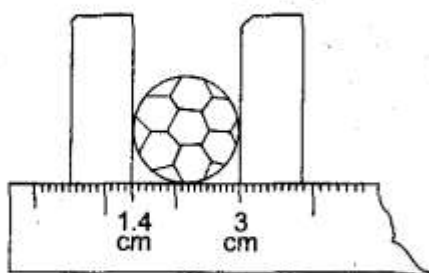


- Q. 9. Weight of the substance means _____.
- ① gravitational force acting on it ② matter contained in it
③ expanse of surface of the substance ④ heaviness of the substance
- Q. 10. Find the odd one out.
- ① Plastic bag ② Jute bag
③ Polythene bag ④ Rexin bag
- Q. 11. Work = _____.
- ① Force/ Displacement ② Length x Breadth x Height
③ Distance/Time ④ Force x Displacement
- Q. 12. Find the odd one out.
- ① The core ② The mantle ③ Lithosphere ④ The crust
- Q. 13. Find proper group.
- ① Radish, beet, ginger ② Carrot, turmeric, beet
③ Radish, carrot, beet ④ Turmeric, ginger, beet
- Q. 14. When pile of 12 coins of one rupee is prepared, the height of the pile is 2.4 cm. Find the thickness of the coin.
- ① 2.4 mm ② 2 mm ③ 2 cm ④ 28.8 cm
- Q. 15. Find the odd pair.
- ① Electric bulb - light energy ② Solar cooker - solar energy
③ Electric bell - sound energy ④ Geyser - heat energy
- Q. 16. Complete the food chain using proper pair.
Grass → _____ → frog → _____
- ① fish, snake ② grasshopper, snake
③ deer, tiger ④ grasshopper, goat
- Q. 17. With reference to purification of water, find odd one out.
- ① filter paper ② fine sand ③ cotton cloth ④ alum
- Q. 18. Which type of magnet is used in generator?
- ① Horseshoe type ② Bar magnet
③ Magnetic needle ④ Disc magnet
- Q. 19. Why is mercury used in thermometer?
- ① Mercury is metal ② Mercury is heavy
③ Mercury is liquid ④ Mercury is good conductor of heat

- Q. 20. In winter why do we hear crackling sound when we fold polyester clothes?
① Due to magnetic force acting on it.
② Due to friction.
③ Due to static electricity produced in it.
④ Due to gravitational force acting on it.
- Q. 21. When a tree blossoms, what kind of change is it?
a. Natural b. Periodic c. Reversible d. Non-periodic
① b, c ② a, b ③ a, d ④ a, b, c
- Q. 22. Which statement is true for corrosion and combustion?
① Corrosion is harmful and combustion is useful.
② Both of them are examples of chemical change.
③ Corrosion is chemical change and combustion is physical change.
④ Corrosion is physical change and combustion is chemical change.
- Q. 23. Find the odd one out with reference to vaccination.
① Tuberculosis ② Polio ③ Scurvy ④ Measles
- Q. 24. Which type of change takes place when we prepare a mixture?
a. Physical b. Chemical c. Reversible d. Irreversible
① a, c ② b, c ③ a, d ④ b, d
- Q. 25. Find the incorrect statement.
① Rubber gloves should be used while doing electrical work.
② Wear turban when you have to work for long time in the Sun.
③ Foment the burn with hot water bag.
④ The wound of snake bite should be washed with Potassium permanganate
- Q. 26. A train starts from station A and reaches station B. In this period its motion is of which type?
① Random ② Uniform linear ③ Non-uniform linear ④ Oscillatory
- Q. 27. What will happen if waste water having hazardous chemicals from industry is mixed with water in the lake?
① People and animals drinking water from the lake will suffer.
② Aquatic animals from the lake will die.
③ Soil surrounding the lake will become infertile.
④ All of the above.
- Q. 28. Find the odd one out.
① Bone meal ② Compost
③ Super phosphate ④ Vermicompost

