Distance from the sun

297. Power of sunglass is-
(a) 0 Dioptre (b) 1 Dioptre
(c) 2 Dioptre (d) 4 Dioptre

298. Which one of the following is used as an antifreeze for the automobile engines?
(a) Ethanol (b) Ethylene glycol
(c) Methanol (d) Propyl alcohol

299. If Va, Vw and Vs respectively are the speed of sound in air, water and steel, then-
(a) Va < Vw < Vs (b) Vs < Vw < Va
(c) Vw < Vs < Va (d) Vs < Va < Vw

300. How much should minimum distance be between the source of sound and reflecting surface, so that an echo can be heard clearly?
(a) 10 meter (b) 17 meter
(c) 24 meter (d) 30 meter

301. Consider the following statements about ultrasonic waves:
1. They can destroy insects.
2. They can clean clothes by removing dust.
3. They can be used to treat diseases.
4. They can control automatic doors.
Of the above statements
(a) 1 and 2 are correct (b) 3 and 4 are correct
(c) 1, 2 and 3 are correct (d) All are correct

302. How many units of electricity will be consumed if you use a 60-watt electric bulb for 5 hours everyday for 30 days?
(a) 12 (b) 9
(c) 6 (d) 3

303. The important nuclear fuel available in India in abundance is :
(a) Uranium (b) Thorium
(c) Iridium (d) Plutonium

304. Match List-I with List-II and select the correct answer by using the codes given below:

List-I (Atomic Power Station)	**List-II (State of Situation)**
A. Kalpakkam	1. Uttar Pradesh
B. Narora	2. Gujarat
C. Kakrapara	3. Tamilnadu
D. Trombay	4. Maharashtra

Code :

	A	**B**	**C**	**D**
(a)	1	2	3	4
(b)	3	1	2	4
(c)	3	1	4	2
(d)	2	3	4	1

305. Which one of the following thermometers is known as pyrometer?
(a) Thermo-electric thermometers
(b) Radiation thermometers
(c) Gas thermometers
(d) Liquid thermometers

306. Match List-I with List-II and select the correct answer using codes given below:

List-I (Units)	**List-II** (Parametric quantities)
A. Watt	1. Heat
B. Knot	2. Navigation
C. Nautical mile	3. Speed of a ship
D. Calorie	4. Power

Code :

	A	B	C	D
(a)	3	1	4	2
(b)	1	2	3	4
(c)	4	3	2	1
(d)	2	4	1	3

307. Which one of the following instrument is used for locating submerged objects in an ocean?
(a) Audiometer (b) Galvanometer
(c) Sextant (d) SONAR

308. Which of the following is not a vector quantity?
(a) Displacement (b) Velocity
(c) Force (d) Volume

309. Who gave the theory of gravity?
(a) Charles Newton (b) Charles Babbage
(c) Isaac Newton (d) John Adams

310. A pendulum clock can run faster in-
(a) Summer (b) Winter
(c) Spring season (d) Rainy season

311. Oil spreads on water surface because-
(a) Oil is denser than water
(b) Oil is less dense than water
(c) Surface tension of oil is more than water
(d) Surface tension of oil is less than water

312. A sudden fall in barometer reading indicates that the weather will be:
(a) Stormy weather
(b) Rainy weather
(c) Cool dry weather
(d) Hot and humid weather

313. Increasing the amount of a substance does not change its-
(a) Volume (b) Weight
(c) Mass (d) Density

314. The smallest unit of length is-
(a) Micron (b) Nanometre
(c) Angstrom (d) Fermimetre

315. The time taken to reach the Sunlight up to the surface of earth is approximately-
(a) 4.2 sec (b) 4.8 sec
(c) 8.5 minutes (d) 3.6 hrs.

