

(=WATER Pollution=)

1.

⇒ WATER Pollution:- The introduction of undesirable substances in water in such a concentration that it will have the bad effect of an abiotic and biotic factors.

⇒ Sources of water Pollution:-

① River AND LAKE WATER Pollution:-

(a) Domestic Sewage:- The domestic sewage includes household wastes which pass through municipal sewage system.

Pollution strength of sewage-polluted water is determined by its Biochemical oxygen demand (BOD). BOD is the amount of oxygen taken up by the micro-organisms present in water.

② Agriculture Source:- With the use of High yielding varieties of crops plants, increased use of fertilizers has become essential. On entering the drinking water these create several health problems.

(c) Pesticides:- These include insecticides, fungicides,



## → EFFECTS OF WATER POLLUTANTS

The main effect of water pollutants are:—

- (a) Compounds of mercury, arsenic and lead are poisonous. Organic sulphur compounds interfere with nitrification.
- (b) Fine suspended particles or colloidal substances make water turbid.
- (c) Soap, detergents and alkalies result in foam formation.

## CONTROL WATER POLLUTION

- ① Industrial effluent and domestic waste must be treated before disposal.
- ② Recycling of water through waste water treatment.
- ③ Public awareness program.



IV. Thermal Pollution:- Power plants and Nuclear power Stations are the source of thermal pollution of . In these plants water is used for Cooling and become hot. The hot water is released back which raise the temperature of the main body. This rise temperature kills fish and other aquatic animal and increases the rate of respiration in aquatic plants.

V. MINERAL OILS:- oil form oil spills and washing into river water through sewers.

## 2. Underground WATER Pollution

Underground water is no more pure and safe, particularly in cities and industrial areas. The Sources of underground water pollution are sewage, industrial effluents, sewage pits, Septic tanks, fertiliser and pesticides, garbage dumps etc.

## 3. MARINE WATER Pollution

Oceans are the ultimate sink of all natural and man-made pollutants. The main source of Oceanic pollution are discharges of oil, grease and petroleum products, detergents, sewage and garbage including radioactive wastes.