

Biodiversity Quiz Questions and Answers PDF

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Which index is commonly used to measure biodiversity?

- Richter Scale
- Shannon Index ✓**
- Beaufort Scale
- Fujita Scale

The most commonly used index to measure biodiversity is the Shannon-Wiener Index, which accounts for both species richness and evenness in a community.

Explain why biodiversity is important for human survival.

A diverse range of species contributes to ecosystem stability, food security, and the availability of medicines, all of which are crucial for human survival.

What does genetic diversity refer to?

- Variety of ecosystems
- Differences within species ✓**
- Number of species in an area
- Climate variation

Genetic diversity refers to the variety of genes within a particular species or population, which contributes to its ability to adapt to environmental changes and resist diseases.

Which of the following is a major threat to biodiversity?

- Sustainable agriculture
- Habitat destruction ✓**
- Renewable energy
- Ecotourism

Habitat destruction is a major threat to biodiversity as it leads to the loss of species and ecosystems. This occurs through activities such as deforestation, urbanization, and agriculture, which disrupt natural habitats.

Describe the role of community engagement in biodiversity conservation.

Community engagement plays a vital role in biodiversity conservation by involving local populations in decision-making processes, promoting sustainable practices, and ensuring that conservation strategies are aligned with the needs and values of the community.

Which species are often most affected by invasive species?

- Native species ✓**
- Endangered species ✓**
- Invasive species themselves
- Migratory species ✓**

Invasive species often most affect native species, particularly those that are already endangered or have limited habitats. These native species may struggle to compete for resources, leading to declines in their populations.

Discuss how overexploitation can lead to biodiversity loss.

Overexploitation can lead to biodiversity loss by depleting species populations, causing extinctions, and disrupting ecosystems.

Which actions can help conserve biodiversity?

- EstablishING national parks ✓**
- ImplementING sustainable fishing practices ✓**
- Promoting monoculture farming
- Enforcing anti-poaching laws ✓**

Conservational actions such as protecting natural habitats, implementing sustainable practices, and promoting biodiversity education can significantly help in preserving biodiversity.

How do biodiversity indices help in conservation efforts?

By quantifying species diversity and ecosystem health, biodiversity indices inform conservation priorities and strategies, helping to identify areas that require protection or restoration.

What is the main purpose of establishing protected areas?

- To increase tourism
- To conserve biodiversity ✓**
- To promote urban development
- To restrict human access

The main purpose of establishing protected areas is to conserve biodiversity and natural resources, ensuring the preservation of ecosystems and the species that inhabit them.

What are some effects of climate change on biodiversity?

- Habitat alteration ✓**
- Increased species extinction ✓**
- Enhanced genetic diversity
- Changes in species distribution ✓**

Climate change significantly impacts biodiversity by altering habitats, disrupting ecosystems, and leading to species extinction. These changes can result in loss of genetic diversity and affect the resilience of ecosystems.

Analyze the impact of human activities on biodiversity, providing examples.

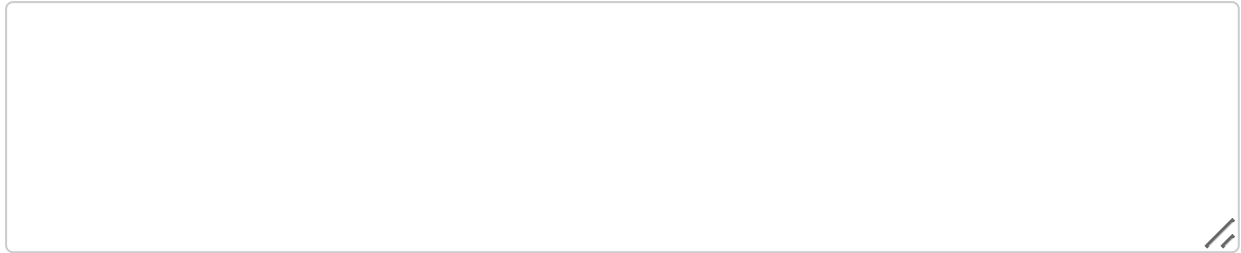
Human activities have a profound negative impact on biodiversity, exemplified by deforestation in the Amazon, which results in habitat loss and species extinction.

Which of the following are considered levels of biodiversity?

- Genetic diversity ✓**
- Species diversity ✓**
- Ecosystem diversity ✓**
- Cultural diversity

Levels of biodiversity include genetic diversity, species diversity, and ecosystem diversity, each representing different aspects of biological variation within the environment.

What strategies can be implemented to restore degraded ecosystems?



Strategies to restore degraded ecosystems include reforestation, wet restoration, soil amendment, controlling invasive species, and implementing sustainable agricultural practices.

Which type of diversity is crucial for species adaptability and survival?

- Ecosystem diversity
- Genetic diversity ✓**
- Cultural diversity
- Climate diversity

Genetic diversity is crucial for species adaptability and survival as it enables populations to adapt to changing environments and resist diseases.

What are common causes of habitat destruction?

- Deforestation ✓**
- Urbanization ✓**
- Conservation efforts
- Agriculture expansion ✓**

Habitat destruction is primarily caused by human activities such as deforestation, urbanization, agriculture, and pollution. These actions lead to the loss of biodiversity and the degradation of ecosystems.

What is the primary goal of the Convention on Biological Diversity?

- To promote deforestation
- To conserve biological diversity ✓**
- To increase urbanization
- To eliminate all invasive species

The Convention on Biological Diversity aims to promote sustainable development by ensuring the conservation of biological diversity, the sustainable use of its components, and the fair sharing of benefits arising from genetic resources.

Which of the following are ecosystem services provided by biodiversity?

- Pollination ✓**
- Water purification ✓**
- Air pollution
- Disease regulation ✓**

Ecosystem services provided by biodiversity include pollination, nutrient cycling, water purification, and climate regulation, all of which are essential for maintaining healthy ecosystems and supporting human life.

What is biodiversity?

- The variety of life on Earth ✓**
- The study of plants
- The process of evolution
- The climate of a region

Biological diversity, or biodiversity, refers to the variety of life forms on Earth, including the diversity of species, ecosystems, and genetic variations within species. It is essential for ecosystem health and resilience, providing numerous benefits to humans and the environment.

Which of the following is an example of a biodiversity hotspot?

- Sahara Desert
- Amazon Rainforest ✓**
- Arctic Tundra
- Gobi Desert

A biodiversity hotspot is a region that is both rich in endemic species and significantly threatened by human activities. Examples include the Amazon rainforest and the Himalayas.