Tutorial Assignment for Class 6th T1

By Mr. Bashir Ahmad Ganaie HOD DIET Beerwah.

WATER

Water: A substance on this planet which is used in maximum amount. Earth is called water planet as four-fifth of its surface is covered by water. Water occurs as vapours in air, moisture in soil, hidden underneath as ground water, present on surface in oceans lakes, rivers etc. water is essential for the existence of life on earth (i.e. Growth and development of plants, animals).

Water as a Natural Resource: All the life processes require water as it being a universal solvent (a prime natural resource). About 97% water is in oceans and 3% as fresh water (river lakes etc.) water is made available to water bodies such as lakes, streams, ponds, rivers, ground water by water cycle (Hydrological Cycle). The disturbance in water cycle by man has resulted water shortage.

Sources of Water:

1. **Rivers and Lakes:-** They are fresh water resources the amount of water in these resources vary from time to time and depend on the amount of rain fall. Most of the rivers (Such as Jhelum) have snow bound mountains as their source, during dry conditions the water level in these resources falls which often results in water scarcity, so the rain water is collected/stored In reservoirs such as ponds, small lakes as the dams have been constructed on rivers.

Fresh water lakes:

Jammu Region:

a) *Sanasar Lake (Udhampur)*
b) *Mansar and Saruinsar Lake*

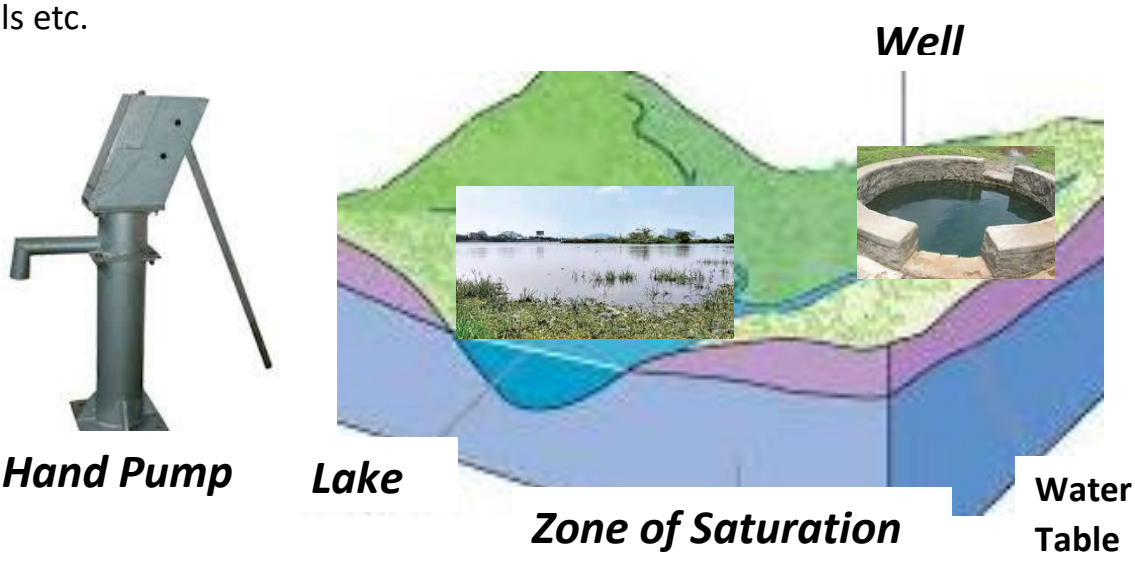
Kashmir region:

a) *Dal Lake (Srinagar)*
b) *Wular Lake (Bandipora, Sopore)*
c) *Manasbal Lake (Safapora, Ganderbal)*

Ladakh region:

a) *Pangong Lake (Leh)*
b) *Tsomoriri Lake (Leh)*

2. **Sea-Water:** Oceans/Seas are the largest reservoir of natural water as streams, rivers flow into them the sea water is salty (about 3.5% salt), because of salty nature human beings cannot use this water for drinking, manufacturing etc.
3. **Ground Water:-** the water which is stored under ground is k/a ground water. During rivers or snow the water seeps into the ground and after trickling down gets collected above the water tight layer called as aquifer while as the upper limit of this zone is called water table. The water from the water table is made available to the people of cities and towns by drillings wells, tube wells etc.



4. **Spring Water: -** The ground water may rise until it finds a way out of the surface to form a flow of water called a spring. The spring water is clean, fresh and cold such as 'Chashma-Shahi'. Achabal, however some springs are hot such as Tata-Pani.

Importance of water for sustaining life:-

Every organism such as plants animals and humans needs water for sustenance the humans require more water than animals and plants such as for bathing, washing, cooking etc.

a) **Water in living things:-**About 65% of weight of the body is due to water in human similarly:

In Elephant=70%
Corn (maize) =80%
Potato=80%
Tomato=95%

The nutrients required by the organism gets first dissolved in water and then taken Acute Loss of water from the body (dehydration) results in death of the organisms (human) Human beings need 2.4 liters of water with food or with beverages (Tea, Coffee etc.) Water is also needed in circulation of blood and excretion of wastes from the body and also regulates body temperature by sweating.

b) **Water in the home:** About 260 liters of water per family is used for cleaning bathing and carrying away the wastes.

