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SCIENCE

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**Science**

No.	Question	Answer
01	The theory of relativity was propounded by	Albert Einstein
02	The principal metal used in manufacturing steel is	Iron
03	An alimeter is used for measuring	Altitude
04	Oology is the study of	Birds eggs
05	Radioactivity was discovered by	Henry Bacquerel
06	The metal used in storage batteries is	Lead
07	The instrument used to measure the relative humidity of air is	Hygrometer
08	Barometer was invented by	Torricelli
09	The unit of power is	Watt
10	Radium was discovered by	Marie and Pierrie Curie
11	The existence of isotopes was discovered by	Frederick Soddy
12	Dynamo was invented by	Michael Faraday
13	The nuclear reactor was invented by	Enrico Ferni
14	The law of gravitation was propounded by	Sir Isaac Newton
15	Crescograph was invented by	J.C.Bose
16	Crescograph is used to measure the	Rate of growth of a plant
17	Galileo's first scientific discovery was	Pendulum
18	Microscope was invented by	Aaton Van Leewen Hock
19	The scientist who is known as father of modern biology is	Aristotle
20	The first person to see a cell under microscope was	Robert Hooke
21	The smallest flowering plant is	Worffia
22	The four blood groups were discovered by	Karl Landsteiner
23	Sodium was discovered by	Sir Humphry Davy

24	The atomic number of oxygen is	Eight
25	The basic building blocks of proteins are	Amino acids
26	The botanical name of the cotton plant is	Gossypium Hirsutum
27	An Electroscope is used to	Detect charges on a body
28	The unit of loudness is	Phon
29	An ammeter is used to measure	Electric current
30	Plant that eat insects are called	Insectivorous plants
31	Fruits that are formed without fertilization are called	Parthenocarpic
32	Plants that flower only once in their lifetime are called	Mono carpic
33	The botanical name for rice is	Oryza Sativa
34	Penicillin is obtained from	Mould
35	The largest tree in the world is	Sequoia Gigantica
36	Herpetology is the study of	Reptiles
37	Entomology is the study of	Insects
38	Ornithology is the study of	Birds
39	Ichthyology is the study of	Fishes
40	Osteology is the study of	Bones
41	The botanical name for brinjal is	Solanum melongenal
42	The botanical name for onion is	Allium Cepa
43	The study of sound is called	Acoustics
44	The study of heavenly bodies is called	Astronomy
45	The study of tissues is called	Histology
46	Electric Lamp was invented by	Thomas alva Edison
47	The fear of crowd is called	Ochlophobia
48	The fear of books is called	Bibliophobia

49	The fear of going to bed is called	Clinophobia
50	The symbol of gold is	Au
51	The symbol of sodium is	Na
52	The symbol of Sr stands for	Strontium
53	The symbol Rb stands for	Rubidium
54	The symbol Md stands for	Mendelevium
55	Calcium sulphate is commonly called	Plaster of Paris
56	Sodium carbonate is commonly called	Washing Soda
57	Sodium chloride is commonly known as	Common Salt
58	The chemical name of Chloroform is	Trichloromethane
59	The chemical name of baking powder is	Sodium bicarbonate
60	The chemical name of bleaching powder is	Calcium hypochlorite
61	The formula HCL stands for	Hydrochloric Acid
62	The formula H <sub>2</sub> SO <sub>4</sub> stands for	Sulphuric Acid
63	The formula CHCl <sub>3</sub> stands for	Trichloromethane
64	The formula H <sub>2</sub> O <sub>2</sub> stands for	Hydrogen peroxide
65	A fungus which can only survive on other living organisms is called	Obligate Parasite
66	A plant which lives in the dark is called	Scotophyte
67	A plant adapted to live in dry places is called a	Xerophyte
68	A plant adapted for growth in water is called a	Hydrophyte
69	Bifocal lens was invented by	Benjamin Franklin
70	Cement was invented by	Joseph Aspdin
71	Laser was invented by	Dr. Charles H. Townes
72	Electromagnet was invented by	William Sturgeon
73	Rayon was invented by	Sir Joseph Swann

74	Thermostat is an instrument used for regulating	Constant temperature
75	The science of organic forms and structures is known as	Morphology
76	Phycology is the study of	Algae
77	Tata Institute of Fundamental Research was established in	1945
78	CSIR stands for	Council of Scientific and Industrial Research
79	ISRO stands for	Indian Space Research Organisation
80	The first human being to land on moon was	Neil Armstrong
81	The first Indian in space was	Rakesh Sharma
82	ISAC stands for	ISRO Satellite Centre
83	VSSC stands for	Vikram Sarabhai space Centre
84	The headquarters of ISRO is located at	Bangalore
85	VSSC is located at	Thiruvananthapuram
86	ISAC is located at	Bangalore
87	National Science Centre is located at	New Delhi
88	Central Tobacco Research Institute is located at	Rajahmundry
89	Indian Institute of Horticultural Research is located at	Bangalore
90	The Atomic Energy Commission was set up in	August 1948
91	The first Indian Satellite was	Aryabhata
92	The first Indian Satellite was launched in the year	1975
93	ASLV stands for	Augmented Satellite Launch Vehicle
94	INSAT stands for	Indian National Satellite
95	The fear of women is known as	Gynophobia
96	The fear of men is known as	Androphobia

97	The scientist who developed the Quantum theory was	Max Plonck
98	The steam engine was invented by	James Watt
99	The botanical name of tea is	Camellia Sinensis
100	Logarithms were devised by	John Napier
101	The acid used in a car battery is	Sulphuric acid
102	The system for writing by blind people was invented by	Louis Braille
103	The parachute was used for the first time by	J.P.Blanchard
104	The German physicit who first demonstrated the existence of Radio waves was	Henrich Hertz
105	The instrument that records the intensity of earthquakes is	Seismograph
106	The laws of floating bodies was discovered by	Archimedes
107	The density of milk is measured by a	Lactometer
108	Fountain pen was invented by	L.E.Waterman
109	The instrument used to measure the pressure of gases is the	Monometer
110	Bhaskara I was a famous	Astronomer
111	The first atomic nower station established in India was the	Tarapore Atomic Power Station
112	The role of heredity was demonstrated by	Mendel
113	The instrument used to measure the concentration of salt water is the	Salinometer
114	Spectroscopy is the study of	Anders John Angstrom
115	Dactylography is the study of	Finger Prints
116	A tangent galvanometer is used to study the	Strength of direct current
117	The fruit of Oak is called	Acron
118	ZETA stands for	Zero Energy Thermonuclear Assembly
119	The formula C <sub>6</sub> H <sub>5</sub> OH stands for	Phenol

120	Michael Faraday worked as an assistant under another scientist whose name was	Sir Humphry Davy
121	Vulcanised rubber was invented by	Charles Goodyear
122	The symbol Zn stands for	Zinc
123	The symbol He stands for	Helium
124	Celluloid was invented by	A.Parker
125	Glider was invented by	Sir George Caley
126	Safety matches were invented by	J.E.Lundstrom
127	Radio valve was invented by	Sir J.A.Fleming
128	Space Applications Centre is located at	Ahmedabad
129	Atomic Energy Commission is located at	Mumbai
130	Dynamics is the study of	Movements of bodies
131	Statics is the study of	Forces acting on bodies at rest
132	Mechanics is the study of	Forces acting on bodies
133	Zoology is the study of	Animal life
134	Botany is the study of	Plant life
135	Psychology is the study of	Human mind
136	The first American to orbit earth was	John H.Glen
137	The electro-cardiograph was invented by	William Einthoven
138	The molecular formula of cane sugar is	C <sub>12</sub> H <sub>22</sub> O <sub>11</sub>
139	A compound which contains only hydrogen and Carbon is called a	Hydrocarbon
140	The liquid used to preserve specimens of plants and animals is	Formalin
141	The law of segregation was propounded by	Mendel
142	Auriscopes are used to detect	Ear disorders
143	The three states of matter are	Solid, liquid and gas

144	The scientific name for blood platelets is	Thrombocytes
145	The response of a plant to heat is called	Thermotropism
146	The response of a plant to touch is called	Trigmotropism
147	The symbol Zr stands for	Zirconium
148	Nickel was discovered by	Cronstedt
149	Manganese was discovered by	Gahn
150	The common name for potassium carbonate is	Potash
No.	Question	Answer
151	Bismuth was discovered by	Valentine
152	The biggest plant seed is	Cocodemer
153	Toxicology is the study of	Poisons
154	Virology is the study of	Viruses
155	Paleontology is the study of	Fossils
156	Calorimeter is used to measure	Quantity of heat
157	Chronometer was invented by	John Harrison
158	Stethoscope was invented by	William Stockes
159	Spinning frame was invented by	Sir Richard Arkwright
160	Al stands for	Aluminium
161	Gd stands for	Gadolinium
162	Ir stands for	Iridium
163	Bi stands for	Bismuth
164	The Chemical formula of sodium bicarbonate is	NaHCO <sub>3</sub>
165	The chemical formula of common salt is	NaCl
166	The chemical formula of washing soda is	Na <sub>2</sub> CO <sub>3</sub> ·10H <sub>2</sub> O
167	The chemical formula of lime soda is	CaCO <sub>3</sub>
168	The chemical formula of chloroform is	CHCl <sub>3</sub>



- 169 The study of grasses is known as Agrostology
- 170 The study of antiquities is known as Archaeology
- 171 The study of the duration of life is known as Chronobiology
- 172 The study of bacteria is known as Bacteriology
- 173 Nylon was invented by Dr.Wallace H.Carothers
- 174 Electric razor was invented by Jacob Schick
- 175 The symbol of silver is Ag
- 176 The symbol of silicon is Si
- 177 The symbol of titanium is Ti
- 178 Calcium oxide is commonly known as Quick lime
- 179 A deviation of light passing from one medium to another is known as Refraction
- 180 An apparatus for generation of atomic energy is called a Reactor
- 181 A machine used for converting mechanical energy into electrical energy is called a Generator
- 182 The first Indian woman in space was Kalpana Chawla
- 183 The revolver was invented by Samuel Colt
- 184 The refrigerator was invented by J.Perkins
- 185 Which is the only common metal that is liquid at room temperature? Mercury
- 186 When a fire is caused by an electric short circuit, why must you not throw water? If you throw water on a fire caused due to short circuit, you may be electrocuted because water is a good conductor of electricity.
- 187 Why do we see lightning much before we hear thunder? This is because light travels much faster than sound. Light travels @  $2.99 \times 10^8$  mt / sec (2,99,000 km/sec) whereas sound travels @ 333 mt/sec.
- 188 Which planet is the closest to the Sun? Mercury
- 189 Which is the hottest planet? Venus
- 190 How much time does the earth take to complete a revolution around the sun? 365 % days.
- 191 Why are whales hunted? For the blubber or the oil in them.
- 192 Where do platypuses live? In burrows near water.