- Q. 29.** Which order of substances is proper for filtration of water?
 ① Coarse sand, powdered coal, fine sand.
 ② Powdered coal, fine sand, coarse sand.
 ③ Powdered coal, coarse sand, fine sand.
 ④ Fine sand, powdered coal, coarse sand.
- Q. 30.** Out of A, B, C, D whose muscles will be strong?
 ① A eats plenty of fish, pulses and grains.
 ② B does exercise every morning and evening.
 ③ C eats plenty of fish and pulses and exercises regularly.
 ④ D has more diet and plays games like carrom and playing cards.
- Q. 31.** Find the odd one out.
 ① X-ray ② Sonography ③ CT scan ④ Blood test
- Q. 32.** Vegetables should be covered while they are cooked because _____
 a. this preserves their constituents
 b. this saves energy
 c. vegetables become tasty
 ① a ② b ③ a, c ④ a, b
- Q. 33.** Who am I?
I help in movement. I give shape to the body. I can change my length.
 ① Bone ② Joint ③ Muscle ④ Skin
- Q. 34.** A ball is kept between two blocks as shown in the figure. Using the ruler shown below, find the radius of the ball.



- ① 1.4 cm ② 3 cm ③ 1.6 cm ④ 0.8 cm
- Q. 35.** Which of the following is sublimative substance?
 ① Ammonium sulphate ② Ammonium nitrate
 ③ Ammonium chloride ④ Ammonium hydroxide

- Q. 36.** State the non-flowering plant having chlorophyll.
① Mould ② Algae ③ Mushroom ④ Croton
- Q. 37.** Why do coolies wear turban?
① As uniform.
② To avoid the baggage from touching their head.
③ To increase the surface area of the head touching the baggage.
④ To reduce the weight on the head.
- Q. 38.** Find the group having same type of calamities.
① Storm, bomb blast, tsunami
② Earthquake, storm, tsunami
③ Tsunami, bomb blast, accident
④ Bomb blast, storm, accident
- Q. 39.** How much time does a marigold plant require to complete its life cycle?
① Three months ② Six months
③ Twelve months ④ Twenty four months
- Q. 40.** Doctor has prescribed to take 5 ml of a syrup thrice a day for 6 days. If the syrup is available in following packing, which pack is suitable?
① 50 ml ② 100 ml ③ 200 ml ④ 500 ml
- Q. 41.** In which type of motion, body passes through the same point again and again after some time?
① Linear motion ② Oscillatory motion
③ Periodic motion ④ Oscillatory and periodic motion
- Q. 42.** How is bowling speed of fast bowler measured?
① By actual measurements ② Using SONAR system
③ Using RADAR system ④ Using LASER system
- Q. 43.** Find the odd activity.
① To prepare idol from a soil.
② To cover walls of the house with soil.
③ To prepare bricks from soil.
④ To construct small bunds in the revulet using stones and soil.
- Q. 44.** Which organ reduces Carbon dioxide from the blood?
① Brain ② Lungs ③ Heart ④ Pancreas

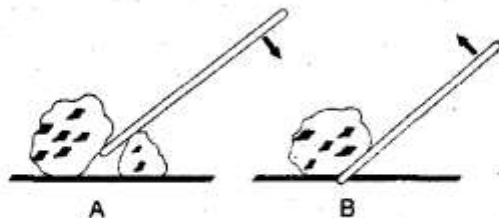
- Q. 45. Some statements about sprinkler irrigation system are given. Select the correct one.
① Water drips near roots of the plant.
② Water flows through channels in the soil.
③ Water get sprayed on the crop from above.
④ Water is carried in pipes which have holes.
- Q. 46. On the Earth, the weather will be hot at_____.
① poles ② equator ③ tropic of cancer ④ tropic of capricorn
- Q. 47. Find the odd one out.
① *Adulsa* ② Turmeric ③ Lemon grass ④ Teak
- Q. 48. For artificial rain which substance is sprayed on the cloud from aeroplane?
① Silver iodide ② Acid ③ Alum powder ④ Bleaching powder
- Q. 49. Which disease is prevented by breeding of *guppy* fish?
① Jaundice ② Malaria ③ Plague ④ Diphteria
- Q. 50. Why do heart beats increase after running?
① Heart works at high speed.
② Lungs work at high speed.
③ Due to running, more perspiration takes place.
④ Due to running, more Carbon dioxide is produced.
- Q. 51. Arrange following substances in the increasing order of density.
① Water, fog, ice ② Fog, ice, water ③ Water, ice, fog ④ Fog, water, ice,
- Q. 52. Who am I?
I am used for lifting objects. I increase distance but reduce the effort required.
① Pulley ② Wheel ③ Inclined plane ④ Lever
- Q. 53. Which of the following pair is wrong?
① Spittle, tuberculosis ② Touch, scabies ③ Water, typhoid ④ Air, cold
- Q. 54. If we dig in the soil, normally what is the order of layers inside?
① Rock, crumble rock, soil ② Soil, rock, crumble rock
③ Soil, crumble rock, rock ④ Rock, soil, crumble rock
- Q. 55. Find the odd process in case of metal.
① To draw a wire ② To make a sheet
③ To prepare a tin ④ To prepare alloy

