# Short-Answer Q\&A Supplement to Capitalism: A Treatise on Economics by George Reisman 



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# Short-Answer Q\&A Supplement to Capitalism: A Treatise on Ec onomics by George Reisman 

The J efferson School of Philosophy, Economics, and Psychology, Laguna Hills, Califomia

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## INTRODUCTION

1. The schools of economic thought that have been the main supporters of capitalism are
a. Marxism and Keynesianism
b. the British classical school and the Austrian school
c. both (a) and (b)
d. neither (a) nor (b)
2. The Manchester, Currency, and Chicago schools have been among the principal allies of the classical and Austrian schools.
3. The most important members of the classical school were Adam Smith, David Ricardo, and John Stuart Mill.
4. The most important members of the Austrian school were Carl Menger, Eugen von Böhm_Bawerk, Ludwig von Mises, and F.A. Hayek.
5. Among the leading critic(s) of capitalism or various major aspects of it have been
a. Karl Marx
b. John Maynard Keynes
c. Joan Robinson
d. Edward Chamberlin
e. all of the above
6. Malthus and Sismondi were important members of the classical school.
7. J. B. Say, James Mill, J. R. McCulloch, and Nassau W. Senior were important members of the classical school.
8. The schools of economic thought that preceded the classical school included the Scholastics, the Mercantilists, and the Physiocrats.
9. The Mercantilists were intellectually $\overline{\text { closer to }}$ the classical school than were the Physiocrats.
10. Contemporary Keynesianism most closely resembles
a. mercantilism
b. physiocracy
c. classical economics
d. the Austrian school
11. The most important members of the Austrian school are
a. Alfred Marshall
b. Milton Friedman
c. Leon Walras
d. all of the above
e. none of the above
12. The leading difference between classical economics and Austrian economics pertains to the theory of value and price and centers on the theory of diminishing marginal utility.
13. Classical economics was abandoned a. in part because it came to be viewed as implying the leading ideas of Marxism and the case for socialism
b. in part because it's espousal of the wages-fund doctrine offered fundamental opposition to essential aspects of the case for socialism
c. both (a) and (b)
d. neither (a) nor (b)
14. The abandonment of classical economics in the nineteenth century contributed to the success of anticapitalist ideas in the twentieth century
a. insofar as the abandonment of the classical economists' ideas on the role of saving prepared the ground for the acceptance of Keynesianism in the 1930s
b. insofar as the abandonment of the classical economists' ideas on the role of cost of production as a determinant of prices paved the way for the acceptance of the doctrines of pure-and-perfect competition and oligopoly and monopolistic competition in the 1930s
c. both (a) and (b)
d. neither (a) nor (b)
15. According to the instructor, classical economics makes possible a far more fundamental and thoroughgoing critique of the Marxian exploitation theory than that provided by Böhm-Bawerk and the Austrian school, despite the prevailing mistaken belief that it implies the exploitation theory.
16. The schools of economic thought which have been opposed to capitalism or essential features of it include the German historical school and the American institutionalist school, both of which denied the very possibility of a science of economic laws.
17. The leading members of the German His$\overline{\text { torical school were Wilhelm Roscher (1817-94), Gus- }}$ tav Schmoller (1838-1917), Lujo Brentano (1844-1931), and Werner Sombart (1863-1941).
18. Sombart began his career as a Marxist and later became a leading supporter of Nazism.
19. The leading members of the American institutionalist school were Thorstein Veblen (18571929), John R. Commons (1862-1945), and Wesley Mitchell (1874-1948).
20. Alfred Marshall's doctrine of the repre$\overline{\text { sentative }}$ firm led to the conclusion that large-sized firms usually cannot gain by cutting their prices because it viewed all competitors as perfectly equal.
21. The partial equilibrium approach of Al$\overline{\text { fred Marshall focuses on the individual firm and indus- }}$ try divorced from the rest of the economic system.
22. The general equilibrium approach of classical and Austrian economics studies economic phenomena from the point of view of their effects on all members of the economic system, not just on those directly involved.
23. The partial equilibrium approach led to the breakup of economics into "microeconomics" and "macroeconomics," the one studying the individual consumer and firm apart from connection with the rest of the economic system, and the other studying the economic system as a whole, apart from its connection to the actions of individuals.
24. According to the instructor, the theoretical substance of most textbooks on "microeconomics" is that the great bulk of business activity is tainted with an element of monopoly and that the only exception is the domain of pure and perfect competition, which is virtually nonexistent. At the same time, little or nothing of the sound price theory developed by the classical and Austrian economists is presented in these textbooks.
25. According to the instructor, the theoretical substance of most textbooks on "microeconomics" is "that with a few, limited exceptions, such as wheat farming, the whole of a capitalist economic system is tainted by an element of monopoly. The solution for this alleged state of affairs is supposed to be a radical antitrust policy, which would fragment all large businesses, or else the nationalization of such businesses and/or government control over their prices-and further policies that would force firms in the same industry to produce identical, indistinguishable products."
26. According to the instructor, the theoretical substance of most textbooks on "macroeconomics" is the elaboration of the doctrines of Keynes that capitalism causes depressions and mass unemployment through overproduction and excess saving and that what is needed to counteract or prevent these evils is inflation of the money supply and deficit-financed government spending.
27. According to the instructor, a shortcoming of mathematical economics is that
a. "It leads to an undue concentration of attention on states of final equilibrium, which are all that its differential equations are capable of describing. It thus takes attention away from the real-world operation of the profit motive and of the market processes by means of which the economic system continually tends to move toward a state of full and final equilibrium without ever actually achieving such a state. The economic system never actually achieves such a state because of continuous changes in the fundamental economic data."
b. "The use of calculus and differential equations to describe economic phenomena represents a Procrustean bed, into which the discrete, discontinuous phenomena of actual economic life are mentally forced, in order to fit the mold of mathematically continuous functions to which the methods of calculus can be applied."
c. "One major consequence [of mathematical economics] is the aid given to the perpetuation of a false theory of the determination of the prices of the factors of production: namely, the theory that the prices of the factors of production are directly derivable from the value of the consumers' goods they help to produce."
d. all of the above
e. none of the above
28. Von Mises
a. is almost alone in the development of a systematic defense of capitalism in all of its leading aspects
b. is the leading critic of socialism and Marxism
c. both (a) and (b)
d. neither (a) nor (b)
29. Von Mises
a. developed answers to virtually all of the accusations made against capitalism-from its alleged exploitation of labor and responsibility for unemployment and depressions to its alleged responsibility for monopoly, wars, and racism
b. developed a social philosophy of capitalism which demonstrates the benevolent operation of all of capitalism's leading institutions, especially private ownership of the means of production, economic competition, and economic inequality c. expounded a procapitalist interpretation of modern economic history, and provided a devastating critique of socialism and government intervention in all of its forms
d. all of the above
30. Von Mises demonstrated that a socialist economic system lacks the ability to engage in rational economic planning because of its lack of a price system and thus the ability to perform economic calculation.
31. In the instructor's view, "what von Mises undertook, and which summarizes the essence of his greatness, was to build a systematic intellectual defense of capitalism and thus of material civilization."
32. Von Mises's major criticism of socialism is that it is impossible to practice a perfect system in an imperfect world.

|  | Correct |
| :---: | :---: |
| Q. \# | Answer |
| 1 | b |
| 2 | T |
| 3 | T |
| 4 | T |
| 5 | e |
| 6 | F |
| 7 | T |
| 8 | T |
| 9 | F |
| 10 | a |
| 11 | e |
| 12 | T |
| 13 | c |
| 14 | c |
| 15 | T |
| 16 | T |
| 17 | T |
| 18 | T |
| 19 | T |
| 20 | T |
| 21 | T |
| 22 | T |
| 23 | T |
| 24 | T |
| 25 | T |
| 26 | T |
| 27 | d |
| 28 | c |
| 29 | d |
| 30 | T |
| 31 | T |
| 32 | F |

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## CHAPIER 1. ECONOMICS AND CAPITALSM

## PARTA. THE NATURE AND IMPORIANCE OF ECONOMICS

1. According to the instructor, economics is a. the science of wealth
b. the science that studies the production and exchange of wealth
c. the science that studies the use of scarce means to achieve competing ends
d. the science that studies the production of wealth under a system of division of labor
2. In a division-of-labor society, the individ$\overline{\text { ual lives }}$ by producing or helping to produce just one or at most a very small number of items, almost all of which are consumed by others; at the same time practically all that he consumes is produced by the labor of others.
3. The importance of economics derives from the importance of wealth insofar as the subject can be no more important than is wealth.
4. The importance of wealth is not sufficient to establish the importance of economics. For example, while wealth would be extremely important to Robinson Crusoe, he would not be able to obtain any advantage other than abstract knowledge pertaining to the world he was cut off from, if he could salvage some books on economics.
5. What necessitates the science of economics is the fact that the production of wealth is not only important but in the conditions of the modern world also depends on the division of labor, which, in turn, does not exist or function automatically but depends on human choices, in particular, choices in the realm of politics and government policy.
$\qquad$ 6. Which of the following statements is the most completely true:
a. Approximately only one-fourth of the population of the present-day world lives in division-oflabor societies; the great majority of people living in populous countries such as China, India, and Indonesia continue to produce mainly for their own and their families' personal consumption.
b. The division-of-labor society, in the sense of the average individual devoting the great bulk of his working time to production for the market, and thus to satisfying the needs of others, while in turn being supplied almost entirely from the market, and thus by means of the labor of others, is presently confined mainly to the United States, Canada, Great Britain, the countries of Western Europe, Japan, South Korea, Taiwan, Australia, and New Zealand.
c. Prior to the rise of the modern Western world, the greatest degree of division of labor was achieved under the early Roman Empire.
d. The first country to develop into a division-oflabor society was Great Britain, in the eighteenth century.
e. all of the above
f. none of the above
6. Which of the following statements is the most completely true:
a. The division of labor raises the productivity of labor by bringing about a corresponding multiplication of the volume of knowledge that enters into the production of goods and services.
b. In a division-of-labor society, the total of the knowledge entering into the production of goods and services is the sum of the bodies of knowledge of each of the differenct specialized occupations and suboccupations. In contrast, in a non-division-of-labor society, there is essentially just one occupation and one body of knowledgethat of self-sufficient farmer.
c. Non-division-of-labor societies represent a wasteful duplication of the mental contents of the human brain, in that everyone lives in the same way and knows essentially just the same things about production as everyone else.
d. In a division-of-labor society, a large proportion of the most intelligent and ambitious members tend to concentrate on areas devoted to the acquistion and application of new knowledge, notably, science, invention, and business, with the effect that the body of knowledge used in the production of goods and services is not only multiplied to the extent that labor is divided into separate occupaiton, each with its own, distinct body of knowledge, but also tends to grow from generation to generation.
e. all of the above
7. The division of labor has radically in$\overline{\text { creased the productivity of labor and made possible }}$ the survival of a vastly larger population, including a vastly larger population in countries with relatively little division of labor, which obtain vital supplies, such as food and medicines, from the countries constituting the division-of-labor society.
8. What people, including governments, do, $\overline{\text { depends on what they think and believe. Public opin- }}$ ion and government policy guided by an ignorance of economics is capable of resulting in actions that severely damage, and can even destroy, the division of labor, which has definite requirements for its maintenance and growth. Without knowledge of economics, the citizens of the division-of-labor society are in the position of a crowd wandering through a modern factory and randomly pushing buttons and pulling levers.
9. Because they lived mainly as hunters, the average American Indian required so much land, to assure an adequate supply of game, that the population of Indians living north of the Rio Grand river could not get beyond approximately one million people.
10. If the present population of the United States were to attempt to live as self-sufficient farmers, the average individual in the lower forty-eight states could have no more than about seven acres of land, including all the deserts and mountains. The situation would be even worse in Western Europe and Japan, where population densities are much greater. There is simply not enough land to support today's numbers if they were to attempt to abandon the division of labor and live as self-sufficient farmers.
11. The rapid growth in population figures around the world over the last two hundred years, after centuries of stagnation, is the result of the higher productivity of labor resulting from the division of labor.
12. The destruction of the modern division of labor would cause radical depopulation all across the world; the survivors would live in the kind of poverty existing in the Dark Ages.
13. The major applications of economics, ac$\overline{\text { cording to the instructor, include the very survival of a }}$ division-of-labor society and all that depends on it.
14. The major applications of economics, ac$\overline{\text { cording to the instructor, include the solution of such }}$ major present or recent economic problems as
a. mass unemployment
b. inflation
c. economic stagnation
d. shortages
e. economic conflict among groups within countries or between countries
f. all of the above
15. An implication of economics for ethics is a. the proposition that one man's gain resulting from an increase in production is not another man's loss; indeed, is frequently the source of other men's gain
b. rather than the individual having to sacrifice his self-interest in order to live in society, the existence of a division-of-labor society is essential to the achievement of the material self-interest of the individual
c. the material self-interest of the individual is served by the existence and the freedom of other people who cooperate with him in the division of labor
d. all of the above
16. Knowledge of economics
a. is a powerful antidote to unfounded feelings of being the victim or perpetrator of "exploitation" b. is a powerful antidote to to all feelings of "alienation" based on the belief that the economic world is immoral, purposeless, or chaotic c. cannot help but support the conviction that the fundamental nature of the world is benevolent and thus that there is no rational basis for feelings of fundamental estrangement from the world d. all of the above

## 18. Knowledge of economics is indispens-

able to
a. understanding the broad sweep of history, nota-
bly the fall of ancient civilization and the rise of modern civilization
b. the pursuit of rational economic policy
c. understanding one's place in the world and the kind of world one lives in
d. the defense of individual rights
e. all of the above
19. Knowledge of economics is important for
a. businessmen
b. historians
c. journalists
d. the intelligent citizen
e. all of the above
20. Knowledge of economics is important to businessmen because
a. it can teach them how to earn profits
b. it explains why everyone benefits from their being free to earn profits