316. What was the fissionable material used in the bombs dropped at Nagasaki (Japan) in the year 1945?

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

317. GPS stands for which one of the following?
(a) Greenwich Polar Satellite
(b) Global Police Surveillance
(c) Global Positioning System
(d) General Pacific Survey

318. Einstein was honoured with Nobel Prize for:
(a) Photoelectric Effect
(b) Theory of Specific Heat
(c) Special Theory of Relativity
(d) Bose-Einstein Statistics

319. Who is the discoverer of Penicillin?
(a) Alexander Graham Bell
(b) Alexander Fleming
(c) Christopher Macdonald
(d) Albert Einstein

320. What is measured by manometer?
(a) Air pressure
(b) Pressure of gas
(c) Density of liquids
(d) Pressure of oil on the surface

321. 'Pyrheliometer' is used for measuring:
(a) Sun spots
(b) Solar radiation
(c) Air temperature
(d) Temperature of plants

322. Spherical form of raindrop is due to-
(a) Density of liquid
(b) Surface tension
(c) Atmospheric pressure
(d) Gravitational force

323. Pressure inside a soap bubble is-
(a) More than atmospheric pressure
(b) Less than atmospheric pressure
(c) Equal to atmospheric pressure
(d) Half of atmospheric pressure

324. Fish can survive in a frozen lake because-
(a) Fish are warm blooded animals
(b) Fish hibernate in ice
(c) Water near the bottom does not freeze
(d) Ice is a good conductor of heat

325. The colour of light is determined by its
(a) Amplitude (b) Wavelength
(c) Intensity (d) Velocity

326. The sun is visible to us a few minutes before the act sunrise because of:
(a) Scattering of light
(b) Diffraction of light
(c) Total internal reflection of light
(d) Refraction of light

327. The concept of expanding universe is based on-
(a) Doppler effect (b) Stark effect
(c) Zeeman effect (d) Raman effect

328. The hand burns more by steam comparatively to boiling water, because-
(a) The steam has latent heat
(b) Steam sneaked into the body
(c) The steam has more power
(d) Steam is gig

329. The heat required in calories to convert one gram of ice at 0 °C to steam at 100°C is approximately
(a) 80 (b) 336
(c) 720 (d) 620

330. What is absolute zero temperature?
(a) The starting point of any temperature scale
(b) Theoretically the lowest possible temperature
(c) The temperature at which the vapour of any liquid substance is condensed.
(d) The temperature at which all material in vapour form.

331. When ice melts, then-
(a) Volume increases (b) Volume decreases
(c) Mass increases (d) Mass decreases

332. The remove the defect of long sightedness one uses-
(a) Concave lens (b) Convex mirror
(c) Convex lens (d) Concave mirror

333. An air bubble in water will act like a:
(a) Convex mirror (b) Convex lens
(c) Concave mirror (d) Concave lens

334. Sea seems blue due to-
(a) Excess deepness (b) Reflection of sky and scattering of light by the drops of water
(c) Blue colour of water (d) Upper layer of water

335. The light with the shortest wavelength is
(a) Red (b) Yellow
(c) Blue (d) Violet

336. The cooling by a desert cooler is based on-
(a) Hot air replacement (b) Air dehydration
(c) Evaporative cooling (d) Air rehydration

337. Cooling is done by-
(a) Flow of water
(b) Release of compressed gas
(c) Cooking gas
(d) Melting the solid

338. Match the following

A. John Guttenberg	1. Telephone
B. W.K. Roentgen	2. Printing Press
C. Michael Faraday	3. X-Ray
D. Alexander	4. Dynamo

Graham Bell

Code:

	A	B	C	D
(a)	1	2	3	4
(b)	2	3	1	4
(c)	3	4	1	2
(d)	2	3	4	1

339. Which of the following is not used as rocket propellant-
(a) Liquid hydrogen (b) Liquid oxygen
(c) Hydrazine (d) Kerosene oil

340. The 'Black Box' of an aeroplane is of
(a) White colour (b) Red colour
(c) Black colour (d) Orange colour

341. On adding common salt to water, the boiling point and freezing point of water will:
(a) Increase
(b) Decrease
(c) Decrease and increase respectively
(d) Increase and decrease respectively

342. To keep drinks at the same temperature for quite sometime, the walls of thermos bottle are coated with:
(a) Aluminium paint (b) Lead Powder
(c) Silver layer (d) Mercury Layer

343. In microwave oven, the microwave tube used is-
(a) A combination of klystron and magnetron tubes
(b) Klystron tube
(c) Magnetron tube
(d) Travelling wave tube

344. Which one of the following is used as a moderator in the nuclear reactor?
(a) Thorium (b) Graphite
(c) Radium (d) Ordinary water

345. The Indira Gandhi Atomic Research Centre is located in
(a) Maharashtra (b) Tamil Nadu
(c) Uttar Pradesh (d) Karnataka