- Q. 56.** Why rubber or plastic should not be burnt?
 ① Smoke will be produced ② It will produce toxic gases
 ③ Substances cannot be recycled ④ All of the above
- Q. 57.** To conserve the natural resources _____.
 ① try to use minimum resources ② try to develop new resources
 ③ increase use of plastic ④ use paper bags instead of plastic bags
- Q. 58.** If rubber ball is pressed between two palms, what is the effect on it?
 ① Ball starts moving ② Mass of the ball will change
 ③ Shape of the ball will change ④ Weight of the ball will change
- Q. 59.** From which part growth of the plant takes place?
 ① Bud ② Leaf ③ Flower ④ Root
- Q. 60.** Which quantity is measured in kilogram?
 ① Length ② Mass ③ Weight ④ Volume
- Q. 61.** Find the odd statement, considering functions of the parts.
 ① Banyan tree has aerial roots
 ② Climbers have spring like parts
 ③ Rose plant has thorns
 ④ Sugarcane has some roots above the ground
- Q. 62.** Stomach: Digestive system: : Pancreas: _____.
 ① Circulatory system ② Excretory system
 ③ Nervous system ④ Digestive system
- Q. 63.** I have four rulers A, B, C, D on which one centimeter is divided into 20, 10, 50 and 5 parts respectively. Which of this ruler will measure the length most accurately?
 ① A ② B ③ C ④ D
- Q. 64.** Some statements are given about the tasks to be done in the field. Arrange them in proper order.
 a. When the crop is ready, it is cut and threshed. b. Seeds are sown
 c. The land is ploughed and dried stalks are cleaned. d. The crop is watered.
 e. The grain is stored in sacks.
 ① a, b, c, d, e ② c, b, d, a, e ③ b, d, c, e, a ④ c, b, a, d, e
- Q. 65.** Disease of throat: Diphtheria: : Disease of lung: _____.
 ① AIDS ② Pneumonia ③ Typhoid ④ Diarrhoea

- Q. 66. Find the brittle and opaque substance.
① Glass ② Chalk ③ Wood ④ Iron
- Q. 67. In early formative years of the Earth _____, _____, _____ these continents combined together were termed as Laurasia by the scientists.
① Asia, Europe, North America ② South America, Africa, Antarctica
③ Europe, Africa, Australia ④ Africa, Asia, Europe
- Q. 68. Elbow: Hinge joint: : Ankle: _____
① Gliding joint ② Pivot joint
③ Ball and socket joint ④ Immovable joint
- Q. 69. Find the odd pair out.
① Cod liver oil, bending of the bones ② Orange, bleeding gums
③ Sprouted pulses, night blindness ④ Leafy vegetables, roughness of the skin
- Q. 70. One different upright structure seen in *gulmohar* flower is _____.
① corolla ② androecium ③ gynoecium ④ calyx
- Q. 71. Which of the following animal does not have significant movement?
① Amoeba ② Earthworm ③ Starfish ④ Sponge
- Q. 72. When carrom piece is struck with carrom striker, it acquires what type of motion?
① Periodic motion ② Circular motion
③ Oscillatory motion ④ Linear motion
- Q. 73. Which of the following type of plants bear flowers only once in their life cycle?
① Annuals ② Biennials ③ Perennials ④ Annuals and biennials
- Q. 74. Arrange the following planets of solar system in proper order.
① Earth, Mercury, Saturn, Venus ② Mercury, Venus, Earth, Saturn
③ Saturn, Venus, Mercury, Earth ④ Mercury, Earth, Venus, Saturn
- Q. 75. Why is cooking of food a chemical change?
① Colour of food changes ② State of food changes
③ New substance is formed ④ Volume of food changes
- Q. 76. Two identical cubes, one made of metal and other of wood are kept in a room. If we touch both the cubes, what do we feel?
① Both the cubes are same. ② Metal cube is colder than wooden cube.
③ Wooden cube is colder than metal cube.
④ Observation depends upon the person who touches the blocks.

