Roles played by major pollutants are:

1. Pathogens: These water pollutants include bacteria and other organisms. They enter water from animal excreta and domestic sewage. Bacteria present in human excreta (for example, *Escherichia coli* and *Streptococcus faecalis*) cause gastrointestinal diseases.

2. **Organic wastes:** These are biodegradable wastes that pollute water as a result of run off. The presence of excess organic wastes in water decreases the amount of oxygen held by water. This decrease in the amount of dissolved oxygen inhibits aquatic life.

3. **Chemical pollutants:** These are water soluble chemicals like heavy metals such as cadmium, mercury, nickel, etc. The presence of these chemicals (above the tolerance limit) can damage the kidneys, central nervous system, and liver.

Question 14.12:

Have you ever observed any water pollution in your area? What when the suggest to control it? m Notesal suggest to control it?

Answer 14.12:

of various husen ities. This includes discharges from Water pollution arises nent plants, on of from agricultural fields, storm-water drainage, etc. waster ca Pollutants from these sources enter the water bodies, thereby contaminating the water and rendering it impure.

Industries and chemical factories discharge toxic, heavy metals such as Fe, Mn, Al, etc., along with organic wastes into water. Domestic sewage and animal excreta are also responsible for pathogenic contamination of water. These pollutants make water unfit for drinking.

Therefore, all industrial and chemical discharges should be made free from toxic metals before allowing them to enter a water body. The concentration of these pollutants should be checked regularly. Compost should be preferred over chemical fertilizers in gardens and agricultural fields to avoid harmful chemicals from entering ground water.