346. Photovoltaic cells are:
(a) Solar cells (b) Thermal cells
(c) Sulphur cells (d) Chemical cells

347. Which of the following is a semiconductor?
(a) Plastic (b) Aluminum
(c) Wood (d) Germanium

348. What gases are filled in fluorescent tube?
(a) Neon (b) Sodium
(c) Mercury (d) Mercury and neon

349. Full form of C.F.L. is-
(a) Compact Fluorescent Lamp
(b) Centrally fixed Lamp
(c) Chemical Fluorescent Lamp
(d) Condensed Fluorescent Lamp

350. Sky is blue because-
(a) Blue colour in the sunlight is more than other colours
(b) Short waves are scattered more than long waves by atmosphere
(c) Blue colour is more absorbing to eyes
(d) Atmosphere absorbs long wavelength more than short wavelength

351. The change of focal length of an eye lense is caused by action of the
(a) Pupil (b) Retina
(c) Ciliary muscles (d) Iris

352. Waves used for telecommunication are-
(a) Visible light (b) Microwave
(c) Radio waves (d) All the above

353. A dynamo which is said to generate electricity actually acts as a
(a) Source of ions
(b) Source of electric charge
(c) Converter of energy
(d) Source of electrons

354. The technique used to transmit audio signals in television broadcast is-
(a) Amplitude modulation
(b) Pulse code modulation
(c) Frequency modulation
(d) Time dimension multiplication

355. The Dynamo
(a) Converts electric energy into mechanical energy
(b) Converts chemical energy into electric energy
(c) Converts mechanical energy into electrical energy
(d) Converts electrical every into chemical energy

356. Transformer is used for-
(a) Converting AC into DC
(b) Converting DC into AC
(c) To step up DC voltages
(d) To step up or step down AC voltages

357. Identify the mineral not associated with atomic power-
(a) Monazite (b) Thorium
(c) Beryllium (d) Chromium

358. Which of the following is not a fuel element?

(a) Uranium (b) Thorium
(c) Radium (d) Helium

359. The Pokhran II test was conducted on-
(a) June 11th, 1998 (b) June 9th, 1998
(c) May 11th, 1998 (d) May 29th , 1998

360. Which one of the following atomic plants of India is located in the IV Seismic Zone?
(a) Kaiga (b) Kalpakkam
(c) Narora (d) Tarapur

361. The fuel used in Fast Breeder Test Reactor at Kalpakkam is
(a) Enriched Uranium (b) Thorium
(c) Plutonium (d) Tungsten

362 Radioactive substance emits-
(a) Alpha rays (b) Beta rays
(c) Gamma rays (d) All the above

363. What are the links between Dhruva, Purnima and Cirus?
(a) They are Indian research reactors
(b) They are stars
(c) These are names of famous books
(d) They are power plants

364. What happens if the control rods are not used in a nuclear reactor?
(a) The reactor will stop working
(b) Chain process would go out of bounds
(c) The reactor will be slow to act
(d) The reactor will continue to work as it is

365. Which of the following elements was first produced artificially?
(a) Neptunium (b) Plutonium
(c) Francium (d) Technetium

366. A body floats at 4°C water. If temperature reaches 100°C then-
(a) The body will sink
(b) No change
(c) More part of the body will submerge
(d) The body will float freely

367. Why it is easier to swim in the sea than in a river?
(a) The sea water is salty
(b) The sea water is deep
(c) The sea water is heavier
(d) The sea water is lighter

368. Light from the Sun reaches Earth in about:
(a) 2 minutes (b) 4 minutes
(c) 8 minutes (d) 16 minutes

369. When light waves pass from air to glass the variable affected are-
(a) Wavelength, frequency and velocity
(b) Velocity and frequency
(c) Wavelength and frequency
(d) Wavelength and velocity

370. Total internal reflection can take place when light travels from:
(a) Diamond to glass (b) Water to glass
(c) Air to water (d) Air to glass

371. Which one of the following phenomenon is used in optical fibres?
(a) Interference
(b) Refraction
(c) Total internal reflection
(d) Polarisation

372. An endoscope is a-
(a) Narrow telescope (b) Type of camera
(c) Simple microscope (d) None of these

373. A cut diamond shines brilliantly due to-
(a) Total internal reflection
(b) Absorption of light
(c) Some inherent property
(d) Its molecular structure