- Q. 77. According to Maharshi Kanad, everything in the nature is made up of _____
① Particles ② Atoms ③ Molecules ④ Peelav
- Q. 78. How plants help in reduction of soil erosion?
a. Roots of plants hold in place the particles of soil.
b. Leaves of plants reduce speed of rain water.
c. Dry leaves that fall from tree do not allow rain water to fall on the soil directly.
d. Trunk of the tree stores water.
① a, b, c, d ② a, b, c ③ a, b ④ a, c
- Q. 79. Due to progress made by man _____.
a. progress of other animals takes place
b. forests are reduced
c. some species of living things are vanished
d. man started living at one place instead of wandering
① a, b, c, d ② a, b, c ③ b, c, d ④ c, d, a
- Q. 80. In which plant we have reticulated venation?
① Banana ② Coconut ③ Castor ④ Wheat
- Q. 81. Which of the aqueous animal is viviparous?
① Star fish ② Whale ③ Shark ④ Jelly fish
- Q. 82. What has to be done to always get plenty of water to all?
① Construct many dams
② Dig many borewells
③ Store rainwater in tanks
④ Make arrangement so that maximum rainwater percolates into the soil
- Q. 83. Find the odd one out (according to their function).
① Kidney ② Lungs ③ Skin ④ Liver
- Q. 84. What is the normal temperature of the body of healthy person?
① 37 °C ② 37 °F ③ 98.4 °C ④ 100 °C
- Q. 85. Which of the following plant grow on support?
① Green peas
② Tomato
③ Lady's finger
④ Brinjal

- Q. 86.** Figure A and B show use of crowbar in two different ways. Observe it and find the order of lever in both the cases.



- ① Fig. A - 1st order, Fig. B - 2nd order
 ② Fig. A - 2nd order, Fig. B - 1st order
 ③ Fig. A - 1st order, Fig. B - 3rd order
 ④ Fig. A - 2nd order, Fig. B - 3rd order
- Q. 87.** How does excretory system help in maintaining our health?
- ① This system produces sweat.
 ② This system produces urine.
 ③ This system throws away the harmful chemicals produced in our body.
 ④ This system throws away undigested food.
- Q. 88.** In cricket, player must have coordination between which parts of the body to take a catch of a ball?
- ① Hands, legs ② Hands, eyes
 ③ Legs, eyes ④ Eyes, hands and legs
- Q. 89.** We cannot produce static electricity using _____.
- ① glass ② plastic ③ wool ④ Silicon
- Q. 90.** When a heavy box is to be pushed up an inclined plane, why Iron pipes are kept below the box?
- ① To avoid slipping of the heavy box from inclined plane.
 ② Pipes work as pulleys.
 ③ Pipes work as levers.
 ④ When pipes are used, we get advantage of wheel with inclined plane.
- Q. 91.** Transition of which planets can be seen on the Sun from the Earth?
- (a) Mars (b) Jupiter (c) Venus (d) Mercury
- ① a, b ② b, c ③ c, d ④ a, d
- Q. 92.** Wavelength of the light is normally measured in _____.
- ① Å ② mm ③ light year ④ m

