

Name: _____ Date: _____

Sturdy Systems: Sustainability for Superior Seniors

Evaluate the complex interplay between industrial ecology, life cycle assessments, and triple bottom line accounting in modern resource management.

1. Which framework evaluates a corporation's performance by integrating social and environmental impact alongside traditional financial profits?

- A. Linear Economy Model
- B. The Triple Bottom Line
- C. The Malthusian Trap
- D. Neoclassical Synthesis

2. The concept of _____ promotes a closed-loop system where waste from one industrial process becomes the feedstock for another.

- A. Industrial Ecology
- B. Carbon Sequestration
- C. Biophilic Design
- D. Ecosystem Services

3. True or False: Life Cycle Assessment (LCA) 'Cradle-to-Grave' analysis only accounts for the energy consumption during the manufacturing phase of a product's life.

- A. True
- B. False

4. What is the primary objective of implementing a 'Circular Economy' in urban development?

- A. Maximizing the throughput of consumer goods
- B. Increasing the speed of planned obsolescence
- C. Decoupling economic growth from finite resource consumption
- D. Expanding landfill capacity for non-recyclable materials

5. The paradox where technological efficiency gains lead to an overall increase in resource consumption is known as _____.

- A. The Tragedy of the Commons
- B. The Jevons Paradox
- C. The Precautionary Principle
- D. The Gaia Hypothesis

6. When applying the 'Precautionary Principle' to new chemical manufacturing, what is required of the manufacturer?

- A. Proof of significant economic profit before safety testing
- B. Waiting for scientific certainty of harm before stopping production

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- C. Burden of proof to show the product is not harmful before widespread use
- D. Relying on government subsidies to offset environmental damages

7. True or False: Intergenerational equity focuses specifically on ensuring that resources are distributed fairly among different socioeconomic groups currently living today.

- A. True
- B. False

8. Which land-use strategy integrates trees and shrubs into crop and animal farming systems to create environmental and economic benefits?

- A. Monoculture
- B. Agroforestry
- C. Hydroponics
- D. Xeriscaping

9. In the context of the UN Sustainable Development Goals, 'Decent Work and Economic Growth' is Goal Number _____.

- A. Goal 2
- B. Goal 8
- C. Goal 13
- D. Goal 15

10. True or False: Biomimicry involves studying nature's best ideas and then imitating these designs and processes to solve human problems sustainably.

- A. True
- B. False