## PARTB. CAPITALSM

## 21. Capitalism

a. is a social system based on private ownership of the means of production
b. is characterized by the pursuit of material selfinterest under freedom
c. rests on a foundation of the cultural influence of reason
d. all of the above
22. Capitalism is characterized by
a. saving and capital accumulation
b. exchange and money
c. financial self-interest and the profit motive
d. all of the above
23. Capitalism is characterized by
a. the freedoms of economic competition and economic inequality
b. the price system
c. economic progress
d. a harmony of the material self-interests of all the individuals who participate in it
e. all of the above
24. Almost every essential feature of capitalism underlies the division of labor and several of them are profoundly influenced by it in their own operation.
25. Economics, as the science which studies the production of wealth under a system of division of labor, is actually the science which studies the production of wealth under capitalism.
26. The foundations of capitalism and economic activity, without which they could not develop or only minimally develop, include
a. philosophical convictions pertaining to the reality and primacy of the material world of sensory experience
b. the philosophical conviction that the world operates according to definite and knowable principles of cause and effect
c. the prevalence of conceptual awareness of the future
d. the individual's identification of himself as a self-responsible causal agent with the power to improve his life
e. all of the above
27. The foundations of capitalism and economic activity, without which they could not develop or only minimally develop, include
a. peace and tranquility
b. respect for individual rights
c. limited government and economic and political freedom
d. all of the above
28. Recognition of property rights presupposes
a. recognition of the principle of causality
b. "secularism," in the sense of the validity of concern with the physical world and material wellbeing
c. both (a) and (b)
d. neither (a) nor (b)
29. Great entrepreneurship as a social phenomenon presupposes the conviction of the potential for human greatness.
30. The continued existence of a capitalist society depends on the ability of economic science to influence people's thinking so that they will favor capitalism and sound economic policy.
31. Freedom means freedom from the initiation of physical force.
32. Physical force means
a. physically doing something to or with the person or property of another against his will
b. is exercised through advertising
c. is present in irresistable logical argument
d. all of the above
33. Various individuals commit acts such as robbery, rape, and murder.
a. In so doing, they are guilty of the initition of physical force.
b. In forcibly apprehending such individuals and carting them off to jail, the police are guilty of the initiation of acts of physical force.
c. both (a) and (b)
d. neither (a) nor (b)
34. Fraud represents the initiation of physical $\overline{\text { force in that it entails the taking of property against its }}$ owner's actual will.
35. The existence of government secures the individual's freedom in relation to other private individuals by virtue of apprehending and punishing those who initiate the use of physical force. To the extent that the government is successful in this, the individual is made free of the initiation of physical force by other private individuals.
36. In order for the individual to have free$\overline{\text { dom in relation to the government, it is necessary that }}$ the government be limited to protection against the initiation of physical force.
37. Freedom should be defined not merely as the absence of the initiation of physical force, but, in addition, in order to highlight its most crucial aspect, the absence of the initiation of physical force specifically by, or with the sanction of, the government.
38. Laws, rulings, decrees that punish by fines or jail terms behavior that does not entail the use of physical force (including fraud) themselves constitute the initiation of physical force and hence represent a violation of the individual's freedom.
39. Freedom is the foundation of economic security in that it is the basis of everyone being as secure as the exercise of his own reason and the reason of his suppliers can make him.
40. Where there is freedom, there is peace, because there is no use of force: insofar as force is not initiated, the use of force in defense or retaliation need not take place.
41. Under freedom, the individual can $\overline{\text { choose to }}$ do whatever he judges to be most in his own interest, without fear of being stopped by the physical force of anyone else, so long as he himself does not initiate the use of physical force.
42. Under freedom, the individual
a. can take the highest paying job he can find and buy from the most competitive suppliers he can find
b. can keep all the income he earns and save as much of it as he likes, investing his savings in the most profitable ways he can
c. cannot use physical force except in immediate self-defense
d. all of the above
43. Peace as the accompaniment of freedom
a. means peace at any price
b. means giving in to the threats of aggressors, in order to avoid conflict
c. is in sharpest contrast to the "peace of slaves and cowards"
d. all of the above
44. The existence of the social security system is a leading consequence of the belief that in order to achieve economic security, one must violate economic freedom and establish a welfare state.
45. Social security
a. deprives the individual, to the extent of his contributions to the system, of the power to decide how his savings are invested
b. diverts the individual's savings into the financing of current government expenditures rather than capital investment
c. makes the individual dependent on the choices of future legislators and future taxpayers as the source of his actual support
d. all of the above
46. Freedom of the press is fully implied in the property rights of a press owner to use his press, paper, and ink to print the words he wants to print and then to distribute his product to all willing buyers or takers.
47. Freedom of speech is fully implied in the property rights of the owner of a piece of land, or of a meeting hall, to invite speakers of his choice onto his property and an audience of his choice to listen to the speakers.
48. An individual's freedom of press is violated when
a. a newspaper or publisher refuses to publish his views
b. when a newspaper or publisher is willing to publish his views but is prevented from doing so by the government
49. An individual's freedom of speech is violated when
a. a radio or television station refuses to invite him to speak
b. when a radio or television station is willing to invite an him to speak but is prevented from doing so by the government
50. Economic freedom and political freedom—property rights and human rights—are indivisible; they are, in fact, merely different aspects of the same thing.
51. On the basis of the anarchic concept of freedom, it is claimed that freedom is violated any time there is anything that, for whatever reason, a person cannot do, from flying to the moon, to being able to afford a house or a college education that is beyond his reach, to committing murder.
52. Such acts as murdering one's mother-inlaw or speeding through red lights and thereby threatening the lives of others, are so far from representing freedom that their prohibition is what actually constitutes freedom.
53. The anarchic concept of freedom is present in the assertion of Communists and socialists that their freedom of speech is violated because they are threatened with arrest for attempting to disrupt the speech of an invited speaker by shouting him down or by speaking at the same time.
54. A prohibition on arbitrarily shouting 'fire' in a crowded theater should not be construed as any kind of limitation on the freedom of speech, let alone a justified limitation. On the contrary, in the case of a live theatrical performance, the freedom of speech is violated precisely when someone does arbitrarily shout 'fire.'"
55. "The anarchic concept of freedom is im$\overline{\text { plicitly accepted by conservatives and fascists, as well }}$ as by anarchists and hippies.
56. The freedom of the press is violated and censorship exists not when a newspaper refuses to publish a story or a column that, for any reason, it regards as unworthy of publication, but when it is prepared to publish a piece and is stopped from doing so by the government. A private newspaper cannot commit censorship. Only the government can commit censorship.
57. The freedom of travel is not violated when an individual wants to travel somewhere but lacks the ability to pay the cost of doing so. On the contrary, it is violated when he has the ability to pay the cost, and wants to pay it, but the government stops him-say, with a wall around his city (as existed until 1989 in East Berlin), a passport restriction, or a price control on oil and oil products that creates a shortage of gasoline and aviation fuel and thus stops him from driving and the airlines from flying.
58. State laws that impose residency requirements for the receipt of welfare violate the freedom of travel, because they stop people from traveling in the knowledge that they will have no source of funds when they reach their destination.
59. Striking down residency requirements for the receipt of welfare requirements represents violating the freedom of taxpayers.
60. The anarchic concept of freedom leads to the belief that freedom of speech is incompatible with the communication of thought. The rational concept of freedom, on the other hand, establishes freedom of speech precisely as the safeguard of the communication of thought.
61. What makes the anarchic concept of freedom so destructive is the fact that in divorcing freedom from the context of rationality, it not only seeks to establish a freedom to initiate physical force, as in
the case of the anarchic concept of the freedom of travel, but also, on the basis of the consequences of such a perverted concept of freedom, provides seeming justification for the violation of freedom as a matter of rational principle.
62. In recent decades, the government's energies and efforts have more and more been diverted from the protection of the individual's freedom to the violation of it.
63. The growth of government corruption is a byproduct of the decline of freedom, in that this last means that the government has gained the power both to impose arbitrary harm and to give arbitrary benefit, the first of which citizens pay to avoid and the second of which they pay to receive.
64. To the degree that they exist, freedom and the pursuit of material self-interest, operating in a rational cultural environment, are the foundation of
a. private ownership of the means of production
b. saving and capital accumulation
c. the development of the division of labor
d. the development of exchange and money
e. financial self-interest and the profit motive
f. economic inequality
g. economic competition
h. the price system
i. economic progress
j. the harmony of rational self-interests
k. all of the above
65. The economic freedom of the United

States led to
a. a vast westward migration
b. a vast increase in private ownership of the means of production as settlers appropriated land and natural resources from nature
c. the development of new and improved means of transportation
d. the development of new and improved products and methods of production
e. the founding and growth of new towns and cities
f. all of the above
66. The unpopularity of capitalism and economic activity are evident in the various attacks that are frequently made on the profit motive, economic competition, economic inequality, money, saving, and virtually every other feature of their existence, and in the numerous laws and regulations that have been imposed to restrain them.
67. Economics is controversial in part be-
cause
a. of the inherent difficulties present in any science of reconciling scientific theory with unscientific personal observations
b. the prevailing prescientific worldview in the realm of economics
c. the fact that economics casts the pursuit of selfinterest in a positive light and thereby appears in conflict with the received morality of altruism d. economics comes into conflict with the pursuit of self-interest by means of force
e. economics presupposes a willingness to follow chains of deductive reasoning and to regard the results of logical reasoning from true premises as binding
f. all of the above
68. The belief that science must be "value $\overline{\text { free" is contradicted by the fact that science itself pre- }}$ supposes such values as rationality, honesty, integrity, and the freedom of inquiry, without which science could not be pursued.

Answers to Questions 1-68 on Chapter 1

|  | Correct |  | Correct |
| :---: | :---: | :---: | :---: |
| Question \# | Answer | Question \# | Answer |
| 1 | d | 35 | T |
| 2 | T | 36 | T |
| 3 | T | 37 | T |
| 4 | T | 38 | T |
| 5 | T | 39 | T |
| 6 | e | 40 | T |
| 7 | e | 41 | T |
| 8 | T | 42 | d |
| 9 | T | 43 | c |
| 10 | T | 44 | T |
| 11 | T | 45 | d |
| 12 | T | 46 | T |
| 13 | T | 47 | T |
| 14 | T | 48 | b |
| 15 | f | 49 | b |
| 16 | d | 50 | T |
| 17 | d | 51 | T |
| 18 | e | 52 | T |
| 19 | e | 53 | T |
| 20 | b | 54 | T |
| 21 | d | 55 | T |
| 22 | d | 56 | T |
| 23 | e | 57 | T |
| 24 | T | 58 | F |
| 25 | T | 59 | T |
| 26 | e | 60 | T |
| 27 | d | 61 | T |
| 28 | c | 62 | T |
| 29 | T | 63 | T |
| 30 | T | 64 | k |
| 31 | T | 65 | f |
| 32 | a | 66 | T |
| 33 | a | 67 | f |
| 34 | T | 68 | T |

## CHAPIER 2. WEALTH AND THE ECONOMIC PROBLEM

1. Wealth is material goods made by man.
2. The concepts of wealth and money are interchangeable.
3. The production of more wealth in the economic system necessarily means a larger total monetary value of that wealth, e.g., a larger GDP.
4. A larger total monetary value of wealth fundamentally depends on
a. more wealth
b. the existence of a larger quantity of money
5. A connection exists between the quantity of money and the amount of wealth when the monetary unit is a physical commodity, such as gold or silver, and the supply of the monetary commodity increases.
6. Monetary aggregates such as GDP or GNP are
a. measures of the amount of wealth produced
b. indicators of the quantity of money in existence
7. Economic goods are goods on whose behalf man must expend labor or effort. In contrast free goods, such as air and sunlight, come to man automatically, without expenditure of labor or effort on his part.
8. Stocks, bonds, and bank deposits are wealth.
9. Licenses, such as liquor-store licences and taxicab medallions,
a. are wealth
b. restrain the supply of wealth by denying people the right to produce or offer it
10. Patents and copyrights can contribute to the production of wealth but are not themselves wealth.
11. Patents and copyrights
a. serve to encourage the production of wealth
b. the effect of their expiration after a reasonable time is then to encourage it further
c. both (a) and (b)
12. In a society that allows slavery, such as the South before the Civil War,
a. slaves are wealth
b. the production of wealth is reduced because the market value of slaves serves to displace the accumulation of material capital goods of a comparable value
13. Stocks, bonds, bank deposits, licenses, patents, copyrights, etc. are
a. wealth
b. property possessing market value
14. Petroleum and uranium have always been economic goods and thus wealth.
15. Petroleum and uranium, before becoming economic goods, first
a. had to be recognized as possessing properties that enable them to serve human needs or wants b. had to be made subject to man's physical power to direct them to the satisfaction of his needs or wants without the expenditure of an inordinate amount of effort
c. both (a) and (b)
16. Because iron is wealth, it follows that iron on Mars or under the floor of the oceans is wealth.
17. Iron on Mars or under the floor of the
oceans
a. can never be wealth
b. could someday become wealth if means were devised whereby man was in a position to gain physical command over it such that he could direct it to the satisfaction of his needs or wants without having to perform inordinate labor or effort
18. Deposits of iron, copper, or any of the other metals were not wealth to the men of the Stone Age.
19. The wealth consituted by the mineral deposits of North America has steadily diminished as more and more minerals have been extracted from the ground.
20. The extent to which the land and mineral deposits of North America represents wealth greatly increased over the 19th and 20th centuries.
21. Desert land on which crops could successfully be grown if the land was irrigated is generally not an economic good or wealth.
22. Imaginary goods are things believed, in $\overline{\text { contradiction of the evidence, to be capable of satisy- }}$ ing a human need or want.
23. Goods
a. of the first order are goods standing closest to the satisfaction of human needs or wants, e.g., bread
b. of the second order are goods necessary to produce goods of the first order, e.g., flour
c. of the third order are goods necessary to produce goods of the second order, e.g., wheat d. all of the above
24. Shale oil is presently not wealth. It would become wealth if its cost of extraction and processing were reduced to a level comparable to that of liquid petroleum.
25. The source of the goods-character of things is ultimately within us. Goods derive their character as goods by virtue of their ability to benefit human beings.
26. The fact that more people are employed today in the various service industries than in manufacturing, mining, and agriculture shows that our economic system no longer revolves around the production of wealth.
27. Economics is concerned with services only insofar as they are necessary to the production, enjoyment, or acquisition of wealth, or depend on the use of wealth. Economics is not at all concerned with the rendition of services apart from their connection with wealth.
28. Its fundamental concern with the production of wealth under a system of division of labor is what leads economics to be vitally concerned with the study of exchange, including the explanation of the ratios at which services might be exchanged for services.
29. Economics is the science which studies the allocation of scarce means among competing ends. It is not a science of wealth.
30. Among the leading classical economists were Menger, Böhm-Bawerk, and Mises.
31. Among the leading Austrian economists were Smith, Ricardo, and Mill.
32. The ultimate source of the importance of the division of labor and capitalism, and of the science of economics, is their contribution to the production of wealth.
33. It is incumbent upon economics, as a science of wealth, to provide philosophical validation for the production of wealth being a central, continuing concern of human existence, because its own importance is derived from the importance of the subject matter it studies.
34. Man's possession of the faculty of reason implies a limitless need and desire for wealth on his part, because
a. it creates the potential for a limitless range of knowledge and awareness, which in turn creates the potential for a limitless range of action and experience
b. wealth in the form of tools, implements, machines, and instrumentalities of all kinds is the material means of action
c. wealth in the form of works of art and sculpture, fine homes and furniture, landscaped grounds, and other objects of contemplation is the material source of valuable experiences d. all of the above taken together
35. Man's need for wealth merely in order to $\overline{\text { serve his }}$ needs for nutrition and health can range from a few primitive hunting implements to perhaps the greater part of a modern economic system, including such industries as iron and steel, electric power, petroleum refining, motor vehicle and aircraft manufacturing, and shipbuilding.
36. Reason gives man the ability to use
wealth progressively to enhance the exercise of the capacities he shares in common with lesser species.
37. The withdrawal of the forms of wealth
specifically adapted to it would
a. reduce music to the untrained singing of the human voice before small, immediately present audiences
b. reduce science to the level of perhaps drawing a circle in the sand with one's finger
c. reduce art probably to the level of making a sketch on the wall of a cave with a piece of charcoal from a camp fire
d. all of the above
e. none of the above
38. Man's nature as a rational being introduces additional, "higher" dimensions into the satisfaction of his "lower" needs such as nutrition.
39. Man's desire for novelty and variety stands in the service of his life by inducing him to explore things he would otherwise not have explored and which turn out to have major practical application, as was the case, for example, with the automobile and the personal computer.
40. Even when no practical applications ever result directly from the things that are desired, such as the paintings or sculptures that a millionaire desires to add to his collection, their being desired still produces important practical results.
41. The proposition of Adam Smith that "the desire of food is limited in every man by the narrow capacity of the human stomach; but the desire of the conveniences and ornaments of building, dress, equipage and household furniture seems to have no limit or certain boundary" continues to be true when understood in contemporary terms.
42. While the desire for additional wealth can be presumed always to be present, philosophical convictions of a definite type must be present to induce people to desire it strongly enough to go out and actually produce it.
43. The fact that the need and desire for wealth are limitless does not mean that when people devote themselves to satisfying that need and desire, as in the nations of modern capitalism, they go through life with a sense of endless frustration, seeking more than they can ever hope to obtain.
44. Far from creating endless frustration, the pursuit of ever more wealth should be expected to contribute powerfully to human happiness.
45. Progress is the natural result of the use of reason as a constant.
46. Economic progress contributes to human happiness by enabling people to live in the present in the light of the prospect of a better future.
47. According to the doctrines of cultural relativism and conspicuous consumption, the concept of economic progress can have no objective meaning.
48. How man succeeds in relation to the physical world provides an objective standard by which to judge the value of cultures.
49. The basis for claiming that the automobile is objectively an advance over the horse and buggy is ultimately the same as the basis for claiming that the possession of legs is objectively better than not possessing legs.
50. The basis for claiming that radio is objectively an advance over the telegraph and tom tom, that television is objectively an advance over radio, and that color television is objectively an advance over black and white, is ultimately the same as the basis for claiming that
a. the possession of ears is objectively better than not possessing ears
b. the possession of eyes and ears together is objectively better than possessing ears alone
c. the ability to see in color is objectively better than being color blind
d. all of the above
51. On the basis of the standard of the value of being able to see, hear, move, do, and think, the earning of wealth deserves to bring prestige.
52. The attempt to substitute the gaining of prestige for the incentive of gaining wealth
a. is tantamount to asking people to toil throughout the year in order to gain a medal on May Day and then, hopefully, to thereafter be called a good boy
b. ends up bringing the opposite of prestige to those who would accept the substitution c. both (a) and (b)
53. The fact that in our culture many people want to own such goods as horses, canoes, bows and arrows, and so on, and in some cases prefer units of these goods to units of more advanced goods serving the same needs
a. is consistent with the objective superiority of the goods of modern capitalism
b. further exemplifies the principle that man's need for wealth is limitless
c. both (a) and (b)
54. In the name of being able to see, hear, move, or do anything that our senses, limbs, and minds enable us to do-in short, in the name of being able to live as human beings-the division of labor and capitalism and the values that underlie them-namely, reason, science, technology, individual rights, limited government and economic freedom, and private ownership of the means of production-deserve to be upheld.
55. The same principle that establishes the objectivity of the economic advances of modern capi-
talism directly establishes the objectivity of the superiority of modern capitalist civilization as such, in comparison to any other form of civilization."
56. By the standard of the ability to acquire and apply knowledge,
a. societies that have developed the art of writing are objectively superior to those that have not b. societies that, in addition to having developed the art of writing, have also identified important principles of mathematics and science, are objectively superior to those that have developed merely the art of writing
c. societies that, in addition to having identified important principles of science and mathematics, have also identified the laws of logic and the principle of causality, are objectively superior to those that have not made these further identifications d. societies that, in addition to having identified the laws of logic and the principle of causality, have achieved an extensive division of labor and secured the freedoms of speech and press, are objectively superior to those that have not achieved these further accomplishments
e. all of the above
57. Capitalist civilization-modern Western civilization-is
a. not the civilization of the white man
b. a body of knowledge and values
c. open to men of all races
d. the civilization of all men who wish to prosper and are prepared to adopt reason as their fundamental means of doing so
e. all of the above
58. Those who view modern Western civili$\overline{\text { zation, whether with pride or with hatred, as the civili- }}$ zation of the white man only are implicitly racists, in that they view civilization and culture as being racially determined.
59. Racism is present in the belief that civilization and culture are determined by racial membership. On this basis,
a. earlier generations of racists held that the existence of inferior civilizations and cultures was proof of the racial inferiority of the members of such civilizations and cultures
b. present-day racists hold that the equal value of all races of human beings implies the equal value of all civilizations and cultures
c. both (a) and (b)
d. neither (a) nor (b)
60. The law of diminishing marginal utility means that the larger is the supply of a good that an individual consumes or possesses, the smaller is the utiity, importance, or subjective value that he attaches to any given unit of the good.
61. The law of diminishing marginal utility
means that the larger is the quantity of a given factor
of production applied to a fixed quantity of another factor of production, for example, more labor applied to the same quantity of land, the smaller is the increase in output compared to the increase in input.
62. The law of diminishing marginal utility rests on the fact that
a. people choose to satisfy their more important wants ahead of their less important wants b. successive units of a supply encounter needs or wants that have already been satisfied to some extent by previous units of the supply and are therefore now less urgent
c. both (a) and (b)
63. "The concept 'most important of our wants that a good is capable of satisfying' must be understood as a variable range, whose extent depends on the quantity of the good we possess.
64. The marginal wants that a good serves should be thought of as being the least important of the most important wants that its supply suffices to serve.
65. The utility of the marginal unit of a supply determines the utility of any of the units of that supply at that moment.
66. The law of diminishing marginal utility contradicts the proposition that man's need for wealth is limitless.
67. Despite the views of Galbraith, the law of diminishing marginal utility is consistent with the fact that man's need for wealth is limitless, because
a. so long as additional wealth has any utility at all, more wealth is better than less wealth b. the process by which wealth is increased is accompanied by the discovery of new avenues of consumption, which serves to increase the marginal utility of wealth in comparison with what it would otherwise be-e.g., while literal horses in the range 101-300 might have little or no marginal utility, the same is certainly not true for horsepower in the range 101-300 or 101-3000, e.g., in the form of automobile engines, elevators and all kinds of other machines and motors c. as wealth increases, the size of the marginal unit under consideration frequently increases as well-e.g., a mansion instead of an ordinary home, a private jet instead of just an automobile d. all of the above
68. The law of diminishing marginal utility resolves the classical economists' paradox of valuei.e., the seeming paradox constituted by the fact that goods of apparently the lowest utility, such as diamonds, are normally more valuable in exchange than goods of apparently the highest utility, such as water.
69. Diamonds are more valuable than water in the sense that a diamond is more valuable than, say, 100,000 gallons of water added on to a supply of water
at one's disposal that is already sufficient to provide for all of one's need or desire for water.
70. Determination of price by cost is an instance of the operation of the law of diminishing marginal utility in that the value of the means of production, which constitutes the cost, is itself determined by the value of the marginal product of the means of production.
71. The law of diminishing marginal utility helps to explain the pattern of demand that prevails in the economic system at any given set of prices of goods.
72. The pattern of consumer spending that results from the operation of the law of diminishing marginal utility is characterized by
a. equal proportionality between price and marginal utility in all lines of expenditure. b. a condition in which a change in the pattern of spending would be accompanied by the loss of more utility in the line where spending was reduced than the gain of utility in the line(s) where spending was increased
73. The principle of diminishing marginal utility helps to explain the phenomenon of partial, relative overproduction and underproduction described by Say's Law.
74. In essence, our desire for wealth outstrips our ability to produce it by virtue of the limitless range of the mental in comparison with the physical and thus by virtue of the fact that the range of our imaginations is always incomparably greater than the power of our arms.
75. Because basic advances in the ability to produce are accompanied by the opening up of new modes of consumption, our desire for wealth continues to outstrip our ability to produce it by an undiminished margin, no matter how much we may augment our ability to produce.
76. What economists mean by "scarcity" is
a. the lack of urgently needed supplies
b. an excess of the desire for wealth over the abil-
ity to produce it
77. Scarcity
a. in a capitalist society means an excess of the desire for wealth over the ability to produce it b. in a precapitalist society means a lack of urgently needed supplys
c. both (a) and (b)
d. neither (a) nor (b)
78. Scarcity as experienced under capitalism is the cause of the progressive elimination of scarcity in the sense experienced in a precapitalist society.

