1. Which parameter measures the amount of oxygen required by microorganisms to decompose organic matter in water?

a) COD
b) BOD
c) TOC
d) TOD

Answer: b) BOD

Explanation: Biochemical Oxygen Demand (BOD) measures the amount of dissolved oxygen consumed by microorganisms while decomposing organic matter in water. It indicates the level of organic pollution in water bodies.

2. Which parameter represents the total amount of organic carbon in water, including both dissolved and particulate forms?

a) COD
b) BOD
c) TOC
d) TOD

Answer: c) TOC

Explanation: Total Organic Carbon (TOC) measures the total concentration of carbon in organic compounds present in water, regardless of their form (dissolved or particulate).

3. Which parameter assesses the amount of oxygen required for both chemical oxidation and

microbial degradation of organic and inorganic matter in water?

a) BOD
b) TOC
c) COD
d) Th OD

Answer: c) COD

Explanation: Chemical Oxygen Demand (COD) measures the amount of oxygen required for the chemical oxidation and biological degradation of organic and inorganic matter in water. It provides an indication of the water's pollution level.

4. Which parameter represents the total oxygen demand in water, including both organic and inorganic sources?

a) BOD
b) TOC
c) COD
d) TOD

Answer: d) TOD

Explanation: Total Oxygen Demand (TOD) encompasses the total oxygen demand in water, considering both organic and inorganic sources. It provides a comprehensive assessment of water quality.

5. Which method of wastewater disposal involves treating wastewater through natural

processes in soil, allowing it to percolate and cleanse contaminants?

a) Land treatment
b) Dilution
c) Filtration
d) Incineration

Answer: a) Land treatment

Explanation: Land treatment involves the application of wastewater to soil, where natural processes such as filtration, adsorption, and microbial degradation help in cleansing contaminants.

6. What is the term used to describe the capacity of a stream to purify itself by degrading and removing pollutants through natural processes?

a) Self-purification capacity
b) Biological augmentation
c) Chemical precipitation
d) Algal bloom

Answer: a) Self-purification capacity

Explanation: Self-purification capacity refers to the ability of a stream or water body to naturally degrade and remove pollutants through physical, chemical, and biological processes, restoring its water quality.

7. Which parameter evaluates the stability of wastewater by determining its tendency to

undergo decomposition and produce foul odors?

a) Relative Stability
b) Th OD
c) BOD
d) COD

Answer: a) Relative Stability

Explanation: Relative Stability assesses the stability of wastewater by measuring its tendency to undergo decomposition, leading to the production of foul odors. It indicates the potential for biological activity and decomposition rates.

8. Which parameter estimates the pollution load of wastewater by equating it to the equivalent number of inhabitants contributing to the pollution?

a) Population Equivalent
b) BOD
c) COD
d) TOD

Answer: a) Population Equivalent

Explanation: Population Equivalent estimates the pollution load of wastewater by equating it to the equivalent number of inhabitants contributing to the pollution. It helps in assessing the impact of wastewater discharge on the environment.

9. Which method of wastewater disposal involves diluting wastewater with large volumes of

water to reduce its pollutant concentration?

a) Land treatment
b) Dilution
c) Filtration
d) Incineration

Answer: b) Dilution

Explanation: Dilution involves the mixing of wastewater with large volumes of water to reduce its pollutant concentration, thereby mitigating its environmental impact. However, excessive dilution can lead to further dispersion of pollutants.

10. Which analysis method assesses the decrease in dissolved oxygen levels downstream from a pollution source in a stream?

a) Oxygen sag analysis
b) BOD analysis
c) COD analysis
d) TOD analysis

Answer: a) Oxygen sag analysis

Explanation: Oxygen sag analysis evaluates the decrease in dissolved oxygen levels downstream from a pollution source in a stream. It helps in understanding the impact of pollutants on aquatic ecosystems and the extent of water quality degradation.