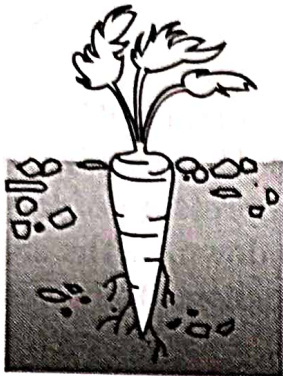


# Standard VI – Question Paper 2021

Q. 1. In which of the following conditions carrot will grow faster?



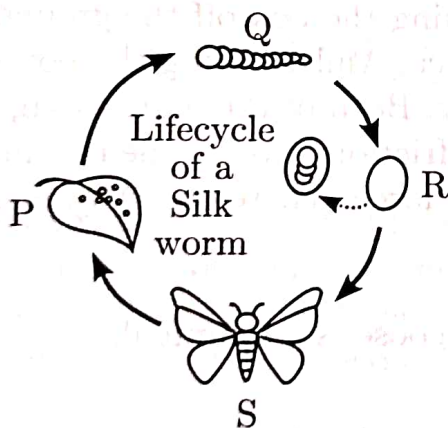
- Ⓐ Carrot alongwith leaves
- Ⓑ Carrot without leaves
- Ⓒ Carrot kept in a dark place
- Ⓓ In all the above conditions carrot will show equal growth

Q. 2. Find the odd one out.  
Castor, Coconut, Sesame, Mustard

- Ⓐ Castor    Ⓑ Coconut    Ⓒ Sesame    Ⓓ Coconut

Q. 3. Observe the given diagram of lifecycle of a silkworm. Read the given statements associated with it. Select the option which correctly fills the blanks (i), (ii) and (iii)

- A) Commercial silk is obtained from \_\_\_\_\_ (i) stage.
- B) \_\_\_\_\_ (ii) stage undergoes four molts to become \_\_\_\_\_ (iii).



- Ⓐ i) S ii) Q iii) P
- Ⓑ i) P ii) S iii) Q
- Ⓒ i) R ii) Q iii) R
- Ⓓ i) Q ii) R iii) S

Q. 4. From December to June, the day becomes X, whereas from June to December it becomes Y.

- Ⓐ X - Bigger, Y - Bigger    Ⓑ X - Smaller, Y - Smaller
- Ⓒ X - Bigger, Y - Smaller    Ⓓ X - Smaller, Y - Bigger

Q. 5. Sameer and his grandfather want to travel to their native place situated at a distance of around 200 km. Which vehicle will be most suitable and eco-friendly for the journey?

- Ⓐ Cycle    Ⓑ Bullock cart    Ⓒ Car    Ⓓ CNG Bus

- Q. 6. Which statement correctly describes the use of *Adulsa* plant?  
1. *Adulsa* is used in the treatment of cold and cough  
2. *Adulsa* is useful in purification of blood.  
(A) Only 1      (B) Only 2      (C) Both 1 and 2      (D) None of these
- Q. 7. Arrange the following materials in decreasing order of their capacity to absorb water.  
Cotton, Nylon, Silk, Wool  
(A) Cotton, Wool, Silk, Nylon      (B) Wool, Silk, Cotton, Nylon  
(C) Nylon, Silk, Cotton, Wool      (D) Cotton, Silk, Nylon, Wool
- Q. 8. To reduce the addiction of alcohol, cigarette, cocaine, heroin, etc. \_\_\_\_\_.  
(A) we should stop production of these substances  
(B) we should create awareness among school children through seminars  
(C) we should build rehabilitation centers  
(D) All of the above
- Q. 9. Use of chemical fertilizers should be limited, because \_\_\_\_\_.  
Choose the *incorrect* option to complete the above statement.  
(A) they are expensive  
(B) they reduce fertility of the soil  
(C) they are harmful to the environment  
(D) they pollute land and water
- Q. 10. Food chain begins with \_\_\_\_\_.  
(A) Algae      (B) Fungi      (C) Parasite (*bandgul*)      (D) Mushroom
- Q. 11. \_\_\_\_\_ is not a component of hydrosphere.  
(A) Ground water      (B) Ice      (C) Water vapour      (D) Rain
- Q. 12. Small sized astronomical bodies rotating around the Sun are called \_\_\_\_\_.  
(A) Asteroids      (B) Dwarf planet      (C) Satellite      (D) Micro planet
- Q. 13. Arrange the following spacecrafts in the chronological order of their launch dates.  
i) *Mangalyaan*      ii) *Chandrayaan*  
iii) *Aryabhata*      iv) Apollo - 11  
(A) i - ii - iii - iv      (B) ii - iii - iv - i  
(C) iv - iii - ii - i      (D) iv - i - ii - iii



