

CHAPTER 3. NATURAL RESOURCES AND THE ENVIRONMENT

PART A. NATURAL RESOURCES

_____ 1. The production of products consumes irreplaceable natural resources.

_____ 2. Since the beginning of the Industrial Revolution, man has actually enlarged the supply of useable, accessible natural resources right along with the increase in the supply of products.

_____ 3. Man creates the goods and wealth character of natural resources in identifying the useful properties of what nature has provided and in gaining the power to direct it to the satisfaction of his needs or wants without having to expend an inordinate amount of labor to do so.

_____ 4. From the upper limits of the atmosphere, to its center, 4,000 miles down, the earth is a solid ball of natural resources, in that it consists of nothing but solidly packed chemical elements.

_____ 5. The supply of useable, accessible natural resources can be progressively increased as man gains greater knowledge of and physical power over nature.

_____ 6. The energy shortage
a. proved the existence of a growing scarcity of natural resources in nature
b. the destructive effects of price controls and restrictions on supply

_____ 7. The law of diminishing returns states that under a given state of technological knowledge, the use of successively larger quantities of any factor of production or combination of factors of production in conjunction with a fixed quantity of any other necessary factor or factors of production eventually results in less than proportionate increases in output.

_____ 8. An important phenomenon analogous to the law of diminishing returns is the resort to progressively less productive land and mineral deposits as sources of additional supply.

_____ 9. The existence of continuous economic progress and the law of diminishing returns
a. are mutually contradictory
b. can be logically reconciled by virtue of technological progress and improvements in equipment progressively raising the points from which returns diminish

_____ 10. The law of diminishing returns
a. confirms
b. contradicts

the fact that the fundamentally limiting factor in production is always human labor.

_____ 11. Allowing fertile land to lie idle is
a. economically wasteful because an opportunity to produce is lost

b. economically sound if the use of the land would serve to make labor unavailable for the production of other, more important products or for use in conjunction with more productive land.

_____ 12. Government irrigation and flood control projects have often been motivated by the conviction that allowing fertile land to lie idle is economically wasteful because an opportunity to produce is lost.

_____ 13. The fact that, as a rule, only one-third of the oil physically present in a petroleum deposit is ever extracted, is evidence of economic waste.

_____ 14. The law of diminishing returns implies that economic progress is necessary to maintain the standard of living, not just to raise it.

_____ 15. Atomic waste disposal and the strip mining of coal should be prohibited because they destroy the future usefulness of the land sites involved, and every piece of land is of great value.

_____ 16. In order to avoid waste, we need to
a. recycle materials, such as gold and silver, whose value is great enough to cover the cost of doing so by an amount sufficient to provide a competitive rate of profit
b. recycle all materials capable of being recycled, such as tin cans and paper products, irrespective of the market value of the materials
c. both (a) and (b)

_____ 17. Recycling raw materials when fresh supplies are available at a low cost is wasteful of human labor.

_____ 18. American retailers are inherently wasteful in giving shoppers fresh paper bags with every purchase. In the name of economy, they should adopt the practice common in many parts of Europe of requiring shoppers to bring their own bags.

_____ 19. Driving at fifty-five miles an hour consumes less gasoline for the same distance travelled than does driving at sixty-five miles an hour. Thus, it is only economic common sense to drive at fifty-five miles an hour.

_____ 20. "Conservation by the market" occurs when the price of a material is high enough to slow its rate of consumption to a point commensurate with the availability of a long-term supply of the item.

_____ 21. In the early years of the twentieth century, logging companies often cut down forests without bothering to replant. This proves the destructive nature of the profit motive.

PART B. THE ECOLOGICAL ASSAULT ON ECONOMIC PROGRESS

22. In the last two centuries, loyalty to the values of science, technology, and capitalism has enabled man in the industrialized countries of the Western world to put an end to famines and plagues, and to eliminate the once dread diseases of cholera, diphtheria, smallpox, and typhoid fever, among others.

23. Industrial civilization has radically increased human life expectancy: from about thirty years in the mid-eighteenth century to about seventy-five years today. Since the beginning of the twentieth century, in the United States, it has increased life expectancy from about forty-six years to seventy-five years.

