

17 Lecture - CS410

Important Subjective

****Question 1:****

What are renewable resources? Provide an example.

****Answer:****

Renewable resources are those that can be naturally replenished over time, either through natural processes or human interventions. An example is solar energy, which is harnessed from the sun's rays using solar panels.

****Question 2:****

Explain the concept of sustainable development in relation to natural resources.

****Answer:****

Sustainable development refers to utilizing resources in a way that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. It involves responsible management and conservation of resources to ensure their availability in the long term.

****Question 3:****

What is the difference between non-renewable and renewable resources? Provide examples of each.

****Answer:****

Non-renewable resources, such as fossil fuels (coal, oil, natural gas), are finite and cannot be replenished on human timescales. Renewable resources, like wind, solar, and hydroelectric energy, are naturally replenished and can be used indefinitely with proper management.

****Question 4:****

How do natural resources contribute to economic development?

****Answer:****

Natural resources serve as inputs for various economic activities, such as agriculture, manufacturing, and energy production. They generate revenue, create jobs, and drive economic growth, making them crucial for development.

****Question 5:****

What is the tragedy of the commons? Provide an example and explain its implications.

****Answer:****

The tragedy of the commons refers to the overexploitation or degradation of a shared resource when individuals act in their own self-interest. An example is overfishing in oceans, leading to depletion of fish stocks and ecological imbalance, illustrating the need for sustainable resource management.

****Question 6:****

Discuss the concept of water scarcity and its impacts on societies and ecosystems.

****Answer:****

Water scarcity occurs when the demand for freshwater exceeds its availability. This can lead to reduced agricultural productivity, compromised ecosystems, and conflicts over water resources among communities or nations.

****Question 7:****

How can technology contribute to the sustainable use of resources?

****Answer:****

Technology can enhance resource efficiency, enable renewable energy generation, improve waste management, and develop more sustainable agricultural practices, thus reducing resource depletion and environmental impacts.

****Question 8:****

Explain the role of biodiversity in maintaining ecosystem services and resource availability.

****Answer:****

Biodiversity ensures ecosystem resilience, contributing to services like pollination, water purification, and soil fertility. It enhances ecosystem stability and supports the availability of various resources, including food and medicine.

****Question 9:****

What are the challenges associated with managing and conserving natural resources?

****Answer:****

Challenges include overexploitation, pollution, habitat destruction, climate change, and conflicting interests among stakeholders. Effective resource management requires sustainable practices, cooperation, and policies.

****Question 10:****

How can individuals contribute to the sustainable use of resources in their daily lives?

****Answer:****

Individuals can conserve resources by reducing energy and water consumption, practicing recycling, supporting sustainable products, and raising awareness about responsible resource use through education and advocacy.