

KEY WORDS

Bio-chemical Oxygen Demand (BOD) : Bio-chemical Oxygen Demand (BOD) is the amount of dissolved oxygen needed (i.e., demanded) by aerobic biological organisms to break down organic material present in a given water sample at a certain temperature over a specific time period. The BOD value is most commonly expressed in milligrams of oxygen consumed per litre of sample during 5 days of incubation at 20⁰ C.

Sewage treatment : Sewage treatment is the process of removing contaminants from wastewater, primarily from household sewage. It includes physical, chemical and biological processes to remove these contaminants and produce environmentally safe treated wastewater (or treated effluent). A by-product of sewage treatment is usually a semi-solid waste or slurry, called sewage sludge that has to undergo further treatment before being suitable for disposal or land application.

Sewage Treatment Plant (STP) : The installation where sewage is treated so that it is not harmful or dangerous to the environment is known as STP.

Wetlands and their ecological significance : Wetlands are transitional state between terrestrial and aquatic ecosystems where the water table is usually at or near the surface or the land is covered by shallow water. As per the Ramsar Convention, “wetlands are areas of marsh, fen, peat land or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters.”

Wetlands are life support systems; winter resorts for variety of birds for shelter and feeding; suitable habitats for fish and other flora and fauna; effective in flood control, waste water treatment, reducing sediment loads and recharging of aquifers; and valuable for their educational and scientific interest.

Ramsar Convention: The ‘Convention on Wetlands’, signed in Ramsar, Iran in 1971, is an intergovernmental treaty which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. Ramsar Convention is the only global environment treaty dealing with wetland ecosystems. Globally, there are presently 169 Contracting Parties to the Convention, with 2245 wetland sites, totalling 215.03 million hectares, designated as Wetlands of International Importance. India became a party to Ramsar Convention on 01.02.82 and so far 26 wetlands have been designated as Ramsar sites in the country.