24. Industrial civilization has

- a. greatly increased both life expectancy and population figures over the last two hundred years
- b. greatly improved the quality of drinking water
- c. improved outdoor air quality in large towns and cities in comparison with the past, by substituting automobile traffic for horse traffic
- d. improved indoor air quality by eliminating the need for indoor fires and providing such things as central heating, air conditioning, and modern ventilation systems
- e. all of the above

25. The use of man-made power, such as steam, electricity, internal combustion, and atomic power enable man to accomplish vastly more with his given, relatively modest muscular capacity and to do so with far less strain and fatigue. In these ways, it is has greatly added to human life expectancy, to population figures, and to the quality of human life.

26. The concepts of economic efficiency and "energy efficiency" frequently work out to be opposites, in that economic efficiency centers on the saving of labor, which typically requires the expenditure of greater amounts of man-made power per unit of labor. Adhering to "energy efficiency" in contrast would prevent the use of that power and thus the greater efficiency of labor.

27. A buffalo hide and buffalo meat available merely for the price of a bullet and the labor that followed, often made economic sense, in that they were very cheap. Buffalo hides and buffalo meat available only at the much higher price necessary to cover the costs of raising buffalo on ranches apparently did not make economic sense in the light of the value scales of the consumers of meat and hides. The result was that buffalo became headed for extinction.

28. The preservation of large numbers of buffalo in the open range, as they had existed before the coming of the settlers, would have prevented the use of that land for the raising of cattle, the operation of farms, and the establishment of towns and cities.

29. The environmental movement recognizes the vital importance of man-made power to the productivity of labor and the standard of living, and therefore supports the construction of new power plants to the extent they are necessary to achieve these ends.

30. The environmental movement recognizes and applauds the numerous achievements of science and technology in promoting human life and well being.

31. The environmental movement generally holds that

- a. the value of nature derives from the value of human life and well-being, and thus that nature is valuable only insofar as it serves human life and well-being
- b. the value of nature is intrinsic, i.e., is valuable in and of itself, totally apart from any connection to human life and well-being

32. According to the doctrine of intrinsic value, hillsides, jungles, swamps, and rock formations, as well as each and every species of plant or animal life, possess intrinsic value and comprise parts of man's environment.

33. According to the environmental movement, harm to man's environment means damage to or destruction of features of man's environment

- a. of value to man
- b. possessing intrinsic value

34. Which of the following represents the destruction of alleged intrinsic values

- a. clearing jungles
- b. draining swamps
- c. cutting away hillsides
- d. damming rivers
- e. walking on the grass
- f. leaving footprints in the sand
- g. all of the above

35. The doctrine of intrinsic value implies a view of human beings as

- a. inherently destructive insofar as their life and enjoyment require changes in the existing state of nature and thus the destruction of the alleged intrinsic values constituted by existing states of nature
- b. the more destructive, the more they are in a position to act on a greater scale by employing more advanced science, technology, and capital equipment
- c. both (a) and (b)
- d. neither (a) nor (b)

36. The exact same set of facts, such as the clearing of a piece of land and its conversion into a

housing tract can be described both as an improvement in the environment and as destruction of the environment, depending on whether the standard of value adopted is that of human life and well-being or that of intrinsic value.

_____ 37. From the perspective of the doctrine of intrinsic value, the lives of spotted owls, snail darters, and gnat catchers are as valuable as the lives and well-being of human beings, and so is the existence of hill-sides, deserts, and jungles, because all allegedly possess intrinsic value.

_____ 38. If human life and well-being are the standard of value, then production and economic activity necessarily tend to improve the environment. This is because, from a physical-chemical point of view, what they constitute is change in the locations and combinations of the same total quantities of the various chemical elements, all of which taken together constitute man's environment, in a way that improves the relationship of the chemical elements to human life and well-being.

_____ 39. According to the author,

- the environmental movement holds individuals responsible for the actions of a collective, as for example, in the causation of global warming
- in cases in which causal responsibility for a harmful outcome cannot be assigned to any given individual but only to a the actions of a collective, the harmful outcome should be regarded as equivalent to one caused by an act of nature
- both (a) and (b)
- neither (a) nor (b)

_____ 40. If the environmental movement had existed in the early 19th century, the settlement of the Midwest would have been greatly accelerated.

_____ 41. According to the author, provided they are not allowed to use force, the voluntary, self-interested actions of individuals always tends to accomplish incomparably more good than harm. Such harm as occurs, which is not intended and for which no individual is actually responsible, should be regarded as an act of nature, which individuals should then be left free to deal with.