- 193 How many days does the moon take to go round the earth? 27 1/3 days.
- 194 Among the insects that are extant, (that are living still), which is the most ancient? Cockroach.
- 195 What is meant by fulcrum? Fulcrum is the point about which a bar or lever will rotate, when a force is applied at any distance from that point or axis.
- 196 What kind of leaves do silkworms thrive on? Mulberry leaves.
- 197 Why is it dangerous to look at the sun during an eclipse? During solar eclipse, the ultraviolet rays are in such high proportion in sunrays, that they can cause irreparable damage to the eye.
- 198 How does a Pitcher Plant eat flies? A Pitcher Plant is hollow and tubular. The surfaces are slippery and they have hairs, which point downwards. When an insect lands on a pitcher plant, it is impossible for it to escape because of the slippery surface and the downward-pointed hairs. It is then easily digested.
- 199 What is the Indian name for the planet Mercury? Budha.
- 200 Where in India do the migratory cranes of Siberia settle down? The Rann of Kutch.
- 201 How many arms does a starfish have? Usually five.
- 202 What is a solar eclipse? The moon comes in between the sun and the earth, and thereby prevents sunlight from reaching the earth.
- 203 Who first saw mountains and craters on the moon using a telescope? Galileo Galilei
- 204 Which is the largest animal on land? African Elephant.
- 205 Why does a rhinoceros spend so much time in mud? To keep cool and protect itself from insect bites.
- 206 Which country first used fingerprints to identify people? Assyria and China.
- 207 In which country was silk first made? China.
- 208 What is cholesterol? Cholesterol is a fat found in the human body and the body of other large animals. In its pure form it looks like white sugar. It is made up of tiny crystals, which can be seen under a microscope. It is said that too much cholesterol in the blood is responsible for the hardening of arteries and for various other heart ailments.
- 209 How did the watch get its name? From the fact that you have to watch it to know the time.
- 210 What is vulcanisation of rubber? The process of hardening rubber by adding sulphur and heating the mixture is vulcanisation. Vulcanisation was discovered by Charles Goodyear. Raw rubber is sticky. It hardens when the temperature is low and softens when it is high. Charles Goodyear discovered

that by combining raw rubber with sulphur and by heating it, the rubber becomes stronger and elastic and also resistant to solvents. Today almost all rubber, whether natural or synthetic is vulcanized.

- 211 When faced with danger what does a Pangolin do? It rolls into a ball.
- 212 Where is the entrance to a baya's nest? At the bottom of the nest.
- 213 What is glass made from? Limestone, Silica and Soda ash.
- 214 What is the microscopic study of plant and animal tissue called? Histology.
- 215 How does a mariner's compass help the mariner? The needle of the compass always points towards the magnetic north pole. This indicates the direction in which the ship is moving.
- 216 Which is the second largest planet in our Solar System? Saturn.
- 217 How many weeks after birth does the young one of a cat opens its eyes? Three weeks.
- 218 The arms of the Octopus have sucker cups. What is the use of these cups? To hold onto a surface.
- 219 What food does a bear love most? Honey.
- 220 How did the Romans rub off what was written on a wooden slate coated with wax? By heating the slate, the wax was melted. The slate became ready to reuse.
- 221 What are seashells? Outer casings of soft-bodied animals, called molluscs.
- 222 How is a pearl formed within the body of an oyster? A pearl is formed when a grain of sand or other foreign matter gets between the hard outer shell and the inner coat called the mantle, of a mollusc. The mollusc surrounds the irritation with nacre, a secretion from the mantle. Many thin layers of nacre give the pearl its lustre.
- 223 How much time does Pluto take to complete a revolution around the sun? 248 years.
- 224 What is a Catamaran? A boat with twin parallel hulls. [From the Tamil words katta and maram, meaning tied up (katta) tree (maram).
- 225 How many ears does a spider have? None.
- 226 How much time does light take to reach the earth from the sun? 8 minutes.
- 227 What is acceleration? The time rate at which the velocity of a point is changing is acceleration. Velocity is just the speed (miles per hour or kilometres per second). The term acceleration is used when the speed keeps increasing. The term deceleration is used when the speed becomes less and less.
- 228 How does a spider eat its food? The spider inserts his fangs into the victim's body and uses them as straws to suck out the liquid.
- 229 Who invented the telescope? Hans Lippershey.

- 230 Why do people living in the deserts prefer white colour for their robes? White coloured robes do not absorb light, whereas dark-coloured clothes absorb the light and conduct heat to the body.
- 231 What is common to dolphins and humans? They are both mammals.
- 232 In which country was the day first divided into 12 parts? Babylon (modern Iraq).
- 233 How does a rocket move forward? It moves forward due to propulsion. You must have seen that a boatman pushes the water backwards with his oar. This creates a force in the forward direction. This is propulsion. Newton's third law of motion states action and reaction are equal and opposite. In a rocket when hot gases come out of the rear with great force as a result of combustion, a force is created in the opposite direction. This takes the rocket forward.
- 234 What are the things necessary to start a fire? Heat, fuel and oxygen.
- 235 How many legs does a butterfly have? Six.
- 236 Who invented the aeroplane heavier than an air machine that could fly? Orville and Wilbur Wright.
- 237 Who invented the modern lift? Elisha Otis.
- 238 Why can't cranes perch on trees branches? They cannot curl their toes. As a result they cannot have a firm grip on a branch.
- 239 Ancient Sumerians used to write on clay. How could this writing be preserved? By baking the tablets. This would remove the moisture from the tablets and harden them.
- 240 How big are the tusks of an Indian female elephant? Indian female elephants do not have tusks.
- 241 Bats cannot see. Then how do they move about? They emit sounds of low intensity, which are reflected from the objects around them. This helps the bats to move about.
- 242 How does a frog catch an insect? It throws out its tongue, which is sticky and catches the insects.
- 243 What is a Portuguese Man of War? A name commonly applied to jelly fish, found in tropical seas.
- 244 Why are oceans important to man? They enable man to travel to distant corners of the world. They also provide food, oil and minerals.
- 245 What is the transparent portion in front of the eyeball called? Cornea.
- 246 What is the meaning of the pecking order? Pecking order is an example of hierarchy among animals, particularly hens. In a coup containing hens and cocks, the seniormost cock can peck at all the other hens and cocks in the coup. A hen can peck at others weaker than it, but must permit pecking by senior members in the hierarchy.

- 247 Who made trains run by steam engine popular? George Stephenson
- 248 How are volcanoes caused? Deep under the crust of the earth is molten rock or lava, also called magma. It is under great pressure because of the intense heat around it and the weight of the earth's crust. When this hot boiling mass finds an outlet in the underside of the earth's crust, it comes through the surface as lava.
- 249 What is a male ant called? Drone.
- 250 How can a frog make such a loud sound? As the frog forces air from the lungs, vocal chords in the voice box (larynx) vibrate to make calls, distinctive of its species. The bulls of some species have air sacs, which help, increase the volume of the sound.
- 251 Who was the first man on the moon? Neil Armstrong.
- 252 What is peristalsis? Peristalsis is a type of movement occurring in the hollow organs of animals, which causes their contents to be pushed ahead.
- 253 What are the main differences between an Indian elephant and an African elephant? The African elephant is much larger in size. Its ears as well as tusks are larger than those of an Indian elephant.
- 254 What is it that silkworms weave around themselves? Cocoon.
- 255 Why did Dr. Lister use carbolic acid to cover wounds? To prevent infection.
- 256 What is the juice of the rubber plant called? Latex
- 257 Why does the ostrich eat sand or gravel? To digest its food.
- 258 Which discovery made soap-making a big industry? It was discovered (in 1787) that caustic soda can be made from common salt. Since soap is made from caustic soda and fat, manufacturing soap became cheaper.
- 259 Who invented the Gramophone? Thomas Alva Edison
- 260 Which is the largest living bird? Ostrich.
- 261 Why didn't the British plant rubber in England? Rubber grows only in tropical countries.
- 262 Why do tigers turn into man-eaters? When tigers become old or are incapacitated because of injury, they prey on human beings. A tiger that has preyed on man and has tasted human flesh often continues to prey on man.
- 263 What was called Penny-farthing? The cycle whose front wheel was much larger than the rear wheel. It was invented by James Starley. It was derisively named penny-farthing after the largest and smallest English copper coins of the period.

- 264 Why does not the moon have an atmosphere? Even if it had some atmosphere, its mass is so low that gravity on the surface is not enough to retain the atmosphere.
- 265 Name the animal that has the largest eyes in the world? The Atlantic Giant Squid, about 30 cm wide.
- 266 Who invented the four-stroke Motorcar engine? Nikolaus Otto.
- 267 What are meteorites? They are rocks or pieces of rocks that enter the atmosphere and are usually burnt out before landing on earth. Some large meteorites can crash against the surface of the earth and cause damage.
- 268 What did ancient Romans think lightning was? Jupiter's weapon.
- 269 Are the soldier ants male or female? They are all female.
- 270 What is the nest of a penguin made of? Pebbles.
- 271 What are the characteristics of a parasitic plant? They cannot produce their own food and obtain food from other sources.
- 272 What keeps the sun so hot? A reaction similar to that of a hydrogen bomb takes place continuously in the sun. Two atoms of hydrogen fuse at high temperatures to form an atom of helium. Immense heat is released in this reaction.
- 273 What is meant by Binary System? We carry out everyday calculations, using the decimal system, with the numbers 1 to 9 and zero. The binary system uses only two numbers 0 and 1. An electric current can be switched on and off using off for 0 and on for 1. Any number can be represented in the binary system.
- 274 Which was the first spaceship launched by man? Sputnik-I, launched by the Russians
- 275 What kind of nests do owls build? They don't build nests. They use hollows in trees for laying eggs.
- 276 Why is polished rice less healthy than unpolished rice? The husk of food grains (rice, wheat, etc) has Vitamins, much of which are lost when the grains are polished.
- 277 Which Psychologist devised the IQ test? Alfred Binet.
- 278 Who discovered Radium? Pierre and Marie Curie.
- 279 What is the approximate temperature deep inside the sun? 14 million degrees C.
- 280 What are Epiphytic plants? Plants that grow on other plants for support. These plants however do not take nourishment from the host

- 281 Sometimes the eagle spits out pellets from its mouth. What are they? Bones and fur of the prey that are left after the food is digested.
- 282 What does a ruminant mean? Ruminant is an animal that chews its cud and has a four-chambered stomach. When food is swallowed by a ruminant, it passes into the rumen or paunch, where it is stored, while the animal eats. Chewing and digestion are carried out at leisure. The food passes from the rumen to the reticulum, where it is formed into small masses and pushed up to the mouth to be chewed. When it is swallowed a second time it takes a different route. Gastric digestion takes place and the food passes into the intestine.
- 283 Who discovered the Planet Uranus? Sir William Herschel.
- 284 Who invented Television? John Logic Baird.
- 285 How do dolphins communicate with each other? By producing screeching sounds.
- 286 Who was the first woman to travel in space? Valentina Tereshkova.
- 287 What are clouds made of? Tiny droplets of ice or water.
- 288 What is the disease that causes dogs to turn mad? Rabies.
- 289 Who conducted the first controlled fission reaction (that led to the making of the atom bomb)? Enrico Fermi.
- 290 Which was the first satellite launched by India? Aryabhata, in 1975.
- 291 What is Dry Ice? Solid Carbon Dioxide.
- 292 Who invented the Radio? G. Marconi (Jagadis Chandra Bose has also been credited with this discovery but his claim has not been recognised).
- 293 What was the theory of the atom put forward by Rutherford? Rutherford put forward the theory that every atom consists of a tiny nucleus with a positive charge, surrounded by electrons. The electrons are far apart from the nucleus and from one another.
- 294 Of which element is diamond made of? Carbon.
- 295 The Pit Viper has poor eyesight. Yet it can locate its prey accurately. How? It has heat sensory cells in the pits between the eye and the nostril, which detect warm-blooded animals.
- 296 Who first propounded the theory of Evolution of Man? Charles Darwin.
- 297 From which elements is steel made? Iron and Carbon.
- 298 Which instrument is used for measuring humidity? Hygrometer.
- 299 If you speak loudly on the moon, approximately how far can your voice travel? Sound waves need a medium in which they can travel. The atmosphere on the moon is negligible. Hence your voice cannot travel any distance.



