

1. Two vectors are equal if their- **shape direction is same.**
2. What type of force acts on a car moving on a circular curved path - **Centripetal force**
3. On what principle does the washing machine work – **decentralization**
4. Under what conditions will the maximum weight of an object be on- **the earth's pole**
5. What is an air pressure measuring instrument called – **barometer**
6. Why the weightlessness is felt when the spacecraft revolves around the Earth - **zero gravity**
7. What principle does the segmental Libra work on - **the Hook rule**
8. Why the Earth has its own atmosphere - **due to the force of gravity**
9. What is the stopping force of a vehicle when applying a brake - **friction force**
10. Sea water has more salts than rain water because - **rivers carry salts from the earth and pour it into the sea.**
11. What is the stored heat energy stored during the change of heat in a substance - **kinetic energy**
12. photon whose basic unit is- **Light**
13. Due to which huge amount of energy is released in the explosion of a nuclear bomb- **the change of neutrons to protons**
14. Which has maximum mass- **neutron**
15. What is the example of the motion of the body around a circular path - **uniform vein, variable acceleration**
16. What principle does the rocket work on - **Newton's Third Law**
17. What causes clouds to float in the atmosphere - **low density**
18. Why the speeding wheel is an important part of the steam engine - **helps the engine to keep the speed the same.**
19. What is the freezing point of fresh water - **0°C**
20. In which a real gas can act as an ideal gas - **low pressure and high temperature**
21. What is the example of the speed of the wheels of a bullock cart while walking on the road - **Transitional and rotational speed**
22. With whose help the purity of a metal can be determined - **Archimedes' principle**
23. When two objects are placed at some distance, they feel the force of gravity against each other. If the distance between them is doubled from the first distance, then the force will be - **1/4 F**
24. Ineffective wave is formed by - **two waves of the same shape, moving in opposite direction**
25. The minimum number of forces to keep a particle in equilibrium is – **2**
26. SHM It should be necessary in the system showing - **both elasticity and inertia**
27. To easily open a door, its handle should be placed- **The handle should be at a greater distance than the occupation to open the door easily.**
28. The driver of a vehicle climbing a hill keeps the ratio of gear - **equal to or more than 1**
29. A wire of resistance T is cut into equal parts, then these parts are connected in parallel. The equivalent resistance of the combination will be - **R / n<sup>2</sup>**
30. An object covers a distance that is directly proportional to the square of time. Its acceleration is- **constant**
31. Distance of stars is measured in- **Light years**
32. 1 micron is equal to- **10<sup>-6</sup> mm**
33. Which is the highest density of water - **40 C**
34. The value of one horsepower is - **746 watts**
35. The sound of an aircraft is generally compatible with- **100 decibels**
36. When the mercury of the barometer suddenly falls, what does it signify- **the possibility of thunderstorm or hail**
37. The work done by the formula of a simple pendulum during a full oscillation is equal to- **Zero**
38. What are the units of Planck constant - **Joule second**
39. What causes a needle or pin to float on the surface of water - **surface tension**
40. What are the units of electric power- **Watt**
41. Both a metal band and a rubber band of the same code normally strike a wall with the same wave. The ball of rubber is rebound and the metal ball is not rebound. What can be concluded from this - **Rubber balls bear more changes in momentum.**
42. If an object rotates in a circle at the same speed- **its velocity remains the same.**
43. Why rice cooks faster in pressure cooker - **Water boils at a higher temperature when there is pressure.**
44. The total energy required to launch a missile at a velocity lower than the Earth's flight velocity – **negative**
45. When water freezes- **its density decreases.**
46. Works on the basis of conservation of linear force- **rocket**
47. The intensity ratio of waves is 25: 9, what will be the ratio of their expansion - **5: 3**
48. What is the most suitable unit to express the nuclear radius- **angstrom**
49. What is the amount of substance in a steel sphere- **mass**



50. Whose rule of hydraulic brake works on - **Pascal's rule**
51. Measuring and recording the relative humidity of air is a - **hygrometer**
52. A gas thermometer is more sensitive than a liquid thermometer because gas **-diffuses more than liquid.**
53. When the bus suddenly turns, then the passengers standing in the bus fall outwards - what is the reason for this - **speed of speed**
54. If the velocity time graph of a particle is represented by  $y = mt + c$ , then the particle is moving- **with uniform acceleration**
55. Quartz crystal work in clock is based on- **Pressure on electric effect**
56. The reasons for TV reception are disturbed when a vehicle passes - **spark plugs cause electromagnetic disturbance.**
57. For moving bodies with unequal velocity and uniform acceleration **-the displacement time graph is non-linear.**
58. The word isoenef signifies lines with the same ..... - **cloudiness**
59. In which the following thermometer engine is used- **Rocket**
60. Who is used to measure very short time intervals - **atomic clocks**
61. The drop of oil spreads over the water because - **the surface tension of the oil is much less than the water**
62. Earthquake measuring instrument is called - **Seismograph.**
63. On which principle does the fountain pen work - **capillary action**
64. The instrument called picnometer is used to measure- **Density**
65. Wind speed measuring device – **Anemometer**
66. The energy stored in clock springs is - **potential energy.**