_____ 42. The doctrine of "externalities"

- refers to the fact that the actions individuals sometimes impose costs or bestow benefits on others
- is frequently used to argue that individuals should pay for all costs their actions impose on others and be paid for all benefits their actions bestow on others
- both (a) and (b)
- neither (a) nor (b)

_____ 43. The externalities doctrine implies such things as that

- successful competitors should be made to compensate their unsuccessful rivals

- passersby who enjoy the appearance of an attractive home, should be made to pay part of the costs of creating and maintaining the appearance of that home
- men who enjoy the appearance of attractive, well-groomed women, should be made to contribute to the costs the women incur on account of their wardrobes and cosmetics, and, if applicable, plastic surgery
- all of the above
- none of the above

_____ 44. According to the author, the appropriate principle in cases of externalities is

- not that individuals are to be able to demand payment for all the benefits they give to others, but only those for which the others have voluntarily contracted to receive and pay for
- not that individuals are to be held accountable for all the costs they impose on others, but only those resulting from their actions that cause demonstrable physical harm to the persons or property of specific other individuals
- both (a) and (b)
- neither (a) nor (b)

_____ 45. In the view of the author, the failure of socialism has contributed to the environmental movement's distrust of science, technology, and the power of human reason insofar as the intellectual mainstream believes that the failure of socialism is the failure of human reason.

_____ 46. Socialism held that if people were left to pursue their own material self-interests, the results would be such undesirable phenomena as the exploitation of labor, depressions, and monopoly, and that government control of the economic system was necessary to prevent these evils. Environmentalism is essentially similar, because it holds that if people are left to pursue their own material self-interests, the results will be such undesirable phenomena as global warming, destruction of the ozone layer, and acid rain, and that government control of the economic system is necessary to prevent these evils.

_____ 47. The ecology movement is an attempt to resurrect the essential doctrines of socialism concerning the consequences of the uncontrolled, self-interested actions of individuals.

_____ 48. According to the author, the devastating failure of socialism, coupled with the belief that its advocacy rests on a foundation of reason, has led the left to turn from the advocacy of "social engineering" to hostility to engineering of any kind.

_____ 49. According to the author, the basic political-economic conditions required for man to deal successfully with changes in economic conditions, including global warming (if in fact it were to come) and the inevitable climate changes, such as the next

ice age, that sooner or later will be produced by nature itself, are those of

- a. free-market capitalism
- b. intelligent government planning
- c. both (a) and (b)

_____ 50. The concepts of economic progress and economic growth are essentially identical.

_____ 51. The concept of progress

- a. implies movement toward a desired goal, in the case of economic progress, toward greater prosperity, health, and longevity
- b. applies across successive generations
- c. does not imply any fixed limit
- d. all of the above

_____ 52. The concept of growth

- a. fundamentally pertains to an individual living organism, such as one person, one tree, one tumor
- b. implies inherent limits
- c. is valuationally neutral in that it applies both to positives and negatives
- d. all of the above

The following is a fourteen-part question.

_____ 53. According to the author, environmentalism is the product of a growing loss of confidence in reason and is the leading manifestation of a rising tide of irrationalism that is engulfing our culture.

_____ 54. According to the author, contemporary education promotes irrationalism and the influence of the ecology movement in

- a. failing to provide essential foundations of knowledge starting in the earliest grades
- b. leading students to regard what they learn as a series of arbitrary assertions
- c. laying the foundation for irrational skepticism on the part of students
- d. conducting a systematic attack on reason and its role in human life
- e. all of the above

_____ 55. According to the author, an essential cause of the inability of contemporary education to succeed in the task of educating is its denigration of the memorization of facts and principles, which runs directly counter to the essential nature of education as a process of the student's internalizing knowledge.

_____ 56. According to the author, a major foundation of the ecologists' irrationalism is the conviction that whatever we may think we know today about anything, can turn out to be wrong tomorrow, because of the discovery of something new which totally invalidates all of our presumed knowledge about it. It is on this premise that the ecologists believe and project that every technological advance is a potential thalidomide.

