

Ecological Economics and Resource Valuation

Economics · Answer Key · 10 Questions

1. Which economic concept describes the decline in value of a natural resource, such as a fishery, due to uncoordinated harvesting by multiple independent actors?

- A) The Gini Coefficient
- B) The Tragedy of the Commons**
- C) The Paradox of Thrift
- D) The Jevons Paradox

2. What is the formal economic term for the benefit provided by ecosystem services, such as bees pollinating agricultural crops, which is not captured in market prices?

- A) Negative Externality
- B) Capital Appreciation
- C) Positive Externality**
- D) Opportunity Cost

3. In environmental economics, what is the 'Hotelling Rule' intended to determine for non-renewable natural resources?

- A) The optimal rate of extraction over time**
- B) The maximum sustainable yield
- C) The cost of waste disposal
- D) The tax rate on carbon emissions

4. Which international agreement established the first market-based mechanism for trading carbon emission permits to address climate change?

- A) The Montreal Protocol
- B) The Kyoto Protocol**
- C) The Ramsar Convention
- D) The CITES Treaty

5. What term refers to the economic value assigned to the preservation of a species for the sake of future generations, regardless of direct use?

- A) Option Value
- B) Bequest Value**
- C) Existence Value
- D) Replacement Cost

6. The 'Jevons Paradox' observes that technological improvements in energy efficiency often lead to what outcome?

- A) A decrease in total resource consumption
- B) An increase in total resource consumption**
- C) No change in resource consumption
- D) An immediate market crash

7. In natural resource management, what does 'Maximum Sustainable Yield' (MSY) represent?

- A) The highest level of extraction that does not reduce the population's ability to renew**
- B) The total extinction point of a species
- C) The market price of a resource at peak scarcity
- D) The maximum profit from a protected area

8. Which economic measure is often criticized for failing to account for the depreciation of natural capital, such as the loss of topsoil or deforestation?

- A) Gross Domestic Product**
- B) Consumer Price Index
- C) Purchasing Power Parity
- D) The Big Mac Index

9. What does the 'Kuznets Curve' in environmental economics suggest about the relationship between economic growth and environmental degradation?

- A) Degradation increases indefinitely with growth
- B) Degradation decreases immediately as growth starts
- C) Degradation initially increases then decreases as an economy matures**
- D) There is no relationship between growth and degradation

10. Which type of economic policy instrument involves the government setting a limit on total pollution and allowing firms to trade the right to pollute?

- A) Command and Control
- B) Cap and Trade**
- C) Subsidy Allocation
- D) Direct Price Ceiling