SCIENCE

CHAPTER 16: WATER A PRECIOUS RESOURCE



Important Questions

➤ Multiple Choice Questions:

| Question 1. Water is found in |
|---|
| (a) solid form |
| (b) liquid form |
| (c) gaseous form |
| (d) all of these |
| Question 2. Water day is celebrated on |
| (a) 21st March |
| (b) 23rd March |
| (c) 22nd March |
| (d) None of the above |
| Question 3. Our body contains % portion of water. |
| (a) 75 |
| (b) 65 |
| (c) 95 |
| (d) 85 |
| Question 4. Which one of the following is the cause of the depletion o water table? |
| (a) Increasing population |
| (b) Agricultural activities |
| (c) Increasing industries |
| (d) All of these |
| Question 5 represents the solid form of water. |
| (a) water vapour |
| (b) snow |
| (c) lake water |
| (d) well water |
| Question 6. The process of seeping of water into the ground is called |
| (a) aquifer |

(b) infiltration (c) water cycle (d) all of these Question 7. The water below the ground is known as (a) groundwater (b) pure water (c) polluted water (d) none of these Question 8. The large well like structure which is used in olden times for rainwater harvesting is called (a) well (b) bawris (c) johad (d) check-dams Question 9. Which of the following doesn't show water shortage? (a) Taps running dry (b) Long queues for getting water (c) Marches and protests for demand of water (d) Three buckets of water per person per day Question 10. 'Every drop counts' is a slogan related to (a) counting of drops of any liquid (b) counting water drops (c) importance of water (d) importance of counting > Fill In the Blanks: 1. The groundwater stored between layers of hard rocks below the water table is known as an 2. is the purest form of water. 3. The water which is fit for human use is called 4. In India was the traditional way of collecting water.

5. % of earth's surface is covered with water.

6. is the process which maintains the amount of water on the earth.

> True or False:

- 1. Ice is liquid form of water.
- 2. Water is not essential for all living beings.
- 3. Water exists in its gaseous form as water vapour above 100°C only.
- 4. Rainwater harvesting is one of the ways to conserve water.
- 5. The minimum amount of water recommended by UN per person per day is 20 L.
- 6. Groundwater will not be depleted due to afforestation.

Very Short Question:

- 1. Name the available water resources on earth.
- 2. Water that is fit for human consumption is called.
- 3. What per cent of total water on the earth is actually available for our use?
- 4. Why ice floats on water?
- 5. Name the gaseous form of water around us.
- 6. Clouds then release the water through?
- 7. Is increasing population the reason for depletion of water table?
- 8. What is water management?
- 9. What do you mean by water harvesting?
- 10. State the advantage of water harvesting?

> Short Questions:

- 1. Why are we left only tiny fraction of water for use even if about 75 % of the earth surface is covered with water?
- 2. State various uses of water?
- 3. Why do we need the water cycle?
- 4. What do you understand by anomalous expansion of water?
- 5. What is the reason behind floating of ice in water?
- 6. Define specific heat capacity of substance?
- 7. Water is a universal solvent. Explain

8. How cloud is formed?

> Long Questions:

- 1. Why water is considered as a precious resource?
- 2. Explain various processes that make up the water cycle.
- 3. Enlist some methods to conserve water.

✓ Answer Key-

➤ Multiple Choice Answers:

- (d) all of these
- 2. (c) 22nd March
- 3. (a) 75
- (d) All of these 4.
- 5. (b) snow
- 6. (b) infiltration
- 7. (a) groundwater
- 8. (b) bawris
- 9. (d) Three buckets of water per person per day
- (c) importance of water 10.

> Fill In the Blanks:

- 1. aquifer
- 2. Rainwater
- 3. freshwater
- 4. bawris
- 5. 71
- 6. Water cycle

> True or False:

- 1. False

- 4. True

Swotters

- 5. False
- 6. True

Very Short Answers:

- 1. Answer: Oceans, seas, lakes, rivers, ice, ground water and moisture in the air.
- 2. Answer: Freshwater.
- 3. Answer: 0.006 per cent
- 4. Answer: Ice is lighter than water so floats on water.
- 5. Answer: Water vapour present in the air around us.
- 6. Answer: Precipitation
- 7. Answer: Yes
- 8. Answer: Water management is the continuous matching of water resources with the water requirements of a place.
- 9. Answer: Instead of letting rainwater run -off into the sea, it can be used to recharge ground water. This is known as rainwater harvesting.
- 10. Answer: Rainwater harvesting can be used to raise the water table in arid areas.

> Short Answers:

- 1. Answer: This is because most of the water about 97% of surface water is in sea and ocean as salty water that is unfit for domestic and agricultural use.
- 2. Answer: Water is used for various activities such as agriculture, industries, cooking, cleaning utensils, bathing, washing clothes, and, most importantly, for drinking.
- 3. Answer: The Earth is covered by water, however, almost 97% is salt water found in the oceans. We cannot drink salt water or use it for crops because of the salt content. We can remove salt from ocean water, but the process is very expensive.
- 4. Answer: When water at room is cooled, it contract until reaches 40c and then starts expanding. This strange behaviour of water is called anomalous expansion of water.
- 5. Answer: Ice is lighter than water so it floats on water.
- 6. Answer: The amount of heat required to raise the temperature of substance is known as specific heat capacity of substance.

- 7. Answer: A large number of substances dissolve in water so it is called universal solvent. A liquid that dissolve another substance (solute) to form solution is called solvent.
- 8. Answer: The evaporated water above the earth surface is carried away by warm air. As the warm air moves higher from the surface of the Earth, it starts to cool down. It is because the water vapour present starts to condense to form tiny water droplets. These droplets float in the air and form cloud.

> Long Answers:

- 1. Answer: Water is a precious source because all our daily activities are carried out with the help of water only. Water is found everywhere but not everywhere it is drinkable/ usable. Though the seas have no lack of water but still we can't drink or use it anywhere. Water helps in nourishment of animals and plants. We can't live without water and because it is scarce, that's why water is precious
- 2. Answer: There are six important processes that make up the water cycle:
 - Condensation the opposite of evaporation. Condensation occurs when a gas is changed into a liquid.
 - Infiltration Infiltration is an important process where rain water soaks into the ground, through the soil and underlying rock layers.
 - Runoff Much of the water that returns to Earth as precipitation runs off the surface of the land, and flows downhill into streams, rivers, ponds and lakes.
 - Evaporation the process where a liquid, in this case water, changes from its liquid state to a gaseous state.
 - Precipitation When the temperature and atmospheric pressure are right, the small droplets of water in clouds form larger droplets and precipitation occurs. The raindrops fall to Earth.
 - Transpiration As plants absorb water from the soil, the water moves from the roots through the stems to the leaves. Once the water reaches the leaves, some of it evaporates from the leaves, adding to the amount of water vapour in the air. This process of evaporation through plant leaves is called transpiration.
- 3. Answer: Water conservation is process of preventing wastage of water, using water carefully and recharging ground water. Water conservation can be done by:

- Repairing leaking pipes and taps.
- Not wasting water during brushing teeth, shaving, bathing, washing clothes and during other activities.
- Rainwater harvesting.
- By drip irrigation of plants.