- Q. 93.** Why marble is not good for kitchen platform?
① Marble is white ② Marble is a soft rock
③ Acid reacts with marble easily ④ All of the above
- Q. 94.** What are the basic properties of nature?
(a) Different cycles e.g. water cycle.
(b) Biodiversity.
(c) All living beings are equally important.
(d) Man is the most important creature.
① a, b ② b, c ③ a, d ④ a, b, c
- Q. 95.** Eden botanical garden is situated in which state?
① Odisha ② West Bengal ③ Jharkhand ④ Assam
- Q. 96.** Which is lightest inactive element?
① Hydrogen ② Helium ③ Neon ④ Nitrogen
- Q. 97.** Cricket bat is made of which wood?
① Teak ② Black wood ③ Willow ④ Mahogany
- Q. 98.** Due to which process mustard seeds crackle in hot oil?
① Burning ② Sublimation ③ Dehydration ④ Evaporation
- Q. 99.** What the green coloured symbol represents?
① Eco-friendly packing ② Oral medicine
③ Vegetarian substance ④ Packed food
- Q. 100.** Which product is designed by Steve Jobs?
① Telephone ② iPhone ③ Microphone ④ Gramophone

Answers with Solutions

- A. 1. (4) Explanation:** In the first analogy, components of Brass are given. Hence in the next analogy, we have to give components of Stainless steel.
- A. 2. (3) Explanation:** Statements 1 and 4 states reuse of waste water. Statement 2 states proper way of disposing waste water. If we throw waste water in river (as per statement 3) it is not a proper action, as it will lead to pollution.
- A. 3. (2) Explanation:** In the first analogy, the machine used to separate the grains from the cobs is given. Hence in the second analogy we have to choose machine that is used to give insecticides to the plants.
- A. 4. (2) Explanation:** Sufficient, fresh and balanced diet is good for our health. Spicy or stale food (though kept in refrigerator) is not good for our health. When we serve more to the guests, the food may get wasted or the guest may suffer. We must take adequate food in our plate and consume it.
- A. 5. (4) Explanation:** Oxygen from the inhaled air gets mixed with blood and it is used to release energy. Carbon dioxide produced in this process gets mixed with air which we exhale. Hence proportion of Oxygen decreases and that of Carbon dioxide increases when we exhale.
- A. 6. (1) Explanation:** Rain water is absorbed in soil and it quickly gets wet. This change is fast. Due to evaporation, the soil becomes dry after some time. Hence this change is reversible.
- A. 7. (4) Explanation:** Look at objects around you like furniture, utensils, stationary etc. They have different shapes and sizes according to their use. Cup and saucer are decorated with designs to increase their aesthetic value. Normally metallic objects are thinner than glass or wooden objects.
- A. 8. (3) Explanation:** The higher speed of water flowing down the hilly region erodes the soil. When it flows through plateau, its speed decreases. The soil carried with water gets settled there. This adds soil to the landmass.
- A. 9. (1) Explanation:** By definition gravitational force acting on the body is its weight. Matter contained in it is represented by mass, expanse of surface is represented by area and heaviness by density.
- A. 10. (2) Explanation:** Jute bag is degradable and rest of the three are not.