Q. 14. Which social issue is depicted by the given symbol?



- (A) Illiteracy
- (B) Child marriage
- (C) Superstitions
- (D) Child labour

Q. 15. Which of the following type of air will be more denser?

- (A) Hot and humid
- (B) Cold and humid
- (C) Cold and dry
- (D) Hot and dry

Q. 16. When air is blown on burning coal, it receives \_\_\_\_\_.

- (A) more Oxygen
- (B) more Carbon dioxide
- (C) more Nitrogen
- (D) more heat

Q. 17. This is/ These are a property/properties of air.

- (A) Air has weight
- (B) Air exerts pressure
- (C) Air occupies space
- (D) All of the above

Q. 18. Jute fibre is obtained from which part of the jute plant?

- (A) Root
- (B) Stem
- (C) Leaves
- (D) Flowers

Q. 19. Match the pairs of laboratory apparatus and their names.

Group I



P



Q



R



S

Group II

X - Beaker, Y - Crucible,

Z - Evaporating dish, W - Morter and pestle

- (A) P - Y, Q - Z, R - W, S - X
- (B) P - X, Q - Z, R - W, S - Y
- (C) P - Y, Q - W, R - Z, S - X
- (D) P - Y, Q - Z, R - X, S - W

Q. 20. Which of the properties given below are same for liquids and gases?

P. They have definite volume.

Q. They can not be compressed easily.

R. They can flow.

S. They take the shape of the container.

- (A) P and Q
- (B) Q and R
- (C) R and S
- (D) Q and S

- Q. 21. Read the following sentences and choose the correct one.  
 P. The distance of the Sun from the Earth is less than the distance of moon from the Earth.  
 Q. A planet can move in the orbit of any other planet.  
 R. Mercury is the hottest planet in our solar system.  
 S. Venus is called morning and evening star.
- (A) P      (B) Q      (C) R      (D) S
- Q. 22. *Guess who am I?*  
 I get produced in biogas plants.  
 I am used as a fuel.  
 I am responsible for global warming.
- (A) Ozone      (B) Methane      (C) Nitrogen      (D) Carbon dioxide
- Q. 23. Which organ of the body of a traffic police will get affected the most due to air pollution?  
 (A) Brain      (B) Lungs      (C) Heart      (D) Stomach
- Q. 24. Unit of work is \_\_\_\_\_.  
 (A) Newton      (B) Joule      (C) m/s      (D) kg
- Q. 25. While opening a soft drink bottle, why does it fizz out?  
 (A) Due to decrease in temperature.  
 (B) Due to increase in temperature.  
 (C) Due to decrease in air pressure on the liquid.  
 (D) Due to increase in air pressure on the liquid.
- Q. 26. Effect of jaundice is observed on \_\_\_\_\_.  
 (A) Pancreas      (B) Stomach      (C) Intestine      (D) Liver
- Q. 27. Select the correct organism that can fit into the given food chain at X.  
 Hen ← X ← Rotten leaves → Snail
- (A) Bacteria      (B) Earthworm      (C) Frog      (D) Grasshopper
- Q. 28. In monsoon season, bread develops a greenish black layer if stored outside for 4 to 5 days. This layer is of \_\_\_\_\_.  
 (A) Bacteria      (B) Viruses      (C) Fungi      (D) Algae



Q. 29. What is the similarity between mushroom and algae?

- i) Both are flowering plants.
- ii) Both are parasites.
- iii) Both do not have organs like other plants.
- iv) Both are poisonous plants.

- (A) i                      (B) ii                      (C) iii                      (D) iv

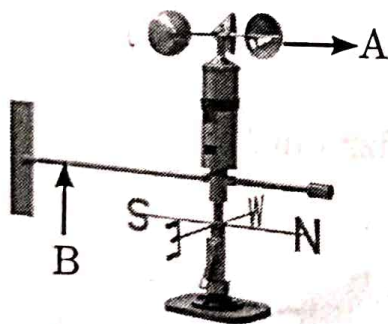
Q. 30. We use charcoal powder in purification of water, because \_\_\_\_\_.

