

## **CHAPTER-4**

## WATER

# **NOTES:**

#### Fresh and Saline

Water makes 71% of the earth's surface. Therefore our earth is known as a watery planet. Out of the total water available on this earth, about 97.5% is saline. The ocean water is saline but the water in rivers and many lakes is fresh. The Loktak Lake in Manipur is a fresh—water lake. Water exists in various forms i.e., water, ice and vapour.

### Hydrological Cycle

Water evaporates from the oceans and other smaller water bodies and reaches the atmosphere as water vapour. On cooling, this water vapour turns into water droplets and falls to earth as rain. The rain water runs into the sea from where it gets evaporated. This cycle is known as hydrological cycle or water cycle.

#### Salinity of Oceans

Saltiness is called salinity. Sodium Chloride or common salt is the most important salt. The average salinity of the ocean is 35 grams of salt per 1000gms of water. In areas where evaporation is high, the salinity is high. In polar areas where evaporation is low, the salinity is very low.

#### Major Water Bodies

There are four major oceans on the earth. They are Pacific Ocean, Atlantic Ocean, Indian Ocean and Arctic Ocean.

Pacific Ocean- It is the largest and deepest triangular in shape. It covers one-third of the earth's surface.

Atlantic Ocean- It is S-shaped covers one-sixth of the earth's surface. This is the busiest ocean providing trade and transport facilities between North America and Europe.

Indian Ocean- It is often called half an ocean because it does not open northwards. The deepest part is the Sunda Trench (7400m).

Arctic Ocean- It is the smallest ocean. It is almost frozen and located around the North Pole.

DISASTER: A case study in Manipur.

Disaster is a serious disruption, occurring over a relatively short time involving widespread human, material, economic or environmental losses. Owing to its geo-climatic, geological and physical features, Manipur is vulnerable to all-major natural hazards.

Disaster can be divided into two 1. Natural Disaster and 2.Man- made Disaster.

Natural Disaster includes Earthquakes, Landslides, mudflows, volcanic eruptions, floods, draughts, hurricanes, tornadoes, blizzards, tsunamis, cyclone etc.

Man-made Disaster includes forest fires, transport accidents, oil spills, nuclear explosions etc.

#### DISASTER MANAGEMENT.

Prevention, preparation, relief and recovery are four essential parts to disaster management.

