Chapter 02
The Economy and the Environment

Multiple Choice Questions

1. The trade-off that exists between harvesting as much as possible of a renewable resource today versus waiting for the future exemplifies the_____of many natural resource management issues.
A. sustainability
B. intertemporal dimension
C. short-run impact
D. efficiency

Difficulty: Easy

2. When a new production technology is invented that results in production of smaller amounts of residuals per unit of output produced, this is called reducing the_____.
A. damages from production
B. intensity of pollution
C. residuals from production
D. residuals intensity of production

Difficulty: Easy

3. The residuals from production can be reduced by_____. A. shifting the composition of output towards low-residual items
B. preventing pollution by reducing the energy inputs required to produce each unit of output
C. reducing the residuals intensity of production
D. all of the choices are correct

Difficulty: Moderate

4. An accidental oil spill is an example of a(n)_____emission while municipal treated waste is an example of a(n)_____emission.
A. continuous; episodic
B. global; local
C. point source; nonpoint source
D. episodic; continuous

Difficulty: Easy

5. The study of nature in its role as a provider of raw materials is called_____.
A. natural resource economics
B. natural economics
C. environmental economics
D. all of the choices are correct

Difficulty: Easy

6. _____economics is an example of a subdivision of natural resource economics.
A. Agricultural
B. Energy
C. Mineral
D. all of the choices are correct

Difficulty: Moderate

7. Nonrenewable resources are those for which there is no process of_____.
A. substitution
B. replenishment
C. sustainability
D. assimilation

Difficulty: Easy

8. Both renewable and nonrenewable resources have_____trade-offs.
A. objectivity
B. intertemporal
C. relevance D.
stock

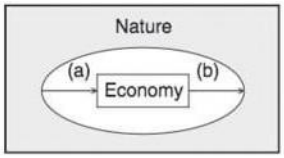
Difficulty: Easy

9. One of the theoretical ideas of natural resource economics is that the earth's _____ is a natural resource under threat of depletion.
A. sun
B. population
C. sustainability
D. assimilative capacity

Difficulty: Easy

10. Although the dividing line between the two is blurring generally speaking,_____is concerned with resource extraction and_____is concerned with environmental degradation.
A. production economics; consumption economics
B. environmental economics, natural resource economics
C. natural resource economics; environmental economics
D. consumption economics; production economics

Difficulty: Easy



11. In the figure above, (a) represents_____.
A. the extraction of resources from nature
B. natural resource economics
C. the consumption of goods and services
D. the role of government

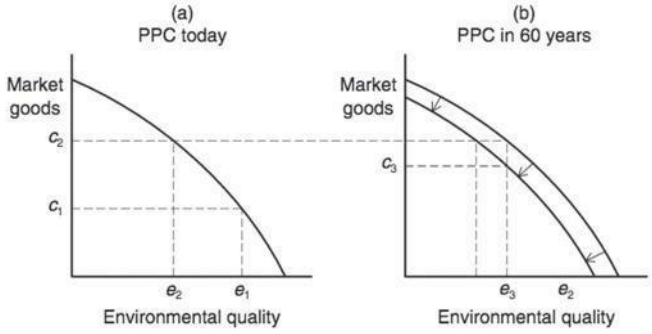
Difficulty: Easy

12. In the long run, residuals discharged by producers plus residuals discharged by consumers must be equal to the materials and energy extracted from the natural environment. The fundamental balance equation states that this is also equal to the_____.
A. output of goods and services minus consumer recyclables
B. output of goods and services plus production residuals minus recyclables
C. output of residuals minus consumer recyclables plus producer surplus
D. benefits plus costs

Difficulty: Moderate

13. According to the fundamental balance equation, how can M, raw materials and energy extracted from the environment, be reduced?
A. Reduce G, the amount of goods produced
B. Reduce R_p, residuals from producers
C. Reduce (R^r_p+ R^r), recyclables from both consumers and producers **D.** All of the above are a method of reducing M