## 79. Time preference

a. means the preference, other things being equal, for goods in the present rather than in the future or
in the nearer future rather than in the more remote future
b. is analogous in the valuation of temporally more remote future goods to the perception of spatially more remote physical objects
c. both (a) and (b)
d. neither (a) nor (b)
80. The principle of time preference is implied in the very nature of valuing something, in that if one values something, then other things being equal, one must consume it today or never consume it.
81. The nature of human life implies time preference
a. in that whatever value we attach to being alive in the future is attributable to our being alive in the present, which, given the uninteruptibility of human life, is the indispensable precondition to our continuing to be alive in the future
b. the value of our being alive in the present must always exceed the value we attach to being alive in the future because it is equal to the sum of the value we attach to being alive in the future plus the value we attach to being alive between now and that time in the future
c. both (a) and (b)
82. The existence of time preference prevents the existence of profit and interest from always resulting in saving and the accumulation of additional capital.
83. Time preference manifests itself in the extent to which individuals make provision for the future relative to their current consumption.
84. Time preference implies that if it is December, an individual in Minneapolis should be expected to value a bathing suit that will be available to him
a. in the coming January more highly than one that will be available to him in the coming July b. in the coming July more highly than one that will be available to him in the July of the following year
85. It is inconsistent with the principle of time preference to value the first unit of a future supply above the second unit of a present supply.
86. The ascending price structure of agricultural commodity futures
a. is inconsistent with the principle of time preference
b. reflects the increasing scarcity of supplies of agricultural commodities between harvests, which is itself due to time preference in bringing about the consumption of such supplies
87. Other things being equal, the savings of an individual with a higher degree of time preference will be less than those of an individual with a lower degree of time preference.
88. The scarcity of capital goods exists a. in both a horizontal and a vertical dimension b. in the sense that more capital goods are needed to produce the larger supplies of consumers' goods that people desire
c. in the sense that more capital goods can be used per unit of consumers' goods produced and result in the ability to produce improved consumers' goods or equally good consumers' goods with greater efficiency
d. all of the above
89. Examples of different degrees of capital $\overline{\text { intensiveness in the production of products are }}$
a. the substitution of machinery for manual labor
b. the construction of railroads and highways that follow straighter, more level routes but at a greater initial cost
c. the maintenance of a higher rather than a lower ratio of inventories to sales, as, for example, in order to provide a wider variety of selection d. the production of twelve-year old whiskey instead of eight-year old whiskey
e. all of the above
90. Industries typically differ from one another in their degree of capital intensiveness.
91. Time preference influences
a. the methods of production used
b. the kinds of products produced
c. the relative size of various industries
d. all of the above
92. Time preference operates to keep capital in its "vertical dimension" permanently scarce.
93. Before the scarcity of capital in its vertical dimension could be overcome capital would have to be accumulated sufficient
a. to enable the 80 percent of the world that is not presently industrialized to come up to the degree of capital intensiveness of the 20 percent of the world that is industrialized
b. within the industrialized countries to enable every factory, farm, mine, and store to increase its degree of capital intensiveness to the point presently enjoyed only by the most capital-intensive establishments
c. within the industrialized countries to enable all establishments to raise the standard of capital intensiveness still further, to the point where no further reduction in costs of production or improvement in the quality of products could be achieved by any greater availability of capital in its vertical dimension
d. all of the above
94. It is always necessary to leave undone an incalculable range of potential improvements whose execution would require a more abundant accumulation of capital in its vertical dimension than exists.
95. Other things being equal, time preference is
a. the lower
b. the higher
the higher is the degree of cultural rationality and of economic freedom and respect for property rights.
96. Wealth is the result of human labor.
97. Labor is the means by which man's mind $\overline{\text { transmits }}$ his designs and purposes to matter.

The following is a four-part question.
98. Labor is man's application of his bodily and mental faculties for the purpose of altering matter in form or location and thereby making the matter thus altered serve a further purpose.
99. Matter thus altered by man's labor is a product.
100. Production is the process of thus altering matter.
101. A producer is one who effects such alterations.
102. In a division-of-labor society, the concept of labor is not limited to manual labor. It embraces much more, such as the labor entailed in founding, organizing, and directing business firms and in providing them with capital. Such labor achieves its effects by operating through the manual labor of others, which it renders more efficient.
103. Man does not create the matter that natu$\overline{\text { ral resources represent, but he does create their wealth- }}$ character by means of identifying their useful properties and by making it possible to gain such physical command over them that he can direct them to the satisfaction of his needs or wants without the expenditure of an inordinate amount of labor.
104. Labor is the source of equipment and $\overline{\text { materials }}$, including additional agricultural commodities and mineral supplies extracted from the ground.
105. The application of more labor is the only fundamental requirement for increasing the supply of wealth.
106. The scarcity of wealth implies a more fundamental scarcity of labor, inasmuch as labor is the only fundamentally limiting factor of production.
107. The scarcity of labor is manifest in the fact that virtually everyone would like to enjoy an income many times greater than the income he is presently capable of earning and at his present rate of pay would have to work more hours than there are in the week in order to earn it.
108. In order for the average member of society to have, say, five times the real income (i.e., buy-
ing power) that he now has, it would be necessary for him to
a. produce five times as much as he now produces
b. in the present state of technology and methods of production, with its present limitations on the output per hour of labor, expend five times the labor, in order to produce five times the output c. earn five times the money income that he now earns
d. all of the above
e. (a) and (b), but not (c)
109. The reason that more production rather than more money income is the key to more buying power is
a. the increase in the quantity of money that would be necessary to raise money incomes would operate equally to raise prices, leaving buying power unchanged
b. the increase in production and supply, on the other hand, prevents prices from rising (or from rising as much) when the increase in the quantity of money raises money incomes, and would operate to reduce prices in the face of the same money incomes, thereby still increasing buying power c. both (a) and (b)
d. neither (a) nor (b)
110. The supply of labor that people can provide falls radically short of the supply whose products they would like to have.
111. The scarcity of personal services adds to the scarcity of labor.
112. The scarcity of labor is implied in the fact that each of us is easily capable of forming desires whose fulfillment requires the labor of multitudes, and yet by the laws of arithmetic, the average member of any society can never obtain more than the labor, or products of the labor, of just one person.
113. The fundamental scarcity of labor implies that there is no inherent reason for the existence of mass unemployment-that mass unemployment is a man-made phenomenon created in opposition to the underlying economic situation.
114. The scarcity of labor is ineradicable, i.e., is not eliminated either by a larger supply of labor or by a higher productivity of labor, because
a. additional workers bring with them desires for wealth far in excess of their ability to add to its production
b. a higher productivity of labor is accompanied by new and additional kinds of consumers' goods, for which new and additional needs and desires appear
c. both (a) and (b)
115. The fundamental and essential nature of $\overline{\text { economic }}$ life is this: the need and desire for additional wealth are there and the nature-given means of produc-
ing it are there; all that is lacking is the ability of human labor to transform the nature-given means of production into additional wealth. This implies
a. the scarcity of human labor
b. the need to raise the productivity of human labor
c. the need for a division-of-labor, capitalist society as the essential framework and foundation of a progressively rising productivity of labor
d. all of the above
116. Always, what stands between man and his need for greater wealth is his limited ability to produce wealth-his limited ability and also willingness to perform labor.
117. The economic problem is how continuously to raise the productivity of labor, to make possible an ever increasing production and enjoyment of goods per capita.
118. An important subsidiary problem that is frequently referred to as the economic problem is how to allocate an existing limited ability to produce in accordance with the choices of individuals to satisfy their more important wants ahead of their less important wants.
119. The solution for the economic problem is capitalism.

| Question \# | Correct Answer | Question \# | Correct Answer | Question \# | Correct Answer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | T | 41 | T | 81 | c |
| 2 | F | 42 | T | 82 | T |
| 3 | F | 43 | T | 83 | T |
| 4 | b | 44 | T | 84 | b |
| 5 | T | 45 | T | 85 | F |
| 6 | b | 46 | T | 86 | b |
| 7 | T | 47 | T | 87 | T |
| 8 | F | 48 | T | 88 | d |
| 9 | b | 49 | T | 89 | e |
| 10 | T | 50 | d | 90 | T |
| 11 | c | 51 | T | 91 | d |
| 12 | b | 52 | c | 92 | T |
| 13 | b | 53 | c | 93 | d |
| 14 | F | 54 | T | 94 | T |
| 15 | c | 55 | T | 95 | a |
| 16 | F | 56 | e | 96 | T |
| 17 | b | 57 | e | 97 | T |
| 18 | T | 58 | T | 98 | T |
| 19 | F | 59 | c | 99 | T |
| 20 | T | 60 | T | 100 | T |
| 21 | T | 61 | F | 101 | T |
| 22 | T | 62 | c | 102 | T |
| 23 | d | 63 | T | 103 | T |
| 24 | T | 64 | T | 104 | T |
| 25 | T | 65 | T | 105 | T |
| 26 | F | 66 | F | 106 | T |
| 27 | T | 67 | d | 107 | T |
| 28 | T | 68 | T | 108 | e |
| 29 | F | 69 | T | 109 | c |
| 30 | F | 70 | T | 110 | T |
| 31 | F | 71 | T | 111 | T |
| 32 | T | 72 | b | 112 | T |
| 33 | T | 73 | T | 113 | T |
| 34 | d | 74 | T | 114 | c |
| 35 | T | 75 | T | 115 | d |
| 36 | T | 76 | b | 116 | T |
| 37 | d | 77 | c | 117 | T |
| 38 | T | 78 | T | 118 | T |
| 39 | T | 79 | c | 119 | T |
| 40 | T | 80 | T |  |  |

## PARTA. NATURALRESOURCES

1. The production of products consumes irre$\overline{\text { placeable natural resources. }}$
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 $\overline{\text { resources can be progressively increased as man gains }}$ 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 evrey 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 waste$\overline{\text { ful in giving shoppers fresh paper bags with every pur- }}$ chase. 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.

## PARTB. THE ECOLOGICALASSAULTON 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
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 equimpent
c. both (a) and (b)
d. neither (a) nor (b)
36. The exact same set of facts, such as the $\overline{\text { clearing }}$ 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 wellbeing of human beings, and so is the existence of hillsides, 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,
a. the environmental movement holds individuals responsible for the actions of a collective, as for example, in the causation of global warming b. 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
c. both (a) and (b)
d. 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" a. refers to the fact that the actions individuals sometimes impose costs or bestow benefits on others
b. 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
c. both (a) and (b)
d. neither (a) nor (b)
43. The externalities doctrine implies such things as that
a. successful competitors should be made to compensate their unsuccessful rivals
b. 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
c. 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
d. all of the above
e. none of the above
44. According to the author, the appropriate $\overline{\text { principle in cases of externalities is }}$
a. 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
b. 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
c. both (a) and (b)
d. 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 $\overline{\text { resurrect }}$ 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 politi-cal-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 $\overline{\text { economic growth are essentially identical. }}$
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 $\overline{\text { education }}$ 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, inasumuch 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 |