67. Newton's first motion - law conceives - **of inertia**
68. The oldest form of energy known to man is- **solar energy.**
69. Energy produced commercially from coal is called **-thermal energy.**
70. Gas density is high - **low temperature, high pressure**
71. A boy sitting in an open car going at a steady speed throws the ball straight up in the air, the ball falls - **in his hand**
72. The process involved in soap making is- **saponification.**
73. Of all the basic forces, the weakest is - **the gravitational force**
74. The strongest in nature - **nuclear force**
75. According to the theory of relativity, what always remains the same - **the velocity of light is**
76. What is the reason for injury to a person by hitting the stone with a rock- **reaction**
77. Two stones of different mass are dropped together from the summit of a building - **both stones reach together on the ground.**
78. Which fluid has the lowest density – **Petrol**
79. During the run, the runner has a center of gravity - **in front of his feet.**
80. The walls of a dam are made thicker at the bottom than at the top because the pressure exerted by the water - **on the wall increases with the depth of the wall.**
81. The intensity of the Earth's gravitational field is maximum - **on the axis**
82. Used in the wheel of a bicycle, it increases its inertia - **moment of moment**
83. Should cars have bumpers that collide - **yes, because they protect the absorption of passengers by withstanding the impact of the collision.**
84. Time period when the pendulum is taken to the moon- **increases**
85. Atmospheric air is placed on the earth - **by gravity**
86. The wheel has ball bearings - **Converting kinetic friction to belon friction**
87. The time period of a pendulum is **2 seconds.**
88. When a spherical ball made of steel is placed in a mercury vessel, it will remain **above the surface of the mercury.**
89. Holding a piece of wood under water, how much buoyancy force will it have on it - **less than the weight of the wood**
90. A pressure gauge is placed in a belazar, what happens when the air is slowly extracted from the belazar - **the mercury level starts to rise.**
91. Which component will be the most damaging - **the speed of both cars decreases to zero after the collision**
92. By which action are wet clothes dried in spin dryers - **concentration force**
93. When a person sitting on a swing stands on it, the frequency of swing - **swing increases.**
94. When the surface tension of water is added to detergent – **decreases**
95. For which purpose metal gaps are left between two rail-pipes - **for linear propagation**
96. The reason for the rounding of small bubbles is - **surface tension**
97. Whom does the bark of velocity-constant graph represent- **Acceleration**
98. There is a hole in the copper disc. If the disc is heated, the size of the hole - **increases.**



99. How long does it take for the light to reach the Earth from the Sun - **8 minutes 20 seconds**
100. Ball pen works on which principle- **Gravitational force**
101. The reason for separation of cream by churning milk is- **centrifugal force**
102. How many synchronous satellites will be required for global transmission without interruption – **2**
103. When detergent is added to pure water, the surface tension will be - **decreases**.
104. Newton's first law is also called - **law of roots**.
105. On what principle do liquid machines work - **Pascal theory**
106. Mass of 10 moles of water is- **180 g**.
107. Which force is the decaying force- **friction force**
108. Who is used in hydraulic press- **Pascal rule**
109. When a running car stops suddenly, the passengers lean forward - **the law of speed**
110. The material for the year old Koto and Tambu is the source of water quality- **Page stress**
111. Once is equal to - **105 Pa**
112. When a body is dropped from an airplane, what increases it – **acceleration**
113. We transform **water energy into potential energy** by a water pump.
114. When a stone block is immersed in water, it displaces water with the same .....- **mass**.
115. What is the motion of a body which keeps repeating after a period of time- **periodic motion**
116. Due to which oil rises in the lamp light - **capillary event**
117. When a body is immersed in a fluid, what force acts on it - **load, uptake**
118. When a stone is thrown in the calm water of a pond, there are waves that rise on the surface of the water in the pond- **Transverse**
119. Why is the color of the sun red at sunrise and sunset - **all the other colors are scattered except red**.
120. The phenomenon of change in the direction of light when it passes from one medium to another is called – **refraction**
121. What would the sky look like in the absence of the earth's atmosphere – **black**
122. The blue color of the sky is visible due to which - **scattering of shorter wave concentration**
123. In which light diffusion occurs - **colloidal solution**
124. Whose unit is a diopter - **the capacity of the lens**
125. On which principle does the fiber optical cable used in communication work- **total internal reflection of light**
126. The object which absorbs all the colors and does not reflect any is seen- **black**
127. Movement of insects towards the source of light is called- **Lucent**
128. The division of white light into components is due to- **Reflection**
129. Why the thin layer of oil appears colored on the water surface - **due to the interference**
130. On which principle do optical fibers work - **complete internal reflection**
131. The color of the stars depends on- **temperature**
132. The sky appears blue due to this - **Raleigh Scattering**
133. Whose units are light years – **distance**
134. What causes Indra-dusha - **refraction and reflection**
135. Lux is the unit of which- **Illumination**
136. If a concave mirror has both the object and the image at the center of curvature, then the image is- **the same size as the object**.