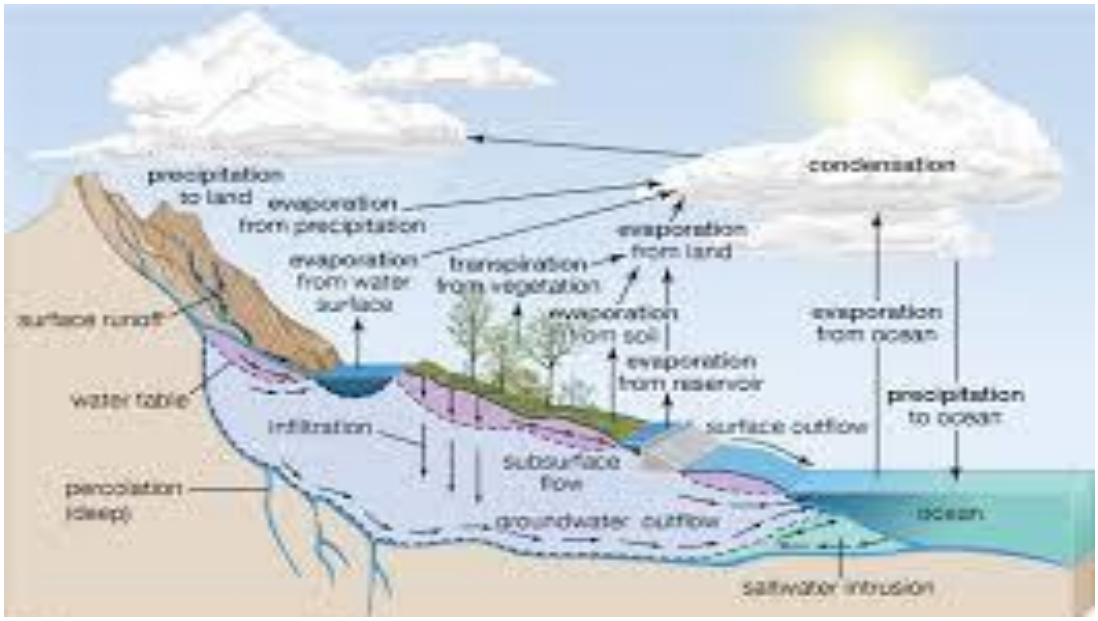
c) **Water for Irrigation:** in India irrigation water constitutes 97% of all uses and accounts for 90% of human use of fresh water most of the plants cultivated by man require huge quantity of water.

In J&K Irrigation is done through:

a) Canals
b) Wells and Tanks
c) Tube Wells
d) Rivers
e) Springs

Seeds of many plants are dispersed (Transported) by water.

Water cycle in Nature:-



Hydrological Water Cycle

It is a regular exchange of water between the surface of earth and atmosphere. Vapours passing into the air cool down and form clouds. Clouds produce rain and snow then excess water available over land ultimately reaches oceans through rivers and other forms of water flow. This cycle goes on and is called water cycle in nature.

Conservation of water: water is a precious resource. We should make judicious use of it, so that it can be consumed. The ways for conservation of water are as:

1) prevention of wastage: water wastage should be prevented through better plumbing, repair of leaking taps and avoiding overflow from storage tanks.

2 Irrigation: To avoid water loss due to irrigation the canals should be made concrete

3. Afforestation and reforestation: All water shed and water catchment areas along with slopes should be covered with forests.

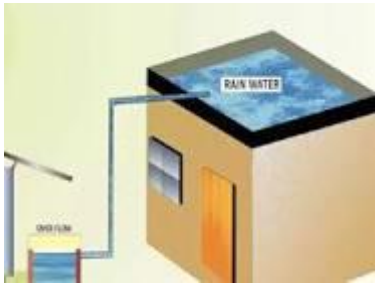
4: Rain water should be stored in dams and Reservoirs.

5 Soil should be covered by plants, so that the rain water is absorbed by the soil.

6 . Rain water Tanks: In arid area rain water should be stored in tanks. The water Tanks Provides water both for irrigation.

Rain water Harvesting: the collection Storage of Rain water for future use is called rain water harvesting, thus to catch water where it falls. The rain water harvesting techniques are:

1: Roof top rain water harvesting: here the rain water from the roof top is collected through pipes and storage in tanks. The water may contain soil (dust particles) from the roof and need filtration before use. The collected pipes from the roof can go directly into the pit to recharge or refill the ground water.



2: The water from the road side is allowed to go directly into the ground to recharge or refill the ground water.

Evaluation

Long answer question

1. **What is water cycle?**
2. **What is rain water harvesting?**
3. **How are clouds formed?**

(Short answer Question)

1. **Name various sources of water?**
2. **What is ground water?**
3. **List the three uses of water?**

chose the correct one

1 The process of water changing into vapour is called Evaporation(T/F)

2. The evaporation of water takes place only in sunlight.(T/F)

3. Excessive rains may cause floods (T/F)