_____ 57. According to the author, contemporary education promotes irrationalism and thus the influence of the ecology movement in propounding

- a. the doctrine of collectivism, in its various forms of Marxism, racism, nationalism, and feminism
- b. the doctrines of cultural relativism, determinism, logical positivism, existentialism, linguistic analysis, behaviorism, Freudianism, and Keynesianism
- c. both (a) and (b)

_____ 58. According to the author, all the varieties of collectivism

- a. deny the free will and rationality of the individual and attribute his ideas, character, and vital interests to his membership in a collective: namely, his membership in an economic class, racial group, nationality, or sex, as the case may be, depending on the specific variety of collectivism
- b. in viewing ideas as determined by group membership, deny the very possibility of knowledge
- c. create conflict between members of different groups: for example, between businessmen and wage earners, blacks and whites, English speakers and French speakers, men and women
- d. all of the above

_____ 59. According to the author,

- a. determinism, the doctrine that man's actions are controlled by forces beyond his power of choice, denies the very possibility of rational thought being capable of guiding human life and achieving human happiness
- b. existentialism, the philosophy that man is trapped in a "human condition" of inescapable misery, teaches the same conclusion as determinism
- c. both (a) and (b)

_____ 60. According to the author, cultural relativism

- a. denies the objective value of modern civilization and thus undercuts students' valuation not only of it, but also of the technology and science necessary to build such a civilization, and the valuation of human reason itself, which is the ultimate foundation of modern civilization
- b. undercuts people's willingness to work hard to achieve personal values in the context of modern civilization
- c. blinds people to the objective value of such marvelous technological advances as automobiles and electric light, and thus further prepares the ground for the sacrifice of modern civilization to such nebulous and, by comparison, utterly trivial values as "unpolluted air"
- d. all of the above

_____ 61. According to the author,

- a. logical positivism denies the possibility of knowing anything with certainty about the real world
- b. linguistic analysis regards the search for truth as a trivial word game
- c. behaviorism denies the existence of consciousness
- d. Freudianism regards the conscious mind (the "Ego") as surrounded by the warring forces of the unconscious mind in the form of the "Id" and the "Superego," and thus as being incapable of exercising substantial influence on the individual's behavior
- e. all of the above

- _____ 62. According to the author, Keynesianism
- a. regards wars, earthquakes, and pyramid building as sources of prosperity
 - b. looks to peacetime government budget deficits and inflation of the money supply as a good substitute for the allegedly beneficial phenomena described in (a)
 - c. results in the erosion of the buying power of money and the undermining of credit, saving and capital accumulation, and the general standard of living
 - d. all of the above

_____ 63. According to the author, along with destroying confidence in science and technology, the rising tide of irrationalism and growing loss of confidence in reason means loss of the philosophical basis of the valuation of man, inasmuch as reason is

man's fundamental distinguishing attribute and a culture's view of reason determines its view of man.

- _____ 64. According to the author,
- a. confidence in the reliability of reason, and thus the philosophical status of man, have declined so far that now virtually no basis is any longer recognized for a radical differentiation between man and animals
 - b. with man's distinctive attribute thus held to be unworthy of special valuation, man himself necessarily appears unworthy of special valuation
 - c. as the environmentalists see matters, they are advocates of a universal brotherhood of all species and all elements of the "environment"—in their eyes, there are, in effect, blacks, caucasians, orientals, giraffes, snail darters, flies, spotted owls, and mountainsides, all with equal rights in the "environmental family"
 - d. all of the above

_____ 65. According to the author, the animal rights movement is a product of irrationalism and the cultural devaluation of man.

_____ 66. According to the author, in the view of environmentalists and the advocates of animal rights, the assertion of man's rights above those of any other species or inanimate object is a form of racism and Nazism—of "speciesism"—in which man seeks to treat other parts of the brotherhood of nature as concentration camp inmates.

Answers to Questions 1-66 on Chapter 3

Question #	Correct Answer	Question #	Correct Answer	Question #	Correct Answer
1	F	23	T	45	T
2	T	24	e	46	T
3	T	25	T	47	T
4	T	26	T	48	T
5	T	27	T	49	a
6	b	28	T	50	F
7	T	29	F	51	d
8	T	30	F	52	d
9	b	31	b	53	T
10	a	32	T	54	e
11	b	33	b	55	T
12	T	34	g	56	T
13	F	35	c	57	c
14	T	36	T	58	d
15	F	37	T	59	c
16	a	38	T	60	d
17	T	39	c	61	e
18	F	40	F	62	d
19	F	41	T	63	T
20	T	42	c	64	d
21	F	43	d	65	T
22	T	44	c	66	T