137. Color of stars depends on- **their temperature**
138. Total internal reflection cannot occur when light - **through water, enters the glass**.
139. Hertz are the units of measure- **Recurrent of waves**
140. What are x rays - **neutral particles**
141. When flat glass is placed on colored letters, which letter appears less raised- **red**
142. Which phenomenon helps in deciding that light is a transverse wave – **polarization**
143. In which case, distant things appear out of focus – **myopia**
144. Which color of light is least diffused through the prism- **Red**
145. The velocity of heat radiation in a vacuum is equal to - **light**
146. Coolidge tube is used to generate - **X rays**
147. Our sky is the shape of Ganges- **Spiral**
148. Who invented the electron microscope - **Knoll and Ruska**
149. Which glass is used in sunglasses- **Crooks glass**
150. Non-responsive waves cannot pass through – **vacuum**
151. Which part of the light in the sun heats the solar cooker – **infrared**
152. What are the techniques related to holography - **to record a permanent one-color or multi-color permanent stereoscopic photograph**.
153. Who absorbs ultraviolet rays in the atmosphere – **ozone**
154. Which varieties of glass are resistant to **pyrex glass**
155. The reason for the sky to appear blue is - **scattering of light**
156. The Lambert law is related to- **Illumination**
157. What is called the atmospheric layer that reflects radio waves – **ionosphere**



158. Who was the first to explain the hydrogen spectrum - **Niels Bore**
159. Who first measured the velocity of light – **Roemer**
160. Where are the mesons found in **the laser beam**
161. The conclusion of mass-energy relationship is- **General Theory of Relativity**
162. Signal of danger is usually red because red light: **deviation is lowest**
163. A simple dithering is **a convex lens with a low focus.**
164. 'Myopia' can be corrected in Manav's eye - **using right concave lens**
165. What is the reason for the shimmer of stars - **atmospheric refraction**
166. Instrument is used for studying the reflection of light – **spectrometer**
167. On which principle do fiber optics work - **full internal reflection**
168. A remote sensing device has a built-in source - **infrared ray**
169. In a laser (neon laser), all atoms emit light waves - **of the same frequency, of the same dimension, of the same art.**
170. What are the complementary colors of yellow – **blue**
171. The reason why water pools appear less deep is **refraction.**
172. Color appears by applying white light on soap bubbles. The reason for this – **Interpretation**
173. The instruments used to see distant objects on the earth are **earthly telescopes.**
174. The sky appears blue, because the vuomandal scatter **the drain color more than other colors.**
175. When a ship enters the sea from the river- it **risers a little.**
176. With the appearance of blue color in the sky, there is a phenomenon of related light – **scattering**
177. Lens is made up of - **Darak (aperture)**
178. It takes the same time and the same kinetic energy to roll a round on two inclined planes of different angles but of equal height.
179. Which types of light are used in remote photographing- **Infra-red rays**
180. How can the magnification capability of an astronomical telescope be reduced - **by increasing the focus distance of the eye**
181. Boolbula behaves like air in water- **like the concave lens**
182. Gulag appears red in the light of the sun. What will that rose look like in green light – **black**
183. The reason for the sparkle of the diamond is the **complete reflection of light.**
184. Expected waves for long distance wireless communication- **Radio waves**
185. 'Liquid Brake' works on the principle - **Pascal law**
186. The bomb falls to mark the 'pilot' target - **before the target**
187. Parabolic mirrors are used - **in car headlights**
188. Red color is used as an emergency or danger signal because its **wavelength is the longest.**
189. Bats can detect obstacles because they produce - **sound waves**
190. The sharpness of an image on television is called - **resolution (resolution).**
