CBSE
Class VI Science
Term 2
Sample Paper – 5 Solution

SECTION A

1. **(c)** Fermentation
   Fermentation is not a method of disposal of garbage.

2. **(a)** Drought
   Scarcity of water turns into drought.

3. **(d)** Stem
   The leaves of the desert plants are reduced and their stems become fleshy to prepare food for the desert plants.

4. **(d)** All of these
   Forests, grasslands, deserts and mountains are terrestrial habitats as the animals and plants found in these habitats live on land.

5. **(b)** Vapour
   Water turns into vapour.

6. **(d)** Composting
   The term used for rotting and conversion of materials into manure is called composting.

7. **(c)** Sieving
   Sieving is the process of separation of components of a mixture using a sieve based on difference in size.

8. **(b)** Both useful components
   Both, the butter and the left skimmed milk are useful products.

9. **(b)** Filtration
   The cloth acts as a filter and keeps the insoluble particles away from water. This separation method is known as filtration.

10. **(a)** increases
    When a solid expands, its volume increases.

11. (b) Irreversible change 1, 3, 4
Examples 1, 3, and 4 are irreversible changes as a new substance is formed in each case.

12. (a) Presence of Oxygen
Oxygen supports burning.

13. (c) Carbon dioxide
Carbon dioxide is the gas mainly responsible for global warming.

14. (a) filament
A thin wire that gives off light in a bulb is called the filament of the bulb.

15. (b) closed
A closed circuit is required for electricity to pass from one terminal to the other terminal of an electric cell.

16. (b) opening
When you flip a switch off, you are opening the circuit.

17. (c) Insulation
Plastic covering on electric wires provides insulation.

18. (a) a magnet
Object X is able to attract the iron ball; hence, it must be a magnet.

19. (b) nagnetic compass
The compass used to find the direction by travellers is a magnetic compass.

20. (a) Like poles attract and unlike poles repel each other
Solution: 'Like poles attract and unlike poles repel each other' is the incorrect statement.

SECTION B

21. The mountain goat has strong hooves for running up the rocky slopes of mountains for grazing.

22. The glass shown in the given image contains cold water as the water drops appear on the outer surface of the glass. The cold surface of the glass containing ice cold water cools the air around it and the water vapour of the air condenses on the surface of the glass.

23. The soil of the region would continue to lose water by evaporation and transpiration. Since it is not being brought back by rain, the soil would eventually become dry.

24. Papier-mâché is a paste made of clay and paper mixed with some rice husk. It is put on baskets to make it stronger.

25. We take the mixture to an open ground and stand on a raised platform. Put the mixture in a plate or a sheet of paper and hold the plate or the sheet of paper containing the mixture, at shoulder height. Tilt it slightly, so that, the mixture slides out slowly. By this process, the different components of a mixture can be separated.

26. Making statues out of plaster of Paris is an irreversible change because the plaster of Paris has a property of setting into a hard mass on getting mixed with water owing to the formation of a new compound. The hard mass cannot be converted back into the previous plaster of Paris. Hence, it is an irreversible change.

27. Take an empty glass bottle. Now, dip the open mouth of the bottle into a bucket filled with water. We will notice that the water does not enter the bottle when it is in an inverted position, as there is no space for air to escape. This activity shows that air occupies space.

28.

Conductors	Insulators
1. The materials that allow electricity to pass through them are called conductors.	1. The materials that do not allow electricity to pass through them are called insulators.
2. Example: copper (material used for wire), silver, gold and aluminum	2. Example: glass, air, plastic, cotton, thermocol, wood and rubber

29. The given figure is of the danger sign displayed on electric poles, electric substations etc. It is to warn people that electricity can be dangerous if not handled safely.

30. The device shown here is a magnetic compass.
The magnetic compass is an instrument used to find the directions.

SECTION C

31. The rainwater harvesting from open spaces around the buildings in a city is done by constructing percolation pits covered with concrete slabs having holes in them, and are connected to the recharge well through a pipe. The rainwater falling in open spaces goes into the percolation pit through the holes in its concrete slab cover. After filtration in percolation pit, the rainwater enters the recharge well through the outlet pipe and gradually seeps into the soil.

32. Ways of minimizing generation of plastic waste:

1. We should make minimum use of plastic bags.
2. We should carry a cloth or a jute bag when we go out for shopping.
3. We should not use plastic bags to store eatables.
4. We should not put garbage in plastic bags and throw it away.

33. Ways to conserve water:

i. Use only the required quantity of water.
ii. Do not allow water to drip from defective taps.
iii. Plant more trees as they help in bringing rain.
iv. Use drip-irrigation or spray-irrigation system.