374. Which of the following is used to take 3-dimentional pictures-
(a) Photography (b) Holography
(c) Radiography (d) None of the above

375. An astronaut sees the colour of the sky as-
(a) Blue (b) White
(c) Black (d) Red

376. The red colour of the Sun at sunset and sunrise is due to-
(a) Scattering of light
(b) Refraction of light
(c) Total internal reflection of light
(d) Dispersion of light

377. Reading glasses are made from which type of lenses?
(a) Concave (b) Convex
(c) Plain (d) None of these

378. The focusing in the eye is done by
(a) Change in the convexity of the lens
(b) To and fro movement of the lens
(c) To and fro movement of the retina
(d) Change in the refractive index of the eye fluid

379. The mirror, which is used in searchlights, is-
(a) Concave mirror (b) Convex mirror
(c) Simple mirror (d) None of these

380. Which instrument is used for measuring humidity in the air?
(a) Hydrometer (b) Hygrometer

(c) Spectrometer (d) Eudiometer

381. The force which opposes the relative motion between different layers of liquid or gases is called
(a) Critical Velocity (b) Streamline Flow
(c) Terminal Velocity (d) Viscous Force

382. Fathometer is used to measure:
(a) Earthquake (b) Rain
(c) Depth of sea (d) Sound intensity

383. The energy of wind is-
(a) Only potential
(b) Only kinetic
(c) Electrical
(d) Potential and kinetic both

384. Which instrument is used to measure sound under water ?
(a) Hygrometer (b) Hygroscope
(c) Hypsometer (d) Hydrophone

385. Diffusion of light in the atmosphere takes place due to:
(a) Carbon dioxide (b) Dust particles
(c) Helium (d) Water vapours

386. When a mirror is rotated by an angle θ, the reflected ray will rotate by:
(a) 0 (b) θ/2
(c) θ (d) 2θ

387. Force of attraction between the molecules of different substances is called
(a) Surface tension (b)Cohensive force
(c) Adhesive force (d) None of above

388. The safest temperature for keeping food fresh in a refrigerator is
(a) 4°C (b) 8°C
(c) 0°C (d) 10°C

389. Which instrument is used in submarine to see the objects above sea level ?
(a) Pykometer (b) Polygraph
(c) Photometer (d) Periscope

390. Why does food cook faster in a pressure cooker?
(a) The increased pressure increases the boiling point.
(b) Does not waste steam.
(c) The food is cooked quickly by steam.
(d) The water boils at constant temperature.

391. A biotechnique in which ultrasonic sound is used-
(a) Sonography (b) E.C.G
(c) E.E.G (d) X-ray

392. Bats can fly during dark nights and also prey. This is because-
(a) The pupil of their eyes is large
(b) Their night vision is very good
(c) Every birds can do this
(d) They produce ultrasonic waves and are guided by them.

393. Which one of the following is the effect of the flight of supersonic jet?
(a) Air pollution
(b) Eye disease
(c) Depletion in ozone layer
(d) None of these

394. Which of the following has the longest wavelength?
(a) Infrared (b) X-rays
(c) Visible light (d) Radio waves

395. The atmosphere exerts enormous pressure on us. But, we do not feel it because
(a) Our blood exerts a pressure slightly more than that of the atmosphere.
(b) We are used to it.
(c) Our bones are very strong and can withstand the pressure.
(d) The surface are of our head is very small.

396. **Assertion (A):** With the increase of temperature, the viscosity of glycerin increases.
Reason (R): Rise of temperature increases kinetic energy of molecules.
Code:
(a) Both (A) and (R) are true, and (R) is the correct explanation of (A).
(b) Both (A) and (R) are true, but (R) is not the correct explanation of (A).
(c) (A) is true, but (R) is false.
(d) (A) is false, but (R) is true.