Difficulty: Moderate



14. In the figure above, the curve in (a) represents_____.
A. a production possibilities curve
B. a trade-off between the production of market goods and environmental quality
C. combinations of outcomes given a fixed endowment and technology
D. all of the above

Difficulty: Easy

15. In the figure above, (b) represents
A. intertemporal linkage between production decisions today and production ability tomorrow
B. a change in technology allowing for increased production
C. the inevitable consequences of air pollution
D. the role of government

Difficulty: Easy

16. _____refers to the quantity of pollutants in the environment
A. Source
B. Effluent
C. $(R^r_p + R^r_c)$
D. Ambient quality

Difficulty: Easy

17. _____is the common term for negative impacts produced by environmental pollution on people in the form of health effects and visual degradation as well as negative impacts on the ecosystem.
A. Disruption
B. Damages
C. Effluent D.
Emissions

Difficulty: Easy

18. Although often used interchangeably,_____broadly describes residuals that are placed in the environment and_____is typically used to describe residuals placed in water. A. pollutant ; effluent
B. effluent; emissions
C. emissions; effluent
D. pollutant; emission

Difficulty: Easy

19. _____is an environmental media.
A. Water
B. Land
C. Air
D. all of the above

Difficulty: Easy

20. For a given amount of residuals, when we reduce the amount that is emitted into one environmental media,_____.
A. the ambient quality of all surrounding media increases.
B. the amounts going into other media must increase.
C. production of goods and services must decrease.
D. it is impossible to specifically state what happens to other environmental media.

Difficulty: Moderate

21. When emissions are mixed and not flowing from a single source, the problem of enforcement to maintain ambient quality is_____.
A. impossible
B. straightforward
C. much more complex
D. all of the above

Difficulty: Easy

22. A living resource can be non-renewable.
A. false; all living resources are renewable
B. true; if the living resource is rare
C. true; if the rate of harvest exceed the growth rate of the resource's stock
D. false; only non-living resources are non-renewable

Difficulty: Easy

23. Continued extraction of a non-renewable resource can be sustainable over time if managed properly.
A. false; all non-renewable resources have a 5 year limit for extraction
B. true; by definition non-renewable resources will never deplete
C. true; with continued increases in technology non-renewable resources can last indefinitely
D. false; non-renewable resources will eventually deplete

Difficulty: Easy

24. A classic example of a non-cumulative pollutant is
A. loud music
B. acid rain
C. methane gas
D. soylent green

Difficulty: Easy

25. Estimating damages from cumulative pollutants is complicated because

A. there is a lack of cause and effect associated with the current emissions and total damages.
B. the intertemporal dimension makes it more difficult to get people to focus on the damages associated with today's emissions.
C. people typically discount the effects of future damage.
D. all of the above

Difficulty: Moderate

26. Point-source pollutants

A. are known for causing greater environmental damages.
B. typically have international damage components
C. have a well defined point of discharge.
D. are typically more difficult to trace to the source of pollution.

Difficulty: Easy

27. It is more difficult to develop and administer control policies for_____than it is for _____.

A. local pollutants; regional and global pollutants
B. air pollution; water pollution
C. point source pollutants, non-point source pollutants
D. non-point source pollutants; point source pollutants

Difficulty: Easy

28. An example of environmental damage that is not related to emissions is_____.

A. strip mining
B. logging
C. the conversion of land to housing
D. all of the above

Difficulty: Easy

29. The policy challenge for continuous emissions is to manage_____.
A. the probability of accidental discharges
B. people who frequently cause
accidents **C**. the rate of the discharges
D. the likelihood that continuous discharges are damaging

Difficulty: Easy

30. The policy challenge for episodic emissions is to manage_____.
A. the probability of accidental discharges
B. the likelihood that continuous discharges are damaging
C. people who frequently cause accidents
D. air pollution in developing nations

Difficulty: Easy