191. In a simple microscope, the image is **a virtual, magnified tabular radius.**
192. On which principle does the periscope work – **diffraction**
193. A lateral view mirror for **driving is convex.**
194. The part of the eye with the highest refractive index is – **lens**
195. Light beam which is very directional, is called- **laser**
196. Energy in reflected light - **does not depend on angle of incidence**
197. Which color of light exhibits the most deviation when passing through a prism- **Purple**
198. When a light wave is reflected from a mirror, then there is **a change in its wavelength.**
199. What type of mirror is used in front lamps (head lights) of vehicles - **concave mirror**
200. What exactly is a magnifying lens - **convex lens**
201. What type of image does concave lens always make - **virtual image**
202. Whom does Gujarat face for full internal reflection of light - **water from glass**
203. People with myopia are advised to use them- **Concave lens (concave lens)**
204. To remove the headlight chandelier in motorcars - **Polyrides are used.**
205. 'lumen' unit - **of flame flux**
206. Who was the founder of quantum theory of radiation – **Planck**
207. How are the magnetic waves used in television remote control – **infrared**
208. In motorcycles, why convex ions are used on the rear arrow to hold the mirror - **it has a smaller shape than the real object.**
209. What causes more biological damage - **gamma rays**
210. What is the light beam going from the critical angle of the respective pair to the mean to the sparse medium at the maximum incidence angle - **the overall internal reflection**
211. What is the mirror used to see the back traffic in an automobile – **convex**
212. Why the snow covered with sawdust does not melt quickly - **sawdust is a bad conductor of heat.**



213. Which instrument is used for photography of the Sun- **Spectroheliograph**
214. Which coolant is commonly used in a refrigerator- **Freon**
215. With which instrument is the temperature of a shining object accurately determined – **Pyrometer**
216. Which metal remains in liquid state at room temperature- **mercury**
217. At boiling point of liquids - **temperature is constant**
218. When ice is formed, water entropy- **decreases**
219. Who suggested quantum theory - **Max Planck**
220. Which device is used to convert solar energy into electricity - **light-voltaic cell**
221. The word 'insulation' means- **incoming solar radiation.**
222. The rate of cooling depends on - **the difference in temperature between the body and its surroundings, the tendency of the radiating surface, the area of the radiating surface**
223. The ratio of the average kinetic energy in the molecules of an ideal gas is - **the ultimate temperature of the gas**
224. A tire of a bicycle suddenly explodes, what does it signify - **a cryptogenic process**
225. Any mass of water from 0°C to 100°C. By heating up, its volume will- **increase after decreasing**
226. What can happen with gamma rays - **gene mutation**
227. What is seen through electron microscope - **Structure of bacteria and viruses**
228. Woolen clothes keep the body warm, because- **they are wool Malicious.**
229. Clothes keep us warm during winters because - **the heat of the body keeps us from going out.**
230. The conductor of electricity is- **graphite.**
231. Clear night are colder than cloudy nights. The reason for this is – **radiation**
232. By what process does the temperature of the Sun reach the Earth – **Radiation**
233. Where does heat in the atmosphere usually come from – **radiation**
234. Metals used to make lightning conductors are- **copper.**
235. Superconductors are- **those whose resistance becomes almost zero at very low temperatures.**
236. Whose unit is 'Therm' - **of heat**
237. Turbulence is predicted when the pressure of the atmosphere is -**reduced.**
238. Where is it difficult to cook rice - **at the top of the mountain**
239. There will be changes in the ice and water kept in the bowl at exactly zero degree Celsius - **no change will occur.**
240. A plate with a circular hole in the middle is heated. What will be the effect on the area of the hole - **will increase.**