300 What is the difference between Toads and Frogs? Toads have a dry warty skin while frogs have a smooth moist skin.

No. Question

Answer

301. Who first discovered that water was produced by burning hydrogen? Henry Cavendish.

302. What are the parts of a comet? Nucleus, coma and tail.

303 Why are the blades of the fan slightly curved? If you wish to carry sand or any solid substance from one place to another, you can carry little if there are straight metal strips. A pail can carry much more. In the case of air, which is a fluid, a slightly curved blade is enough to help circulate air in the room.

304 What is absolute zero temperature? Absolute zero is the temperature at which thermal energy (energy related to heat) vanishes. It corresponds to -273.15 degrees, on the Celsius scale.

305 Who is considered the father of plastic surgery in ancient India? Sushruta. He is best known for the operations he performed called rhinoplasty (remodelling of the nose).

306 What are isotopes? Isotopes are different forms of an element with the same number of protons, but a varying number of neutrons in the nucleus of an atom. All elements consist of atoms. Atoms have a nucleus, which consists of proton or protons and neutrons. They usually have as many electrons as protons, continuously whirling around the nucleus. Hydrogen has two naturally existing isotopes - one with only a proton and no neutron in its nucleus and another with a neutron and a proton. The first one is commonly known as hydrogen. The second one is rare and is called deuterium or heavy hydrogen. A third isotope, called tritium, is artificially produced. Tritium has one proton and two neutrons.

307 Who discovered the cause of malaria? Ronald Ross.

308 Which planet has a moon named Titan? Saturn.

309 Name the largest bone in the human body. Femur (in the thigh).

310 What is the source of all energy on earth? The sun.

311 What was the name of the instrument used by Jagadis Chandra Bose to measure sensitivity of plants? Crescograph.

312 How long do banyan trees live? Banyan trees seem to live for hundreds of years. Aerial roots develop from its branches and they take root in the soil. Over the years these roots turn into sturdy trunks, which too grow roots and the cycle continues. It is said that the entire army of Alexander had taken shelter under one such banyan tree.

313 Which part of the plant do you eat when you eat carrots? Roots.

314 Who was the first man to travel in space? Yuri Gagarin.



- 315 What is reinforced concrete? Reinforced concrete is ordinary concrete which has steel rods fixed in it.
- 316 What is meant by latent heat? Heat absorbed when a substance changes its state without changes in temperature, e.g. water boils at 100°C. When we heat it further the temperature is not raised but the heat is absorbed.
- 317 In ancient India shells of a sea-animal were used as money. What were they called? Cowries.
- 318 How does spraying kerosene on marshes reduce mosquitoes? A film of oil is produced which prevents the larvae of the mosquitoes from having access to the oxygen in the atmosphere.
- 319 How many bones are there in an adult human being? 206.
- 320 Who is considered to be the father of Geometry? Euclid.
- 321 What is the study of sound called? Acoustics.
- 322 Which was the first satellite India launched from Indian soil using an Indian launch vehicle, SLV3? Rohini Satellite (RSI).
- 323 What are bacteria? Where are they found? Bacteria formerly classified as plants are now classified separately as Prokaryotes. They are so small that we can see them only with a microscope. They are found almost everywhere. Bacteria cause and spread diseases, but there are many bacteria that are helpful to man. Bacteria are responsible for converting grape juice into wine and milk into curd.
- 324 What is the name of the instrument that records heart beat? Cardiograph.
- 325 Who discovered the connection between magnetism and electricity? Hans Christian Oersted.
- 326 Who discovered the presence of neutrons in the nucleus of elements? Physicist James Chadwick.
- 327 At what temperature does water become ice? Zero degrees on the Celsius scale.
- 328 What do deciduous trees mean? Trees that shed leaves in autumn are called deciduous trees.
- 329 The electric discharge of which fish is the most powerful? South American Electric Eel.
- 330 What is the name for power generated from water? Hydroelectricity.
- 331 How is sound produced? Basically sound is produced when a vibrating body sets air molecules in motion. Musical instruments produce sounds by vibrating strings. The vibration and waves that are produced reach the ear, which passes the vibrations to the brain. To test this take a steel tumbler and tap on it with a metallic spoon. Sound is produced. Hold the edge of the tumbler between two fingers. The sound stops. This illustrates the importance of vibration in producing sound.

- 332 How are motion pictures made? When the eyes see an image, they hold onto it in the form of a visual memory for a fraction of a second after it is gone. In a motion picture, the projector flashes still pictures quickly in succession. The usual numbers of pictures that are projected per second are 24. Because of persistence of vision, the picture seems to be one continuous moving picture.
- 333 From which part of the plant, is ginger that we eat obtained? From the stem.
- 334 Who was the first person to find out that microscopic organisms are responsible for milk, wine, etc turning sour? Louis Pasteur.
- 335 What is the meaning of the word Hippopotamus? River Horse.
- 336 Who invented the Hovercraft? Christopher Cockerell.
- 337 Who discovered Vitamins? Christopher Eijkman - though he did not use the word, vitamin.
- 338 Who coined the word Vitamin? Casimir Funk.
- 339 Why does the planet Mars appear red? Due to the highly oxidised surface of the planet.
- 340 Name the Vitamin that prevents night blindness. Vitamin A.
- 341 Where do sea plants obtain carbon dioxide to manufacture their food? From dissolved gases
- 342 Who is considered as the father of modern Medicine? Hippocrates.
- 343 How does an Octopus camouflage itself? By changing its colour and merging with the background.
- 344 Who first proved that lightning is an electric charge coming down to the earth? Benjamin Franklin.
- 345 What are cosmic rays? Cosmic rays are radiation from outer space, which bombard the earth. They constantly strike the molecules of the earth's upper atmosphere. As a result, additional radiations are produced. The atmosphere absorbs most of these rays.
- 346 What is a cocoon? It is a silk case, that covers a caterpillar before it becomes a moth (butterfly). After the caterpillar is completely wrapped in its cocoon, it sleeps through the winter.
- 347 What does the acronym LASER stand for? Light Amplification by Stimulated Emission of Radiation.
- 348 How is cement obtained? Heating a mixture of limestone and clay.
- 349 Name the only mammal, other than man, that can walk upright? Gibbon.
- 350 Which disease is caused by insufficiency of iodine in the diet? Goitre.
- 351 What are molluscs? A class of animals with a soft body and no bones.

- 352 Which animal has the longest life span? Tortoise.
- 353 How is the glow of a firefly caused? When certain proteins get oxidised, in the presence of an enzyme called luciferase, light is produced. Fireflies have special light organs on the underside of the abdomen. Here in the presence of luciferase, light is produced.
- 354 Who first enunciated the laws of heredity? Gregor Johann Mendel
- 355 What does the acronym, SONAR, stand for? Sound Navigation and Ranging.
- 356 What are comets? Comets are heavenly bodies that travel around the sun. When they are near the sun, they look like stars with long glowing tails. Halley's comet appears once in about 76 - 78 years. Some comets appear near the sun only once in millions of years. A comet has a head, which looks like a star. The head is surrounded by a coma or a fuzzy hood. The tail may be millions of kilometres long.
- 357 Why does a metal rod feel cooler than a piece of wood? Metals are good conductors of heat. When we touch a metallic rod, it takes away the heat from the hand and feels cooler. A piece of wood is a bad conductor of heat and therefore it does not take away the heat from our hands.
- 358 Why does a jet of water come out of a whale's back? It is air, exhaled by the whale.
- 359 How many teeth do sheep have on their upper jaw? None.
- 360 How are helicopters useful in rescue operations? A helicopter can move up, take off or land easily from small clear areas. Hence they are useful in dropping food or rescuing stranded people. It has a rotor, which enables it to rise up or go down, vertically.
- 361 How can lizards walk on walls? The base of their paws has cuplike structures that stick to the walls. This enables them to move even on walls.
- 362 How does a perfume spread to the corners of any room even though there is no breeze? Molecules of oxygen, nitrogen and other gases in the air keep on spreading all around them.
- 363 Where does light fall inside the eye? Retina.
- 364 Chlorine is very injurious to health. So is sodium. The table salt we use is sodium chloride. Why is it not dangerous to health? It must be noted that a compound formed from two or more elements need not have a single property of its constituent elements. Sodium and Chlorine combine to form table salt, which is healthy (in small amounts). Water, which sustains life, is formed from hydrogen and oxygen. The properties of hydrogen as well as oxygen are not found in water.
- 365 How does a frog breathe under water? Through its skin.
- 366 What is the difference between a tortoise and a turtle? Tortoise is the name applied to the terrestrial species and turtle is the name applied to the aquatic species.

- 367 What is meant by sublimation in chemistry? Conversion of a substance from solid state to vapour state (without the intervening liquid state) is sublimation. For example, iodine sublimates from its solid state to vapour.
- 368 What are the sieve like plates in a whale's mouth called? Baleens.
- 369 Why do people cover ice slabs with sawdust? Sawdust is a bad conductor of heat and slows down the melting of ice.
- 370 Why are droplets formed on the outer surface of a glass when cold water is poured into it? The moisture in the air condenses on the cool outer surface of the glass.
- 371 Why is food preserved in a refrigerator? Most bacteria are destroyed as the temperature of the surroundings rises. Temperatures higher than 40° C do not favour growth of bacteria. Similarly low temperatures prevent bacteria from multiplying. Hence food is preserved in the refrigerator by keeping its contents at low temperature.
- 372 Why do we feel sleepy after a heavy meal? The blood circulation to the digestive tract increases. As a result the blood circulation to the brain is reduced. This makes us sleepy.
- 373 Which organs in the human body filter waste products from the blood? Kidneys.
- 374 Which organs are most damaged when a person consumes much liquor? Liver and stomach.
- 375 What does Aurora mean? Bright patches of light are seen at high latitudes above 60° north or south. They are named Aurora Borealis (northern lights) or Aurora Australis (southern lights) depending on their position. The term "Aurora Polaris", polar lights, is a general name for both. The aurora consists of rapidly shifting patches and dancing columns of light of various hues.
- 376 Which vitamins are soluble in water? Vitamins of the B and C group.
- 377 What is the composition of perspiration? Mostly water with a little salt.
- 378 Which gland in the human body produces insulin? Pancreas.
- 379 What is the principal enzyme in the gastric juice? Pepsin.
- 380 What is the vaccination given to prevent polio? Salk Vaccine. It was discovered by Jonas Edward Salk in 1952. The theory behind the Salk Vaccine is that a virus that has been killed cannot infect or multiply, but it can still produce antibodies against that particular virus. The vaccine was tested first on monkeys and eventually on children, including Dr. Salk's three children, before it was released for nationwide distribution.
- 381 What are Pachyderms? Animals with thick skin like elephants and rhinoceros.
- 382 Why is it that some people have a dark skin? The dark colour of the skin is due to a pigment called melanin. On exposure to sunlight, man's skin undergoes gradual tanning to protect the skin from injurious solar rays.

