

CORRIGÉ TYPE

Module: Terminology

Master 1 – Waste Valorization and Treatment

Semester: S1

Question 1

Define the term *biological treatment* as used in the text.

Answer (English)

Biological treatment refers to waste treatment processes that use microorganisms to decompose biodegradable organic materials into stable end-products, thereby reducing waste volume and environmental impact.

Question 2

According to the text, what role do microorganisms play in biological waste treatment?

Answer (English)

Microorganisms are responsible for breaking down biodegradable materials into simpler and more stable compounds through biological processes such as composting and anaerobic digestion.

Question 3

Explain the main difference between composting and anaerobic digestion mentioned in the text.

Answer (English)

The main difference is that composting is an aerobic process carried out in the presence of oxygen and produces a humus-like material, while anaerobic digestion occurs in the absence of oxygen and produces biogas and digestate.

Question 4

Identify two end-products of biological waste treatment processes and state their usefulness.

Answer (English)

Two end-products are compost, which is useful for improving soil fertility, and biogas, which can be used as a renewable source of energy.

Question 5

In your opinion, why is biological waste treatment considered an important strategy for environmental protection?

Answer (English)

Biological waste treatment is important for environmental protection because it reduces waste volume, limits pollution, recovers valuable resources, and contributes to sustainable waste management.