241. Lakes freeze in winter in cold countries, leaving water below - **at 4°C**
242. The amount of water vapor in the air chamber is measured - **in the form of humidity**
243. Which has the highest specific heat value – **water**
244. When vapor becomes equal to atmospheric pressure, what is the effect on the fluid - **the fluid starts boiling.**
245. The temperature whose reading is the same on both Fahrenheit and Celsius scales - **32°C**
246. A body absorbs heat the most when it is - **black and rough**
247. Water is used in hot water bags because - its specific heat is high.
248. Mercury is commonly used in thermometers because it has high conductivity.
249. Water is not suitable as a substance until calorimetric — it has high specific heat.
250. The density of water is 1 g / cc. This is perfect - **at 4°C**
251. Why the outside of the bottom of cooking utensils is left black - **Black surfaces are good absorbers of heat.**
252. Gas thermometers are more sensitive to the weight of liquid thermometers, because- **the diffusion coefficient of the gas is higher.**
253. What is a white and smooth surface - **bad absorber of heat and good reflectivity**
254. At what fraction of centigrade and Fahrenheit temperature are uniform - **32°C**
255. What material is used in electric heater – **nichrome**
256. The device for converting transformer is- **Low voltage AC.in High voltage AC**
257. The term 'Higgs Boson' is related to- **Gad particle**
258. If the electrical resistance is to be reduced, then the number of resistors should be connected to – **parallel**
259. Which is not an electromagnetic wave - **Cathod ray**
260. Diamond does not conduct electricity because- **it does not have an independent electron.**
261. What is the anti-particle of electron – **positron**
262. Who is associated with the current carrying conductor - **electromagnetic field**
263. Nuclear detonation is induced by- **uncontrolled chain reaction**



264. What is the adverse effect of emission of X-rays - **Light - Electrical effect**
265. What is called a group of solar cells that are folded together in a certain pattern - **solar cell panels**
266. What is a choke used with tubelight - **effector**
267. Which transistor is most likely to be in - **Audio equipment**
268. With whom a galvanometer can be connected and made into a voltmeter - **high resistance in series**
269. Fleming's 'left hand rule' is related to - **magnetic field on the current**
270. Sill-frequency - **frequency under which light electrical emission is not possible.**
271. Super conductors are materials that give - **minimum resistance to the flow of electric current.**
272. In a conductor - **the valence band and conduction band overlap each other.**
273. The electrical resistance of some materials is completely eliminated at very low temperatures. What are these materials called - **superconductors**
274. Dynamo converts it - **mechanical energy into electrical energy**
275. A fuse wire is identified due to these characteristics - **minimum resistivity and minimum melting point**
276. When the number of the coil in a horseshoe is tripled without any change in the length of the coil, how much is its inductance - **nine times**
277. In electronics what comes under tank circuit - **resistance (resistance) and capacitance**
278. Tungsten is used to make the filament of an electric bulb, because - **its melting point is very high.**
279. Poly-meter is used to measure - **current, voltage, resistance**
280. A nuclear reactor used for power generation is based on - **nuclear fission.**
281. A kilowatt-hour is a unit of - **energy.**
282. In our domestic electrical circuit the fuse melts when there is a huge surge - **in the current**
283. The instrument used to change the speed of electric fan is - **Regulator**
284. Superconducting is the conductor which has - **zero resistance**
285. Which device is used to limit current in electrical circuit - **Fuse**
286. Water cannot be used to extinguish a fire caused by electric current, because - **it can cause electrocution.**
287. Produces dynamic electrical charge - **magnetic field**
288. The SI unit of electric charge is - **Coulomb**
289. Safety fuse wire used in household electrical appliances is made of a metal whose - **melting point is low.**
290. For electromagnetic radiation, make the correct configuration in the order of their increased frequency - **X-rays, infrared, visible, microscopic waves.**
291. Whose unit is "farad" - **of capacity**
292. What is the nature of photon particle formation - **light effect**
293. The level of incompatibility of an electrolyte depends on - **Tanaka**
294. Electric fuse is an alloy of - **tin and lead.**
295. What is a conductor wire - **neutral**
296. What is the unit of electrical conductivity - **mho**
297. What is the conductor when carrying current - **negatively charged**
298. What is the unit of sound pollution (decibel) - **decibel**
299. Sound height depends on - **amplitude**
300. Which property of sound changes due to change in temperature of air - **wavelength**
301. The velocity of sound in humid air is higher than in dry air because in humid air: - **Density is lower than in dry air.**
302. A decibel unit is used for - **sound intensity.**
303. Bolometer is used to measure - **temperature**
304. What is noise measured in - **decibels**
305. On which principle does the stethoscope used by the doctors work - **the reflection of sound**
306. Doordarshan's sound signals are - **frequency modulated**
307. The owl can see even in the darkest darkness, because - **his big eyes are facing forward, which gives him a binocular view.**
308. What is the frequency of sound - **Frequency**
309. The ozone layer in the upper atmosphere helps us to - **absorb ultraviolet radiation.**
310. What is the quality that is seen in light wave but not in sound wave - **polarization**
311. Microphones are devices that convert - **sound signals into stream signals.**
312. By which can the wave form of a signal be studied - **Voiceimeter or Sonometer**
313. Which is responsible for the resonance of sound waves - **Reflection**