- 383 Which Vitamin helps in preventing rickets? Vitamin-D.
- 384 Which is the second most common element on the earth's surface? Silicon.
- 385 Which planet is known as the red planet? Mars.
- 386 What does a lizard do when its life is in danger? The lizard discards its tail to divert the attention of its enemy.
- 387 Why is the housefly considered a health hazard? On their legs they may carry millions of germs. When they rest on a food plate, these may be transferred to the object they rest on.
- 388 Which metal is also called quicksilver? Mercury.
- 389 What is the main food of a Koala bear? Eucalyptus leaves.
- 390 If hair is dead tissue, how does it grow? It is true that hair consists of Keratin, a dead tissue. But the hair is lodged in a follicle located a little below the scalp, which is very much alive. This is where the growth takes place. The living hair pushes up the dead tissue. That living tissue also dies and is pushed up. Pull out a hair and you will feel pain and understand the truth of this statement.
- 391 What is meant by Acid Rain? When there is a substantial amount of sulphur dioxide, carbon dioxide, etc in the rain, it is referred to as acid rain.
- 392 What is the common food of the Blue Whale? A shrimp like creature called krill.
- 393 What is Betelgeuse? It is one of the brightest stars visible in the night sky, It is in the constellation, Orion. It is also called Alpha Orionis, It takes about 300 years for the light from Betelgeuse to reach the earth.
- 394 How long do elephants live? 65 to 100 years.
- 395 What do a koala bear, opossum, wombat and bandicoot have in common? They are all Marsupials, i.e. they carry their young ones in pouches.
- 396 Name the person who first discovered the presence of Microbes. Anton Van Leeuwenhoek.
- 397 How do mother animals recognize their babies? By their smell.
- 398 Why do water pipes burst in hill stations? There is an unusual expansion of water, when its temperature goes below 4° C. Instead of contracting, the water begins to expand till ice is formed at zero degrees Celsius. Unable to bear the pressure, the pipe bursts.
- 399 Which animal shoots its quill and hurts the enemy? Porcupine.
- 400 Who made the first electric motor? Michael Faraday.
- 401 Who first used electrolysis for isolating elements? Sir Humphry Davy.

402 Who first put forward the Atomic Theory that all matter is made of atoms, held together by some force of attraction? John Dalton.

403 Is it true that the age of a tree can be known by studying its rings? Yes, each year during spring a light ring grows just inside the bark of the tree. During summer and autumn, the ring that grows is darker. Too little sunlight, too little moisture or injury results in a smaller and darker ring. After counting the rings, we can assess the age of the tree.

404 How does the rotation and revolution of the earth affect our lives? The earth rotates on its axis even while it revolves around the sun. The rotation results in night and day. As the earth revolves around the sun, it also tilts on its axis. This tilt causes changes in the earth's position, which results in the seasons.

405 Who found out that oxygen is present in both water and air? Antoine Lavoisier.

406 Which Vitamin is important for the health of bones? Vitamin D.

407 Why do animals like rats and squirrels keep gnawing at things? Gnawing helps wear down their teeth. If they did not gnaw at things their teeth would keep on growing.

408 Who was the first woman of Indian origin to travel in a space vehicle? Kalpana Chawla.

409 Why does a snake flick its tongue so often? To smell the surroundings.

410 What is the scientific name for man? Homo Sapien.

411 Who is considered to be the father of modern experimental science? Galileo Galilei.

412 What is the name of our galaxy? Milky Way.

413 How is petroleum formed? Remains of plants and tiny animals that lived millions of years ago remain buried and turn into petroleum.

414 What is a mirage? How is it caused? A mirage is a reflection, caused by the bending of light rays. When we ride along highways particularly in arid regions, we see a reflection ahead, which looks like water. This is caused by a dense layer of warm air near the surface of the earth. Light rays from the sky are reflected toward one's line of vision - what one sees is a reflection of the sky and not water.

415 How is oxygen formed in the atmosphere? In the presence of chlorophyll, a chemical reaction takes place in the leaves using carbon dioxide in the air and water transported from the roots. As a result of the chemical reaction, starch is produced. Oxygen is the by-product of this reaction.

416 Which is the juice secreted in the liver which helps digestion? Bile.

417 What is meant by the word 'frequency' of a sound? Frequency is defined as the number of vibrations per second. It must be noted that sound is caused as a result of vibrations in air columns or strings or objects. Sound travels in waves.

418 Which is the longest poisonous snake in the world? King Cobra

- 419 What is the tendency of plants to grow towards sunlight called? Phototropism.
- 420 Why do snakes shed their skin? Unlike human beings, whose growth stops around 20 years, snakes keep on growing. This becomes possible because they keep casting off old skin and develop new skin, when the old one is shed.
- 421 Why does it take longer to cook food at high altitudes? The atmospheric pressure at high altitudes is much lower than at sea level. The greater the pressure, the faster the cooking.
- 422 What is the use of the ozone layer in the earth's atmosphere? It bounces off ultraviolet radiation.
- 423 How do we get heat and light from the sun? Through radiation.
- 424 How do insects breathe? Insects breathe through the tiny holes in their body.
- 425 Why doesn't ice sink in water? Ice is lighter than water. After the temperature of water cools down to 4° Celsius (instead of contracting) water keeps on expanding till it reaches 0° Celsius and becomes ice.
- 426 Apart from earth on which other planet in the solar system does life exist? Nowhere else. As we know it.
- 427 What is meant by the Water Table? Water filters down the surface of the ground and is absorbed and stored by soil and rocks in a zone of saturation. The top of this zone is called Water Table. During drought, the Water Table too goes down.
- 428 Who is known as the father of computers? Charles Babbage.
- 429 Why do we feel hungrier in winter? In winter we need energy to maintain the body temperature in addition to sustaining normal activities of the body. To meet this requirement of energy we eat more.
- 430 Can you give an example of reflex action? Knee jerk. It is the involuntary kick caused by a blow on the tendon just below the knee.
- 431 What is an electrocardiograph? The electrocardiograph is an electrical instrument, which records the activity of the heart muscle. As the heart beats, several activities take place in a regular order. The electrocardiograph records changes that occur in a regular order, during a complete heartbeat.
- 432 Which bird can rotate its head by 180 degrees on either side? The Owl.
- 433 Man, dogs, cats, horses have lungs through which they breathe. How do smaller animals like fish, earthworm, etc obtain their requirement of oxygen? Earthworms also respire. They use their moist skin to exchange carbon dioxide for oxygen. The fishes use their gills to respire. Even frogs in the tadpole stage use their skin for respiring. Reptiles such as snakes and turtles and even birds breathe through lungs.
- 434 What are the uses of snake venom? It is helpful in curing many ailments affecting the nervous system.



- 435 What is the major element a star is made of? Hydrogen
- 436 Where does a female butterfly lay its eggs? Under side of leaves.
- 437 Who invented the miner's safety lamp? Sir Humphry Davy.
- 438 Name the world's largest rodent and where is it found. Capybara found in the Amazon jungles of South America.
- 439 What is the chemical name of baking soda? Sodium Bicarbonate.
- 440 What is Telepathy? Telepathy is direct communication of thought from one person to another, without using any physical channels of communication. Though there are many who claim telepathy is possible, there has been no positive proof of the existence of telepathy.
- 441 What is ultrasound? Human beings cannot hear sound waves which have frequencies above 20,000 vibrations per second. This is termed ultrasound.
- 442 Who was the scientist who initiated the Atomic Energy Programme of India? Homi Bhabha.
- 443 Who invented the rigid airship? Ferdinand Von Zeppelin.
- 444 Who invented the calculator? Blaise Pascal.
- 445 From which element was the first Atom Bomb made? Uranium 235.
- 446 Who invented the diesel engine? Rudolf Diesel.
- 447 Who made the first locomotive that had successful runs? George Stephenson.
- 448 What is paper made of? Mainly wood pulp.
- 449 Name the Chinese method of curing ailments by using needles? Acupuncture.
- 450 What causes rusting? How can it be prevented? Metals like iron are often exposed to moisture. Rusting is the process of oxidation occurring when the iron and air slowly combine to form iron oxides. Oil is often used to slow down rusting. When a coat of paint or varnish is given to a metal, this also prevents (reduces) oxidation.
- 451 What is Googol? Googol is the number one followed by a hundred zeros.
- 452 Which are the only mammals that can see colours? Man and monkey (apes). It is commonly believed that bulls react violently when they see a red rag. Bulls just cannot see any colour. They react to the teasing movement of the rag.
- 453 Why does an apple that has been cut open turn brown and then black? Polyphenols in the apple get oxidised.
- 454 Why does the liquid in the egg become solid when heated or boiled? Due to congealing - coagulation of the yolk.



- 455 What is the green colour of the leaf due to? Chlorophyll.
- 456 How many days does Mercury take to complete one rotation on its axis? 59 earth days.
- 457 What are aerial roots? Roots that grow down from the branch of a tree. The banyan tree is a good example.
- 458 What is Halley's comet? The Halley's comet is named after the English astronomer Edmund Halley. The theory of gravitation developed by Isaac Newton helped Halley to discover that the bright comet that appeared in 1682 had an orbit that brought it back to the inner solar system at regular intervals.
- 459 Why is helium used in gas balloons? Because helium is very light and does not burn.
- 460 What is plastic surgery? Plastic surgery is surgery performed on someone's face or body to remove a deformity or to make it more attractive.
- 461 How can the moon which is very small, cover the sun which is very big, during an eclipse?  
The sun is far far away compared to the moon, Therefore even though the sun is very large, the moon can cover it. Even a coin can cover the moon, if held close to the eye.
- 462 What is the Archimedes Principle? It is a law of physics that states that when an object is totally or partially immersed in a fluid, it experiences an upward thrust equal to the weight of the fluid displaced. The principle is most frequently applied to the behaviour of objects in water, and helps to explain floating and sinking and why objects seem lighter in water.
- 463 What is meant by a refracting telescope? A refracting telescope is made by using two lenses, both of which are convex.
- 464 What are corals? They are combined skeletons of tiny marine animals, which live together in a colony.
- 465 What is the distance between the earth and the sun? About 150 million kilometres.
- 466 Why does water in an earthen pot become very cool in summer? Earthen pots have tiny holes from which water seeps out to the surface. When this water evaporates, it takes away the latent heat of vaporisation and keeps the pot (and its contents) cool.
- 467 Why do dogs pant? To keep themselves cool. When they throw out the tongue while panting, the moisture in the tongue evaporates. This directly results in cooling. Humans keep themselves cool by sweating and then evaporation of the sweat, from a large surface of the skin.
- 468 Which important mineral is to be found in spinach? Iron.
- 469 What does milking of poisonous snakes mean? It means drawing out poison from the serpents for medical use.
- 470 Who first isolated Sodium? Sir Humphry Davy.

