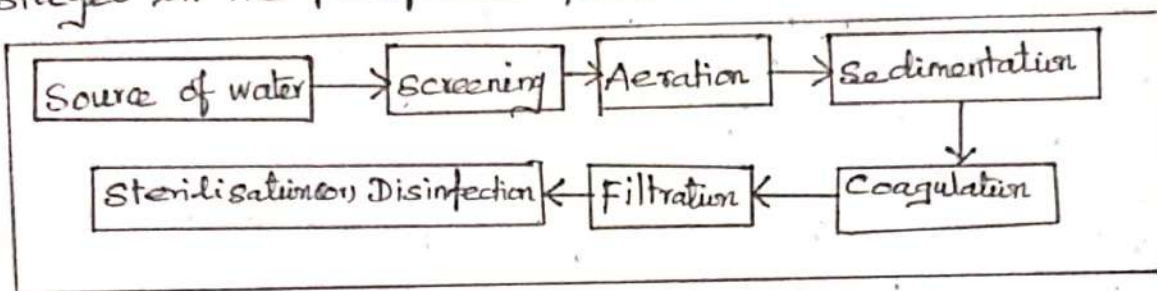


Municipal Water Treatment (or) Domestic Supply (or) Potable Water Treatment

River and lakes are the most common source of water used by municipalities. These water should be free from colloidal impurities, domestic sewage, industrial effluent and disease producing bacteria. Hence domestic supply of water involves the following stages in the purification processes.



Primary Treatment

Screening:

* It is a process of removing the floating material like leaves, wood pieces, etc... from water.

* The raw water is allowed to pass through a screen, having large number of holes, which retains the floating materials.

Aeration:

- * The process of mixing water with air is known as aeration
- * To remove gases like CO_2 , H_2S & volatile impurities causing bad taste and odour to water.
- * To remove the impurities like Fe & Mn

Sedimentation:

- * It is a process of removing suspended impurities by following the water to stand undisturbed for 2-6 hours in a big tank.
- * Most of the suspended particles settle down at the bottom, due to forces of gravity, and they are removed.
- * Sedimentation removes only 75% of the suspended impurities.

Coagulation:

Finely divided clay, silica, etc... do not settle down easily and cannot be removed by sedimentation. Such impurities are removed by coagulation method.