314. Which instrument is used to measure the wavelength of X-rays - **Bragg spectrometer**
315. In which sextant device is used - **Navigation**
316. What is measured by the anemometer, in the given options - **Wind speed**
317. Which has minimum frequency - **visible light**
318. What is the phenomenon that established the transverse form of light - **polarization**
319. Neutron is denominated in a nuclear reactor - **moderator**



320. Why does a person standing on the platform of a railway station feel drawn towards a fast approaching train - **the difference in pressure between them due to the fast moving air**
321. Why a cannon retreats after firing - **Newton's third law of motion**
322. During the speed of the projectile fired from the surface of the Earth - **the horizontal component of its velocity constant**
323. When iron rusts, its weight- **increases.**
324. For which reason air bubbles arise in liquids - **viscosity and eruption**
325. If the speed of rotation of the earth increases, the weight of the body - **will decrease.**
326. Reaction is heat dependent - **the path through which the maximum product is obtained.**
327. Green house gases - **CO<sub>2</sub>, CH<sub>4</sub>, NO and CFC**
328. How is Dahk Sada – **Praswadi**
329. A white solid substance A, on heating, removes a gas, which turns lime water to milky, the remaining material remains yellow in hot state, but turns white when cooled accordingly. What is solid A- **Zinc Carbonate**
330. Iron and manganese are removed from water by which process - **air mixture**
331. Excess fraction of water absorbed by steps is extracted – **transpiration**
332. What are the substances that bring down fever in the condition of high fever- **antipyretic**
333. Sulfuric acid is- **anisotropic.**
334. What is the function of depressurization in the treatment of dirty water - **removal of suspended solids**
335. There are two metal ions that cause hardness in water - **calcium, magnesium.**
336. Which metals contribute to the bio-magnification problem in ecology – **Mercury**
337. Elements that are not in nature but can be produced artificially, what is- **Plutonium**
338. What is the process involved in the iron ore fermentation process – **oxidation**
339. The diagonal is used to change - **the alternating current into the direct current**
340. Elements having different physical properties but with similar chemical properties are called as- **Allotropes**
341. Hexavalent chromium is strongly present in the exclusion of which - **tanning houses**
342. Thermal decomposition is the method followed for disposal - **hazardous waste**
343. Fullerene is a newly discovered crystalline carbon molecule - **60C atom.**
344. Maximum moisture content of composting mixture for vermicomposting is- **65**
345. The permitted concentrations of residual chlorine in drinking water, in mg / L, are- **0.2**
346. What is the chemical used to develop photographic films – **hypo**
347. Arsenic pollution - **black foot disease**
348. Alcoholic fermentation is made by- **yeast.**
349. Non-metals found in liquid state are- **bromine.**
350. The heaviest element found in nature is- **uranium.**
351. Hydrogen balloon hovers above because- **the balloon's forest is less than the forest of air displaced by it.**
352. While using cloth, we use blue because- **of its correct character combination.**
353. The energy stored in the spring of the clock is- **potential energy.**
354. The oscillation of the cricket ball in air can be explained - **based on the buoyancy of the air**
355. When an object is taken from the earth to the moon, the weight changes, - **but the mass remains the same.**
356. Two stones of different mass are dropped together from the summit of a building - **both stones reach the ground together.**
357. Ball bearings work in the wheel - **converting kinetic energy into cylinder friction**
358. Pushing is usually made of steel because- **its elasticity is high.**
359. What is the principle of life jacket - **It increases the volume of a person to keep him floating.**
360. To get the benefit of a player, who runs before a long jump - **speed of speed**
361. Instead of carrying a bucket of water in one hand, it is easier to carry two buckets in both hands separately, because- **the center of gravity and balance center are in the legs.**
362. If the copper wire is doubled, its resistance will be- **four times.**
363. Single stationary pulleys are used to draw water from the well because **the velocity ratio is low.**
364. If in a break, a bomb explodes in small pieces, then the total momentum of all the pieces will be- **zero.**
365. Bullets are fired from a rifle which retreats after firing. What is the kinetic energy ratio of the rifle against that bullet - **One**
366. Holes are made by cutting between a plate of metal and then it is heated. The size of the hole will- **increase.**
367. Kilowatt hours is a unit of **energy.**
368. A bottle of sodalime has been caught by the neck and rotated rapidly in the vertical circle, near which part of the bottle will the bubbles collect - **near the neck**
369. A cricket ball should be hit with a case angle so that it can reach the maximum horizontal distance - **an angle of 45° from the horizontal.**



370. When we move from the equator to the north pole, what is the acceleration of gravity – **increases**
371. What is the technique of collecting information about an object remotely without direct contact – **remote sensing**
372. Inside an artificial satellite, a person feels weightless because the force of attraction of the earth is- **zero at that place.**
373. If we want to calculate the pressure of a liquid on the bottom of a vessel, then to determine what quantity is not expected - **the surface area of the surface of the vessel**
374. The water of the hand pump is hot in winter, because- **the temperature inside the Earth is higher than the temperature of the atmosphere.**
375. A stone is dropped from the roof of a house towards the ground. When will the kinetic energy of that stone be maximum - **just before it reaches the ground**