- 471 What is a robot? Robot is any machine, developed by man to do the work of a human being such as running a machinery by remote control or to operate devices like switch boards automatically. It is usually directed by sound waves, light waves or radio waves.
- 472 What is moulting? Moulting takes place because of a number of reasons. Birds discard old feathers for new ones. This is also referred to as moulting. Snakes keep on growing, unlike human beings whose growth stops after attaining adulthood. The snakes discard their skins for a new one. Lobsters, crabs, etc have a hard covering outside the body to support. The animal then breaks out of the old cover and quickly grows before the new chitin already recreated by the tissues underneath, can harden. Frequently during such periods, the animal hides, since it has no protection then.
- 473 In which organ of the human body are the lymphocyte cells manufactured? Spleen.
- 474 Which are the distinct layers of the skin? Dermis and Epidermis.
- 475 Who invented the printing machine? Johan Gutenberg.
- 476 Who pioneered the use of antiseptic? Joseph Lister.
- 477 What is the name of the gland that produces tears? Lachrymal Gland.
- 478 What is the name of the bacteria that converts milk into curd? Lactobacillus.
- 479 What does DPT stand for? Diphtheria, Pertussis and Tetanus. DPT is a combined vaccine for diphtheria, whooping cough and tetanus.
- 480 What does a Hydrometer measure? Density of liquids.
- 481 Why is the rainbow seen only during and after the rain? This is so because the rain drops serve like prisms and diffract the white light of the sun into violet, indigo, blue, green, yellow, orange and red colours.
- 482 What is meant by a radio telescope? From their telescopes, astronomers could study objects in outer space that could not be seen with the naked eye. Radio telescopes are telescopes that can study long waves, which are not visible. They can do this using antenna, since radio waves are much longer than light waves. To be effective, radio telescope needs to be much larger than ordinary optical telescope,
- 483 What is smog? Smog is a mixture of solid and liquid fog and smoke particles. Fog is formed when the humidity is high. The word smog is derived from smoke + fog.
- 484 What is the name of the layer in the atmosphere of the earth that protects the earth from harmful radiation? The ozone layer.
- 485 What is the name of the radiation that comes from outer space? Cosmic Rays.
- 486 For the protection against which disease is the B.C.G vaccination given? Tuberculosis (T.B)

- 487 What are Sunspots? Areas where the sun's surface is slightly cooler than normal - about 4000 degree C instead of 6000 degrees C.
- 488 What is the scientific name for Vitamin C ? Ascorbic Acid.
- 489 Name the galaxy that is nearest to our galaxy. Andromeda Galaxy.
- 490 Who invented the Barometer? Evangelista Torricelli.
- 491 In the human body what is the end product of protein digestion? Amino acids.
- 492 Who gave the name rubber to the gum of the Hevea tree? Joseph Priestley. Because the gum could rub out pencil marks.
- 493 What are salivary glands? Salivary glands are located in the mouth. There are three pairs, one pair is located in front of the ears, one pair is located underneath the lower jaw and the third is under the tongue. Salivary glands secrete an enzyme called ptyalin, which helps in the digestion of starches. Saliva has an alkaline action. If you see many players chewing gum, it is because when a person is tense, the stomach produces more acids. The saliva, produced by chewing gum, neutralizes this acid.
- 494 Why do crocodiles shed tears? They secrete the excess salt in the body through this action. They get rid of this by means of a gland near the corner of the eyes.
- 495 What is Bronze? An alloy of copper and tin.
- 496 What is the meaning of the word "DINOSAUR"? Terrible lizard.
- 497 What is Brass? An alloy of Copper and Zinc.
- 498 Which element is important for the health of bones? Calcium.
- 499 Which Vitamin helps in preventing rickets? Vitamin D.
- 500 What is the name for the position of the moon, an earth satellite, when it is at the greatest distance from the earth? Apogee.
- 501 What is the study of weather and climate called? Meteorology.
- 502 Name the unit in which electric current is measured? Ampere.
- 503 What are the four stages in the development of a butterfly?
- Egg
  - Larva
  - Pupa

d) Butterfly

504 Who invented the Radio? G. Marconi.

505 What is meant by Hibernation? Many animals sleep or go into a trance-like state during the long, winter months. This winter sleep is called hibernation. Polar bears go into hibernation in winter.

506 What is meant by Escape Velocity? It is the minimum initial velocity required for an object to escape the gravitational attraction of an astronomical body, and to continue travelling away from it without the use of further effort.

507 Which present day animals are said to be direct descendants of dinosaurs? Komodo dragon and Crocodile.

508 Who invented the military tank? Ernest Swinton of Britain.

509 What is the study of birds called? Ornithology.

510 Who was the founder of the system of medicine known as Homoeopathy? Samuel Hahnemann.

511 From which ore is Aluminium made? Bauxite.

512 How does a plant transfer nutrients it absorbs through its roots to other parts? Through tiny tubes called Xylem.

513 Who discovered the planet Uranus? William Herschel.

514 Kidneys help the body to eliminate waste. Which other parts of the human body do the same? Lungs, skin and rectum.

515 Why is a soap bubble always spherical and not a square or a triangle?

When a soap bubble forms and goes up in the air, it is subject to immense pressure from all sides. Only a spherical shape can withstand maximum pressure. That is why soap bubbles are always spherical.

516 Who discovered the circulation of blood in the human body? William Harvey, in 1628. People did not believe in what Harvey said and they opposed his ideas. It took many years for the opposition to die down.

517 What is meant by centrifugal and centripetal force? If a ball is whirled at the end of a string in a circular motion, it would seem as if the ball were suddenly very heavy and pulling harder as it is whirled faster. The force of the string pulling the ball toward the centre is the centripetal force. There is an outward force on the string by the ball. This outward force is the centrifugal force.

518 How much blood does an average adult human being have? About 6.5 litres.

519 Who wrote the book on "The Origin of species by means of Natural Selection"? Charles Darwin.

- 520 Which is the most destructive insect in the world? Desert Locust.
- 521 Who invented the sewing machine? Elias Howe of USA in 1845.
- 522 What are the substances that can cause cancer called? Carcinogens.
- 523 What is meant by Photosynthesis? Photosynthesis is the word used for making food from carbon dioxide in the air and water from the soil, in the presence of sunlight. It occurs in plants.
- 524 What is meant by colour blindness? Inability to distinguish one or more of the primary colours.
- 525 Who discovered the Laws of Motion? Sir Isaac Newton,
- 526 Who invented the Telegraph? Samuel Morse.
- 527 What is a Supernova? A star, which suddenly burns up a lot of its matter and gives a brilliant light.
- 528 How many chromosomes does a man have in his body cell? 46.
- 529 Why is selenium used in the making of photoelectric cells? Photoelectric cells convert light into electricity. Selenium is used in making these cells because its electrical conductivity increases when light strikes it and because it can convert light into electricity.
- 530 For which invention or process is Henry Bessemer best known? Bessemer converter used for making steel.
- 531 Who was the first man to study sunspots? A German by name Hienrich Schwabe.
- 532 Mercury is closest to the sun, then how come Venus is the hottest planet? Venus has thick clouds around it that prevent heat from escaping from its surface.
- 533 Which planet rotates the most slowly on its axis? Venus
- 534 How does a microwave oven work? Water molecules vibrate and rub against each other, producing heat because heat is produced by these molecules an external source of heat is not required for cooking in a microwave.
- 535 Who produced the world's first petrol driven car? Karl Benz.
- 536 Why does the running sound of a train change when it passes over a bridge? Sound travels in the form of waves. The frequency of the waves and the amplitude (the width) of the waves determine the sound. The sound waves are of different kinds, when a train moves on solid ground, and when it moves on a bridge, whether made of steel or plain concrete.
- 537 What is a photometer? An instrument for measuring the intensity of light.

- 538 What is meant by Radio carbon dating? Scientists describe the radioactivity of an element in terms of half-life - the time the element takes to lose half of its radioactivity through decay. By measuring the radioactivity scientists can calculate the age of the element that is being tested.
- 539 What is the meaning of geothermal energy? The heat produced within the crust and upper mantle of the earth, primarily by decay of radioactive elements.
- 540 What is the difference between nuclear fission and nuclear fusion? The reaction where heat is produced because of the fission (division) of a nucleus is called nuclear fission. The reaction in which heat is produced because of the fusion of two nuclei is called nuclear fusion. In hydrogen bomb the reaction was due to nuclear fusion. In the atomic bomb dropped on Hiroshima and Nagasaki, it was a fission bomb.
- 541 What is Robert Boyle known for? Boyle is known for his experiments on the physical properties of air and his law on the relationship between the pressure and the volume of the gas.
- 542 What is genetics? Genetics is the study of all those qualities of organisms that are governed by certain biologically active elements derived from the parents.
- 543 How many toes does an ostrich have on each of its legs? An ostrich has two toes in each leg.
- 544 Who is considered to be the father of modern astronomy? Copernicus.
- 545 From which material is aluminum made? Bauxite.
- 546 What are asteroids? Asteroid means "like star". Asteroids are heavenly bodies like the earth, but very much smaller in size. Some may be only a kilometre or two in diameter. They also orbit around the sun.
- 547 What is meant by convection of heat? A process in which heat is transferred by movement of heated fluid such as air and water is called convection.
- 548 What is meant by cloud seeding? Spraying of certain chemicals into clouds to induce rain.
- 549 Who was the first man to point out that things get spoiled because of germs? Louis Pasteur.
- 550 Why does cutting onions give a burning sensation in the eyes? When onions are cut, volatile oils, containing sulphur, are released. In combination with the water in the eye, they produce irritation.
- 551 What is the enzyme in human saliva? Mainly Amylase, which converts starches and glycogen into the sugar maltose. Apart from saliva amylases are found in pancreatic juices and intestinal juices too.
- 552 What is meant by ignition point? Ignition occurs when the temperature of a substance is raised to the point at which its molecules will react spontaneously with oxygen, and the substance begins to burn. This is called the ignition point.
- 553 Which is the largest and heaviest snake in the world? The anaconda. It weighs up to 200 kg.
- 554 To which family of plants do bamboos belong? The grass family.