1. The division of labor is a system of production in which the labor required to support human life and well-being is broken down into separate, distinct occupations.
2. In a division-of-labor society, the individ$\overline{\text { ual lives by producing, or helping to produce, just one }}$ thing or at most a very few things, which are consumed overwhelmingly by others, and is supplied by the labor of others for the far greater part of his needs.
3. The multiplication of knowledge
a. exists to the extent that labor is divided into separate occupations and suboccupations, because each of these has its own specialized body of knowledge
b. makes possible the production of products that would otherwise be impossible because of the inability of any given individual or small group of individuals to hold the necessary knowledge c. both (a) and (b)
4. Compared with division-of-labor societies, non-division-of-labor societies, such as those comprised of large numbers of essentially self-sufficient farm families, entail a wasteful duplication of the mental contents of the human brain.
5. The division of labor makes it possible for $\overline{\text { geniuses }}$ to specialize in science, invention, and the organization and direction of the productive activity of others, thereby further and progressively increasing the knowledge used in production.
6. An important advantage of the division of labor is that individuals at all levels of ability can concentrate on the kind of work for which they are best suited on the basis of differences in their intellectual and bodily endowments.
7. The geographical gains from the division $\overline{\text { of labor refer to the fact that under a system of divi- }}$ sion of labor, each area tends to concentrate to an important extent on the exploitation of any advantages it may possess in terms of natural resources and climate conditions, with the result that each territory that participates in the division of labor is able to gain the benefit of the special advantages of every other such territory.
8. In producing more iron than is required by its inhabitants, Minnesota
a. wastes a scarce, precious natural resource for the benefit of outsiders
b. obtains the ability to obtain a wide variety of natural resources, agricultural commodities, and manufactured products that it itself either cannot produce at all or cannot produce very efficiently
9. Participation in the division of labor is essential to the ability of any geographical area to exploit its natural resources effectively, in that, for
example, the ability to produce iron and steel from the iron ore of Minnesota depends on the availability of coal from West Virginia or Wyoming, and the ability to mine coal depends on the use of steel drills and steel structural supports in coal mines.
10. The division of labor increases the efficiency and effectiveness of the processes of learning that are entailed in production by
a. making possible, through constant repetition of the same tasks, a subconscious automatizing of knowledge and a corresponding increase in the efficiency with which it is applied
b. increasing the ratio of the time spent in applying knowledge to the time that must be spent in acquiring it, thereby making the acquisition of
knowledge more worthwhile
c. making education and communications-all the activities concerned with storing and transmitting knowledge-into specializations, which, like all other specializations, tend to be carried on by those best suited for them
d. all of the above
11. The division of labor increases the degree to which knowledge of production is assimilated and therefore the efficiency with which it is used, the yield to the time spent in acquiring it, and the efficiency with which it is disseminated.
12. The division of labor increases the effi$\overline{\text { ciency of }}$ the processes of motion that are entailed in production by
a. concentrating work of the same type in the same place
b. breaking work down into the simplest possible steps, consisting of the smallest possible number of separate motions
c. eliminating the time that would otherwise be lost in walking back and forth from one place to another to do different kinds of work, in constantly picking up and putting down different types of tools, and in constantly having to finish up and perhaps clean up what one has been doing and warm up to what one is about to do
d. all of the above
13. The division of labor underlies the use of machinery in production by means of a. providing, through its multiplication of knowledge, a sufficient fund of knowledge in a society to make the production of machinery possible b. providing, through its geographical aspect, the extensive and widely scattered range of materials necessary for the production and use of most machines
c. making science and invention into specializations carried on by geniuses, which greatly facilitates the invention of machinery
d. reducing jobs wherever possible to a small number of distinct motions repeated over and over again, as a result of which it enormously simplifies the problems of designing a machine or special tool to help do the work
e. concentrating a large volume of work of the same type in the same hands, the division of labor makes the use of machinery and specialized tools economically worthwhile
f. all of the above
14. Knowledge of the gains derived from the division of labor fails to explain why 18th Century England was the first country to experience the Industrial Revolution.
15. A division-of-labor society represents the organization of the same total sum of human brain power in a way that enables it to store and use vastly more knowledge than would otherwise be possible.
16. The effect of a division-of-labor society is not only to increase the total of the knowledge that the same amount of human brain power can store and use, but also to bring that knowledge up to a progressively rising standard set by the most intelligent members of the society.
17. While man always possesses the faculty of reason, a division-of-labor society is necessary if he is to use his rationality efficiently in production.
18. The division of labor increases the efficiency with which man is able to apply his mind, his body, and his nature-given environment to production.
19. The division of labor is an essential pre$\overline{\text { condition }}$ for the achievement of a high and steadily rising productivity of labor.
20. The division of labor is the essential framework for the ongoing solution of the economic problem.
21. Whoever, in the words of von Mises, pre$\overline{\text { fers wealth to poverty, and life and health to sickness }}$ and death, is logically obliged to value the existence of a division-of-labor society and all that it depends on.
22. The widely held notion that life in society requires the sacrifice of the individual's self-interest is
a. confirmed
b. refuted
in regard to a division-of-labor society.
23. In a division-of-labor society, the individual's material self-interest is served to the extent that others are secure in their persons and property from the initiation of force, because they are thereby enabled to produce more goods which are sold on the market and available for the individual to buy.
24. In the light of knowledge of the gains from the division of labor, the ethical principle of respect for the persons and property of others has a basis
in the requirements of the individual serving his own material self-interest.
25. The division of labor has raised the pro$\overline{\text { ductivity }}$ of labor so high that today the average member of a division-of-labor society has
a. both substantial real wealth at his disposal and substantial leisure in which to enjoy it
b. open to him in no small measure precisely the kind of life that the ancient Greeks thought could be enjoyed only by a slave-owning aristocracy c. both (a) and (b)
26. The claim that a division-of-labor society is incompatible with the well-rounded development of the individual, in accordance with the ideals of the Renaissance, is contradicted by the fact that it is precisely in a division-of-labor society that the average worker, for the first time in all of human history, has the opportunity of actually becoming something of a Renaissance man.
27. A dull job performed for money is less dull than one performed merely for the sake of a given physical result, to the extent that the earning of money makes possible a wide range of choice in what the work will accomplish for the individual.
28. Even the otherwise most monotonous, $\overline{\text { repetitious types of factory work might be given an im- }}$ portant measure of challenge and excitement if it were possible to perform the work as piecework.
29. The proportion of interesting and challenging jobs in the economic system has steadily declined with the progress of the division of labor.
30. While it is true that alienation-a sense of lack of belonging and lack of control in one's lifeis a growing problem in present-day society, the wealth and leisure and the resulting education and level of knowledge that a division-of-labor society makes possible are powerful forces working against such feelings.
31. Alienation is a growing problem in pres-
ent-day society
a. because of
b. in spite of
the existence of the division of labor.
32. In the physical sense,
a. production is man's alteration of matter in form or location, in accordance with conscious design, in order to make the matter thus altered serve a further purpose
b. a producer is one who effects such alterations
c. a product is matter that has been altered in one or more of the above ways
d. a product can also be an alteration of matter that we perceive as essentially unchanged
e. all of the above
33. Labor is
a. the means by which man's mind transmits his designs and purposes to matter b. man's application of his bodily and mental faculties for the purpose of altering matter and thereby making it serve a further end c. both (a) and (b)
34. All production entails the presence of preexisting matter, which is to be altered, and whose ultimate source is always nature.

## 35. "Land"

a. is the name which economists have traditionally given to nature's contribution to production b. as the term is used by economists, includes land as we normally think of it, namely, pieces of ground, plus all the natural resources within it and all the trees and plants and animals that are naturally present upon it-i.e., present without man's intervention
c. embraces bodies of water and their contents, air, and, eventually no doubt, even outer space, insofar as these things are employed in production d. all of the above
36. Land and labor together are sometimes referred to as the original factors of production.
37. The description of land as an original factor of production can be misleading insofar as man is responsible for whatever wealth-character it possesses.
38. Products produced are continuously used up, worn out, or simply deteriorate through the action of nature, as when they rust or rot.
39. "Consumption," in its physical sense means the using up, wearing out, or deterioration both of products and nature-given goods (such as mineral deposits).
40. A consumer in the physical sense is one who uses goods up, wears them out, or in whose possession they deteriorate.
41. Every product produced
a. is subsequently consumed
b. reflects a prior consumption in the process of its own production
c. both (a) and (b)
42. Recognition that consumption is entailed in the very process of production itself, led the classical economists to distinguish between two, and sometimes three, very different kinds of physical consumption, which they called, respectively, productive, unproductive, and reproductive consumption.
43. Productive consumption means consumption for the purpose of production.
44. Examples of productive consumption are a. the consumption of flour and ovens for the purpose of baking bread
b. the consumption of steel and stamping equipment for the purpose of producing automobiles
c. the consumption of cloth and sewing machines for the purpose of making clothing
d. all of the above
45. Unproductive consumption is consumption not for the purpose of production. For example, the eating of bread, the driving of an automobile for pleasure, the wearing of clothes.
46. Reproductive consumption means that variety of productive consumption in which the product produced can play the same role in further production as the goods consumed in its own production, or can be employed in the production of such products.

## are

a. the consumption of seed in the production of wheat
b. the wearing out of trucks in making deliveries to truck factories
c. the wearing out of oxcarts in the construction of a railroad
d. the using up of steel in the manufacture of iron mining equipment and the subsequent wearing out of the iron mining equipment
e. all of the above
48. The wearing out of oxcarts in the construction of a railroad is reproductive consumption in that oxcarts and railroads play the same role in production, insofar as both are means of transport.
49. In the context of a division-of-labor, monetary economy, in which anything that is used in the production of a product to be sold can make possible its own replacement by way of exchange-that is, by using the sales proceeds its products bring in, to purchase its replacement-the concepts productive consumption and reproductive consumption become synonymous.
50. Capital goods in the physical sense are goods productively or reproductively physically consumed. For example, the flour and ovens, steel and stamping equipment, cloth and sewing machines, and the seed, trucks, oxcarts, and steel and iron mining equipment, mentioned above.
51. The aggregate of the capital goods in the possession of an individual can be described as his capital. And capital can be defined as wealth reproductively employed-that is, as wealth employed in the production of wealth.
52. In the context of a division-of-labor economy,
a. the concepts capital goods and capital come to be inseparably connected with the question of whether or not the goods are purchased, or the sums of money are expended, for the purpose of bringing in subsequent sales revenues
b. capital is wealth employed in the earning of money
c. both (a) and (b)
53. The supply of capital goods is of vital significance to production because it is a major determinant of the productivity of labor-i.e., the output per unit of labor. A larger supply of capital goods per capita operates to raise the productivity of labor, and a smaller supply to reduce it.
54. More capital goods make it possible to produce not only more of various products, but products whose production would otherwise be completely impossible. For example, while a plow enables a farmer to grow more food than he could grow without it, a furnace of some sort is necessary in order to produce any steel at all.
55. A growing or improving supply of capital goods is indispensable to the adoption of more advanced technologies and to the continuing rise in the productivity of labor.
56. Because capital goods undergo productive consumption, it follows that in order to
a. maintain the supply of capital goods, a proportion of production must be devoted to their production at least sufficient to offset their productive consumption, which proportion can be termed the maintenance proportion
b. have capital accumulation, the proportion of production devoted to the production of capital goods must be greater than the maintenance proportion
c. both (a) and (b)
57. The existence of division of labor operates to raise the productivity of labor in large measure by virtue of increasing the supply of capital goods per capita.
58. The increase in the supply of capital $\overline{\text { goods is the effect of division of labor in all the ways }}$ that it serves to increase production and insofar as the products are capital goods.
59. Capital accumulation depends on a. the proportion of total production in which capital goods are produced
b. the general efficiency with which labor and existing capital goods are used in production
c. both (a) and (b)
60. Greater efficiency in the utilization of $\overline{\text { labor and existing capital goods serves to increase the }}$ supply of capital goods because it
a. results in a larger total product, including a
larger supply of capital goods for any given proportion of productive effort devoted to the production of capital goods
b. serves to reduce the proportion of production required for the replacement of capital goods and to make possible capital accumulation with a rela-
tive concentration on the production of capital goods that was previously sufficient only to maintain the supply of capital goods,
c. serves increase the rate of capital accumulation to whatever extent an economic system was already devoting to the production of capital goods a larger proportion of its efforts than was required for the mere replacement of capital goods d. all of the above

## The following is a six-part question.

A self-sufficient farmer must consume 1 bushel of seed in order to grow 2 bushels of crop, from which he obtains replacement seed.
61. Calculate the farmer's maintenance proportion.
62. Calculate the supply of capital goods (seed) that the farmer will produce if he devotes 50 percent of his productive effort to the production of seed.
63. Calculate the supply of capital goods (seed) that the farmer will produce if he devotes 60 percent of his productive effort to the production of seed.
64. Calculate the farmer's maintenance proportion if he increases his efficiency and can now produce 3 bushels of crop instead of 2 , with the same labor and seed.
65. Calculate the supply of capital goods (seed) that the farmer will now produce if he devotes 50 percent of his productive effort to the production of seed.
66. Production with capital goods always represents an indirect, more time-consuming process of production as compared to production without capital goods because labor must first be applied to the production of the capital goods and only then to the production of consumers' goods.
67. The greater lapse of time between the performance of labor and the achievement of its ultimate result, when capital goods must first be produced, is well compensated for by the larger size of the product and by the fact that in many cases products of the same kind could simply not be obtained otherwise.
68. The division of labor is intimately bound up with the question of the time factor involved in production insofar as one group of workers begins its production with capital goods produced by previous groups of workers. Such temporal succession in the stages of division of labor can be described as the division of labor in its vertical aspect.

|  | Correct |  | Correct |
| :---: | :---: | :---: | :---: |
| Question \# | Answer | Question \# | Answer |
| 1 | T | 35 | d |
| 2 | T | 36 | T |
| 3 | c | 37 | T |
| 4 | T | 38 | T |
| 5 | T | 39 | T |
| 6 | T | 40 | T |
| 7 | T | 41 | c |
| 8 | b | 42 | T |
| 9 | T | 43 | T |
| 10 | d | 44 | d |
| 11 | T | 45 | T |
| 12 | d | 46 | T |
| 13 | f | 47 | e |
| 14 | F | 48 | T |
| 15 | T | 49 | T |
| 16 | T | 50 | T |
| 17 | T | 51 | T |
| 18 | T | 52 | c |
| 19 | T | 53 | T |
| 20 | T | 54 | T |
| 21 | T | 55 | T |
| 22 | b | 56 | C |
| 23 | T | 57 | T |
| 24 | T | 58 | T |
| 25 | c | 59 | c |
| 26 | T | 60 | d |
| 27 | T | 61 | 50\% |
| 28 | T | 62 | 1 bu. |
| 29 | F | 63 | 1.2 bu |
| 30 | T | 64 | 33.33\% |
| 31 | b | 65 | 1.5 bu. |
| 32 | e | 66 | T |
| 33 | c | 67 | T |
| 34 | T | 68 | T |

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## DEPENDENCE OF THE DIVISON OF LABOR ON CAPITALSM

1. In a division-of-labor society, each person benefits from the fact that other people possess knowledge which he does not, and an intelligence separate from and often greater than his own.
2. The knowledge and intelligence of others $\overline{\text { enter into }}$ the productive process and thus enable the individual to obtain goods and services for the production of which his own knowledge and intelligence would be insufficient.
3. The benefits the individual derives from $\overline{\text { others in }}$ the division of labor requires that others be able to acquire and apply their knowledge on their own initiative, without having to await his orders, approval, or permission, which, in the nature of the case, he would be unable to give in any rational way, since he necessarily lacks the knowledge that would be required to do so.