- (A) it kills germs
- (B) it improves level of Oxygen
- (C) it separates volatile organic liquids and chlorine effectively
- (D) All of the above

Q. 31. Identify the relation between distance covered and displacement.

- (A) Distance = Displacement
- (B) Distance > Displacement
- (C) Distance < Displacement
- (D) Distance  $\geq$  Displacement

Q. 32. The following image shows anemometer. Which statement about anemometer is correct?



- (A) Part A shows speed of the wind and part B shows direction of the wind.
- (B) Part A shows direction of the wind and part B shows speed of the wind.
- (C) Part A and B both show speed of the wind.
- (D) Part A and B both show direction of the wind.

Q. 33. Guess who am I?

I cause pollution of atmosphere.

When I get mixed in rainwater, it causes acid rain.

I am not useful for plants.

- (A) Carbon dioxide
- (B) Nitrogen dioxide
- (C) Sulphur dioxide
- (D) Oxygen

Q. 34. An element consists of \_\_\_\_\_ of atoms.

- (A) one type
- (B) two types
- (C) several types
- (D) combination

Q. 35. Earthworm burrows deep inside the soil, because \_\_\_\_\_.

- (A) Earthworm has to interchange the layers of soil
- (B) Earthworm is a timid animal
- (C) it wants to get protection from other animals
- (D) Earthworm responds to the stimulus of sunlight and goes in opposite direction

Q. 36. Fill a glass half way with water and mark the level of water. Then keep it in the freezer. Observe after 4-5 hours. What do you see?

- (A) Water has turned into ice and the level is increased.
- (B) Water has turned into ice and the level is decreased.
- (C) Water has turned into ice and the level remains the same.
- (D) Water in the glass remains in liquid state and the level is increased.

Q. 37. If we add water, mercury and kerosene in a separating funnel, what will be the order of liquids downwards.

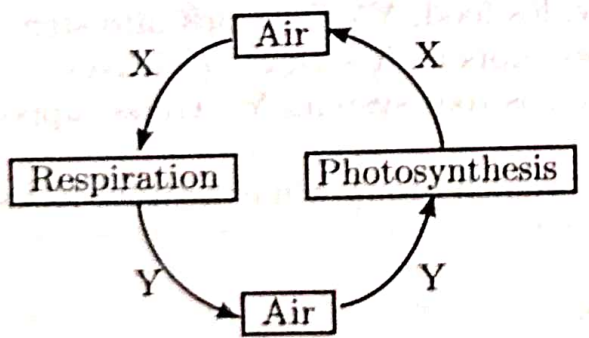
- (A) Water, mercury, kerosene
- (B) Kerosene, mercury, water
- (C) Kerosene, water, mercury
- (D) Mercury, water, kerosene

Q. 38. Which of the following statements is true?

- i) Pressure of air at the sea level > pressure of air at higher altitude
- ii) Pressure of air at the sea level < pressure of air at higher altitude
- iii) Pressure of air at the sea level  $\geq$  pressure of air at higher altitude
- iv) Pressure of air at the sea level = pressure of air at higher altitude

(A) i            (B) ii            (C) iii            (D) iv

Q. 39. Which one of the following gases should be present at position X?



- (A) Nitrogen
- (B) Carbon dioxide
- (C) Hydrogen
- (D) Oxygen

Q. 40. Air is present in \_\_\_\_\_.

- (A) Atmosphere            (B) Water in ponds
- (C) Soil                        (D) All of these



Q. 41. Identify the analogy and select the correct option.  
Impure water : Filter :: Solar rays : \_\_\_\_\_.

- (A) Troposphere (B) Stratosphere (C) Ionosphere (D) Exosphere

Q. 42. *Guess who am I?*

I am an animal but can not swim in water.

I am not a bird but can fly in the air.

I sleep in day time.

