Texte 02

An **ecosystem** is a community made up of living organisms and nonliving components such as air, water, and mineral soil. Ecosystems may be studied either as contingent collections of plants and animals, or as structured systems and communities that are governed by general rules. The [biotic](https://en.wikipedia.org/wiki/Biotic_component) and [abiotic components](https://en.wikipedia.org/wiki/Abiotic_component) interact through [nutrient cycles](https://en.wikipedia.org/wiki/Nutrient_cycles) and energy flows. Ecosystems include a network of interactions among organisms, and between organisms and their environment. Ecosystems can be of any size but one ecosystem has a specific, limited space. Some scientists view the entire planet as one ecosystem.

Energy, water, [nitrogen](https://en.wikipedia.org/wiki/Nitrogen) and soil minerals are other essential abiotic components of an ecosystem. The energy that flows through ecosystems comes primarily from the [sun](https://en.wikipedia.org/wiki/Sun), through [photosynthesis](https://en.wikipedia.org/wiki/Photosynthesis). Photosynthesis also captures [carbon dioxide](https://en.wikipedia.org/wiki/Carbon_dioxide) from the atmosphere. [Animals](https://en.wikipedia.org/wiki/Animal) also play an important role in the movement of matter and energy through ecosystems. They influence the amount of plant and [microbial](https://en.wikipedia.org/wiki/Microbe) [biomass](https://en.wikipedia.org/wiki/Biomass_(ecology)) that lives in the system. As organic matter dies, [decomposers](https://en.wikipedia.org/wiki/Decomposer) release carbon back to the atmosphere. This process also facilitates [nutrient cycling](https://en.wikipedia.org/wiki/Nutrient_cycling) by converting nutrients stored in dead biomass back to a form that can be used again by plants and other microbes.

Ecosystems are controlled both by external and internal factors. External factors such as [climate](https://en.wikipedia.org/wiki/Climate), the [parent material](https://en.wikipedia.org/wiki/Parent_material) that forms the soil, [topography](https://en.wikipedia.org/wiki/Topography) and time have a big impact on ecosystems, but they are not themselves influenced by the ecosystem. Ecosystems are dynamic: they are subject to periodic disturbances and are in the process of recovering from past [disturbances](https://en.wikipedia.org/wiki/Disturbance_(ecology)). Internal factors are different: They not only control ecosystem processes but are also controlled by them. Internal factors are subject to [feedback loops](https://en.wikipedia.org/wiki/Feedback).

[Humans](https://en.wikipedia.org/wiki/Human) operate within ecosystems. The effects of human activities can influence internal and external factors. [Global warming](https://en.wikipedia.org/wiki/Global_warming) is an example of a cumulative impact of human activities. Ecosystems provide benefits, called "[ecosystem services](https://en.wikipedia.org/wiki/Ecosystem_services)", which people depend on for their [livelihood](https://en.wikipedia.org/wiki/Livelihood). [Ecosystem management](https://en.wikipedia.org/wiki/Ecosystem_management) is more efficient than trying to manage individual [species](https://en.wikipedia.org/wiki/Species). www.wikipedia.com

**Answer the questions below.**

1. Referring to the text, give adefinition to the ecosystem ……………………….
2. “Ecosystems can be of any size but one ecosystem has a specific, limited space”, means that the earth can be considered as a one ecosystem.

* True.
* False.

1. The Energy is a

* biotic component.
* abiotic component.
* others.

1. The soil’s texture is

* an abiotic component.
* an important factor that controls the ecosystem.

1. The time

* can influence the ecosystem.
* can be influenced by the ecosystem.
* is an important internal factor.

1. The Ecosystem is in a constant change

* True.
* False.

1. Past and recent troubles can affect the Ecosystem

* True.
* False.

1. Humans are

* Internal factors.
* External factors.
* Others.

1. Ecosystem services are

* goods provided from it.
* public helps.
* profits gained from it.

1. “a good ecosystem management” means

* We have to manage individual species.
* We cannot manage individual species without the ecosystem management.

1. give a definition to the underlined words

.....................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................

1. **Synonyms and Opposites.**
2. Find words from the text that have similar meaning to the following
3. A quantity=……………………….b. main=……………………………………
4. Find words from the text that have opposite meaning to the following
5. Disadvantages≠…………………………….b. Some≠………………………….