The following is a nine-part question.
4. Private ownership of the means of production is the most fundamental of the institutions of capitalism. It underlies a division-of-labor society in a direct way and in a variety of indirect ways.
5. The direct dependence of the division of labor on private ownership of the means of production is based on the nature of the gains provided by the division of labor, in particular, the gains derived under the head of "the multiplication of knowledge" and "the benefit from the existence of geniuses."
6. The gains from the multiplication of $\overline{\text { knowledge that the division of labor provides results }}$ from the fact that different individuals know different things about production, and yet the totality of all their separate knowledge enters into the productive process and benefits all who consume the products that result.
7. The gains from the existence of geniuses that the division of labor provides results from the fact that different individuals have different degrees of intelligence and that the intelligence of all enters into the productive process and serves to benefit everyone who consumes the products.
8. Both the multiplication of knowledge and the gains from the existence of geniuses that the division of labor provides derive from the fact that individuals possess separate, independent minds and think and hold knowledge separately and independently from one another.
9. The fact that individuals think and hold knowledge separately and independently from one another requires that they be able to act and produce separately and independently from one another. If they
could not, then those with knowledge would be in thrall to those who lacked knowledge and those with greater intelligence would be in thrall to those of lesser intelligence.
10. Since action and production require the use of material means of action and production if they are to achieve any significant or substantial results, the need for separate, independent action and production implies a need for separate, independent holdings of wealth and capital, i.e., a need for private property and private ownership of the means of production.
11. By the nature of the leading benefits it provides, namely, the multiplication of knowledge and the gains from the existence of geniuses, a division-oflabor society depends on the institution of private property and private ownership of the means of production.
12. Private property and private ownership of $\overline{\text { the means of production are fundamental and essential }}$ to a division-of-labor society because the separate, independent thinking and acting of individuals is fundamental and essential to it, and because they are the material requirement of such separate, independent thinking and acting.
13. The existence of numerous medium and large-sized business enterprises, in which large numbers of individual wage earners successfully produce under the direction of businessmen and capitalists
a. refutes the claim that separate, independent production is necessary to the existence of the division of labor, since in these important cases it does not exist
b. is consistent with the claim that separate, independent production is necessary to the existence of the division of labor, because the formation and extent of all business enterprises is itself the product of the separate, independent thinking and acting of all the individual participants-e.g., the individual stockholders decide the extent to which it is advantageous to pool their capitals and employ other people; the individual wage earners decide the extent to which working for such an enterprise is to their advantage compared with working on their own, as businessmen, and with working for any other such enterprise
c. both (a) and (b)
14. In placing ownership of the means of production under government control, and thereby precluding separate, independent production and the benefits of separate, independent minds driving the productive process, socialism and collectivism destroy the foundation on which rest the most important gains from the division of labor and are thus fundamentally incompatibile with a division-of-labor society.
15. As expressed in the phrase "central planning," which is an essential characteristic of its operation, socialism and collectivism require that
a. the whole of society function as one, indivisible unit in the conduct of the economic system b. every citizen or, as a minimum, the Supreme Dictator and the other members of the Central Planning Board know every significant fact pertaining to production anywhere in the economic system
c. both (a) and (b)
16. In order for a socialist system to be operated democratically,
a. it would be necessary that the voters decide such questions as whether a new steel mill should be built in Gary, Indiana, or somewhere else; what kind of steel mill it should be; how large it should be; and so on
b. in the face of hundreds or thousands of such questions arising every day, the voters would have to devote their lives to nothing else, and still they would be almost entirely ignorant about the matters raised in each case
c. both (a) and (b)
17. Any democratic decision making under $\overline{\text { socialism }}$ would necessarily quickly give way to decision making by a narrow group of government offials-the Central Planning Board.
18. Central planning even by a board of experts is actually impossible, because of its requirement that a single mind be able to know and work with every significant fact pertaining to production anywhere in the economic system.
19. Socialism in fact does not represent any $\overline{\text { form of coordinated central planning, but always lim- }}$ ited, partial planning, which is all that any human mind is capable of accomplishing.
20. The necessarily limited, partial plans of $\overline{\text { socialism again and again turn out to be mutually con- }}$ tradictory, because of the lack of ability to oversee them all and thus to coordinatate and harmonize them. Thus, for example, separate plans are made by different authorities that presuppose the use of one and the same supplies of means of production, with the result that the success of one plan necessitates the failure of others.
21. Economic planning under capitalism exists
a. to the extent that the government becomes involved in economic decision making and thus introduces planning
b. insofar as businessmen, investors, wage earners, and consumers think about courses of action they expect to be profitable or otherwise beneficial to them and decide to follow the pattern of behavior that their thinking indicates
22. Capitalism is characterized by economic $\overline{\text { planning }}$ on the part of all of the individual participants in the economic system-businessmen, investors, wage earners, and consumers.
23. Economic planning is present under capitalism when
a. a consumer plans to buy a home or automobile or new clothes or change his diet
b. a wage earner plans to change his job or learn a new skill or do his work in a different geographical area
c. a businessman plans to introduce a new product, or retire an existing product, build up his inventory or run it down, hire workers, or discharge workers, open or close a branch, change his methods of production or keep them the same d. all of the above
24. Economic planning under capitalism a. exists and is all pervasive
b. routinely takes place on the part of all participants in the economic system
c. is based on a consideration of prices in the
form of costs or revenue or income
d. all of the above
25. The prices on which economic planning under capitalism is based make possible economic calculations, which provide a standard of action for the planner under capitalism, which is, other things being equal, buy what costs the least and do what earns the most.
26. The standard of action described in the $\overline{\text { previous }}$ question is objective in the light of one's desire to obtain more wealth, since buying any given thing for less releases funds that make additional purchases possible, and earning more provides additional funds for additional purchases.
27. Prices serve to coordinate and harmonize $\overline{\text { the plans }}$ of each individual under capitalism with the plans of all other individuals in the economic system.
28. When a student changes his career plan $\overline{\text { from actor to accountant on the basis of the difference }}$ in income he can expect to earn, the change signifies making his career plan coordinate better with the plans of his fellow citizens, whose plans-as manifested in what they are willing to spend their money for-call much more for the kind of services he is likely to be able to provide as an accountant than for the kind of services he is likely to be able to provide as an actor.
29. When a prospective home buyer changes his plan concerning which neighborhood to live in on the basis of the difference in home prices, he is adjusting his housing plan to the housing plans of others, inasmuch as it is the plans of others willing and able to pay more to live in certain neighborhoods, and less to live in certain others, that determine the relative housing prices confronting our home buyer.
30. When a business changes its plan concerning product lines, methods and locations of production, or any other aspect of its activities in response to profit-and-loss calculations, it is changing its plan in response to changes in the plans of others. This is because it is the plans of its prospective customers, of all competing sellers of its goods, and of all other buyers of the means of production it uses or otherwise depends on, that enter into the formation of the prices determining the revenues and costs of any business firm and thus what it finds profitable or unprofitable to produce.
31. Use of the expression "economic planning" as a synonym for government planning ignores the massive planning of all of one's fellow citizens and is thus an insult to them.
32. The price system is what makes possible the division of the intellectual labor required in the process of economic planning, in that it coordinates and harmonizes all the various separate, partial plans of the multitudes of different individual planners under capitalism.
33. Capitalism is
a. an anarchy of production
b. a thoroughly planned economic system, one which is planned on the basis of the thinking and values of all of the participants in the economic system
34. The price system rests on the profit motive and the freedom of competition.
35. Operating in conjunction with one another, the profit motive and the freedom of competition are the elements that
a. drive and regulate the price system
b. determine the formation of all individual prices
c. bring about the integration of all individual prices into a system of prices that coordinates and harmonizes the activities of all participants in the economic system
d. all of the above
36. The text promises to show that the profit motive
a. provides powerful incentives for the steady expansion and improvement of production
b. operates to keep the relative size of all the various industries and occupations in proper balance c. makes production accord with the will of the ultimate buyers-the consumers
d. ensures that the production of each individual good takes place in a way that is maximally conducive to production in the rest of the economic system
e. balances the demand and supply of each product and ensures the most rational and efficient distribution of each product over space and time among all the markets that compete for it f. all of the above
$\qquad$ 37. The text promises to show that the profit motive
a. ensures the delivery of each product into the hands of those individuals who, within the limits of their wealth and income, need or desire it the most
b. ensures the most rational and efficient allocation of capital and of every type of labor and material among its possible alternative uses c. makes the economic system respond to changes in economic conditions in the most rational and efficient manner possible
d. creates economic order and harmony out of the activities of all the different individuals who comprise the economic system
e. is what enables capitalism to be an economic system that is rationally and cohesively planned by each and every individual who participates in it f. all of the above
38. The profit motive is what prevents any sort of "anarchy of production."
39. In seeking to serve his financial self-interest,
a. every seller under capitalism must be aware that there are other sellers or potential sellers who might sell to his customers and thus that he must accordingly limit the prices he asks
b. every buyer under capitalism must be aware that there are other buyers or potential buyers who might buy from his suppliers and thus that he must set the prices he offers accordingly c. in the above ways, competition and the freedom of competition are the built-in regulator which provide the essential context in which the profit motive operates
d. all of the above
40. While the price system vitally depends on the profit motive and the freedom of competition, they in turn depend on the institution of private ownership of the means of production.

## 41. Private ownership of the means of production

a. is what makes the profit motive operative in the formation of prices, the prices both of means of production and of products
b. underlies the very existence of the incentives of profit and loss, in that it is private property, above all in the form of private ownership of the means of production, that is the substance of what is gained or lost by producers
c. both (a) and (b)
42. Private ownership of the means of production underlies the existence of the incentives of profit and loss, because without the ability to accumulate holdings of private property, there would be nothing for producers to
a. gain except the ability to enlarge their immediate consumption
b. lose, because losses can be losses only of preexisting property
c. both (a) and (b)
43. With private ownership of the means of production there is not only the incentive of profit and loss to use the means of production profitably but also the fact that an individual's control over the means of production is increased or decreased to the extent that he uses them profitably or unprofitably.
44. An individual's control over the means of production is increased or decreased to the extent that he uses them profitably or unprofitably because
a. those owners who use the means of production profitably are in a position to save and reinvest, in proportion to the extent of their profits and thereby to enlarge their control over the means of production
b. those owners of the means of production who suffer losses correspondingly lose control over the means of production, inasmuch as their losses mean that their sales proceeds are less than their initial outlays and thus that they lack the funds to replace the means of production with which they began
c. both (a) and (b)
45. Private ownership of the means of production is what
a. gives the profit motive its substance and strength
b. enables the profit motive both to be operative in the formation of the prices of means of production and products and to direct the use of the means of production
c. enables success or failure in earning profits to determine the extent of one's control over means of production in the future
d. gives the profit motive virtually all of its economic influence
e. all of the above
46. Private ownership of the means of production underlies economic competition, in that economic competition presupposes separate, independent producers, who, in order to be separate and independent, must hold the wealth they use in production separately and independently from one another, i.e., as private property.
47. Competition among producers presupposes private ownership of the means of production.
48. The freedom of competition, like virtually all other freedoms, is an aspect of property rights: it is the freedom of owners of means of production to employ their means of production in any branch of industry they choose.
49. In addition to its dependence on the $\overline{\text { profit motive and freedom of competition, the price }}$
system, also depends on the institutions of exchange and money.
50. The very phenomenon of exchange pre$\overline{\text { supposes }}$ the separate ownership of the things exchanged. Exchange is a mutual transfer of property between two parties, with the property of each being given as the condition of receiving the property of the other.
51. Prices are sums of money exchanged for units of goods or services.
52. A collectivist monopoly on production, which is the essence of socialism, is incompatible with the means of production being exchanged or, therefore, having prices.
53. Under socialism, capital goods cannot be $\overline{\text { bought or sold because all capital goods are owned by }}$ the same party: the state.
54. A leading purpose of socialism is supposed to be the removal of labor from the status of a commodity that is bought and sold in the market; and, indeed, labor cannot be bought and sold under socialism except on the terms arbitrarily dictated by a universal monopoly employer: the state, which would imply wages at the level of minimum subsistence.
55. Private ownership of the means of production is essential for the existence of markets for capital goods and of competitive markets for labor. It is thus essential for the existence of market prices of the means of production.

The following is a five-part question.
56. The price system depends on the institution of saving and capital accumulation, in that the prices of the means of production are not paid by the consumers, who purchase only the ultimate final products, but by businessmen.
57. All the materials and supplies, all the tools, equipment, and labor services used in production are purchased and paid for by businessmen, almost entirely out of accumulated capital, not by the ultimate consumers out of consumption spending.
58. True answers to the two preceding questions imply that the prices of the means of production depend on saving and capital accumulation.
59. In order for people to save and accumulate capital, to improve the productive property at their disposal in any way, or even just to maintain it, they must have the expectation of benefiting from such action. They can rationally have that expectation only if that wealth-those means of production-are securely their private property.
60. Saving and capital accumulation vitally $\overline{\text { depend on the institution of private ownership of the }}$ means of production and its security. Where property
is insecure, there is little or no saving and capital accumulation.
61. The price system depends on the institution of private ownership of the means of production through its dependence on
a. the profit motive
b. competition
c. exchange and money
d. saving and capital accumulation
e. all of the above
62. The institution of private ownership of the means of production underlies
a. the profit motive
b. competition
c. exchange and money
d. saving and capital accumulation
e. the price system
f. all of the above
63. Saving and capital accumulation are necessary to the existence of a division-of-labor-society because
a. they are necessary to the production of all goods whose production requires more time than elapses between two meals
b. in raising the productivity of labor in the production of food and other vital necessities, they make possible the release of labor for the production of other goods and thus the development of the division of labor
c. they make possible a "division of payments"
d. all of the above
64. The "division of payments"
a. refers to the fact that instead of payments being made only at the end of a process of production, by the ultimate consumers, they are made at points along the way, within relatively short periods of time after the producers at any given stage of production have completed their specific work b. is illustrated by the fact that autoworkers are paid within one or two weeks after the start of their labor, and the producers of the steel and other capital goods that go into automobiles are usually paid within a month or two of their shipment of those capital goods, even though the consumers of automobiles may not complete payment for their cars for as long as five years
c. both (a) and (b)
65. It is not uncommon for cases to exist in which labor must be performed decades or generations before the ultimate final products appear-for example, the case of workers building a factory to produce construction equipment used in the construction of further factories.
66. The division of payments and thus saving and capital accumulation are vital to the existence of the division of labor in its vertical aspect (the aspect of
temporal succession in the process of production), since without them producers whose work is temporarily far removed from the payment by the ultimate consumers would simply be unable to produce such products because the waiting time for payment would be too long.
67. In a division-of-labor society exchange must exist on a massive scale and be a central feature of economic life because a. each product originates in a huge concentration in the hands of a relatively small number of producers and must be brought into the hands of a vast number of consumers
b. exchange is the mechanism by means of which the movement of goods from producer to consumer is accomplished c. both (a) and (b)
68. A division-of-labor society depends specifically on monetary exchange
a. in order to overcome the barriers to exchange that would otherwise exist on account of the common absence of a "double coincidence of wants" b. because of the necessity of monetary calculations to serve as a guide to production
c. both (a) and (b)
69. The absence of money would mean that in order to live, people would either have to themselves be farmers or produce the kinds of goods or services frequently sought by farmers, such as the services of blacksmiths.
70. In the light of its essential role in making possible the existence of a division-of-labor society, it makes sense to claim that "money is the root of all evil."
71. A major source of the gains from the division of labor is that the production of everything tends to be carried on by those who are able to do it best. Economic competition is the process of establishing who is able to produce things best.
72. Economic competition is the process of determining the organization of a division-of-labor society with respect to the choice of
a. persons for occupations-for example, who will be company president and who will be janitor b. which products will serve which markets and to what extent
c. which technological methods of producing any given product will be employed and to what extent d. all of the above
73. Economic competition is a. essentially an antisocial phenomenon, representing conflict, and more akin to combat than to social cooperation
b. the mechanism for organizing and improving the efficiency of the process of social cooperation, which the division of labor represents
74. The freedom of competition, i.e., the free$\overline{\text { dom to gain the customers of others by means of offer- }}$ ing better and/or less expensive goods or services, including goods or serivices that others may have chosen temporarily not to offer, serves to safeguard a divi-sion-of-labor society from possible extortion by the members of individual vital industries.
75. Prohibiting the use of strikebreakers, either by law or by private intimidation, is a violation of the freedom of competition.
76. Economic inequality is a virtually inevita$\overline{\text { ble result }}$ of economic freedom in that individuals are not all equally intelligent, talented, or otherwise capable, and not all equally lucky, and thus, while all trying to succeed, will almost certainly succeed to unequal degrees.
77. The imposition of economic equality represents the destruction of the individual's ability to regard himself as a causal agent because it divides the otherwise significant effects he is able to cause by a denominator equal to the number of equal sharers and thus correspondingly reduces the effect remaining to him. For example, a man capable, by doubling his efforts, of doubling the income he earns, is able to experience only one one-thousandth of that doublng if he must share it with 999 others, and is able to experience only one one-millionth of it if he must share it with 999,999 others.
78. The imposition of economic equality represents the destruction of the individual's perception of the cost of his actions, because that cost is divided over a large group, possibly millions or even billions of people, and correspondingly reduces the cost to the individual concerned.
79. Assume that a quadruple-bypass operation costs $\$ 100,000$ but will be paid for by Medicare and thus by the taxes of perhaps 100 million American taxpayers. Calculate the cost of the operation to the individual taxpayer, including the recipient of the operation.

The following is a six-part question.

Mr. $A$ can assemble 20 units of a product in an hour and must be paid $\$ 10$ per hour. Mr. $B$, who is much less capable than Mr. $A$, can manage to assemble only 10 units of the same product in a hour, but need by paid only $\$ 4$ per hour.
80. Calculate the unit labor cost that results from employing Mr. $A$.
81. Calculate the unit labor cost that results from employing Mr. $B$.
82. Use the letter $A$ or $B$, indicate which of $\overline{\text { these two individuals it would be more economical to }}$ employ in terms of unit labor cost.

Now assume that the government's minimum wage, which previously had been $\$ 3.75$ per hour is raised to $\$ 5.25$ per hour.
83. Calculate the unit labor cost of employ$\overline{\text { ing Mr. } B}$ at $\$ 5.25$ per hour.
84. Again using the letter $A$ or $B$, indicate $\overline{\text { which of }}$ these two individuals it would now be more economical to employ in the terms of unit labor cost and be in compliance with the minimum wage law.
85. The minimum wage law in the above example operates in the material self-interest of Mr. $B$, because it enables him to earn more money than before.
86. Economic inequality enables less capable individuals to compete with, and even outcompete, more capable individuals by means of accepting incomes that are lower in greater proportion than is their relative productivity.
87. The forcible elimination or reduction of $\overline{\text { economic inequality serves to deprive less capable in- }}$ dividuals of the ability to successfully compete.
88. Relatively high incomes have no significant association with relatively high rates of saving out of income.

## CHAPIER 5, PARTB.

## ELEMENIS OF PRICE THEORY: DEMAND, SUPPLY, AND COSTOF PRODUCTION

89. In classical economics the concepts demand and supply refer to schedules of price and quantity and, when diagrammed, to curves showing quantitites demanded or supplied at varying prices arranged in descending or ascending order.
90. In contemporary economics, the concepts demand and supply refer respectively to an amount of
expenditure of money and a quantity of a good or service put up for sale and sold.
91. The law of demand states that, other things being equal, the quantity of a good demanded is greater at a lower price and smaller at a higher price.
92. At the level of the economic system as a whole, the law of demand follows directly from the fact that the need and desire for wealth has no limit
and that a fall in the prices of goods and services is all that is necessary to enable any given expenditure of money to purchase a larger quantity of goods and services.
93. The law of demand exists because of the operation of
a. the law of diminishing marginal utility
b. the substitution effect
c. the income effect
d. all of the above
94. According to the substitution effect, a change in the price of a given good, while the prices of its substitutes remain unchanged, has the effect of shifting expenditures to it, if the change in price is in the downward direction, and away from it if the change in price is in the upward direction, because of the implicit change in the good's competitive position vis-a-vis its substitutes.
95. According to the income effect, to the extent that people were already prepared to buy a given quantity of a good at a definite price, the effect of a lower price is to enable them to buy that same quantity for a smaller expenditure of money, which is equivalent to the generation of additional income and thus gives rise to an increase in the quantity of the good demanded equivalent to the increase that would result from an equivalent increase in income.
96. The marginal utility of every unit of a good that is purchased must exceed its price, if people are to buy it. A fall in price serves to put the price below the marginal utility of additional units and thus to increase the quantity of the good demanded.
97. Other things being equal, a change in price causes a
a. change in demand
b. change in quantity demanded along one and the same demand curve
98. A rise in price reduces
a. demand and thus reduces price
b. quantity demanded
99. Changes in the demand for a good are caused by changes in the price of the good.
100. Changes in the demand for a good are caused by changes in
a. the prices of other goods
b. tastes and preferences
c. the quantity of money
d. money incomes
e. the size and composition of the population
f. the state of technology
g. all of the above
101. Complementary goods are goods that $\overline{\text { must be employed together in order to produce the de- }}$ sired product or outcome. Cigarettes and matches, beer
and pretzels, automobiles and gasoline, the services of carpenters and electicians, are all examples.
102. A rise in the price of a complementary good operates to decrease the demand for the other complementary goods.
103. A rise in the wage rates of bricklayers is in the interest of electricians and carpenters, because all wage earners have the same interests.
104. The elasticity of demand refers to the degree of increase or decrease in quantity demanded in response to a change in price.