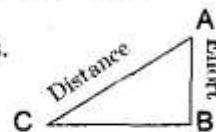
- A. 11. (4)
- A. 12. (3)
- A. 13. (3) **Explanation:** Radish, carrot and beet are roots, while ginger and turmeric are stems. Option 3 has all roots.
- A. 14. (2) **Explanation:** Thickness of the coin \times 12 = thickness of the pile of 12 coins.
 $= 2.4 \text{ cm} = 24 \text{ mm}$
 \therefore Thickness of a single coin $= 24 \text{ mm} / 12$
 $= 2 \text{ mm}$
- A. 15. (2) **Explanation:** Options 1, 3 and 4 reflect energy conversion. In option 2, no such conversion is observed.
- A. 16. (2) **Explanation:** Grasshopper and deer can eat grass and only snake can eat frog. Hence the given food chain must be Grass \rightarrow grasshopper \rightarrow frog \rightarrow snake
- A. 17. (4) **Explanation:** Filter paper, fine sand and cotton cloth are used to filter the water. Only alum is used for sedimentation.
- A. 18. (1) **Explanation:** In generator, coil of wire rotates between two poles of the magnet to generate electricity. Hence horseshoe type magnet is used in generator.
- A. 19. (4) **Explanation:** We require liquid which conducts heat and expands evenly with rise in temperature. Mercury has these properties. Hence the answer.
- A. 20. (3) **Explanation:** Polyester clothes do not conduct electricity. Electricity is not conducted by dry air in winter. Hence when we fold polyester clothes, static electricity is produced due to friction. When electric charge jumps from one part to another part of the cloth, we hear crackling sound.
- A. 21. (2) **Explanation:** Blossoming of tree is a natural process. It repeats after fixed intervals. That means it is periodical.
- A. 22. (2) **Explanation:** Combustion is reaction in which a substance reacts with Oxygen. Corrosion is a process in which metals react with Oxygen or any other gas in the air. Both are chemical changes.
- A. 23. (3) **Explanation:** Vaccination can be done for tuberculosis, polio and measles. Scurvy is a deficient disease of vitamin C.
- A. 24. (1) **Explanation:** When we prepare a mixture, no chemical reaction takes place. Hence the change is physical and reversible.

- A. 42. (3)
- A. 43. (3) **Explanation:** When bricks are prepared from soil, they are roasted. So bricks can not be converted back to the soil easily. In all other given activities soil remain as it is.
- A. 44. (2) **Explanation:** The inhaled air goes to alveoli of lungs. Alveoli have thin membrane and are surrounded by thin blood vessels. Here the exchange of gases takes place.
- A. 45. (3)
- A. 46. (2)



Explanation: Equator of the Earth is an imaginary circle at the center of north and south pole. This part of the Earth gets maximum heat from the Sun throughout the year. Hence weather on the equator is hot.

- A. 47. (4) **Explanation:** *Adulsa*, turmeric and lemon grass are all medicinal plants. Teak is a plant which gives wood for furniture and construction of houses.
- A. 48. (1)
- A. 49. (2) **Explanation:** *Guppy* fish feeds on mosquito eggs and larvae.
- A. 50. (1) **Explanation:** While running, we require more energy. So blood supply to all the parts of the body has to be increased. Heart pumps blood to the body. Hence heart works at high speed and heart beats increase after running.
- A. 51. (2) **Explanation:** Ice floats on water. This shows that density of ice is less than water. Fog is a gaseous state of water, so its density is very less.
- A. 52. (3) **Explanation:** Inclined plane is used to lift heavy objects. When we use inclined plane, the distance increases but the effort is reduced. $AC > AB$.
- A. 53. (1)
- A. 54. (3)
- A. 55. (4) **Explanation:** First three options indicate malleability and ductility of metal which are physical properties, whereas option 4 indicates chemical change.
- A. 56. (4) **Explanation:** Rubber and plastic can be recycled by proper processes. When we burn them we can not recycle them and toxic smoke is produced.



- A. 57. (1) Explanation:** Natural resources are of two types - renewable (e.g. plants) and non-renewable (e. g. minerals). We cannot produce non-renewable resources. Also, renewable resources are renewed at a certain speed. We have to use them with a speed less than that. Hence, to conserve both types of resources we have to use minimum resources.
- A. 58. (3) Explanation:** Mass/weight of the substance cannot be changed using pressure. Rubber ball being elastic, its shape changes. It being held between palms, does not move.
- A. 59. (1)**
- A. 60. (2)**
- A. 61. (3) Explanation:** Options 1, 2 and 4 are based on support while option 3 on protection.
- A. 62. (4)**
- A. 63. (3) Explanation:** With ruler we can measure the length, equal to the length of smallest division accurately. When same distance is divided into more parts, the length of smallest division decreases. Hence ruler having more division in one meter can measure the length more accurately than the ruler having less divisions in the same length.
- A. 64. (2)**
- A. 65. (2) Explanation:** The analogy is between the disease and the part affected by it. Lungs are affected by pneumonia.
- A. 66. (2)**
- A. 67. (1)**
- A. 68. (1) Explanation:** The analogy is given between the part and type of joint present. Ankle has gliding joint.
- A. 69. (3) Explanation:** The question is based on diseases caused due to vitamin deficiency.
- A. 70. (3) Explanation:** *Gulmohar* flower has many stamens which form androecium. It has only one pistil which appears different represents stamens. Pistil forms gynoecium.
- A. 71. (4) Explanation:** Natural sponge is a sedentary animal. It remains attached to the wood or a rock.
- A. 72. (4)**
- A. 73. (4) Explanation:** Annual plants complete their life cycle in one year and bear flowers only once. Though biennial plants complete their life cycle in two years, they also bear flowers only once.
- A. 74. (2) Explanation:** Sequence of planets is written in the ascending order of their distance from the Sun.
- A. 75. (3)**