397. Food gets cooked faster in a pressure cooker because-
(a) Water starts boiling at a lower temperature due to high pressure
(b) Water starts boiling at a higher temperature due to high pressure
(c) Water boils only at 100° C but the heat content is higher at high pressure
(d) Convection currents are set inside the cooker

398. When a piece of ice floating in a glass of water melts, the level of water will:

(a) Fall
(b) Rise
(c) Remain same
(d) Fall or rise depends on the temperature of water

399. Satellite is kept moving in its orbit around the Earth; it is due to
(a) Centrifugal force
(b) Centripetal force
(c) Gravitational force or lack of it
(d) Some other forces

400. Earth's escape velocity is-
(a) 15.0km/sec. (b) 21.1km/sec.
(c) 7.0km/sec (d) 11.2km/sec

401. If a gas is compressed to half of its original volume at 27°C, to what temperature should it be heated to make it occupy is original, volume?
(a) 327°C (b) 600°C
(c) 54°C (d) 300°C

402. A device which converts electrical energy into mechanical energy is-
(a) Dynamo (b) Transformer
(c) Electric motor (d) Inductor

403. Electric motors operating at low voltages tend to burn out because-
(a) They draw more current which is inversely proportional to the voltage.
(b) They draw more current which is inversely proportional to the square root of the voltage.
(c) They draw heat proportional to V^2.
(d) Low voltage sets in electrical discharge.

404. For reproducing sound, a CD (Compact Disc) audio player uses a:
(a) Quartz
(b) Titanium needle
(c) Laser beam
(d) Barium titanic ceramic

405. Television signals cannot be received beyond a certain distance because:
(a) Signals are weak
(b) Antenna is weak
(c) Air absorbs signals
(d) The surface of the earth is curved

406. The principle reason why it is better to have two eyes than one is that:
(a) By having two eyes we can distinguish colour easily
(b) By having two eyes we can easily see in the dark as well in dim light
(c) It gives a man a type of vision known as mosaic vision
(d) It enhances distance and depth perception in us

407. Direct viewing of sun during total solar eclipse causes irreversible damage to eyes. The retinal burn is caused by which one of the following components of the sun rays?
(a) Heat (b) Rainbow light
(c) Ultra-violet light (d) Infra-red light

408. The sun and the moon appear elliptical near the horizon because of :
(a) Refraction (b) Optical illusion
(c) Interference phenomenon
(d) Their actual shape

409. Photosynthesis using the invisible part of the sunlight is done by some-
(a) Trees (b) Algae
(c) Bacteria (d) Fungi

410. Red light signal is used as a danger signal because-
(a) Red light is scattered least
(b) This is comfortable for eyes
(c) It produces least chemical reaction
(d) It is least absorbed in air

411. Which one of the following colours is seen in the middle of a Rainbow?
(a) Blue (b) Green
(c) Red (d) Yellow

412. In which direction the rainbow is seen at 12 noon?
(a) In the West (b) In the South
(c) In the East (d) It cannot be seen

413. Colour in a colour television is produced by a combination of three basic colours, they are:-
(a) Red, blue and orange
(b) Red, green and blue
(c) Red, yellow and green
(d) Red, green and brown

414. In cold countries, alcohol is preferred to mercury as a thermometric liquid because:
(a) Alcohol has a lower freezing point
(b) Alcohol is a better conductor of heat
(c) Alcohol is cheaper than mercury
(d) The world production of alcohol is greater than that of mercury

415. Pure water freezes at what temperature?
(a) 47 F (b) 32 F
(c) 0 F (d) 19 F

416. CT Scan is done by using-
(a) Infra-red Rays (b) Ultrasonic Waves

(c) Visible Light (d) X-Rays

417. As per the WHO, the safe noise level for a city is-
(a) 45 db (b) 50 db
(c) 55 db (d) 60 db

418. Which one of the following does a TV remote control unit use to operate a TV set?
(a) Light waves (b) Sound saves
(c) Microwaves (d) Radio waves

419. The working principle of a washing machine is-
(a) Centrifugation (b) Dialysis
(c) Reverse Osmosis (d) Diffusion

420. Which physical quantity is represented by the ratio of momentum and velocity of the body?
(a) Velocity (b) Acceleration
(c) Mass (d) Force

421. The energy of wind is-
(a) Only potential
(b) Only kinetic
(c) Electrical
(d) Potential and kinetic both

422. Photovoltaic cells are:
(a) Solar cells (b) Thermal cells
(c) Sulphur cells (d) Molar cells

423. What is the correct equation for finding the acceleration?
(a) a = (v-u)/t (b) a = u + vt
(c) a = (v+u)/t (d) a=(v+u)/2