The following is multi-part question.
A fall in price results in an increase in quantity demanded, and a rise in price results in a decrease in quantity demanded.
105. In order for the demand to be elastic, the change in quantity demanded must outweigh the change in price, as shown by the total expenditure to buy the item (or, equivalently, the total revenue received from the sale of the item) increasing when the price decreases and decreasing when the price increases.
106. In order for the demand to be inelastic, the change in price must outweigh the change in quantity demanded, as shown by the total expenditure to buy the item (or, equivalently, the total revenue received from the sale of the item) decreasing when the price decreases and increasing when the price increases.
107. The type of demand that is on the borderline, between elasticity and inelasticity is the unit elastic demand, whose essential characteristic is the constancy of total expenditure/total revenue, which results from the changes in quantity demanded being in precise inverse proportion to changes in price.

The following is a four-part question.
108. With a unit elastic demand, when price doubles, quantity demanded halves. When price halves, quantity demanded doubles.
109. Calculate the effect on quantity de$\overline{\text { manded }}$ when price increases by ten percent.
110. Calculate the effect on quantity demanded when price declines by twenty-five percent.
111. Calculate the effect on quantity de$\overline{\text { manded }}$ when price declines by ninety percent.
112. A mathematical definition of elasticity is the percentage change in quantity demanded divided by the percentage change in price.

[^0]114. A fall in the price of a good that is a $\overline{\text { good substitute for other goods is likely to increase the }}$ amount of money spent to buy it, because buyers will shift funds to its purchase from the purchase of substitutes whose price has not fallen.
115. A fall in the price of a luxury good that is widely desired will result in an increase in the amount of money spent to buy that good, to the extent that the lower price makes it affordable by greater numbers of individuals and thus opens up a mass market.
116. Cases of poor substitutes and necessities represent examples of demands that are likely to be inelastic.
117. Economy-wide, aggregate demand is the leading example of a unit elastic demand, because total expenditure for goods and services is determined by the quantity of money in the economic system and thus can be taken as given in the face of supply and price changes.
118. In the case of the demand for an individ$\overline{\text { ual good, total expenditure cannot be taken as given }}$ because changes in the supply and price of any given good affect its compeititive position vis-a-vis other goods and thus the amount of money spent to buy it. Hence, the concept of unit elasticity has little or no actual application at the level of the individual good.
119. The concept of elasticity of demand helps to explain how labor-saving machinery sometimes results in the employment of fewer workers in an industry and other times in the employment of more workers in an industry.
120. Labor saving improvements in agriculture should be expected to result in
a. more
b. less
employment in agriculture.
121. Labor saving improvements in automobilies and personal computers s for the most part have resulted in
a. more
b. less employment in those industries.
122. Labor saving improvements in industries with an inelastic demand result in
a. unemployment both in such industries and in the economic system as a whole
b. make labor available to produce more of the goods and services people are now enabled to buy with the money they save as the result of the fall in prices in the industries with inelastic demands
123. Labor-saving improvements in agricul$\overline{\text { ture have been a major source of the rising demand for }}$ goods and services throughout the rest of the economic system.
124. Suppose that successive price reductions reduce total revenue. The supplier faces a demand curve that is, in this region:
a. price elastic
b. unitary elastic
c. infinitely price elastic
d. of indeterminate elasticity
e. price inelastic
125. If demand is price elastic within the rele$\overline{\text { vant price range, then total revenue: }}$
a. will rise with a fall in price
b. will fall with a fall in price
c. will remain constant with a fall in price
d. may either rise or fall with a fall in price e. will rise if price is greater than $\$ 1$, but fall if price is less than $\$ 1$
126. If demand is relatively price inelastic: a. a 1 percent increase in price evokes a less than 1 percent decrease in quantity demanded b. a 1 percent increase in price evokes a larger than 1 percent decrease in quantity demanded c. a 1 percent decrease in price evokes a larger than 1 percent increase in quantity demanded d. a 1 percent decrease or increase in price induces no change in total revenue
e. none of the above
127. In cases in which a seller need not worry about competition, say, because he has a patent or copyright, or trade secret, the concept of elasticity of demand can help to explain the effect on his profits of charging a higher or lower price.
128. Elasticity remains constant over the entire length of the same demand curve.
129. Supply curves typically slope upward and to the right.
130. In a modern division-of-labor economy, a major reason for the upward slope of supply curves is the increasing marginal utility of the diminishing supplies that remain to sellers as they increase their sales volume.
131. The law of diminishing returns is usually not relevant to upward sloping supply curves in the short run.
132. The basic case with respect to supply is that of a given stock available for sale, which is represented by a vertical line reflecting a given quantity that sellers are prepared to sell at the best price they can obtain. In this case, upward sloping supply curves are nevertheless present in partial markets, where they reflect the competition of the buyers in other partial markets for the limited supplies.
133. At any given time, the overall supply of wheat, crude oil, gasoline, skilled or unskilled labor, and many other things is simply a given fact and can be depicted by a vertical supply curve. Nevertheless,
any given partial market for such an item can be more fully supplied by drawing supplies away from other such partial markets. To do so, however, it is necessary to "ride up" the demand curves in those markets, and this is what creates the upward slope of the supply curve in the given partial market.
134. In cases such as manufacturing and retailing, in which the quantity supplied is not a given fact but actually depends, within broad limits, on the quantity demanded, the seeming determination of price by supply and demand curves actually represents determination of price on the basis of cost of production. But the prices that constitute the costs are directly or indirectly determined by supply and demand.
135. Supply and demand curves are intellectual constructs based on logical deduction from true premises under the assumption of all other things being equal. In the real world, however, the "other things" do not remain equal, and supply and demand curves are therefore constantly changing and thus do not present themselves in a way that would enable us to observe the various individual points that make up such a curve. What we actually observe are continually changing intersection points of continually changing demand and supply curves, not points on any given demand or supply curve.
136. It is incorrect to try to derive supply and demand curves by observing changes in price and quantities demanded and supplied over time.
137. Cases in which both prices and quantities demanded rise over time
a. contradict the law of demand
b. reflect increases in demand and are consistent with quantities demanded having risen still more if prices had not risen or had risen less

The precise formula for calculating elasticity of demand is:

$$
\begin{gathered}
E_{\mathrm{D}}=\frac{\frac{\left(Q_{2}-Q_{1}\right)}{\left(Q_{1}+Q_{2}\right)}}{2} \\
\text { all divided by } \\
\frac{\frac{\left(P_{2}-P_{1}\right)}{\left(P_{1}+P_{2}\right)}}{2}
\end{gathered}
$$

Use this formula to answer the following two questions:
138. If at a price of $\$ 10$, quantity bought will be 5400 per day, and at $\$ 15$, quantity bought will be 4600 per day, then the price elasticity of demand is approximately:
a. 0.2
b. 0.4
c. 0.6
d. 2.5
e. 6.0
139. If at a price of $\$ 8$, the quantity of movie tickets bought will be 3300 per day, and at $\$ 12$, the ticket quantity bought will be 2700 per day, then the price elasticity of demand for movie tickets is approximately:
a. 0.4
b. 0.5
c. 0.7
d. 2.0
e. 2.5

Answers to Questions 1-139 on Chapter 5

| Question \# | Correct | Question \# | Correct | Question \# | Correct | Question \# | Correct |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Answer | $36$ | Answer | Question \# 71 | A ${ }_{\text {T }}$ | $106$ | T |
| 2 | T | 37 | f | 72 | d | 107 | T |
| 3 | T | 38 | T | 73 | b | 108 | T |
| 4 | T | 39 | d | 74 | T | 109 | 10/11 |
| 5 | T | 40 | T | 75 | T | 110 | 4/3 |
| 6 | T | 41 | c | 76 | T | 111 | 10 |
| 7 | T | 42 | c | 77 | T | 112 | T |
| 8 | T | 43 | T | 78 | T | 113 | T |
| 9 | T | 44 | c | 79 | . 1 cent | 114 | T |
| 10 | T | 45 | e | 80 | 50 cents | 115 | T |
| 11 | T | 46 | T | 81 | 40 cents | 116 | T |
| 12 | T | 47 | T | 82 | b | 117 | T |
| 13 | b | 48 | T | 83 | 52.5 cents | 118 | T |
| 14 | T | 49 | T | 84 | a | 119 | T |
| 15 | C | 50 | T | 85 | F | 120 | b |
| 16 | C | 51 | T | 86 | T | 121 | a |
| 17 | T | 52 | T | 87 | T | 122 | b |
| 18 | T | 53 | T | 88 | F | 123 | T |
| 19 | T | 54 | T | 89 | F | 124 | e |
| 20 | T | 55 | T | 90 | F | 125 | a |
| 21 | b | 56 | T | 91 | T | 126 | a |
| 22 | T | 57 | T | 92 | T | 127 | T |
| 23 | d | 58 | T | 93 | d | 128 | F |
| 24 | d | 59 | T | 94 | T | 129 | T |
| 25 | T | 60 | T | 95 | T | 130 | F |
| 26 | T | 61 | e | 96 | T | 131 | T |
| 27 | T | 62 | f | 97 | b | 132 | T |
| 28 | T | 63 | d | 98 | b | 133 | T |
| 29 | T | 64 | c | 99 | F | 134 | T |
| 30 | T | 65 | T | 100 | g | 135 | T |
| 31 | T | 66 | T | 101 | T | 136 | T |
| 32 | T | 67 | c | 102 | T | 137 | b |
| 33 | b | 68 | c | 103 | F | 138 | b |
| 34 | T | 69 | T | 104 | T | 139 | b |
| 35 | d | 70 | F | 105 | T |  |  |

# CHAPIER 6. DEPENDENCE OF THE DIVISON OF LABOR ON CAPITALSM II: THE PRICE SYSTEM AND ECONOMIC COORDINATION PARTA. UNIFORMITY PRINCIPLES 

1. The uniformity-of-profit principle states that there is a tendency toward an equalization of profit margins throughout the economic system.
2. The uniformity-of-profit principle states that there is a tendency toward the equalization of the rate of profit (rate of return) on capital invested throughout the economic system.
3. The achievement, throughout the economic system, of a uniform rate of profit on capital invested is consistent with the existence of permanently unequal profit margins counterbalanced by permanently unequal capital turnover ratios.
4. Assume that supermarkets have profit mar$\overline{\text { gins of } 2}$ percent, automobile companies 10 percent, and electric utilities 20 percent. If the ratio of sales revenues to capital invested (i.e., capital turnover ratio) is 5:1 for supermarkets, $1: 1$ for auto companies, and $1: 2$ for electic utilities, calculate the respective rates of profit on capital invested for
a. supermarkets
b. automobile companies
c. electric utilities
5. The existence of unequal rates of profit in the various branches of production
a. creates incentives for the investment of additional capital in the industries earning above-average rates of profit and for the withdrawal of capital from industries earning below-average rates of profit
b. the effect of the investment of additional capital in the industries earning above-average rates of profit is to increase the supply of products they produce and thus to reduce the selling prices, profit margins and rates of profit of those industries
c. the effect of the withdrawal of capital from the industries earning below-average rates of profit is to reduce the supply of products they produce and thus to raise the selling prices, profit margins, and rates of profit of those industries
d. all of the above
6. An above-average rate of profit provides $\overline{\text { not only the incentive for the investment of additional }}$ capital in the industries concerned but also the means for increased capital investment insofar as the aboveaverage profits are themselves saved and reinvested.
7. Losses provide not only the incentive for the withdrawal of capital from the industries concerned but also themselves directly reduce the capital invested in the industries that suffer them.
8. Low positive rates of profit that are insufficient to cover dividends being paid also directly result in the reduction of the capital invested in an industry.
9. The uniformity-of-profit principle serves to make mistakes of relative overinvestment and overproduction and relative underinvestment and underproduction self-correcting.
10. The uniformity-of-profit principle counteracts the mistakes of relative overinvestment and overproduction and relative underinvestment and underproduction, and thus promotes coordination in the relative size of the various branches of production because
a. mistakes of the first kind result in low profits or losses, which serve to halt and reverse the relative overinvestment and overproduction b. mistakes of the second kind result in high profits, which provide the incentive and means for stepped up investment and production
c. both (a) and (b)
11. The uniformity-of-profit principle delimits the size of the mistakes of relative overinvestment and overproduction and relative underinvestment and underproduction, by making the counteracting forces of correction through respectively falling and rising rates of profit more powerful as the size of the mistakes increases, with the result that "the bigger the mistake, the harder it is to make it."
12. The uniformity-of-profit principle serves to largely prevent the mistakes of relative overinvestment and overproduction and relative underinvestment and underproduction from being made in the first place
a. because the desire of investors to make profits and avoid losses and to make higher profits in preference to lower profits makes them strive to avoid investments representing overinvestment and overproduction and to seize the profit opportunities created by others' insufficient investment b. at any given time, most of the capital of the economic system tends to be in the hands of investors with prior investment success, in that large capitals will tend to be in the hands of those who have succeeded in making high profits, which they have largely saved and reinvested, and the earning of which signifies investing in lines where investment was greatly needed, while those who invested where investment was not needed have incurred losses and thus now command correspondingly less capital
c. both (a) and (b)
13. The uniformity-of-profit principle gives consumers the power to change the pattern of production, i.e., to cause industries to expand or contract,
merely by changing their pattern of buying and abstention from buying.
14. Products continue to be produced because a. businessmen go on producing them
b. consumers value the products and are prepared to pay profitable prices for them
15. Insofar as goods are produced in a free market to which various people object-such as allegedly nonnutritious breakfast cereals, automobiles without seatbelts or airbags, trashy or pornographic literature, alcoholic beverages, cigarettes, and so onthe logical targets of the complaints are the consumers, even though the actual targets are almost always the manufacturers.
16. The uniformity-of-profit principle operates to bring about a progressive increase in production because in order to earn an above-average rate of profit in the face of its operation, it is necessary to introduce repeated improvements in products and methods of production.
17. Improvements in products and methods of production are the source of high profits only until competitors can copy them to the point of making them the general standard of the industry, at which point the continued earning of high profits requires the introduction of further improvements.
18. No matter what its record of past success in innovation, a company is doomed if competitors not only catch up to it but now more and more pull ahead of $i t$.
19. In the face of innovative competitors, adopting improvements is necessary not only to earn premium profits but also to staying in business at all, in that while premium profits go to the innovators, no profit whatever goes to those who lag too far behind the innovators.
20. The uniformity-of-profit principle implies
a. increasing production and falling prices
b. where virtually costless, irredeemable paper is the monetary unit, an increase in the quantity and fall in the value of such money more rapid than the increase in the production and supply of goods and thus rising prices expressed in terms of such money
c. both (a) and (b)
21. The empirical fact that the great majority of prices have risen over the last seventy years is a contradiction of the proposition that the uniformity-ofprofit principle operates to reduce prices.