- (A) Bat (B) Crocodile (C) Peacock (D) Platipus

Q. 43. Which animal spends around  $3/4^{\text{th}}$  of his life span in sleep and hibernation?

- (A) Snail (B) Crab (C) Tortoise (D) Frog

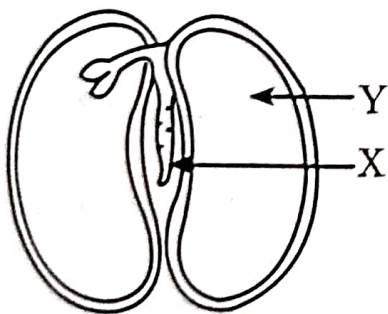
Q. 44. If we stop deforestation then \_\_\_\_\_.

- (A) biodiversity will be preserved (B) soil erosion will be reduced  
(C) ground water level will increase (D) All of the above

Q. 45. Choose an option about P, Q, R, S if P is mango, Q is mustard, R is hibiscus and S is watermelon.

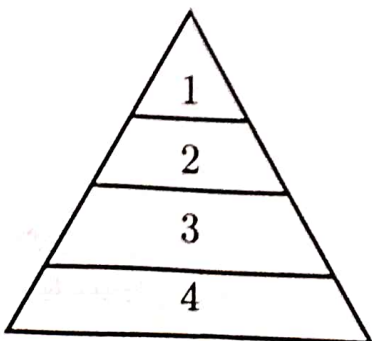
- (A) P - Herb, Q - Tree, R - Shrub, S - Climber  
(B) P - Tree, Q - Shrub, S - Herb, S - Climber  
(C) P - Tree, Q - Herb, R - Shrub, S - Climber  
(D) P - Tree, Q - Shrub, R - Climber, S - Herb

Q. 46. What is the function of the parts labelled X and Y in the given diagram of germinated seed.



- (A) X - Develops root system, Y - Provides food  
(B) X - Provides food, Y - Develops into stem  
(C) X - Gives support, Y - Develops leaves  
(D) X - Develops root system, Y - Gives support

Q. 47. This pyramid depicts balanced diet. Which group will constitute foods like eggs and milk.



- (A) 1  
(B) 2  
(C) 3  
(D) 4

Q. 48. Imagine a new scale for measurement of temperature is made. As per this scale, freezing point of water is 20 and boiling point of water is 120. What would be the normal temperature of human body as per this scale?

- (A) 47      (B) 57      (C) 67      (D) 77

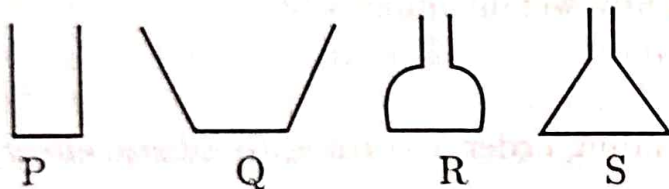
Q. 49. Intensity of earthquake is measured in Richter scale. The name Richter is based on \_\_\_\_\_.

- (A) earthquake of highest magnitude took place at Richter  
 (B) a city from Japan named Richter which was completely submerged due to an earthquake  
 (C) an invention by scientist named Richter  
 (D) a synonym for internal movement of the Earth

Q. 50. First aid to be given in case of burning \_\_\_\_\_.

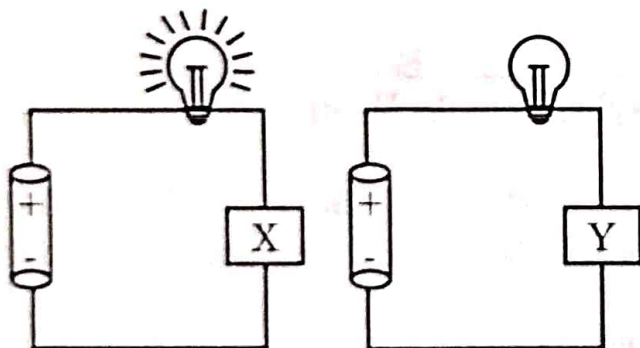
- (A) Applying oil      (B) Pour ink  
 (C) Pour cold water      (D) Apply turmeric

Q. 51. Petrol of equal volume and same temperature is stored in the following containers. Where will be the volume of petrol get reduced the most?