424. A drop of water is spherical in shape. This is due to:
(a) Surface tension (b) Low temperature
(c) Air resistance (d) Viscosity of water

425. Velocity of light is maximum in-
(a) Diamond (b) Water
(c) Vacuum (d) Hydrogen

426. One pikogram is equal to-
(a) 10^{-6} gram (b) 10^{-9} gram
(c) 10^{-12} gram (d) 10^{-15} gram

427. The apparatus used to measure the intensity of light is known is-
(a) Anemometer (b) Colorimeter
(c) Luxmeter (d) Altimeter

428. Energy conservation means-
(a) Generation and destruction of energy
(b) Energy could be created
(c) Energy could not be created but destroyed
(d) Energy can neither be created nor destroyed

429. If a person sitting in a lift then when will he feel that his weight gets increased?
(a) When the elevator going upward expeditiously
(b) When the elevator going down expeditiously.
(c) Going upward with constant velocity.
(d) Going downward with constant velocity.

430. The separation of cream from milk by churning is due to-
(a) Gravitational force (b) Cohesive force
(c) Centrifugal force (d) None of the above

431. The speed of light is–
(a) 9×10^2 m/sec (b) 3×10^{11} m/sec
(c) 3×10^8 m/sec (d) 2×10^4 m/sec

432. The Sky appears blue due to-
(a) Blue color is scattered most
(b) The red color is scattered most
(c) Blue light is minimum absorbed by atmosphere
(d) Red light is ultimately absorbed by atmosphere

433. For shaving, one uses-
(a) Concave mirror (b) Plain mirror
(c) Convex mirror (d) None of these

434. Which of the following lens is used to minimize Myopia?
(a) Convex lens (b) Concave lens
(c) Cylindrical lens (d) None of these

435. When beams of red, blue and green lights fall on the same spot, the colour of the light becomes:
(a) Violet (b) Red
(c) Yellow (d) White

436. What is the distance between two successive crests or successive troughs called?
(a) Amplitude (b) Wavelength
(c) Frequency (d) None of these

437. A 100 watt electric bulb is used for 10 hours. What will be the cost of electricity consumed, if the consumption cost is Rs. 5 per unit?
(a) Rs. 5 (b) Rs. 10
(c) Rs. 25 (d) Rs. 50

438. Which of the following metals is used as filament in lighting bulbs?
(a) Iron (b) Molybdenum
(c) Silver (d) Tungsten

439. The principle of atomic bomb is based on-
(a) Nuclear fusion (b) Nuclear Fission
(c) Above both (d) Above none

440. The unit of power is-
(a) Hertz (b) Volts
(c) Watt (d) Neutrons

441. The velocity of wind is measured by:
(a) Barometer (b) Anemometer
(c) Hydrometer (d) Wind Vane

442. Match the correct:

A. Fathometer	1. Atmospheric pressure
B. Barometer	2.Atmospheric humidity
C. Hygrometer	3. Height
D. Altimeter	4. Depth of sea

Code :

A	B	C	D
(a) 2	3	1	4
(b) 4	1	2	3
(c) 4	2	3	1
(d) 3	1	2	4

443. Force is the product of-
(a) Mass and velocity
(b) Mass and acceleration
(c) Weight and velocity
(d) Weight and acceleration

444. Which of the following pairs is correctly matched?

A. Radium	1. Alexander Fleming
B. Penicillin	2. Madan Curie
C. X-ray	3. Edward Jenner
D. Smallpox	4. W.K. Roentgen

Code:

A	**B**	**C**	**D**
(a) 2	1	4	3
(b) 2	3	4	1
(c) 3	4	1	2
(d) 4	1	2	3

445. While travelling by plane, the ink of the fountain pen starts to come out-
(a) Due to decrease in air pressure
(b) Due to increase in air pressure
(c) Due to increase in volume of ink
(d) Due to excessive load

446. While floating in a sea what part of an iceberg is above the surface of the sea?
(a) 1/9 (b) 1/3
(c) 1/6 (d) 1/4

447. What is the order of magnitude of electric resistance of the human body (dry) ?
(a) 10^2 ohm (b) 10^4 ohm
(c) 10^6 ohm (d) 10^8 ohm