376. What is used to convert a dynamo - **travel energy into electrical energy**
377. A fluid is boiled about when its vapor pressure becomes- **equal to variable pressure.**
378. Rice cooks quickly in a pressure cooker because - **high pressure increases the boiling point of water.**
379. Why it takes longer to cook potatoes on mountain tops - **high atmospheric pressure**
380. In cooking utensils there is a handle of lacadi or bakelite because- **wood and bakelite are bad conductors of heat**
381. On hearing the thunder, the person opens his mouth, of which - **to equalize the pressure of the air on the ears of both ears.**
382. Two bodies of the same bulk are thrown at the same time from the top of a mine at the same speed. If one body is thrown down vertically, the other body is thrown flat, then- **both reach the ground with the same kinetic energy.**
383. What happens when there is a spontaneous change - **free energy loss**
384. Why is it easier for a human to swim in sea water than in water - **the density of sea water is more than the density of river water**
385. What should a person do to reduce his gait on a freely rotating platform - **spread his hands outward.**
386. When two cubes of ice are pressed together, they form a cube. Does it help them to get together - **making hydrogen bond**
387. Pressure cooker cooks food quickly because- **the contents of the cooker are conductive.**
388. Relative gravity is the ratio of which of the following - **density of matter and density of water**
389. The work done by the formula of a simple pendulum during a full oscillation is equivalent to – **zero**
390. A liquid boils about when its- **vapor pressure is equal to the variable pressure.**
391. A pressure gauge is placed in a bell jar. Slowly remove the air from that jar, but what happens - **the water level starts rising**
392. Steel is more elastic than rubber because - **steel easily deforms.**
393. What has no effect on the velocity of sound – **humidity**
394. The characteristic of the star is the temperature – **temperature**
395. The glow that occurs in bubbles created by water is due to which process - **due to the total internal reflection of light**
396. What is the purpose of optical filters - **transmission or inclusion of light of different colors.**
397. How signals are transmitted in optical (optical) fibers - **due to total internal reflection**
398. The stars shine, but the planets do not shine because - **they are closer to the earth, so they get more light and even if there is little change in intensity, they are not seen.**
399. Lenses are used to correct the vision of a person suffering from myopia - **concave lens**
400. In which light diffusion occurs - **colloidal solution**
401. What is not the result of atmospheric refraction of light - **showing sunlight at a higher altitude than its actual height**
402. On what principle does optical fiber work - **complete internal reflection**
403. For what reason does the sea appear golden – **polarization**
404. Why does the electron give more magnification than the microscope - **because the wavelength of the electron is less than the wavelength of the visible light .**
405. What affects the color of flowers - **flowers blooming, vegetation growing, fruit bearing**
406. What are the minimum permeable power rays - **alpha-rays**
407. What is the disorder that can penetrate deep into our body- **gamma-particle**
408. What are X-rays - **neutral particles**
409. Velocity is the incident light wave on a flat surface with  $x$ . How much does  $V$  become after reflection-  **$x$**
410. What causes redness in the atmosphere at sunrise and sunset - **scattering of light**



411. Which color of light is least unchanged in the prism- **red**
412. What is the view in which the points in one plane of a substance appear in the center while the points in the second plane are seen outside the center- **Immobility**
413. What is the technique related to 'Holography' - **recording a one-color or one-dimensional stereoscopic photograph of multiple colors**
414. With whom is the color of light – **frequency**
415. Which compound is most convenient during day and night - **red and green**
416. Why can we hear short-wave transmissions better than long-duration transmissions - **short-range atmospheric disturbances have no effect**
417. What is the color of emerald (emerald) generally- **dark green**
418. What is the tangency of the visible spectrum - **3900Å – 7600Å**
419. Lambert's rule is related to- **Illumination**
420. Which lens is used to correct the defect of blindness- **Cylindrical lens**
421. Which form of friction angle and repose angle are - **equal to each other**
422. On what phenomena are optical fibers based - **complete internal reflection**
423. Eclipse is caused by which optical phenomenon – **diffraction**
424. For what purpose is a very bright light in the lighthouse - **to guide and warn the ships coming from different directions in the sea.**
425. A person wears glasses with a concave lens, because of this, where is the image of distant objects usually focused in their eyes - **in front of the retina**
426. How does the microscope used in pathology laboratories make images - **magnified, virtual, erect**
427. Using photography at night and in fog and fog is possible using- **infrared radiation**
428. In what colors can a blind person differ - **red and green**
429. Initially the radiation in a fluorescence tube is - **ultraviolet.**
430. It is dangerous to see solar eclipse with naked eyes because - **ultraviolet radiation coming out of the sun burns our retina.**
431. Which waves cannot be transmitted through vacuum- **sound waves**
432. If an ordinary glass tube and a glass capillary tube are both poured into a beaker of water, in which water will rise - **only in the glass capillary tube**
433. Long vision can be corrected by the use of - **by convex lenses**
434. Whose thin layer is coated on the back page of the mirror - **Silver nitrate**
435. In what form does a lightly plane surface reflect a beam of light - **in the form of diffused beam in all directions**
