



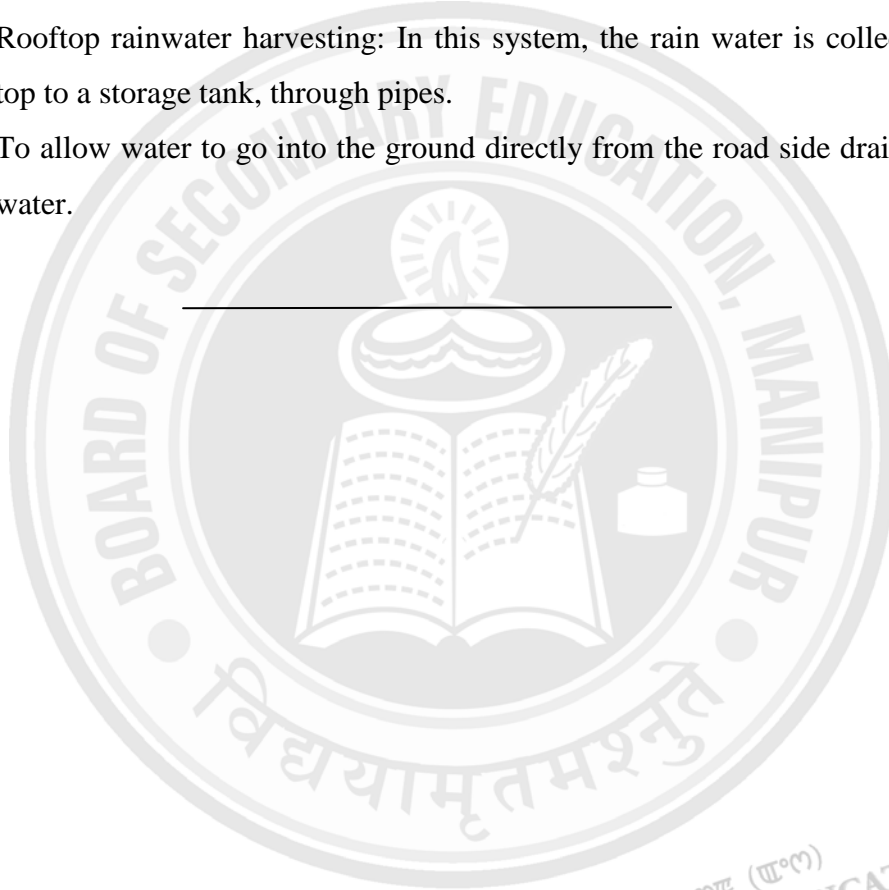
## Chapter: 14

### WATER

#### Notes

- We all use water for various activities like drinking, cooking, cleaning, washing, bathing etc and for other purposes like irrigation, cultivating crops and industrial requirements.
- About two-thirds of the earth is covered with water but only a small percent is suitable for human use.
- Water is found in oceans, seas, ponds, lakes, rivers, wells etc. However, water in the oceans and seas is not suitable for human consumption, as the water in seas and oceans is saline.
- Water can exist in three states solid, liquid and gas.
- Evaporation is the process of converting water into its vapour state.
- Transpiration: The process of loss of water from the surface of leaves of the plant is called transpiration.
- Condensation: The process of converting water vapour into its liquid form is called condensation.
- Precipitation: After reaching certain height in the atmosphere, the air becomes so cool that water vapour present in it condenses to form tiny drops of water and they remain floating in the air as cloud. This is called precipitation. This drop of water will come down to earth as rain, snow or hail.
- Ground water is the water found under the earth's surface in soil. Ground water can be drawn by a hand pump or tube wells.
- Water from the ocean and surfaces of earth goes into the air as vapour through evaporation and transpiration; these water vapour again return as rain, hail or snow and finally goes back to the oceans. This circulation of water in this manner is known as water cycle.
- We are able to make use of seas and ocean water with the help of water cycle.
- The time, duration and the amount of rainfall varies from place to place.
- Excessive rainfall may lead to rise in the level of water in rivers, lakes and ponds causing floods. Floods caused extensive damage to crops, domestic animals, property and human life.

- When it does not rain in a region for a long period of time, say for a year or more, there is a decrease in the level of water in ponds and wells. Some of them may even dry up. The ground water becomes scarce. This condition is called drought.
- In drought conditions, it is difficult to get food and fodder.
- With rising population, the demand for water is also increasing day by day. However, only a small fraction of water available on the earth is fit for use on plants, animals and human. So, it is very important to use water carefully and wisely. We should try to harvest rain water.
- Two techniques of rain water harvesting are:
  - (a) Rooftop rainwater harvesting: In this system, the rain water is collected from the roof top to a storage tank, through pipes.
  - (b) To allow water to go into the ground directly from the road side drains that collect rain water.



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