- A. 76. (2) **Explanation:** Both the cubes will have same temperature. But metal is a good conductor of heat and wood is a bad conductor. When we touch a metal cube, it takes heat.
- A. 77. (4)
- A. 78. (2) **Explanation:** Soil erosion takes place when water flows with high speed. Branches and leaves of tree reduce the speed of rainwater while it comes down. Due to dry leaves on the land the speed of water flowing on the land is reduced. Roots form web in the soil and hold the soil particles together. But, normally trunk of the tree does not store water.
- A. 79. (3) **Explanation:** Progress of other animals does not depend on progress of the man.
- A. 80. (3) **Explanation:** Banana, coconut and wheat are all monocotyledonous. They have parallel venation. Castor is dicotyledonous. It has reticulate venation.
- A. 81. (2)
- A. 82. (4)
- A. 83. (4) **Explanation:** Kidney, lungs and skin are excretory organs. Liver is not an excretory organ.
- A. 84. (1)
- A. 85. (1) **Explanation:** Green pea plants are climbers. They require support.
- A. 86. (1) **Explanation:** In figure A, fulcrum is at a point where small stone touches the crowbar (Load-fulcrum-effort). Hence, this is lever of 1st order. In figure B, fulcrum is at a point where crowbar touches the ground i.e. it is at one end and load is in between the fulcrum and the force. Hence this is lever of 2nd order.
- A. 87. (3) **Explanation:** Many chemical reactions take place in our body. These reactions produce chemicals which are harmful to our body like Carbon dioxide, uric acid etc. Excretory system throw away these chemicals and protect our body.
- A. 88. (4)
- A. 89. (4) **Explanation:** Static electricity is produced only on insulators, as they do not conduct electricity produced due to friction. All other options except Silicon are insulators.
- A. 90. (4) **Explanation:** We can look at pipe as a broad wheel. When we put pipes below the box, we get advantage of wheel with inclined plane.
- A. 91. (3) **Explanation:** Transition of planets can be seen only for internal planets (i.e. planets nearer to Sun than the Earth).

A. 92. (1)

A. 93. (4) **Explanation:** Though marble has different colours, white marble is common. When we use it for kitchen platform, it is very difficult to maintain its original colour. Marble reacts with acids and acidic substances like lemon, tamarind, *amla*. As Marble is soft and porous, its erosion is common. Hence its surface dose not remain smoother after use.

A. 94. (4) **Explanation:** In nature we have many cycles like Oxygen cycle, Nitrogen cycle, Carbon cycle etc. We can use the same matter again and again due to these cycles.

We can see variety of leaving being around us they vary in size, structure and habitat where they live. This is called biodiversity. All living and non-living things around them depend upon each other. They share some or other thing with each other.

All living things have same importance in nature. Man feels that he is the only important creature in the world and all other things are only for his use. But this is not true.

A. 95. (2)

A. 96. (2) **Explanation:** Hydrogen is the lightest element but is highly reactive. Helium and Neon are inert elements. Helium is the lightest of these. Nitrogen is moderately reactive.

A. 97. (3)

A. 98. (3) **Explanation:** Though we feel that mustard seeds are dry, small amount of water is present in them. When we put these seeds in hot oil (temperature around 300 - 350 °C) this water gets evaporated instantly and seeds crackle. This process is called dehydration.

A. 99. (3)

A. 100. (2)