436. Light waves are transverse waves because- **they can be polarized.**
437. The organ with the highest refractive index is- **the lens.**
438. A man cannot see from 10 meters away from which disease- **myopia**
439. What is the shape of the shaving- **Concave**
440. E.N.T. What type of head mirror is used by doctors – **concave**
441. Which of the following is produced by conversion of solar energy using light voltage cells - **electric energy**
442. The ultraviolet light of the Sun's radiation does not reach the Earth's atmosphere due to its layer- **Ozon**
443. Why are white clothes cooler than black clothes - **they reflect whatever light reaches them.**
444. What are the main colors in photography - **red, blue, green**
445. Black body can absorb whose radiation- **all wavelengths**
446. Those bodies, which are good absorbers of heat, have other properties as well - **good radiative**
447. What is wavelength when black body radiation reaches the highest state - **decreases with increasing temperature.**
448. X-ray fields are located between the gamma-ray and ultraviolet regions.
449. Most of the electric power used in fiber type light bulbs is- **manifested as infrared rays.**
450. Why red lights are used as traffic signals to stop traffic - **they are the least scattered**
451. The reason why the star appears twinkling in the sky - **refraction of light by the atmosphere**
452. When a strong beam of light passes through a colloidal solution, the light will – **disperse**
453. Which radiation has the lowest wavelength - **γ rays**
454. The principle behind the stability of vision is the theory behind- **Cinema**
455. Who discovered the electromagnetic form of light – **Maxwell**
456. What is the time of exhalation required to take a photograph of a substance - **the brightness of the substance**
457. Is the color disc test function of Newton responsible for the - **stability of vision**
458. Which layer of the Earth's atmosphere contains ozone layer – **stratosphere**
459. What will be the boiling point of water in mountainous areas - **less than the sea water**



460. In which process is the transmission of heat through the actual motion of molecules from high temperature to low temperature – **Convection**
461. Even after sunset, due to which the air near the surface of the earth keeps getting heat - **terrestrial radiation**
462. Which device (instrument) can be used to detect radiative heat - **thermoelectric mass**
463. Which law of thermodynamics says that the heat of a high-temperature object cannot be transferred from a low-temperature object without the help of any external factor - **2<sup>nd</sup>**
464. Burning by steam is more painful than boiling water. Because - **steam contains latent heat.**
465. If an inert and an inertial engine are working between the limits in front of the heat, - **the efficiency of the inertial engine will be higher than the inertial engine.**
466. The first law of thermodynamics is generally related to the matter - **conservation of energy**
467. Even after sunset, what causes the air near the surface of the earth to receive heat - **terrestrial radiation**
468. The commonly used plastic material for making gear heels is - **polystyrene.**
469. Which is used in closed- **oven (micro-wave)**
470. What causes the continuous creation of energy in the Sun- **nuclear fusion**
471. Different colors of different stars are due to **the variation of – temperature**
472. Whom is made by - **water vapor at low temperature**
473. How does refrigeration occur in the refrigerator- **by the volatile liquid**
474. By keeping the Saint open in one corner of a room, its scent spreads to all parts of the room. What is the reason for this – **diffusion**
475. How the heat of the Sun reaches the Earth - **by radiation**
476. When two cubes of ice (cubes) are pressed on top of each other, they join to form a cube - **covalent attraction**
477. Why it seems that strong wind is hurling large fires in the open- **Why the surrounding hot air rises and cold air enters and has the effect of kindling the fire.**
478. Energy emitted by the Sun is due to- **nuclear fusion.**
479. Energy in ultraviolet rays is more than what- **infrared rays**
480. The parachute comes down slowly, while the stone thrown from the same height comes faster - **the surface area of the parachute is more, so the air resistance is more**
481. Which instrument is used to measure humidity- **Sling cyclometer**
482. If there is a sudden increase in the temperature of a place, the immigrant humidity - **decreases.**
483. Water pipes are often broken in cold winter nights in mountainous places, because - **the water inside the pipe becomes snowy and spreads and the pipes burst.**
484. Why a two thin shirt can keep us warmer than a thick shirt in the winter - **the air layer between two shirts acts as an anti-aging medium.**
485. What is called horizontal heat transfer inside the atmosphere - **Convection**
486. Cloudy nights are warmer than clean nights, because - **clouds mainly reflect the heat given by the Earth.**
487. Lakes freeze in winter in cold countries, except water below - **at 4 ° C.**
488. The amount of water vapor in the atmosphere is measured - **in the form of humidity**
489. Which has the highest specific heat value- **Water**
490. By whom is the high temperature required to ignite fuel in a diesel engine - **by compressing the air in the cylinders**
491. When the vapor pressure becomes equal to the atmospheric pressure, what is the effect on the fluid - **the fluid starts boiling**
492. The temperature whose reading is the same on both Fahrenheit and Celsius scales - **40 ° C**
493. A body absorbs heat the most when it is - **black and rough**
494. Water is used in hot water bags because - **its specific heat is high.**
495. Mercury is commonly used in thermometers because - **it has high conductivity.**
496. Why water is not suitable as a calorimetric material - **it has high specific heat.**
497. Why the bottom of the cooking utensil is left black - **Black surface is good absorber of heat**
498. Gas thermometers are more sensitive than liquid thermometers because - **the diffusion coefficient of the gas is high.**
499. What is a white and smooth surface - **bad absorber of heat and good reflector**
500. What material is used in electric heater- **nichrome**