- 555 Who propounded the theory of relativity? Albert Einstein.
- 556 How does the chameleon catch its prey? It flicks out its long sticky tongue and catches unwary insects flying by.
- 557 What is concrete? How is it made? Concrete is a rock like substance made from cement, natural sand, stone and water. Cement and water react chemically and serve like glue to bond the stones and form a hardened mass. When the material is still in a "plastic state" it can be very easily formed into various shapes. But once the concrete sets (hardens) no changes can be made.
- 558 In which part of their body do spiders spin the thread? Abdomen.
- 559 What is meant by fermentation? Breakdown of organic substances into simpler substances due to the action of bacteria is called fermentation. Grapes are fermented to produce wine. Thus fermentation of wheat and rice results in the breakdown of the starches to simpler sugars and alcohols.
- 560 In which part of the plant are ovules contained? Pistil.
- 561 How long do butterflies live? 2 to 3 weeks.
- 562 What is the study of prehistoric animal and plant life through the analysis of fossils called? Palaeontology.
- 563 What does mammal mean? A mammal is a warm-blooded animal, which suckles its young ones with milk and has hair on its skin.
- 564 Which are the main gases in the atmosphere of the earth? Nitrogen and oxygen.
- 565 Who invented the stethoscope? Laennec.
- 566 What is a huge mass of ice slowly moving ahead called? Glacier.
- 567 What is an ammeter used for? Measuring the strength of an electric current.
- 568 How do bats communicate with each other? Bats produce screeching sounds. As these sounds strike objects around them, they produce echoes, which are heard by the bats. This helps the bats in navigation. Human beings cannot hear the sounds produced by the bats as they have much higher frequency than the audible range of the human ear.
- 569 What are the three main constituents of a galvanic cell? a. An anode b. A Cathode  
c. An electrolyte in which the anode and cathode are placed.
- 570 Who invented the telephone? Alexander Graham Bell. He was, however, interested in constructing an electrical device that would help deaf-mutes learn to speak.
- 571 What is the fluid part of the blood called? Plasma. It is about 90% water.
- 572 What is malaria? Malaria is an acute disease caused by an animal parasite called plasmodium. The disease is spread by the bite of the female Anopheles mosquito.



- 573 What is the origin of the word 'Malaria' ? Romans were familiar with this disease. They thought it is caused by bad (mal) air (aria).
- 574 How many eggs does a starfish lay at a time? Millions.
- 575 What does the acronym RADAR mean? Radio Detection and Ranging.
- 576 What is meant by Diabetes? Diabetes is caused because of inadequate secretion of insulin by the pancreas or the inability of the body to utilise the insulin produced.
- 577 How does the sun generate its energy? Inside the sun a reaction similar to that of a hydrogen bomb goes on continuously. Two atoms of hydrogen fuse to produce an atom of helium. The sun is today at the midway of its life.
- 578 What is the meaning of the word 'Protozoa' ? Protozoa means the first animal. They are the simplest form of life. They are made of a single cell.
- 579 What is the difference between dyes and pigments? Dyes are complex organic substances that are chemically bound to the fibres. Pigments consist of larger particles that form a film on the surface.
- 580 Who proposed the Centigrade Scale? Anders Celsius first proposed the centigrade thermometer, which has a scale of 100 degrees separating the boiling and freezing points of water.
- 581 Why do flocks of swans fly in a V-formation? By flying in this way they meet minimum resistance from the air to their flying.
- 582 Which is the fastest moving land snake? The Black Mamba, which has a speed of about 11 km per hour.
- 583 What is meant by the term habitat? Habitat is the place where a certain animal or plant would live and grow naturally. Thus an ocean is the habitat of whales and a pond is the habitat of frogs.
- 584 How can astronauts walk in space without any support to walk on? Because there is hardly any gravity far away from the earth. (Or any heavenly body).
- 585 Who is usually considered to be the discoverer of oxygen? Joseph Priestley.
- 586 What is a Tapir? Where is it found? A Tapir is an animal that looks like a pig. It is found in Malaysia and Central and South America.
- 587 Why are tea plants cut when they grow to a height of two metres or more? To force more tender leaves to branch out and make handpicking of leaves easier.
- 588 What is forging? The shaping of metals by hammering them is called forging.
- 589 What was Chandrasekhar Subrahmanyan known for? Indian-born American theoretical astrophysicist and Nobel laureate, Chandrasekhar Subrahmanyan contributed greatly to our understanding of the evolution of stars. Chandrasekhar was best known for his theoretical prediction, made at the age of



20, that large stars would collapse at the end of their lives into some unknown state even more dense than that of a white dwarf.

590 What is the condition caused by lack of Vitamin C? Scurvy.s

591 Who was the first man to make a phonograph (gramophone)? Thomas Alva Edison.

592 What is a black hole? A body whose mass is so intensely concentrated that even light cannot escape its gravitational attraction. Normal properties of space in its vicinity are altered drastically.

593 How did Charles Goodyear discover the vulcanisation of rubber? Accidentally he spilled a mixture of rubber and sulphur on a hot stove. He observed that the rubber had become stronger and elastic. From there he got; the idea of hardening rubber.

594 How did Roentgen discover X-rays? While experimenting with a glass tube from which the air had been pumped, Roentgen happened to pass an electric current through the tube. Nearby was a screen coated with Barium Platinocyanide. Suddenly he noticed that the screen was glowing with a greenish blue light. After experimenting with this radiation, coming from the evacuated glass tube Roentgen found that this radiation could pass through substances of varying densities placed between the tube and the screen. He named these rays X-rays.

595 What are chromosomes? Chromosomes are tiny thread-like parts of a cell. These can be seen under a microscope. They are made up of smaller parts called genes. These chromosomes and genes decide heredity.

596 Who was the first person to show that the Milky Way is composed of stars? Galileo Galilei.

597 What is the average life of a red blood corpuscle? 120 days.

598 What is the scientific study of insects called? Entomology.

599 What are the properties of aluminium, which make it very useful, particularly in the aerospace industry? Aluminium is very light and yet very strong. It does not get corroded. Aluminium's excellent electrical conductivity makes it very useful in making high voltage electrical conductors.

600 Who invented the Battery? Alessandro Volta.

601 Name the first aircraft to hard land on the moon. Luna 2. It was launched on September 12, 1959 by the USSR.

602 Name two countries, which use geothermal heat (heat from far below the earth's surface) to produce electricity? Italy, Iceland, Japan, New Zealand, USA and Russia.

603 What is cerebrum? The cerebrum is the main part of the brain and controls the ability to think. The cerebrum receives impulses and directs the body into activity.

604 What are citrus fruits? Citrus fruits are those, which contain citric acid in sizeable amounts. Citric acid gives the citrus fruits their sour taste. Lemons, oranges and limes all contain citric acid.

- 605 What is the difference between an Arabian camel and a Bactrian camel? The Arabian camel (or dromedary) has only one hump, while the Bactrian camel has two humps.
- 606 What is carbolic acid? The scientific name for carbolic acid is Phenol. It is extremely poisonous. It is used in the preparation of some plastics. Picric Acid, obtained from phenol, is an ingredient in many explosives.
- 607 What is meant by a Marsupial? Animals carrying their young ones in a pouch.
- 608 What is the only food of the giant pandas in the wild? Bamboo shoots and leaves.
- 609 What is the name for the unit of electric power? Watt.
- 610 What causes tides in the ocean and sea? Gravitational pull of the moon and to some extent the sun.
- 611 Why does a fire look yellowish, at times? When the combustion (burning) is not complete the colour of fire becomes yellowish. When the combustion is complete, the colour changes to pale blue.
- 612 Which material is used to make cellophane? Cellulose, the chemical substance that lines the walls of plant cells. Cellophane is used in packaging.
- 613 What is a cataract? Cataract is a disease affecting the lens of the eye. The lens consists of a semi-solid substance, enclosed in a capsule. Cataract is a condition in which the lens loses its transparency and tends to become opaque.
- 614 What is the difference between mass and weight? Weight and mass are two different things. The amount of matter that a body contains is mass whereas the weight of an object will be a little less near the equator (where it is further away from the centre of the earth) and a little more at the poles. An object in free space has no weight, but it will have a definite mass.
- 615 What is meant by a catalyst? A catalyst is a substance, which alters the rate of speed of a chemical reaction, without itself being permanently changed. Normally a catalyst hastens or encourages the rate of reaction. However, at times, catalysts are used to slow down a reaction.
- 616 Who discovered Penicillin? Alexander Fleming
- 617 What is measured in the Richter scale? Earthquakes.
- 618 When was the metric system introduced? During the French revolution, France introduced the metric system. The standard of length was related to the dimensions of the earth rather than the dimensions of a human limb.
- 619 Where would you find a dodo? Nowhere. It was last reported in Mauritius in 1681. Now it is extinct.
- 620 When did Marie Curie win the Nobel Prize? In 1903 for physics and in 1911 for chemistry.

- 621 Of all the bones in the skull and the face, which is the only movable bone in human beings?  
The lower jaw.
- 622 How big is the Milky Way? It is estimated that the Milky Way has over a hundred billion stars. The sun is one of the stars in the Milky Way.
- 623 Where does the impure blood enter the human heart? It enters the cavity of the right auricle through two veins - one called the superior vena cava enters from the head region and the other called the inferior vena cava enters from the lower or posterior region of the body.
- 624 What is the difference between Direct Current and Alternating Current? The current flowing in a circuit is described as direct current if it flows continuously in a single direction, and as alternating current if it flows alternately in each direction.
- 625 What is distillation? Distillation is the process of converting a liquid into vapour form (by heating) and then cooling this vapour to recover the evaporated constituents by the process of condensation.
- 626 How does a thermos flask retain the heat of its contents? It has a tightly fitting cap of cork or such material, which is a poor conductor of heat. The bottle has a double layer of glass. Glass too is a poor conductor. There is vacuum between the layers of glass to prevent loss of heat by convection and conduction. If the surfaces are made highly reflective, even radiation can be reduced.
- 627 Who made the first balloon that could fly? Joseph & Jacques Montgolfier.
- 628 How are mosquito fish helpful to man? They eat mosquitoes.
- 629 What is meant by the Hippocratic oath? Hippocrates was a Greek physician whose oath is still taken by medical students, when they graduate. The oath reads, in part, "I swear so far as power and discernment shall be mine, I'll carry out regimen for the benefit of the sick and will keep them from harm and wrong. To none will I give a deadly drug even if solicited. Into whatsoever house I shall enter I'll go for the benefit of their sick" There is also a clause that secrecy will be maintained about the ailment of the patients.
- 630 Name the animal, which has the largest eyes in the world. The Atlantic Giant Squid. The diameter of its eye is about 30 cm.
- 631 What is horticulture? Horticulture is the science and art of growing fruits, vegetables, flowers or ornamental plants.
- 632 What is a hygrometer? A hygrometer is one of the instruments used to measure the moisture in the air.
- 633 What is an Ibex? Where are they found? The Ibex is a mountain goat. It was close to extinction in the Alps. It is now under Government protection. In India Ibex is found at high altitudes in Kashmir.