The following is a two-part question, based on the assumption that a new light bulb sells for $\$ 1$ and costs $90 \propto$ to produce and that a ten-times longer-lasting light bulb could be produced at the same unit cost.
22. Give an estimate of how much more con$\overline{\text { sumers would be willing to pay for the ten times- }}$ longer lasting bulb.
23. Give an estmiate of how much more the light-bulb manufacturer would have to charge to make more profit on one ten-times longer-lasting bulb than on ten of the present bulbs, allowing five cents of lost recovery of depreciation on each of the present bulbs.
24. Claims that businesses engage in "planned obsolescence"
a. imply that, contrary to the uniformity-of-profit principle, the profit motive operates to make prices higher rather than lower
b. ignore the fact that to compensate for any lost unit volume due to greater durability of their products, business firms need to raise their prices by far less than the premium consumers are tyically willing to pay for the greater durability c. both (a) and (b)
25. Cutting costs of production
a. by means of the use of labor-saving machinery, or the use of less expensive materials or components that are less expensive because less labor is employed in their production, has the effect of making labor available for the production either of more of the product whose costs of production are cut or more of other products in the economic system
b. by means of the use of less expensive labor which is less skilled, or of materials that are less expensive because of their comparative abundance and/or lack of valuable alternative uses, is equivalent to increasing the supply of more valuable labor and materials and their products at the expense of reducing the supply of less valuable labor and materials and their products
c. both (a) and (b)
26. Cost cuts
a. are sought by businessmen in order to improve their profits
b. serve to expand production in the economic system
c. both (a) and (b)
27. Premium rates of profit can be earned by $\overline{\text { better anticipating changes in consumer demand than }}$ others, because doing so enables one to be early on the scene in cases in which increases in consumer demand serve to create a premium profit.
28. Economic progress results in such largescale changes in the pattern of consumer demand as accompanied cost-cutting improvements in agriculture, which served to make food and fiber less expensive and thus to enable people to afford more of numerous other things.
29. Successfully anticipating changes in consumer demand operates to increase the gains from economic progress because it represents the movement of
capital and labor into the production of the things consumers wish to obtain as the fruits of the progress. For example, improvements in the efficiency of producing foodstuffs would have been of far less value if the capital and labor saved had been applied to the production simply of more foodstuffs rather than make possible the expansion of production outside of agriculture.
30. A minimum price control is a price control that imposes
a. an artifically low price
b. an artifically high price
c. an artifically high price below which one is prohibited from selling

## $\overline{\text { trol that }}$ that

31. A maximum price control is a price con-
a. imposes an artifically high price
b. an artifically low price
c. an artifically low price above which one is prohibited from selling
32. A synonym for maximum prices is ceil$\overline{\text { ing prices. }}$
33. A synonym for mimimum prices is floor prices.
34. Farm subsidies, minimum wage laws, and labor-union wage scales imposed by government policy are all examples of minimum prices.
35. Rent controls and the price controls imposed on oil and other products in the 1970s are examples of maximum price controls.
36. If the government abolished its farm subsidy program and refunded its cost to the taxpayers, who pay for it, the effects would be
a. a plunge in the sales revenues and profits of agriculture
b. a rise in the sales revenues and profits of the additional things purchased by the tax payers c. a shift of capital and labor out of agriculture and into the things in additional demand by the taxpayers
d. a restoration of the rate of profit in the smallersized agriculture that would remain
e. the elimination of premium profits on the things bought by the taxpayers with their tax savings as the production of those things expanded f. all of the above
37. The permanent effect of the abolition of farm subsidies and the equivalent reduction of taxes would be the elimination of farm production that the market does not want sufficiently to be willing to pay profitable prices for it and the expansion of the production of other goods that the market does want sufficiently to be willing to pay profitable prices for them.
38. If long-standing rent controls were repealed,
a. the immediate effect would be a sharp rise in rents and the profitability of rental housing
b. the longer-run effect would be an increase in the supply of rental housing and a reduction in rents toward the costs of providing such housing plus only as much profit as required to provide the going, competitive rate of profit
c. the still longer-run effect would be a progressive fall in the real cost of rental housing and improvement in its quality as landlords once again came under the necessity of earning premium profits through making such improvements and competition progressively passed them on to tenants
d. all of the above
39. The effect to be expected from repealing a maximum price control is a temporary surge in price followed by an increase in supply and decline in price, to the point where the industry no longer earns an exceptional rate of profit but is merely larger.
40. Experience following repeal of price controls on oil and oil products in the United States in 1980 contradicts the expectation expressed in the preceding question.
41. Since equity capital provides a buffer of security for the capital of lenders and thus reduces the risks of the lenders compared with those of the borrowers, the rate of profit on equity capital is generally likely to exceed the rate of interest paid on borrowed capital.
42. People are able to borrow money to the extent that they already have money because the wealth they have serves as a protective buffer for creditors. The greater their wealth, the greater the borrowings on which they can provide such a protective buffer.
43. The geographical uniformity-of-price principle states that there is a tendency toward the establishment of a uniform price for the same good throughout the world, plus or minus transportation charges.
44. The basis of the geographical uniformity-of-price principle is that the existence of an unequal price for the same good in two markets
a. creates the opportunity for profit by buying in the cheaper market and selling in the dearer market
b. the effect of such buying is to raise the price in the initially cheaper market while the effect of such selling is to lower the price in the initially dearer market
c. the above process goes on until the price discrepancy is no greater than transportation cost d. all of the above
45. When the price of the same good in two markets differs by less than transportation cost, it does not pay to buy in the cheaper market in order to sell in the dearer market.
46. The ability of a government to create and $\overline{\text { maintain }}$ an inequality of price greater than transportation cost, as, for example, that created by a tariff, confirms the geographical uniformity-of-price principle rather than contradicts it, because the discrepancy can be maintained only if measures are taken of sufficient strength to offset the operation of the principle, such as severe penalties against smuggling combined with a great liklihood of being caught if one becomes a smuggler. If not for such penalties and the liklihood of suffering them, the tariff could not be effective.
47. The operation of the geographical unifor-mity-of-price principle serves to spread the effect of local failures of supply over a wider area, thereby reducing the severity of the local reduction in supply and correspondingly limiting the resulting rise in price.
48. In a free market, the effect of the Arab oil embargo of 1973 would have been
a. a surge in the price of oil and oil products in the Northeastern United States, which was the region where the reduction in supplies mainly took place
b. the movement of replacement supplies to the Northeast from elsewhere in the United States as soon as the price of oil and oil products in the Northeast exceeded the price in the rest of the country by more than costs of transportion
c. the movement of replacement supplies to the United States as a whole from non-Arab foreign suppliers as soon as the price of oil and oil products in the United States came to exceed the price in those areas by more than the costs of transportion
d. the resumption, despite the embargo, of the indirect import of Arab oil via third-parties, such as European refiners using Arab oil
e. all of the above
49. In 1973 price controls on oil and oil products in the United States served to make illegal the action people would otherwise have been able to take to mitigate the effects of the Arab embargo.
50. In a free market, the effect of a foreign $\overline{\text { embargo }}$ against a country on the part of suppliers not controlling substantially all foreign supplies will be to reduce the supply of the embargoed good in that country
a. by the amount no longer supplied by those conducting the embargo
b. by nothing at all if those conducting the embargo go on selling the same overall amount but merely to different buyers
c. by an amount commensurate only with whatever reduction the embargoing suppliers are able to achieve in the global supply of the good
d. (b) and (c) but not (a)
e. all of the above
51. The belief that if a country has lower tariffs than its trading partners it is at a disadvantage, is equivalent to the belief that if the winds and the ocean currents run toward it and cause its inbound transportation costs to be less than its outbound transportation costs, it is at a disadvantage.
52. The temporal uniformity-of-price principle
a. is that in a free market, the expected price of a storable good in the future tends to exceed its price in the present by no more than the costs of storage for the period in question together with an allowance for the competitive rate of profit for the period in question
b. exists because buying now for future sale when the present price is less than the expected future price by more than the factors indicated in answer (a) serves to raise the present price and the corresponding availability of more supply for the future serves to reduce the expected future price, thereby narrowing the difference in price
c. by coordinating anticipated future demand and supply with present demand and supply, operates to balance the consumption of commodities over time and to minimize the effects of scarcities d. all of the above
53. In serving to raise current or spot prices in anticipation of higher prices in the future, commodity speculators bring about a curtailment of present consumption and an enlargement of supplies available for the future when they are more needed.
54. By encouraging an undiminished rate of consumption, a price control can turn a scarcity of a storable good into a famine.
55. Speculators as a class cannot profit from price increases caused by their own activity because if nothing else but their buying were present to raise price, they would eventually have to sell back at lower prices than they bought.
56. The uniformity-of-wages principle
a. is that there is a tendency toward a uniformity of wage rates for workers of the same degree of skill and ability
b. exists because of the preference of workers for higher wages rather than lower wages
c. exists because the movement of workers from the lower-paying fields into the higher paying fields reduces the supply of labor and raises its wages in the initially lower-paying fields and increases the supply of labor and reduces its wage rates in the initially higher-paying fields d. all of the above
57. The operation of the principle that there is a tendency toward a uniformity of wage rates is unrealistic because it requires that forty-year olds be willing to change careers for ten or twenty percent pay differences.
58. The uniformity-of-wages principle gives the consumers the power to determine the relative size of the various occupations simply by changing their pattern of buying and abstention from buying.
59. Positives or negatives, such as safety or danger, pleasantness or unpleasantness, and low or high costs of training, associated with the different types of jobs serve to create permanent inequalities in wage rates at any given level of skill and ability, with the wages where the positives prevail being correspondingly higher and the wages where the negatives prevail being correspondingly lower.
60. Permanent inequalities of wage rates exist between unskilled, skilled, and professional-level workers, because of the inability of those in the lower categories to cross over into the higher categories and thereby change the relative supplies of the different types of labor.
61. The inability of the less capable to cross $\overline{\text { over into }}$ the ranks of the more capable helps to explain the extraordinarily high incomes of star performers.
62. The effect of a rise in the demand for the $\overline{\text { products }}$ and services of skilled labor relative to those of unskilled labor reduces the disparity in the wages of the two groups.
63. Where changes in the pattern of the consumers' buying and abstention from buying are unable to effect a change in the relative size of the various occupations, because of the inability of the wage earners to move from occupations in lesser demand into those in greater demand, the effect is to change the relative wage rates of the occupations.
64. Relative consumer demand in the face of fixed supplies is what explains
a. the incomes of star performers relative to those of everyone else
b. inequalities in the wages of unskilled, skilled, and professional-level workers
c. both (a) and (b)
65. The profit motive is consistent with paying blacks and women less than whites and men for doing the same work, because more profit is earned by paying lower wages.
66. The fact that, other things being equal, more profit is earned by paying lower wages than
higher wages leads to an increase in the demand for the workers earning the lower wages and a decrease in the demand for workers earning the higher wages, which serves to raise the wages of the former and lower the wages of the latter, until they are equal or the difference is imperceptible.
67. The profit motive is consistent with charging blacks higher rents for the same housing and higher prices for the same goods, because, other things being equal, higher rents and higher prices mean higher profits.

## 68. Cost of production influences the prices

 of productsa. indirectly by causing production to be increased and prices to fall where price exceeds cost by more than enough to provide the going, competitive rate of profit, and by causing production to decrease and prices to rise where price does not exceed cost by enough to provide the going, competitive rate of profit
b. directly, in that large low-cost producers with capacity to spare are in a position to set prices close to the costs of their less efficient rivals, who are thereby normally prevented from earning high profits and expanding, while they themselves can earn substantial profits on the basis of their lower costs of production
c. both (a) and (b)
69. Cost of production at any given stage of production
a. always reduces to a sum of prices times respec-
tive physical quantities of the various means of production
b. consists in part of prices determined by further costs of production and of wage rates and other prices determined by demand and supply c. is more and more resolvable into wage rates and other prices determined by demand and supply as one goes further back in the chain of supply d. all of the above
70. Cost of production
a. provides the ultimate explanation of prices b. cannot be an ultimate explanation of prices, but leads back to supply and demand as the ultimate explanation of prices

## PARTB. АШОСАTION PRINCIPLES

71. This is a multipart question. Match the $\overline{\text { following items with a " } \mathrm{C} \text { " if their prices are normally }}$ determined directly on the basis of cost of production and with a " $D$ " if their prices are directly determinded by demand and supply.
a. agricultural commodities between harvests
b. skilled and unskilled labor
c. goods at retail
d. second-hand goods
e. manufactured or processed goods
f. paintings by old masters
g. scrap iron
72. The quantity of money determines the absolute height of goods and services in limited supply and consumer preferences determine their relative height.
73. In a free market, the prices of consumers' goods in limited supply are set high enough to limit quantity demanded to the supply available and thereby prevent shortages of such consumers' goods.
74. The setting of prices in the manner described in the previous question
a. serves the interests of the sellers and the rich but harms the interests of the buyers and the poor b. serves the self-interests of buyers as well as sellers, and of poor buyers as well as rich ones c. makes the distribution of goods and services in limited supply take place in accordance with a combination of relative wealth and income and relative need and desire
d. all of the above
e. (b) and (c)
75. In a free market, the prices of factors of production in limited supply
a. are high enough to limit the quantity of such factors demanded to the supply of them available b. carry through as costs of production to the products of such factors and serve to keep the quantities of them demanded within the limit of the supply of the factors of production available c. are in the self-interest of buyers, including employers, no less than sellers
d. serve to bring about a distribution of the benefit of the factors in accordance with a combination of the relative wealth and income and relative need and desire of the ultimate consumers e. serve to accomplish the added dimension of distribution of factors of production among the competing uses of them in the production of various products, e.g., the distribution of crude oil as between the production of gasoline and the production of heating oil
f. all of the above
76. In a free market, the distribution of the factors of production among their various uses takes place in accordance with a process of bidding among the different needs, desires, and purposes of one and the same set of consumers.
77. In a free market, the factors of production $\overline{\text { are allocated to their most important uses, in accor- }}$
dance with the bidding of the consumers for their products.
78. The concept "most important uses" of a factor of production is
a. a given fact
b. a variable range determined by the supply of the factor available
79. A free market operates to maximize gains and minimize losses in connection with increases or decreases in the supply of a factor of production by means of
a. withdrawing a factor of production in diminished supply or in additional demand from the least important of its previous uses, i.e., its previously marginal uses
b. allocating the newly available supply of a factor of production that result either from a decrease in demand for it or from an increase in its overall supply to the most important of its previously submarginal uses
c. both (a) and (b)
80. By prohibiting the rise in oil prices, price controls during the Arab oil embargo led to submarginal uses of oil being able to go on obtaining supplies at the expense of far more important uses of oil.
81. Free market prices, which are high enough to end shortages, prevent hoarding.
82. Cost of production signifies a combination of the quantities and value of the factors of production that are made unavailable for alternative uses. The lower the cost of producing any given item, the larger the quantities and the more valuable the factors of production left available for use elsewhere in the economic system.
83. Cost calculations operate to lead each product to be produced by methods that least impair production in the rest of the economic system.
84. In a free market, a reduction in the supply of a factor of production causes a rise in its price and efforts on the part of those faced with the higher price to find substitutes and to respond by reducing their consumption of the more expensive item(s) in ways that are least costly to themselves.
85. Price controls during the Arab oil em$\overline{\text { bargo prevented the economic system from adopting a }}$ rationally planned response to the reduction in oil supplies.

| Question \# | Correct Answer | Question \# | Correct Answer | Question \# | Correct Answer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | F | 31 | C | 61 | T |
| 2 | T | 32 | T | 62 | F |
| 3 | T | 33 | T | 63 | T |
| 4 | a) $10 \%$, b) $10 \%$, <br> c) $10 \%$ | 34 | T | 64 | C |
| 5 | d | 35 | T | 65 | F |
| 6 | T | 36 | f | 66 | T |
| 7 | T | 37 | T | 67 | F |
| 8 | T | 38 | d | 68 | c |
| 9 | T | 39 | T | 69 | d |
| 10 | c | 40 | F | 70 | b |
| 11 | T | 41 | T | 71 | a) D, b) D |
| 12 | c | 42 | T |  | c) $C$, d) $D$ |
| 13 | T | 43 | T |  | e) $C, f) D$ |
| 14 | b | 44 | d |  | g)D |
| 15 | T | 45 | T | 72 | T |
| 16 | T | 46 | T | 73 | T |
| 17 | T | 47 | T | 74 | e |
| 18 | T | 48 | e | 75 | f |
| 19 | T | 49 | T | 76 | T |
| 20 | c | 50 | d | 77 | T |
| 21 | F | 51 | T | 78 | b |
| 22 | up to \$10 | 52 | d | 79 | c |
| 23 | \$2.50 | 53 | T | 80 | T |
| 24 | c | 54 | T | 81 | T |
| 25 | c | 55 | T | 82 | T |
| 26 | c | 56 | d | 83 | T |
| 27 | T | 57 | F | 84 | T |
| 28 | T | 58 | T | 85 | T |
| 29 | T | 59 | F |  |  |
| 30 | c | 60 | T |  |  |

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# CHAPTER 7. DEPENDENCE OF THE DIVISION OF LABOR ON CAPITALISM III: PRICE CONTROLS AND ECONOMIC CHAOS 

## PARTA. PRICECONTROLS AND SHORTAGES

## 1. The definition of inflation as being rising

 prices implies thata. inflation comes into being only as and when prices rise and would not exist if prices did not rise b. businessmen are responsible for inflation, since prices would not rise if they did not raise them
c. price controls are capable of eliminating inflation
d. all of the above
2. In place of rising prices inflation has also been defined as an
a. undue increase in the quantity of money
b. increase in the quantity of money at a rate in excess of the rate of increase in the supply of gold and silver
c. increase in the quantity of money caused specifically by the government
d. all of the above
3. Defining inflation as an increase in the quantity of money at a rate in excess of the rate of increase in the supply of gold and silver is tantamount to defining it as an increase in the quantity of money caused specifically by the government, inasmuch as, in the absence of government interference, the quantity of money could not for very long increase at a faster rate than the increase in the supply of precious metals.