- (A) P      (B) Q      (C) R      (D) S

Q. 52. In the given figure, which substances can be connected at positions X and Y?



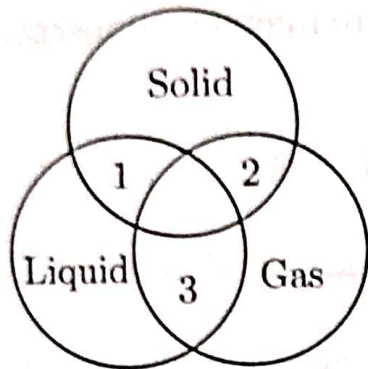
- (A) X - Aluminium foil, Y - Wooden plate  
 (B) X - Copper strip, Y - Nail  
 (C) X - Graphite, Y - Aluminium wire  
 (D) X - Wooden plate, Y - Ebonite rod



- Q. 53. Match the correct pairs from the table given.  
 Column I: 1. Mercury, 2. Silicon, 3. Chlorine  
 Column II: a. Solid, b. Gaseous, c. Liquid  
 Column III: x. Metalloid, y. non metal, z. Metal

- (A) (1-c-z), (2-a-x), (3-b-y)                      (B) (1-a-z), (2-c-x), (3-b-y)  
 (C) (1-c-x), (2-b-z), (3-a-y)                      (D) (1-c-z), (2-a-y), (3-b-x)

- Q. 54. In the given figure, which substances should be written at positions 1, 2, and 3?



- (A) 1) Salt water, 2) Dust particles, 3) Sponge  
 (B) 1) Soda water, 2) Water colour, 3) Air  
 (C) 1) Muddy water, 2) Smoke, 3) Soda water  
 (D) 1) Sponge, 2) Milk with turmeric, 3) Dust particles

- Q. 55. When 100 gm of weight is hung to the spring, length of the spring is 9 cm. 150 gm weight will make the length of spring 11 cm. Then what should be the length of the spring without any weight hung to it?  
 (A) 2 cm              (B) 4 cm              (C) 5 cm              (D) 7 cm

- Q. 56. Arrange air, brick, water in ascending order according to kinetic energy of their molecules.  
 (A) Brick, Water, Air              (B) Water, Air, Brick  
 (C) Air, Water, Brick              (D) Water, Brick, Air

- Q. 57. Complete the analogy  
 Vegetaive : Cotton :: Man-made : \_\_\_\_\_.  
 (A) Silk              (B) Jute              (C) Nylon              (D) Wool

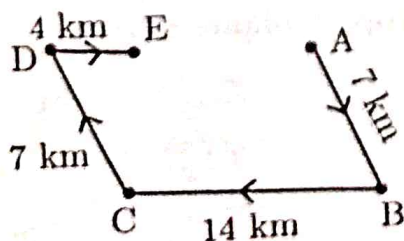
- Q. 58. *Guess who am I?*  
 I preserve the moisture in the body.  
 I Synthesize vitamin.  
 I give protection from heat and cold.  
 (A) Bone              (B) Brain              (C) Skin              (D) Muscles

- Q. 59. Match column I and II, according to Indian Helpline numbers.  
 Column I - 1. Disaster management, 2. Fire brigade, 3. Police, 4. Ambulance  
 Column II - P. 100, Q. 102, R. 108, S. 101

- (A) 1-P, 2-Q, 3-R, 4-S                      (B) 1-R, 2-S, 3-P, 4-Q  
 (C) 1-Q, 2-R, 3-S, 4-P                      (D) 1-S, 2-P, 3-Q, 4-R

- Q. 60. Complete the analogy.  
 Vitamin E : \_\_\_\_\_ :: Vitamin B : Beriberi  
 (A) Night blindness (B) Skin disease (C) Scurvy (D) Anemia
- Q. 61. What will happen if a patient takes two tablets of Vitamin C instead of one in a day?  
 (A) The patient will suffer from scurvy.  
 (B) The patient has to be rushed to the doctor.  
 (C) Excess Vitamin C will be excreted through the urine.  
 (D) The patient will keep eating throughout the day due to excess hunger.
- Q. 62. \_\_\_\_\_ are the smallest and longest bones present in the human body respectively.  
 (A) Vertebra and monkey bone (B) Sternum and ribs bone  
 (C) Stirrup and femur bone (D) Bones of finger and arm
- Q. 63. What will be useful to generate heat on moon?  
 (A) Cowdung cakes (B) Kerosene (C) Windmill (D) Solar cooker
- Q. 64. Select the correct statement with respect to human skeletal system.  
 (A) Bones are joined with each other by muscles.  
 (B) Bones give shape and support to human body.  
 (C) Muscles move because of bones.  
 (D) Bones keep muscles together.
- Q. 65. Which of the following is not an example of flat bone?  
 (A) Bone Sternum (Rib bone) (B) Leg bone  
 (C) Shoulder bone (D) Skull
- Q. 66. While sliding from a slide, the starting speed is X; in between it was Y and later after stopping it was Z. Find the correct options for X, Y, Z from the following.  
 (A) Slow, Fast, Slow (B) Fast, Fast, Slow  
 (C) Slow, Fast, Fast (D) Fast, Slow, Fast