634 What is inertia? Inertia is the property of matter, which keeps a body at rest unless a force is exerted on it. Inertia also keeps a moving body in motion at the same speed and in the same direction unless a force is applied to stop this forward motion.

635 Who discovered the laws of planetary motion? Johannes Kepler - Sir Isaac Newton later used these laws as the basis of his law of Universal Gravitation.

636 What is hybridisation? Hybridisation is the mating or crossing of two parents of different species or varieties. Thus a mule is a hybrid of a horse and an ass. In the case of flowers, hybridisation is done by taking pollen from one plant and dusting it on the pistils of another plant. A bag is placed over the pistils until the seeds are developed. Then the seeds are planted and a hybrid is formed.

637 Who discovered the germ, which causes tuberculosis? Robert Koch, a famous German physician.

638 What is an antidote? A remedy for poisoning is called antidote. The remedy may consist of

(a) Neutralising the poison

(c) Preventing the body from absorbing it or

(d) Assisting the body in eliminating.

639 What is a desert? A desert is a large area of land that is too dry to support life. Deserts are not always hot, dry or sandy. The tundras of Siberia (in Russia) are deserts. Water is frozen here and does not support life.

640 Who invented the dynamo?

Michael Faraday.

641 Why is the Egyptian plover bird popularly called the "crocodile bird"? The Egyptian plover bird has been nicknamed the crocodile bird following an account by Herodotus that he saw these birds enter the open jaws of crocodiles and pick pieces of food from their gums.

642 Which were the first passengers to fly in a balloon?

A sheep, a cock & a duck.

643 Which was the first living being to enter space? A dog named Laika.

644 What is a light year? In measuring distances on earth we use units like miles and kilometres. But even for giving the distance between the sun and the earth, we have to write 93,000,000 million miles or 150,000,000 kilometres. To write the distance between Alpha Centauri and earth we have to write long numbers. Hence measuring in units based on the speed of light has been adopted. In this scale the sun is 8 minutes from the earth. In kilometres one light year is approximately  $9.24 \times 10^{13}$  or 9,240,000,000,000,000 kilometres. Alpha Centauri is just 4.6 light years away.

645 Which element is important in the formation of blood? Iron.

- 646 Name the animal that can lift 50 times its weight. Ant.
- 647 Which fish carries its eggs in its mouth? Catfish or Cichlid fish.
- 648 How do fireflies produce light? There are proteins in the body of fireflies that produce light, when they get oxidized in the presence of the enzyme, Luciferase.
- 649 Where in the world are wooly Mammoths found? They are extinct and are not found anywhere. But about a million years ago, they roamed over land They were the ancestors of modern elephants.
- 650 In which organ of the human body are the lymphocyte cells (blood cells) manufactured? Spleen
- 651 What are the constituents of stainless steel? Stainless steel is an alloy of iron, nickel and chromium. Stainless steel making involves the removal of impurities and addition of desirable metals like chromium and nickel.
- 652 What is meant by the term Water cycle? Water Cycle is the story of a raindrop, which passes through other phases to become a raindrop again. In summer the water in lakes and rivers evaporates. This water vapour is warm and is pushed up by cold air. As the warm air moves upwards air currents develop. They are called winds. When the warm air passes over mountains or when it goes high up, it cools down and condenses to water again and falls down to earth. On the surface of the earth the raindrops may join other raindrops and if the earth cannot absorb this water quickly, they form streams and rivers. And the cycle continues.
- 653 What is Plaster of Paris? When gypsum is heated to  $120^{\circ}\text{C}$  it loses water and becomes a white powder. That is plaster of parts. When water is added to the powder, it hardens. It is used for plasters, moulds and models.
- 654 Who discovered Plutonium? Glenn Seaborg.
- 655 Who was the person to first identify the proton? Ernest Rutherford.
- 656 What is a planarium? A planarium is a simple form of life, which crawls about and feeds on small animals.
- 657 Why does milk spill out when boiled? When milk is heated, the water in it starts evaporating. The fat globules present in the milk get separated and float on the top as cream. On further heating, more water vapour is formed. But when it tries to escape, it gets trapped by the thick layer of cream on the top. The water vapour pushes up the layer of cream and forms a bulge, which finally bursts out, causing the spill.
- 658 What is the difference between a porpoise and a dolphin? Porpoises are smaller than dolphins and they do not have beak like snouts of dolphins. Porpoises live in the shallow water of ocean bays and the mouths of rivers, while dolphins live out in the deeper waters.
- 659 Where is the pituitary gland situated in the body? In the brain on its underside.
- 660 What is ozone? Ozone is an isotope of oxygen with three atoms of oxygen in its molecule.

- 661 What is the difference between a planetarium and a telescope? Through a telescope we can see a real but small part of the sky. On the dome of the planetarium what we see is a picture of the sky, containing the sun, the moon, the stars and planets in an artificial sky.
- 662 What is meant by the term 'Orbit'? Orbit is the path of any body revolving around another body. This path can be circular or elliptical (as an ellipse).
- 663 Where do frogs lay their eggs? All frogs go back to water to lay their eggs.
- 664 Who was Pythagoras? He was a Greek Philosopher and mathematician who lived around 520 BC.
- 665 Who propounded the theory that the sun and not the earth is the centre of the Solar System? Nicolus Copernicus (Bhaskaracharya of 11th Century A.D and Aryabhata of the fifth century A.D seem to be aware of this).
- 666 Who invented the lightning rod to help prevent lightning from damaging buildings and physical property? Benjamin Franklin of USA.
- 667 What is an anableps? Any of the three species of Fish, commonly referred to as four eyed fish. An anableps has the ability to see above and below the water at the same time.
- 668 Why is it dangerous to walk on quicksand? Quicksand is a bed of very fine, powdery wet sand. It is a thick fluid. Once a foot is placed on quicksand, it is not easy to pull it away. The foot may slowly sink in the quicksand. Struggling to take out the foot may sink the foot further down. It is advisable to wait for help. If a man remains calm and does not move his foot, he may stop sinking.
- 669 What is an antiseptic? It is a chemical used to kill germs on the skin or in the wounds. It is also used on things people handle.
- 670 What is a satellite? A body that revolves around another is called a satellite. The earth and the other planets are satellites of the sun. The moon is a satellite of the earth.
- 671 What is Greenwich Meridian Time? Greenwich Meridian is an imaginary north-south line on the earth's surface drawn through Greenwich near London and both geographical North Pole and South Pole. This line has been arbitrarily chosen as the 0° longitude.
- 672 Who for the first time in recorded history used a prism to split white light into many colours? Sir Isaac Newton.
- 673 What is a fuse? The fuse is a strip of metal (or metallic wires) that melts at a relatively low temperature. When an electric circuit carries more electric current than it is supposed to carry, the fuse melts and prevents fires.
- 674 What is meant by the term 'freezing point'? The temperature at which a liquid changes to the solid state is called freezing point.
- 675 Who made the first printing press with moveable types? Johannes Gutenberg of Germany in the middle of the 15th century.

- 676 What is meant by wireless telegraphy? Wireless Telegraphy originally consisted of a sending key, which opened and closed the circuit and a sounder connected by wires to the key. Whenever the circuit was complete a click sound would be heard. Thus all the letters would be represented by the sounds being produced in the right sequence.
- 677 Which is the largest flesh-eating animal? Kodiak bear.
- 678 What is larva? A larva is a young animal that is not fully developed but is able to move about and feed itself. It changes into an adult animal that usually looks different. This change is called metamorphosis. Tadpoles, which grow into frogs, caterpillars, which grow into butterflies, and grubs, which grow to become beetles, are all examples of larva.
- 679 Is it true that the Himalayas grow taller year after year? Yes, about one mm a year. The solid layer of the earth consists of about a dozen semirigid plates. As the Indian plate moving north presses against the stationary Asian landmass, the height of the Himalayas increases. The increase is imperceptible.
- 680 Why doesn't a crocodile harm the plover birds that enter its mouth? Because the plover birds enter the mouth of the crocodile and eat tit-bits found there. This helps the crocodiles to improve their oral hygiene. Therefore crocodiles do not harm the plover birds.
- 681 From where does the moon get its light during the night? Earth
- 682 How many parts was a day divided into, in ancient India? Eight parts, called prahars. The Hindi word 'dupahar', for noon, is derived from 'du' (two) and pahar (prahar).
- 683 What was special about the telescope invented by Newton? The telescope devised by Galileo was a refracting telescope. The refracting telescope uses a large convex lens as the objective to focus light and form a real image. Another lens is used to magnify it. The reflecting telescope uses a large parabolic or concave mirror instead of the objective lens to focus light and form a real image. The images produced by these telescopes are inverted. An additional lens is used to right the image.
- 684 How are we protected from the ultraviolet rays of the sun? Ultraviolet rays come from the sun. If all the ultraviolet rays emanating from the sun travelling to the earth were to reach the earth, all life on earth would be destroyed. But this does not happen, because a layer of ozone (20 to 50 km) above the earth's atmosphere absorbs the ultraviolet rays of the sun.
- 685 What is the meaning of the word Tanning'? Converting raw animal skin into leather.
- 686 Who developed the modern concept of the element? Antoine Lavoisier.
- 687 How do bees communicate? Bees communicate the source of nectar to others by the pattern of the dance they perform.
- 688 Who invented the Thermos Flask? James Dewar.
- 689 What were the first words to be recorded on the gramophone made by Edison? "Mary had a little lamb."



- 690 Which is the hardest substance in the human body? The enamel that covers teeth.
- 691 What is a bone made up of? Two-thirds of the bone is calcium phosphate. The other one-third is gelatin.
- 692 What are sweat glands? Sweat glands are located under the skin of mammals. They are coils of soft, tiny tubes. The tube ends at openings in the skin called pores. Sweat glands carry moisture and waste material to the surface of the skin. When the water is brought to the surface of the skin it evaporates there and keeps the body cool.
- 693 Why can't a horse sit? They don't have knees on their hind legs.
- 694 What is the lead of a pencil made of? Graphite, whose main constituent is carbon
- 695 Who discovered radioactivity? A.M. Becquerel.
- 696 Who produced the first synthetic dye? William Perkin.
- 697 Where are the lobster's teeth located? In the stomach.
- 698 What is parachute? How does it work? Parachute is nothing but a big umbrella made of a special fabric. The parachute and the person using it are subject to two forces: - 1) gravity, which brings them down and 2) the buoyant force of air, which pushes up the umbrella. If the force of the gravity is greater than the buoyancy, the parachute moves down, but very slowly. Hence men can reach the ground safely.
- 699 What is inoculation? Introduction of germs into a body to precipitate a mild form of a disease. As a result antibodies are produced, which protect the body from the invading germs.
- 700 What is meant by Acrophobia? Fear of heights.
- 701 How many lobes does a human liver have? Four
- 702 What is fog? Fog is water vapour condensing near the surface of the earth. Fog differs from clouds in that fog is close to the earth and clouds are in the sky.
- 703 What is the unit used for measuring work or energy? Foot-pound. Thus if an object weighing one pound were lifted through a distance of a foot, one footpound of work would be done.
- 704 How many chambers are there in a human heart? Four. Right auricle, left auricle, right ventricle and left ventricle.
- 705 What is the blood condition involving an abnormal reduction in the number of red blood cells called? Anaemia
- 706 How are hereditary characters transmitted from one generation to the next? Genes are believed to be responsible for transmitting hereditary characters. Every human cell contains 23 pairs of chromosomes, which are made up of many paired particles or units called genes.



