with more species showed less year-to-year variation in total biomass. He also showed that in his experiments, increased diversity contributed to higher productivity.

Q18.

Answer: A

Explanation:

In situ Bioremediation: It provides treatment at contaminated sites and avoiding excavation and transport of contaminants, which means there is no need to excavate the water or contaminated soil for remediation. This in-situ bioremediation is further subdivided into the following category.

Bioventing: It is a technique to degrade any aerobically degradable compound. In bioventing the oxygen and nutrient like nitrogen and phosphorus are injected into the contaminated site. The distribution of these nutrients and oxygen in soil is dependent on soil texture. In bioventing, enough oxygen is provided through a low airflow rate for microbes.

Biosparging: In biosparging, the air is injected below the groundwater under pressure to increase oxygen concentration. The oxygen is injected for microbial degradation of pollutants. Biosparging increases aerobic degradation and volatilisation. There must be control of pressure while injecting the oxygen at the contaminated site to prevent the transfer of volatile matter into the atmosphere.

Bioaugmentation: Microorganisms with specific metabolic capability are introduced to the contaminated site to enhance the degradation of waste.

Ex-Situ Bioremediation: The treatments are not given at the site. In ex-situ, the contaminated soil excavates and treat at another place.

Landfarming - In land forming, make a sandwich layer of excavated soil between clean soil and clay and concrete. The clean soil at the bottom and concrete layer should be the uppermost layers. After this, allow it for natural degradation. It also provides oxygen, nutrition, and moisture. The pH should also maintain near pH 7 by using lime. Land forming is useful mainly for pesticides.

Biopiling - It is a hybrid form of composting and land farming. The basic biopile system includes a treatment bed, an aeration system, an irrigation/nutrient system and a leachate collection system.

Q19.

Answer: D

Explanation:

Statement 1 is correct: When water is too warm, corals will expel the algae (zooxanthellae) living in their tissues, causing the coral to turn completely white. This is called coral bleaching. When a coral bleaches, it is not dead. Corals can survive a bleaching event, but they are under more stress and are subject to mortality.

Statement 2 is correct: Overexposure to sunlight: When temperatures are high, high solar irradiance contributes to bleaching in shallow-water corals.