- Q. 67. Riya visited her friend's house E, starting from her house A as per the diagram alongside. What is the difference between distance she walked and her displacement?



- (A) 32 km  
 (B) 22 km  
 (C) 10 km  
 (D) 42 km



Q. 68. When you rub your palms, they become warm because \_\_\_\_\_.

- (A) there is air between the two palms
- (B) body heat transfers to hand after rubbing the palms
- (C) rubbing causes friction which generates heat
- (D) warm blood is present in the palms

Q. 69. Complete the analogy.  
Train : Linear motion :: Swing : \_\_\_\_\_

- (A) Circular motion
- (B) Oscillatory motion
- (C) Linear motion
- (D) Random motion

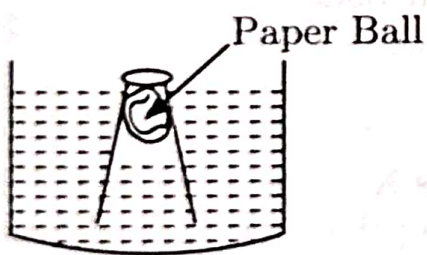
Q. 70. Which forces are responsible for the motorcycle to move?

- (A) Mechanical, frictional and muscular force
- (B) Frictional and mechanical force
- (C) Muscular and mechanical force
- (D) Frictional and muscular force

Q. 71. Mass of an object is 120 kg on the Earth. Find the mass of the same object on moon.

- (A) 120 kg
- (B) 20 kg
- (C) 240 kg
- (D) 720 kg

Q. 72. A paperball is taken and fixed tightly at the bottom of a glass. The glass is then inverted and dipped into water. It is observed that the paperball remains dry. Select the appropriate reason for this observation.



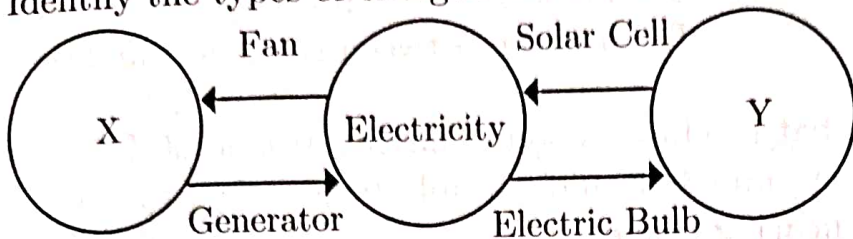
- (A) Air present in the glass does not allow water to enter inside.
- (B) Paper ball in the glass absorbs all water.
- (C) The pressure of entrapped air increases which does not allow water to reach the ball.
- (D) Water occupies the empty space in the glass.

Q. 73. Which energy conversion is observed in autotrophic plants during photosynthesis?

- (A) Heat energy to chemical energy
- (B) Chemical energy to heat energy
- (C) Light energy to chemical energy
- (D) Chemical energy to light energy

Q. 74. To obtain salt, \_\_\_\_\_ energy is used in salt pans.  
 (A) wind energy (B) electrical energy  
 (C) heat energy (D) solar energy

Q. 75. Identify the types of energies at X and Y in the diagram given below.

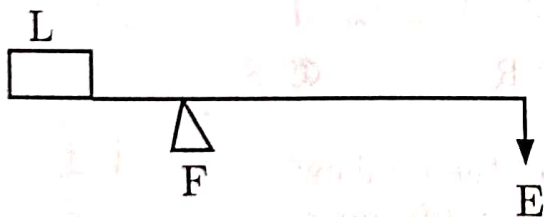


- (A) X - Potential energy, Y - Heat energy
- (B) X - Light energy, Y - Sound energy
- (C) X - Kinetic energy, Y - Light energy
- (D) X - Sound energy, Y - Heat energy