- 707 How are hydrocarbons produced? Hydrocarbons consist mainly of hydrogen and carbon. They are produced from the breakdown of plants and other living beings, either by bacteria or by heat and pressure under the surface of the earth. They are also called Natural Gas.
- 708 What is the human body made up of, according to Hippocrates? Blood, phlegm, yellow bile and black bile.
- 709 From which plants do we get potatoes? How? Potatoes grow on potato plants. The plant stems grow under the ground and are called tubers. These are the edible parts and are called potatoes. Spanish explorers brought the potato to Europe.
- 710 What are glacial ages? There have been several periods of time when much of the earth's surface became covered with ice. These different periods of time make up the glacial ages.
- 711 How many nephrons does a human kidney contain? About a million.
- 712 What is the common unit of measurement of electric power? Kilowatt Hour.
- 713 When we run very fast or work strenuously, we feel tired. What is this tiredness due to? Lactic Acid is formed when the glycogen or sugar in the muscles is used. This makes us feel tired.
- 714 How are gills important to fish? They are used for breathing air by most Fishes and certain other lungless animals.
- 715 What are radioactive elements? These are elements in which protons and neutrons are not in balance. They slowly breakdown to form stable elements.
- 716 What are lichens? Lichens are plants that have no flowers, roots, leaves or stems. They grow on rocks and along beaches. They live on the bark of tree on the highest mountains.
- 717 Whose notebooks were Filled with ideas and sketches of inventions, including designs for an airplane? Leonardo da Vinci.
- 718 What is a ligament? Ligament is a term for individual tough fibrous bands of connective tissue that support the internal organs and hold bones together at the joints.
- 719 What is a larynx? The larynx is the voice box, located in the throat.
- 720 Who is considered as the father of modern rocketry? Robert Mulchings and Goddard Hutchings.
- 721 What is Brownian movement? That small particles of matter (molecules) are in constant motion was observed by Robert Brown through his microscope, by putting very fine powder in water. This movement of molecules is referred to as Brownian movement.
- 722 What is camouflage in nature? In nature many animals resort to a number of ways to protect themselves from enemies or predators. This is called camouflage. The Polar Bear, having a white colour is an example of camouflage. Similarly zebra's colour confuses its enemy and serves as a camouflage.

- 723 What is the chief source of uranium and radium? The mineral, Pitchblende.
- 724 Why do planes flying at great speeds leave white fumes behind? The planes leaving fume behind are jet planes. In a basic jet engine air is compressed and forced into a chamber, where fuel is added. Here combustion (burning) takes place. The hot gases that are produced escape from the base of the engine. This pushes the aircraft forward. The white fumes that you see are the hot gases as they escape out. Since the temperature around the jet is low, the fume condenses and becomes visible.
- 725 Why do some people have fat legs? The cause of filaria (elephant leg) are worms called Wucheria bancrofti the female worm gives birth to young worms and not eggs. These young ones, called microfilaria, find the way into blood stream of their victims and from there into the lymphatic vessels. The immediate cause of filarial is a mosquito called culex.
- 726 What is a dehumidifier? Why is dehumidification important? Heating, cooling, ventilation and dehumidifying are aspects of air-conditioning. It is believed that a cold climate with a low level of humidity is good for health. Even food is preserved better when the temperature and humidity are low.
- 727 What is meant by Quarantine? Quarantine is the isolation of persons, animals or plants, which have been exposed to communicable diseases.
- 728 What is the Pythagoras theorem? The theorem states that the square of the hypotenuse of a right-angled triangle is equal to the sum of the squares of the other two sides.
- 729 What are pseudopodia? Pseudopodia are temporary extension of the body of a one-celled animal such as amoeba.
- 730 How is plywood made? Plywood is made by gluing wide thin slices of wood together in order to make a strong board.
- 731 How many pairs of legs do crabs have? Five pairs.
- 732 What is a rain gauge? It is a device used for measuring rainfall.
- 733 How do planaria (flatworm) reproduce? Planaria (plural of planarium) constrict and fragment just behind the pharynx. Both pieces then develop into complete animals.
- 734 What is a fungus? A fungus is a plant without chlorophyll or true leaves, stem and root. Since they are unable to make their own food, they must live on other living or dead plants and animals. Fungi (plural of fungus) are found almost everywhere. Mushrooms are fungi.
- 735 What is resonance? When an object is set into vibration with a certain pitch (frequency) any other object nearby that can vibrate at the same pitch, will start vibrating. This is referred to as resonance.
- 736 Where are the vocal cords located in man? The vocal chords are located in the larynx. The larynx is a hollow muscular organ forming an air passage to the lungs.
- 737 What are alveoli? The tiny air sacs in the lungs are called alveoli. It is through the walls of the alveoli that the exchange of gases takes place.

738 What is meant by embalming a body? When a body is treated in such a way that it is preserved from decay, it is called embalming.

739 What is embryology? Many animals begin life as a fertilised egg. These grow over a period into the form of an adult animal. The study of the changes that take place as an egg develops into an animal is the science of embryology.

740 What is an element? An element is a substance that cannot be broken down or decomposed into smaller parts by ordinary chemical means.

741 What do elements consist of? Positively charged protons, negatively charged electrons and neutrons, which have no charge.

742 What is electrolysis? Electrolysis is the decomposition of a substance using electricity. For example when table salt is subjected to electrolysis, it turns into sodium and chlorine.

743 Who propounded the theory of relativity? Albert Einstein

744 What is ecology? Ecology is the study of plants and animals in relationship to their environment. Everything that affects plants and animals and how they are dependent upon their surroundings is the subject matter of the study of ecology.

745 Why is an earthworm also called 'a Farmers best friend'? The earthworm is called the farmer's friend because it helps him to keep the soil rich and loose so that plants can grow. As they burrow into soft soil, they swallow some of it, which passes through their bodies and finally is left behind as castings. This is enriched material.

746 What is a mammoth? Mammoth was an ancestor of the elephant (of the modern elephant), which is now extinct. Whole frozen mammoths have been found below the ice in Siberia.

747 What is a manometer? It is an instrument for measuring the pressure of gases.

748 How many satellites does Mars have? Two.

749 What is medulla oblongata? It is the part of brain that connects with the spinal cord.

750 How many pairs of nerves are there in man that are connected to the brain? Twelve pairs. They are called the cranial nerves.

751 Why do earth and other planets revolve around the sun? Sun's gravitational force keeps the planets in a fixed orbit.

752 Name the unit in which electric current is measured? Ampere.

753 Which planet in the solar system moves faster around the sun than any other planet? Mercury.

754 What are antibiotics? How do antibiotics help in curing diseases caused by bacteria? In nature, there are moulds and bacteria that attack other organisms in order to obtain nourishment and to

reproduce. Antibiotics are chemical substances produced by organisms (usually microorganisms) that are harmful to other bacteria and life forms. If you moisten a piece of stale bread and keep it in the open, there will be a greenish growth on it a little later. That is because of the spread of a mould called *Penicillium Notatum*. It produces penicillin. Penicillin is a highly effective antibiotic. Most bacteria double every half an hour. Just one bacterium (singular of bacteria) becomes thousands within a few hours. An antibiotic does not permit the multiplication of bacteria. In many cases, the antibiotic does not permit even the survival of bacteria.

- 755 Which is the star closest to our earth, after the sun? ProximaCentauri.
- 756 Who founded the school of mathematics at Alexandria in Egypt? The Greek mathematician Euclid around 300 B.C.
- 757 What are the remains of animals or plants, preserved deep under the earth or in rocks, etc called? Fossils.
- 758 The intensity of which insect's song gives us an indication of the temperature? The cricket.
- 759 What was the name of the first Atomic Reactor built by India? Where is it? Apsara, in Mumbai.
- 760 Which are the only planets to revolve clockwise around the sun? Venus and Uranus.
- 761 What is the study of water with reference to its occurrence in nature known as? Hydrology.
- 762 How can gargling with salt water help relieve a sore throat? An infection of the throat spreads rapidly. Quite a few varieties of bacteria double every half an hour. Gargling with warm water does not kill these bacteria, but it prevents their growth. Temperatures of more than 40 degrees Celsius are not conducive to the growth of bacteria. Any solution which has more than eight per cent salt inhibits the growth of bacteria. Thus, if you gargle with warm salt water, it will prevent the proliferation of bacteria.
- 763 Why does the sound of water keep changing when a vessel is being filled under a tap? Sound is produced by the movement of columns of air. Strike a stainless steel glass with a spoon. A sound is produced. Stop the vibration of the steel glass with your fingers. There will be no sound. When water is being filled in a vessel, sound is produced because of the movement of the column of air. This column becomes smaller and smaller as the water level rises in the vessel. Hence the sound changes.
- 764 What is the form in which iron is found in nature? Iron Oxide.
- 765 Who invented the Dynamo? Michael Faraday.
- 766 How does a cricket produce the chirping sound? By rubbing its legs against one of its front wings.
- 767 What is magma made of? Molten rocks.
- 768 Who first introduced the concept of molecules? Amedeo Avogadro in the year 1811.

- 769 From the bark of which tree is quinine extracted? Cinchona.
- 770 Where do frogs usually live in the hot season? Buried at the bottom of ponds.
- 771 Who discovered Calcium? Sir Humphry Davy.
- 772 Which is the most abundant metal in the earth's crust? Aluminium.
- 773 What is matter made of? Matter is made of electrically charged protons, found in the nucleus and electrons travelling about the nucleus. In addition, there are neutrons in the nucleus with a weight similar to protons but lacking any charge.
- 774 Who first introduced vaccination in medical practice? Edward Jenner.
- 775 Name the only two poisonous lizards in the world The Gila Monster and the Beaded Lizard.
- 776 What is the scientific study of the earth's crust known as? Geology.
- 777 Name the mammals that lay eggs. Platypus and Echidna.
- 778 Why did Galileo come into conflict with the church? Because he supported the Copernican theory that the planets (including the earth) revolve around the sun.
- 779 What does U.F.O stand for? Unidentified Flying Object.
- 780 Which is the brightest star in the sky at night? Sinus.
- 781 What method of healing is also known as shiatsu? Acupressure.
- 782 What is Hypothermia? It is a body condition in which the temperature falls suddenly as a result of exposure to extreme cold.
- 783 What is the thin flap of cartilage attached to the base of the tongue of terrestrial vertebrates called? Epiglottis.
- 784 What is the term used to describe the remains of forests where the trees have been submerged or buried and the tree tissues have been replaced gradually by minerals such as silica or calcite? Petrified Forest.