34.

(a) Water from the wet surfaces absorbs heat from the surroundings, and gets converted into vapour which escape into the atmosphere
(b) Water vapour enters the air through the processes of evaporation and transpiration.
(c) The basic idea behind rainwater harvesting is to catch water where it falls on the Earth's surface.

35.

(a) White powdered solid P insoluble in water, could be chalk powder.
(b) Q can be water, since chalk powder is insoluble in water.
(c) The solid which is left behind on the filter paper after filtration is called residue.
(d) The clear liquid collected in the beaker after filtration is called filtrate.

36.

(a) The changes which take place in a long period of time are called slow changes. For example: rusting of iron.

The changes which take place in a short period of time are called fast changes. For example: bursting of crackers.

(b) Change of day and night cannot be considered a fast change since it doesn't occur in a small span of time. It is a slow change.

37.

(a)

i. The animals living in soil get oxygen for breathing from the air present in the spaces between the soil particles.

ii. The plant roots which grow in the soil get oxygen for respiration from the air present between the soil particles.

iii. The animals living on land take the oxygen for breathing from the air around them.

(b) During respiration, oxygen breaks down food to give carbon dioxide, water and energy.

(c) Take a glass tumbler and add some soil in it. Then, pour some water on the soil slowly and stir for a while. The air bubbles start coming out of the soil. This proves that soil holds air in it.

It is the water that expels the air out from the spaces between the soil particles. This expelled air is seen in the form of bubbles.

38.

(a) The two cars attract each other because both the magnets have their unlike poles facing each other.

(b) We will require any object made of iron or steel (such as a paper clip). The steel bar to which this object gets attracted will be a magnet.

39.

(a) An electric circuit is an arrangement that provides a complete path for the electricity to pass between the two terminals of the electric cell.

(b) The electrical wires are covered with plastic coverings because plastic is an insulator and thus, it protects us from getting shocks.

40.

(a) When we rub soil or sand with a magnet, we find that some particles of soil or sand remain attached to it because the soil or sand particles contain some iron particles which stick to the magnet.

(b) Let the magnet suspend freely. The end of the magnet that points towards the north is called the North Pole of the magnet and the other end that points towards the south is called the South Pole of the magnet.

SECTION D

41.

(a) Cacti are adapted to survive in a desert as they have:

i. No leaves or have spiny leaves to prevent loss of water through transpiration.
ii. Stem is modified in such a way that it performs photosynthesis and conserves water.
iii. Their roots go very deep into the soil for absorbing water.

(b)

i. Desert
ii. Forest
iii. Grassland
iv. Sea

42.

(a)

i. We should use both sides of the paper to write.
ii. We should use a slate for rough work.
iii. We should use all blank sheets of paper left in our notebooks for rough work.

(b) When stray animals look for food in plastic bags, they end up swallowing these plastic bags. This causes many health problems for them and they may even die due to eating plastic bags.

43.

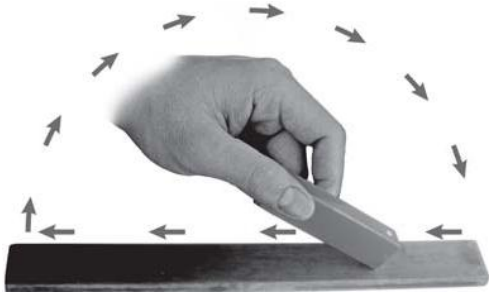
(a) The process of changing of a liquid into vapour without heating is called evaporation.

(b) The use of evaporation for separating a mixture is based on the fact that liquids vaporize easily whereas solids do not vaporize easily.

(c) Common salt dissolved in water can be separated by the process of evaporation as follows:

The solution of common salt and water is taken in a porcelain dish and heated gently over a burner. The water present in salt solution will form water vapour and escape into atmosphere. When all the water present in the solution gets evaporated, then common salt is left behind in the porcelain dish as a white solid.

44. Take a rectangular piece of iron and place it on the table.



Now, take a bar magnet and place one of its poles near one edge of the bar of iron.
Without lifting the bar magnet, move it along the length of the iron bar till you reach the other end.
Now, lift the magnet and bring the pole (the same pole that you started with) to the same point of the iron bar from which you began.
Move the magnet again along the iron bar in the same direction as done before.
Repeat the process around 30-40 times.
Take a pin or some iron filings near the iron bar to check whether it has become a magnet.
Note that the pole of the magnet and the direction of its movement should not change.
Thus, we know how to make a magnet out of an iron bar.