Q. 76. Wheel and axle is used to move heavy load from one place to another, because \_\_\_\_\_.

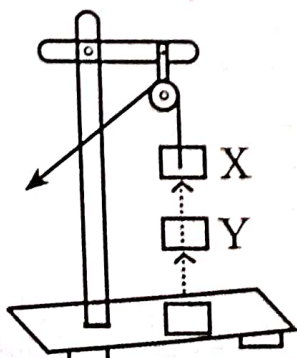
- (A) they work as inclined plane
- (B) both help to change the direction of force
- (C) sliding friction is less than the rolling friction
- (D) rolling friction is less than the sliding friction

Q. 77. In the given figure, length of the stick is 1.20 m. The fulcrum (F) is at 0.2 m distance from the load (L). The effort (E) is at the other end of the stick. Because of this arrangement, how much will be the mechanical advantage? (Mechanical advantage = Effort arm/Load arm)



- (A) 5 (B) 50 (C) 60 (D) 0.6

Q. 78. A box weighing 2 kg is lifted to point Y from the base with the help of a pulley. Then it is lifted to point X. Work done to bring the box from base to point Y and X is  $W_Y$  and  $W_X$  Joule respectively. Find the correct relation between them.



- (A)  $W_Y > W_X$
- (B)  $W_X > W_Y$
- (C)  $W_X = W_Y$
- (D)  $W_Y \geq W_X$



Q. 79. Which body part of a mosquito is responsible for the buzzing sound?  
 (A) Wings (B) Mouth (C) Legs (D) Antenna

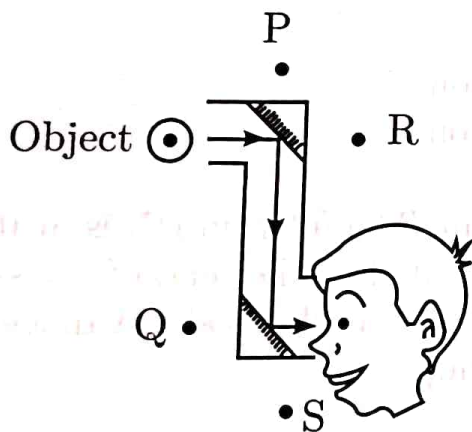
Q. 80. The size of shadow of an object depends upon which factor?  
 (A) Intensity of light source (B) Smoothness of substance  
 (C) Size of screen (D) Distance between the object and screen

Q. 81. During night time, a bat produces a sound having around 50 KHz frequency. Which of the following animals would possibly be attacked by the bat?

Animals	Sound hearing range
Beetles	20 Hz - 80 KHz
Moth	10 Hz - 100 KHz
Flies	38 Hz - 44 KHz

(A) Beetles (B) Moth (C) Flies (D) All of the above

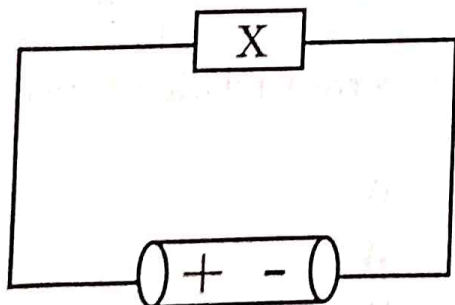
Q. 82. An observer used a periscope having two plane mirrors to look at an object 'O'. At which point, the image of the object will be seen?



(A) P (B) Q (C) R (D) S

Q. 83. Which colour is present in the middle of the rainbow?  
 (A) Red (B) Yellow (C) Green (D) Indigo

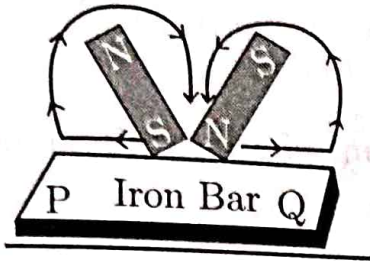
Q. 84. Which substance should be connected at point X to create an electromagnet?