448. Which one among the following has the highest energy?
(a) Blue light (b) Green light
(c) Red light (d) Yellow light

449. Light is made of seven colours. What is the method of separating the colours?
(a) The colours can be separated by a prism
(b) The colours can be separated by a filter
(c) The colours can be separated by plants
(d) The colours cannot be separated

450. In which of the following conditions wet clothes will dry earliest?
(a) 100% RH, 60°C temperature
(b) 100% RH, 20°C temperature
(c) 20% RH, 20°C temperature
(d) 20% RH, 60°C temperature

451. In the night wind blows fast, dew is not formed because
(a) Rate of evaporation is fast
(b) Moisture in air is low
(c) Temperature is high
(d) Sky is not clear

452. In an earthen pitcher, the water remains cold due to the process of
(a) Condensation (b) Evaporation
(c) Sublimation (d) None of the above

453. The velocity of sound in air is approximately-
(a) 10 km/sec. (b) 10 mile/min.
(c) 330 m/sec. (d) 3 × 1010/sec.

454. A wire with black insulation during electric supply is-
(a) Live wire (b) Earth wire
(c) Neutral wire (d) Fuse wire

455. Parameters of electricity supply in India are
(a) Potential Difference of 220 V, Frequency of 50 hertz and Current Rating of 5A/15A
(b) Potential Difference of 150 V, Frequency of 40 hertz and Current Rating of 10 A
(c) Potential Difference of 220 V, Frequency of 60 hertz and Current Rating of 15A
(d) Potential Difference of 220 V, Frequency of 40 hertz and Current Rating of 5 A

456. Human eye is most sensitive to visible light of the wavelength
(a) 655 nm (b) 555 nm
(c) 455 nm (d) 755 nm

457. The wave length extension of visible light is-
(a) Between 200–900 nm
(b) Between 250–850 nm
(c) Between 300–800 nm
(d) Between 390–780 nm

458. The speed of light will be minimum while passing through-
(a) Glass (b) Vacuum
(c) Water (d) Air

459. The radius of curvature of the plane mirror is:
(a) Zero (b) One
(c) Infinity (d) Between one and infinity

460. Which one of the following is the best conductor of electricity?
(a) Mica (b) Copper
(c) Gold (d) Silver

461. Which is not used as Atomic fuel?
(a) Uranium (b) Thorium
(c) Plutonium (d) Lead

462. The gas used in discharge tubes for optical decoration and advertising is-
(a) Carbon dioxide (b) Ammonia
(c) Sulphur dioxide (d) Neon

463. A radio station broadcast at 30 metre band. The frequency of the carrier wave transmitted by this station is:-
(a) 10 KHz (b) 100 KHz
(c) 10 MHz (d) 100 MHz

464. Xeric condition refers to-
(a) low temperature
(b) low humidity
(c) high evaporation
(d) extreme temperature

465. The temperature of the filament of lighted electric bulb is generally:
(a) 100°C to 500°C (b) 1000°C to 1500°C
(c) 2000°C to 2500°C (d) 4000°C to 5000°C

466. In a three-pin electrical plug longest pin should be connected to
(a) Ground terminal (b) Live terminal
(c) Neutral terminal (d) Any terminal

467. The electric current does not flow between two properly connected charged bodies if they are having
(a) Same charge (b) Same capacity
(c) Same resistivity (d) Same potential

468. Small drops of the same size are charged to V volts each. If n such drops coalesce to form a single large drop, its potential will be:
(a) n^(2/3) V (b) n^(1/3) V
(c) n V (d) N^- V

469. Alternate current is not preferable-
(a) To charge storage battery
(b) To run/start a electric motor
(c) To transmit electric power
(d) To heat up electric toaster

470. The conductivity of a semi-conductor at zero degree Kelvin is-
(a) 〖10〗^5 ohm (b) 〖10〗^(-1) ohm
(c) 〖10〗^(-5) ohm (d) zero

471. Which of the following are semiconductors?
1. Silicon 2. Quartz
3. Ceramics 4. Germanium
Choose the correct answer from the following alternatives:
(a) 1 and 2 (b) 1 and 3
(c) 1 and 4 (d) 3 and 4

472. Cyclotrons are used to accelerate:
(a) Neutrons (b) Protons
(c) Atoms (d) Ions

473. Which one of the following can be used to confirm whether drinking water contains a gamma emitting isotope or not?
(a) Microscope (b) Lead plate
(c) Scintillation counter (d) Spectrophotometer

