CHAPTER 1
Population explosion along with rapid industrialization increasing demands for wholesome water and generating much more wastes simultaneously, that threaten to outstrip human ability to tidy up afterwards. Industrial waste water constituted broad and varied quantities of gasesous, liquid and solid pollutants. Untreated or partially treated release of wastes create serious health hazards and gradually demolishing the ecological equilibrium of the environment. Crumble of environment is assuming disastrous impact of pollution.
all through the world. Third world countries, like India, more prominent to undergo overall degradation of water, atmospheric and soil pollution. Water pollution is usually defined as an impairment of suitability of water for any of its beneficial uses, actual or potential by man caused changes in quality of water (Warren, 1971).

Indiscriminate water pollution is a phenomenon all over the world, particularly in densely populated industrial cities and India is no exception to this. In India, Central and 14 State Water Pollution Control Boards (1981) identified 1,700 large and medium water polluting industries, about half of them were in urban areas. The industries both which depend upon old and advance technology are pouring bulk quantity of waste water directly into water course or on the land. Characteristically many of these industrial effluents derived from disperse and diffuse sources contain more than one kind of pollutants but lead to similar effect on receiving water. The discharge of industrial wastes with a high organic matter in tropical waters is probably far more detrimental to aquatic life than in temperate regions.

In general wastes are categorised as biodegradable and non degradable. The degradability of a compound depend upon intrinsic characteristics of that compound and environmental properties of that ecosystem receiving the waste. Non biodegradable substances having lasting effect on the water quality, since that are difficult
to decompose. Streams and Rivers are subject to much natural pollution because they serve as drainage channels for large areas of countryside.

The major effect of waste water discharged into natural water course.

Microbial oxidation of the carbonaceous compounds in the waste increases BOD of the water and this may lead to severe degree of deoxygenation.

Excessive load of inorganic nutrients particularly nitrates and phosphates stimulate abundant growth of algae termed as eutrophication.

Increase in suspended matter in water may cause reduction in plant growth due to lessening in light penetration.

Higher temperature of the waste water cause thermal pollution may seriously affect flora and fauna of the ecosystem.

Decomposition of organic matter produce odour components, made the life of nearest dwellers painful.

Waste water also impart colour to the water body have aesthetic impact.

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