(A) Graphite strip (B) Copper wire  
 (C) Iron wire (D) Aluminium strip

- Q. 85. If a magnet is \_\_\_\_\_, then it loses its magnetic properties.  
 (A) kept open (B) kept with iron  
 (C) thrown down from a height several times (D) dipped in water

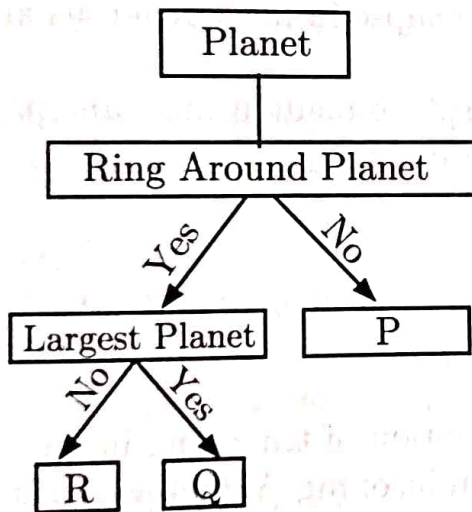
- Q. 86. Which poles will develop at point P and Q if we use method of magnetisation shown in the figure?



- (A) P - South, Q - North  
 (B) P - North, Q - South  
 (C) P - South, Q - South  
 (D) P - North, Q - North

- Q. 87. Astronomical unit is equal to \_\_\_\_\_.  
 (A) Distance between the Sun and Earth  
 (B) Distance between Earth and Moon  
 (C) Distance between Mars and Earth  
 (D) Distance between Jupiter and Mars

- Q. 88. Observe the flow chart carefully and select the correct answers for P, Q and R.



- (A) P - Jupiter, Q - Saturn, R - Venus  
 (B) P - Jupiter, Q - Venus, R - Saturn  
 (C) P - Venus, Q - Jupiter, R - Saturn  
 (D) P - Saturn, Q - Jupiter, R - Venus

- Q. 89. We get specific smell when we crush Ammonium chloride and Calcium hydroxide together. This change is \_\_\_\_\_.  
 (A) physical change (B) chemical change  
 (C) temporary change (D) physical and temporary change

- Q. 90. There is large temperature difference in illuminated and darker part of the Moon, because \_\_\_\_\_.  
 (A) Moon has less gravity (B) Moon has smaller size  
 (C) There is no environment on Moon (D) A and C both



- Q. 91. Which of the following is used for prevention of diseases?  
 (A) Antibiotics (B) Vaccine  
 (C) Fungicide (D) Insecticide
- Q. 92. The certification mark of packed food items like oil, turmeric, coriander powder is denoted by \_\_\_\_\_.  
 (A) ISI mark (B) Green mark  
 (C) Red mark (D) AGMARK
- Q. 93. A \_\_\_\_\_ is used to transfer accurate amount of a liquid from one container to the other.  
 (A) beaker (B) measuring cylinder  
 (C) pipette (D) burette
- Q. 94. The unit \_\_\_\_\_ is used to measure water stored in a dam.  
 (A) Cusec (B) Cumec  
 (C) TMC (thousand million cubic feet) (D) Mega litre
- Q. 95. Which type of eclipse is dangerous to view with unprotected eyes?  
 (A) Lunar eclipse (B) Solar eclipse  
 (C) Lunar and solar eclipse (D) Viewing of eclipse is not dangerous at all
- Q. 96. When a paper from a notebook and a paperplane made using same paper are thrown, paperplane covers more distance, because \_\_\_\_\_.  
 (A) Mass of paperplane < Mass of paper  
 (B) Mass of paperplane > Mass of paper  
 (C) Air resistance is less  
 (D) Air resistance is more
- Q. 97. Sameer is travelling in a desert. He has an option of travelling in any of the available cars and none of them have air conditioning. Which car will be comfortable for him?  
 (A) Red car (B) Grey car (C) Pink car (D) White car
- Q. 98. Which of the following lights consume less energy?  
 (A) LED (B) LCD (C) CFL (D) Electric bulb
- Q. 99. Stars twinkle at night because  
 (A) They are far away (B) They are spherical  
 (C) They do not have their own light (D) They are in dark
- Q. 100. Which ocean has the most earthquakes?  
 (A) Pacific ocean (B) Atlantic ocean  
 (C) Indian ocean (D) Arctic ocean