

## UNIT : 2. WATER

CLASS : VI

SUBJECT : SCIENCE

### I. Choose the appropriate answer

- Around 97% of water available on earth is water.  
a. fresh                      b. pure                      **c. salty**                      d. polluted
- Which of the following is not a part of water cycle?  
a. evaporation      b. condensation                      c. rain                      **d. distillation**
- Which of the following processes add water vapour to the atmosphere?  
i. Transpiration    ii. Precipitation    iii. Condensation    iv. Evaporation  
(a) ii and iii                      (b) ii and iv                      **(c) i and iv**                      (d) i and ii
- About 30% of the fresh water is found in?  
a. glaciers                      **b. ground water**                      c. other sources of water      d. 0.3%
- Using R.O. plant at home eliminates lot of non-potable water. The best way to effectively use the expelled water of R.O. plant is .  
a. make the expelled water go and seep near the bore well  
**b. use it for watering plants**  
c. to drink the expelled water after boiling and cooling  
d. to use for cooking as the water is full of many nutrients

### II. Fill in the blanks

- Only 0.3 percent of natural water is available for human consumption.
- The process of changing water into its vapour is called Evaporation.
- Dam is built on rivers to regulate water flow and distribute water.
- Water levels in rivers increase greatly during Raining .
- Water cycle is also called as Hydrological cycle.

### III. True or False. If False, give the correct statement

- Water present in rivers, lakes and ponds is unit for use by human beings. **False.**
- Seas are formed when the water table meets the land surface. **False**
- The evaporation of water takes place only in sunlight. **True**
- Condensation results in the formation of dew on grass. **True**
- Sea water can be used for irrigation as such. **False**

### IV. Match the following

- Flood                      -                      Increased rain fal
- Surface water                      -                      Lake

- |                 |   |              |
|-----------------|---|--------------|
| 3. Sun light    | - | Evaporation  |
| 4. Cloud        | - | Water vapour |
| 5. Frozen water | - | Pole         |

#### V. Arrange the following statements in correct sequence

- ❖ The heat of the sun causes evaporation of water from the surface of the earth, oceans, lakes, rivers and other water bodies.
- ❖ Water vapour is also continuously added to the atmosphere through transpiration from the surface of the leaves of trees.
- ❖ Higher up in the atmosphere, the air is cool.
- ❖ These vapours condense to form tiny droplets of water.
- ❖ These droplets floating in the air along with the dust particles form clouds.
- ❖ Warm air carrying clouds rises up.
- ❖ The water droplets come together to form large water droplets.
- ❖ The large water droplets become heavy and the air cannot hold them, therefore, they fall as rains.

#### VI. Analogy

1. Population explosion : Water scarcity :: Recycle : Water Management.
2. Ground water : Tube wells :: Surface water : lakes

#### VII. Give very short answer

##### 1. Name four different sources of water

Rivers, wells, lakes, glaciers, ponds etc.

##### 2. How do people in cities and rural areas get water for various purposes?

In city, people get water from water tanks, hand pipes and bore wells.

In rural area, people get water from wells, canals, ponds and rivers.

##### 3. Take out of cooled bottle of water from refrigerator and keep it on a table. After some time you notice a puddle of water around it. Why?

The cooled surface of bottle cools the air around it and the water vapour of the air condenses. So after some time a puddle of water can be noticed around the bottle.

##### 4. We could see clouds almost every day. Why doesn't it rain daily?

1. The millions of tiny droplets do not collide with another to form larger droplets.
2. The air around the clouds is not cool.

## 5. Name the places where water is found as ice.

Polar ice-caps, Ice sheets and glaciers in Arctic region and Antarctica.

## 6. How do aquatic animals manage to live in Arctic and Antarctic Circle?

- In Arctic and Antarctic circle, water in lakes and ponds will be frozen and a solid layer of ice is formed on the surface of water.
- Still aquatic animals living under the ice do not die.
- This is because the floating layer of ice acts as a protective coat and does not permit heat to escape from water.
- So as the surface water alone turns to ice, the aquatic animals manage it.