474. Which one of the following pairs is not correctly matched:
(a) Discovery of Meson - Hideki Yukawa
(b) Discovery of Positron - C.D. Anderson and U.F. Hess
(c) Theory of energy production in the sun and stars-H.A. Bethe
(d) Synthesis of transuranic elements-Enrico Fermi transuranic elements

475. The maximum density of water is at
(a) 373 Kelvin (b) 277 Kelvin
(c) 273 Kelvin (d) 269 Kelvin

476. The technique to integrate and mark the image of a three- Dimensional object is-
(a) Audiography (b) Lexieography
(c) Photography (d) Holography

477. Which mirror is used as a rear view mirror in vehicles?
(a) Plain (b) Convex
(c) Concave (d) Cylindrical

478. The minimum height of a plane mirror to see the full size image of a person is equal to-
(a) The height of the person
(b) Half the height of the person
(c) One-fourth the height of the person
(d) Double the height of the person

479. Photovoltaic cells are :
(a) Solar cells (b) Thermal cells
(c) Sulphur cells (d) Molar cells

480. Hydrogen bomb was developed by
(a) Edward Teller
(b) Bernor Bon Bron
(c) J. Robert Opan Heemar
(d) Samual Cohen

481. Indian Institute of Remote Sensing is situated-
(a) In Ahmedabad (b) In Dehradun
(c) In Sriharikota (d) None of the above

482. The term MB is used for-
(a) Magnetic Bits (b) Mega Bytes
(c) Mega Bits (d) None of the above

483. X-ray was invented by:
(a) W.C.Rontgen (b) Gutenberg
(c) Edison (d) Graham Bell

484. In a pressure cooker food is cooked in shorter time because-
(a) The boiling point of water increases
(b) The boiling point of water decreases
(c) The food takes less heat
(d) None of the above.

485. Light year is the unit of-
(a) Distance (b) time
(c) Speed of light (d) Intensity of light

486. How many watts are there in a horsepower?
(a) 1000 (b) 750
(c) 746 (d) 748

487. Pyrometer is used to measure-
(a) Air pressure (b) Humidity
(c) High temperature (d) Density

488. The working principle of a washing machine is :
(a) Centrifugation (b) Dialysis
(c) Reverse osmosis (d) Diffusion

489. The time period of a pendulum-
(a) Depends on the mass
(b) Depends on the length
(c) Depends on time
(d) Depends on temperature

490. The rain drops are spherical because-
(a) They fall from big height
(b) The air has resistance
(c) The water has surface tension
(d) None of the above

491. Optical fibre works on the principle of :
(a) Total internal reflection
(b) Refraction
(c) Scattering
(d) Interference

492. At what degree are the Centigrade and Fahrenheit temperatures the same?
(a) 100° (b) 80°
(c) –32° (d) –40°

493. When a ship floats on water
(a) it displaces no water
(b) the mass of water displaced is equal to the mass of the ship
(c) the mass of water displaced is lesser than the mass of the ship
(d) the mass of water displaced is greater than the mass of the ship

494. Which type of electromagnetic radiation is used in the remote control of a television receiver?
(a) Visible (b) Ultra-violet
(c) Infra-red (d) None of the above

495. Which one of the following is not correct:
(a) Theory of evolution was propounded by Charles Darwin.
(b) The breaking apart of the nucleus of an atom is called fusion.
(c) 'Dry ice' is nothing but solid carbon dioxide.
(d) Telephone was invented by Graham Bell.

496. Among the following radiations, which has the highest energy?
(a) Visible (b) X-ray
(c) Ultra-violet (d) Infra-red

497. Source of Energy from the Sun is
(a) Nuclear fission (b) Nuclear fusion
(c) Photoelectric effect (d) Cherenkov effect

498. What is the source of electrical energy in an artificial satellite?
(a) Solar cells (b) Mini nuclear reactor
(c) Dynamo (d) Thermopile

499. A vast collection of stars held together by mutual gravitation is called
(a) A galaxy (b) Universe
(c) Constellations (d) Nebula

500. The stars which appear in the form of closed groups and form recognizable shapes and patterns are known as
(a) Supernova (b) Neutron stars
(c) Milky Way (d) Constellations