



1. Fill in the blanks:

- (a) Cleaning of water is process of removing \_\_\_\_\_
- (b) Wastewater released by houses is called \_\_\_\_\_.
- (c) Dried \_\_\_\_\_ is used as manure.
- (d) Drains get blocked by \_\_\_\_\_ and \_\_\_\_\_.

Answer:

- (a) pollutants
- (b) sewage
- (c) sludge
- (d) chemicals, kitchen waste

2. What is sewage? Explain why it is harmful to discharge untreated sewage into rivers or seas.

Answer: Sewage is a liquid containing wastes which is disposed by households, industrial and agricultural activities in water. It is harmful to discharge untreated sewage into rivers or seas because it can pollute the whole sources of water. Sewage contains harmful substances and disease causing organisms. It is therefore dangerous to release untreated sewage in water.

3. Why should oils and fats be not released in the drain? Explain.

Answer: Oils and fats should not be released in drains because they harden the soil in the pipes and block them. Fats get clogged in holes of the soil in the drain and block it. It does not allow the water to flow.

4. Describe the steps involved in getting clarified water from wastewater.

Answer: Following steps are involved in the purification of water:

- (i) Firstly all the physical impurities like stones, plastic bags, cans etc. are to be removed. It is done by passing the water through bar screens.
- (ii) Then water is taken to grit and sand removal tank where impurities are removed by sedimentation.
- (iii) Solid impurities and faeces etc. are collected from bottom of water. These impurities collected are called sludge.
- (iv) Clarified water is cleaned of other impurities by aerator. All disease causing bacteria are removed by chlorination.

5. What is sludge? Explain how it is treated.

Answer: Sludge is the collected solid waste from the wastewater during the treatment in water treatment plant. Sludge is decomposed in a separate tank by the anaerobic bacteria. Activated sludge is used as manure.

6. Untreated human excreta is a health hazard. Explain.

Answer: Untreated human excreta can cause a lot of health related problems. It pollutes water, air and soil. The polluted water contain disease causing bacteria which can spread epidemics like cholera, meningitis etc.

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