## 7. What are the types of rain water harvesting?

- There are two types of rainwater harvesting.
- Collecting water from where it falls.
- Collecting rainwater by constructing bunds.

## VIII. Give short answer

### 1. Differentiate between surface water and ground water.

#### Surface water:

- ❖ Water present on the surface of the earth.
- ❖ Ex : River, lake, ponds, streams or freshwater.

#### Groundwater:

- ❖ Water present beneath earth's surface in soil.
- ❖ Ex : open wells, tube wells (or) hand pumps, Spings etc.

### 2. Write a few slogans of your own on the topic "Save Water".

- "To a thirsty man, a drop of water is worth more than a sack of gold".
- "Water covers 2/3 of the surface of the earth. But only 0.002% is drinkable. Save water"
- "Save water to secure your future"
- "Don't make nature cry, keep your water clean"
- "Store water for dry days".

### 3. About 71% of earth's surface is covered with water, then why do we face scarcity of water?

About 71% of the earth's surface is covered with water and even then we face scarcity of water.

#### Reasons:

- 97% of total water is found in seas and oceans, which is salty and not fit for human consumption.

- Only 3% found is the freshwater and that too available in polar ice caps and glaciers.
- Out of 3% fresh water, only 0.3% is available to us as surface water, in lakes, rivers, and swamps.

**4. Give reason for the following statement - Sewage should not be disposed of in rivers or oceans before treatment.**

- Sewage should not be disposed of in rivers or oceans before treatment.
- If we dispose of sewage before treatment the rivers and oceans will be polluted.
- Aquatic animals and species will die due to pollution.
- We can not use the river water for our day to day life.

**5. The fresh water available on earth is only 3%. We cannot increase the amount of water. In that case, how can sustain the water level?**

- The sewage water treatment is to be adopted.
- Decrease the usage of pesticides, insecticides, and fertilizers in agriculture.
- Protect forest and trees.
- Adopt drip irrigation and sprinkler irrigation in agriculture.
- Rainwater harvesting should be implemented in every building.
- Create awareness about the impact of throwing wastes into the water bodies.

**IX. Answer in detail.**

**1. What is potable water? List down its characteristics.**

- Potable water is the water which is safe to drink.
- On average the human body requires 2-3 litres of water per day for proper functioning.

**Characteristics of potable water :**

- Cleaned of harmful contaminants.
- It is transparent.
- It is odourless and colourless.
- It is harmless or free from disease-causing bacteria.

**2. Who is known as waterman of India? Browse the net and find the details about the award, the waterman received for water management. State the findings by drafting a report.**

The 'Waterman of India' is Dr. Rajendra Singh. He is a well-known water conservationist and environmentalist from Alwar district, Rajasthan.

#### Awards:

- He got Ramon Magasaysay award for community leadership in 2001.
- In 2005, he got Jamnalal Bajaj award for Science and Technology for rural development.
- In 2008, The Guardian, named him amongst its list of 50 people who could save the planet.
- In 2015, he won Stockholm Water Prize. He runs an NGO called 'Tarun Bharat Sangh' (TBS), which was founded in 1975.
- In 2016, he was bestowed with Ahimsa Award by Institute of Jainology based in UK.

### 3. What is rainwater harvesting? Explain in a few sentences how it can be used in houses.

- Direct collection and use of rain water is called rainwater harvesting.
- The system is easy to install, operate and maintain for all types of houses.
- Excellent and valuable source of water in emergencies.
- Reduces rainwater runoff and solve drainage problems in houses.
- Ideal solution for inadequacy of water.
- Increase groundwater level.

### X. Question based on Higher Order Thinking Skills

#### 1. When there is no pond or lake in an area, will there be formation of clouds possible in that area?

Yes, the formation of clouds is possible at that area because plants also release water vapour by transpiration process. This water vapour will form clouds.

#### 2. To clean the spectacles, people often breathe out on glasses to make them wet. Explain why do the glasses become wet.

When we breathe out, the hot air comes out from our mouth which get condensed and changed into tiny water droplets and glasses become wet.