## 4. Rising prices are

## a. inflation

b. a leading symptom of inflation, not the phenomenon itself, which can exist, and, indeed, accelerate, even though this particular symptom is prevented from appearing
c. both (a) and (b)
5. The general consumer price level, i.e., the $\overline{\text { weighted }}$ average of the actual prices at which goods and services are sold, is, literally, nothing more than the total spending to buy them divided by the total quantity of them sold. It is thus an arithmetical quotient, with demand (spending) as the numerator and supply (quantity of goods sold) as the denominator.
6. Rising aggregate demand or falling aggregate supply are the only two possible direct causes of a higher price level. Any other, indirect cause must operate through one or both of these two direct causes.
7. In explaining the chronically rising prices of the last 70 years,
a. falling supply must be ruled out, because in practically every year supply in the economic system has increased rather than decreased
b. the contribution of supply to the general consumer price level has not only not been to make prices higher, but to make them lower than they otherwise would have been
c. the explanation of rising prices is a rise in aggregate demand great enough to overcome the price reducing effects of growing supply
d. all of the above
8. The rise in aggregate demand is what
a. bids up the prices of all goods and services in limited supply
b. enables price increases initiated by sellers, whether businessmen or labor unions, to take place as a repeated phenomenon
c. both (a) and (b)
9. In the absence of the rise in aggregate demand, price increases initiated by sellers would reduce the amount of goods and services that could be sold. This loss of sales volume, and the mounting unemployment that goes with it, would soon put an end to such price increases.
10. An increasing quantity of money raises aggregate demand and thus prices by virtue of being spent and respent so long as it continues in existence and thereby raises the level of aggregate spending.
11. The author holds that the quantity theory of money-viz., the increase in the quantity of money-is
a. the only valid explanation of the phenomenon of generally rising prices
b. one among several equally valid explanations
of generally rising prices
12. Once the truth of the quantity theory of $\overline{\text { money is }}$ recognized, the government's responsibility for rising prices follows immediately, because under the conditions of the last seventy years, the government has had virtually total control over the quantity of money and has deliberately brought about its rapid increase.
13. Since 1933, the quantity of money in the United States has increased from approximately \$19 billion to more than $\$ 2.5$ trillion, an increase well in excess of a hundredfold.
14. The imposition of price controls to combat inflation is analogous to an attempt to deal with expanding pressure in a boiler by means of manipulating the needle in the boiler's pressure gauge, or to reduce a patient's fever by means of manipulating his thermometer reading.

## 15. Price controls

a. stop inflation
b. combine with inflation to produce a different and worse set of consequences than inflation alone would produce, namely, shortages and the consequences of shortages
16. A shortage is an excess of the quantity of a good buyers are seeking to buy over the quantity sellers are willing and able to sell. An example of a shortage is the case of eager buyers of gasoline who are unable to find gasoline.
17. The concept of a shortage
a. is the same as
b. differs from
that of scarcity.
18. In a free market scarcities do not result in shortages but in prices sufficiently high to reduce the quantity demanded to within the limit of the supply available.
19. Gold and diamonds are widely desired and are extremely scarce. As a result,
a. their prices are extremely high-high enough to limit the quantity of them demanded to the supply of them that is available
b. they are in a state of shortage, with supplies being unavailable to buyers willing and able to pay the market price
c. both (a) and (b)
20. Scarcities can result in shortages only when they are accompanied by price controls, because in the absence of price controls the effect of scarcity is simply to drive the price to whatever point is required to limit the quantity demanded to the supply available.
21. Price controls can create shortages even when supplies of goods are at record-high levels, by bringing about an increase in the quantity of the good demanded to a point that exceeds the record-high-level of the supply available. For example, a record-highlevel of wheat production could be accompanied by a severe shortage of wheat if the government imposed a price control low enough to make it profitable to use greatly increased amounts of wheat as animal feed.
22. The oil shortage of the 1970s in the United States existed despite the fact that the supply of oil in the United States was still large enough to make possible per capita oil consumption far greater than that of practically any other country and far greater than that of the United States itself not many years earlier.
23. The combination of inflation plus price controls easily results in large and growing shortages of practically everything, because the increase in the quantity of money, and thus the increase in the willingness and ability to spend money, that inflation represents, serves to increase the demand for virtually everything. As soon it succeeds in increasing the quan-
tities demanded beyond the supplies available, shortages come into existence.
24. Inflation
a. in the absence of price controls results in
higher prices
b. in combination with price controls results in shortages
c. is wiped out of existence by price controls
d. all of the above
e. (a) and (b) but not (c)
25. Shortages cause scarcities by allowing supplies to be diverted to less important uses at the expense of more important uses, with the effect of undercutting production. For example, diverting part of the supply of oil required to keep oil wells in operation to such uses as providing the gasoline for shopping trips that would be avoided at a higher price of gasoline. Such outcomes occur because the price controls prohibit the more important uses from outbidding the less important uses for the supply of the item.
26. In a free market, so far from there being $\overline{\text { shortages, the typical case is that a seller is in a posi- }}$ tion to supply more than his present number of customers, even when the overall supply of the item is strictly limited for the time being.
27. The situation described in the preceding question results from the price being high enough to hold the quantity demanded to a point somewhat below that of the full supply available, thus leaving the sellers with a stock capable of serving additional customers.
28. When accompanied by inflation, which $\overline{\text { drives up }}$ costs, price controls cause industries to become progressively less profitable and more and more unprofitable and thus to produce less and ultimately go out of existence altogether.
29. Rent controls first destroy the housing of the poor, because such housing starts out with operating costs closer to rental revenues than is the case with higher quality housing.
30. Price controls
a. in a local market operate to deprive that market of supply by making it impossible for it to compete for supplies with other local markets b. in the natural gas crisis of 1977 served to prohibit areas such as New York and New Jersey from obtaining additional supplies by virtue of preventing them from matching gas prices in Texas and Louisiana
c. caused the agricultural export crisis of 197273 by prohibiting Americans from bidding up the price of agricultural commodities and thus restraining the quantities demanded by foreign buyers
d. all of the above
31. Price controls foment international hostility and thus serve to promote wars, because a. they create conditions in which the citizens of a country (or region) are prohibited from competing for supplies with foreign buyers and thus can be deprived of urgently needed supplies by the foreign buyers
b. because of (a) can lead to prohibitions on exports, i.e., embargoes
c. countries that have price controls and which are the target of embargoes, such as the US during the Arab oil embargo, suffer economic devastation as the result of embargoes, since price controls deprive them of the ability to take the necessary actions to respond to the embargoes d. all of the above
32. Price controls that are expected to remain in force for several more years reduce the supplies of goods held in storage.
33. Private hoarding is responsible for the existence of shortages whether price controls exist or not.
34. In cases in which suppliers withhold supplies, in anticipation of the relaxation or repeal of a price control in the near future, the resulting intensification of the shortage is due to the fact that the existing price control prohibits those seeking to buy in the present from freely competing with prospective future buyers.
35. In contrast to the case of most goods, price controls on natural resources in the ground are likely to result in a withholding of supplies.
36. A control on the wage rate of any particu$\overline{\text { lar type of labor operates to reduce the supply of that }}$ type of labor to the extent that workers who perform that type of labor have the ability to perform other types of labor whose wage rates are rising.
37. A price control on any particular product of a factor of production, such as milk, operates to reduce the supply of that product even if the price of the factor of production, in this case raw milk, is also controlled. This is because the uncontrolled prices of other milk products, such as butter, cheese, and ice cream make them relatively more profitable uses for raw milk and cause milk supplies to be diverted to them at the expense of milk for drinking.
38. If rent controls are placed on apartments, it should be a source of shock and outrage when landlords start converting their apartment buildings to coops and condominiums.
39. Government bodies that enact rent controls have every right to expect that their action will not cause a decrease in the supply of rental housing.
40. Price controls are tantamount to a prohibition of supply insofar as they amount to saying that businessmen are allowed to produce something, indeed, that their production of it is earnestly desired,
only that they will not be allowed to profit from producing it.
41. The likely effect of the combination of price controls and inflation on electric utilities and other regulated industries is that
a. these industries will simply continue to prosper and grow
b. will be unable to keep up with rising demand and potentially could go into decline
42. The general level of knowledge concerning the cause of shortages is in accord with the teachings of economic science.
43. The statement presented in the previous question is confirmed by the New York City law declaring that rent controls could not be lifted until the vacancy rate in the City had first climbed to a certain substantial level.
44. Inflation raises nominal profits while reducing real profits.
45. Inflation reduces real profits because it increases the replacement prices of assets. In order to pay those higher replacement prices, it would be necessary to use most of the higher nominal profits that inflation creates. However, those profits are unavailabe to the extent that they have been taxed away.
46. Inflation
a. proves the need for price controls, because while the average wage earner suffers from rising prices, wealthy businessmen earn record profits b. leads economically ignorant people, who are misled by false appearances, to urge price controls
47. According to the author, the claim of the city government of New York that in refusing to keep up their rent-controlled buildings landlords were 'milking' their properties was an attempt of the guilty to prosecute the innocent.
48. The expression "destructionist mentality" refers to a mindset that is hostile to business profits and which is based on a combination of economic ignorance, envy, and resentment.
49. If the landlords, electric utilities, and the oil companies were richer, the effect on tenants and consumers of electricity and oil products would be that they would be
a. poorer
b. have a more abundant and lower-priced supply of rental housing, electric power and oil products available to them
50. The fact that the greater wealth of producers means a greater supply of products is a point that is widely understood and accepted.
51. In an inflationary environment, the upward repricing of inventories already on the shelves is in the long-run interests of the consumers as well as the producers in that it is necessary to provide the
funds to make possible the purchase of replacement inventories at their higher cost.
52. In the press and media campaign against the profits of the oil companies in the early 1970s, the claim was repeatedly made that the rise in the profits of the oil companies was the cause of the rise in the price of oil. Sixty and seventy percent increases in oil company profits were repeatedly reported in connection with inceases in the price of oil and oil products of similar relative magnitude.
53. Essential facts omitted in the above-mentioned campaign against the profits of the oil companies were
a. the higher profits of the oil companies were not earned on domestically produced oil or oil products but were the result of inventory profits earned abroad, higher profits on other operations, such as chemical production, and profits earned on foreign exchange holdings
b. higher profits could not have been earned on domestically produced oil or oil products because of the combination of government controls on their selling prices and a dramatic increase in their costs of production due to the rise in the world price of crude oil and thus in the cost of imported crude oil
c. the higher profits of the oil companies could not have contributed significantly to the rise in the price oil and oil products in the United States even if, contrary to fact, they had been earned on domestically produced petroleum or petroleum products, inasmuch as oil industry profits the year before were typically only on the order of 5 or 10 percent of sales revenues, and thus a 60 or 70 percent increase in profits could at most explain an increase in prices of between 3 and 7 percent, not 60 or 70 percent
d. even with the 60 or 70 percent increase-from whatever sources-the profits of the oil companies were only restored to the same level in relation to sales revenues at which they had existed in 1968
e. the actual rate of return on capital of the oil companies, rather than the percentage increase in their profit margins, was little more than the rate of increase in the consumer price index and sometimes less than the rate of increase in the consumer price index, with the result that their real rate of profit ranged from modest to negative f. all of the above
54. In the 1970 s, the oil companies were widely blamed for having caused the oil shortage. Given the fact that a shortage results only from a price being held too low, it follows that in order to be responsible for causing the oil shortage, the oil companies would have had to charge too low a price for their oil.
55. The accusation that the oil companies were responsible for the oil shortage by charging too low a price for oil is logically consistent with the almost daily repeated accusation that their behavior is "monopolistic" or "oligiopolistic" and strives to keep the price of oil artificially high.
56. In order to be responsible for a high price of oil as distinct from a shortage of oil, the American oil companies would have had to be responsible for artificially holding down the supply of oil.
57. The American oil companies have been responsible for holding down the supply of oil and thus for causing its price to be higher than necessary. This has been demonstrated repeatedly, in their efforts to prevent the environmental movement from expanding oil production on the North Slope of Alaska, from establishing new offshore wells on the continental shelf, and from finding and developing new oilfields in the areas they (the oil companies) have succeeded in setting aside as wildlife preserves and wilderness areas.
58. In a free market, the oil companies' profit $\overline{\text { motive is }}$ tied to achieving as great a supply and as low a price as possible because
a. the interests of the firms that are predominantly petroleum refiners, and whose capital is invested primarily in refineries, pipelines, tankers, delivery trucks, and the like, rather than in deposits of crude oil in the ground, lie with the greatest possible supply and lowest possible price of crude oil, which price is their cost
b. the interests of the producers of crude oil lie with the greatest possible efficiency of refining operations and the lowest possible price of refined petroleum products, because the lower the prices of refined products, the greater the quantity of them demanded and therefore the greater the quantity demanded of crude oil, which means that the price of crude oil can benefit by part of any cost savings in refining
c. the mutual tension between the interests of refiners and producers of crude oil makes it necessary for each group to try to improve its own production, because if the existing producers of crude oil lag behind, they can expect competition from the refiners, who can develop their own supplies of crude oil or expand their existing crude oil operations; if the existing refiners lag behind, they can expect competition from the producers of crude oil, who, for their part, can undertake refining operations or expand their existing refining operations
d. both groups can expect competition from total outsiders if they fail to exploit any significant opportunity for improvement
e. within each group, whichever individual firm succeeds in improving production ahead of its rivals will almost certainly gain at their expense f. all of the above
59. In contrast to the oil companies, the U.S. government, acting largely under the influence of the ecology movement, restricted the supply of oil in the following ways:
a. it prevented exploration for and development of oil reserves in vast areas of territory arbitrarily set aside as "wildlife preserves" or "wilderness areas"
b. it prevented the development of offshore wells on the continental shelf
c. it prevented the construction of oil and gas pipelines, of new refineries, oil storage facilities, and facilities for handling supertankers
d. it imposed price controls on oil
e. it acted further to restrict oil company profits, and thus oil industry investment, by punitively increasing their rate of taxation through first reducing and then totally abolishing the customary depletion allowance on crude oil
f. it deterred investment in the oil industry through threats of antitrust actions forcing the breakup of existing companies, and even through threats of nationalization
g. all of the above
60. Over the years, the U.S. government has been responsible for increasing the demand for oil, and thus for raising its price, by means of
a. its policy of inflation of the money supply, which serves to increase the demand for and raise the price of virtually everything
b. controlling the price of natural gas, thereby undermining the growth of that industry and causing the demand for fuel that normally would have been supplied by natural gas to overflow into an expanded demand for petroleum, which is its closest substitute for most purposes
c. preventing the construction of atomic power plants and restricting the mining of coal, which serve to force the demand for fuel to rely more heavily than necessary on oil supplies d. all of the above
61. In restricting the supply of oil and ex$\overline{\text { panding the demand for it, the policies of the U.S. gov- }}$ ernment have been responsible for the success of the OPEC cartel, because in their absence, in order to achieve the prevailing price of oil, OPEC would have had to reduce its own production of oil by an amount equal to the reduction in supply and increase in demand that the U.S. government has achieved for it, an amount so substantial that the rise in price probably would not have been worthwhile to OPEC.
62. In a free market, the achievement of a higher price by a cartel which does not control all the available sources of supply, which is and was the situtation of OPEC, serves to enrich its competitors more than itself, since they too receive the higher price but without having had to restrict their own production.
63. To the extent that the competitors of a $\overline{\text { cartel are }}$ in a position to expand their production in response to the higher price it achieves, it must progressively further curtail its own production in order to maintain that higher price.
64. Price controls and restrictions on production imposed on the American oil industry by the U.S. government served to insulate the OPEC cartel from competition by preventing major competitors from profiting from the rise in prices it achieved and expanding their production.
65. In the absence of the U.S. government's destructionist policies, the Arab cartel would probably never even have been formed in the first place, because the conditions required for its success would have been lacking.
66. To argue that the oil companies were re$\overline{\text { sponsible }}$ for the oil shortage of the 1970s is an absurdity compounded by a triple injustice in that it
a. implies that the oil companies charged too low a price for their oil
b. evades the fact that it was the government's price controls that kept the price too low and so created the shortage
c. ignores the fact that by the nature of the profit motive the oil companies have always worked to expand the supply of oil and reduce its price
d. evades the fact that the government and the ecology movement did practically everything they could to restrict the supply and expand the demand for oil
e. all of the above
67. Price control means
a. the setting of prices, whether by private businessmen, in the interest of private profit, or by government officials, in the public interest; either way prices are controlled, just as there is censorship whether by the decisions of private publishers about what to publish or not to publish or by government officials about what should be published or not be published
b. the setting of prices by the government
68. The claim that in setting their prices private firms are engaged in a process of price control, with the result that the only choice left is between selfish, private price controls and benevolent, government price controls ignores the fundamental and radical distinction between private action and government action, which is that private action is voluntary and proceeds by mutual consent to mutual advantage, while government action is based on the threat of physical force and proceeds against the will and the interests of one or more of the parties involved.
69. When prices are set by private firms, they are set with regard to the mutual self-interest of the buyer and seller, including the need to take into account the threat of competition or potential competi-
tion. Thus, a seller must ask prices that are not only high enough to enable him to stay in business and make the best possible profit he can, but, simultaneously, that are low enough to enable his customers to afford his goods and too low for other sellers or potential sellers to try to take away his market.

## PARTB. FURIHER EFFECTS OF PRIC E CONTROLS AND SHORIAGES

71. The shortages that result from price controls represent a situation in which
a. the excess of quantity demanded over supply available means that there are waiting lines and waiting lists of customers hoping to be supplied b. if a dissatisfied customer were to leave any given supplier, he would have to go to the end of the waiting line or waiting list of some other supplier and might not be supplied
c. if a customer does leave a given supplier, that supplier suffers no economic loss because the customer is immediately replaceable by the next customer on the waiting line or waiting list
d. buyers are deprived of economic power over the sellers
e. sellers are placed in a more powerful position with respect to ignoring the wishes of the buyers than if they (the sellers) were protected legal monopolists
f. producers can reduce their costs by reducing the quality of their products and at the same time not lose any business and thus have a powerful motive to do so
g. all of the above
72. Price controls and shortages launch a spi$\overline{\text { ral of mutually reinforcing hatred between buyers and }}$ sellers
a. in which buyers experience themselves as economically impotent and the sellers as all powerful tyrants, with their (the buyers) only recourse being resort to the power of the state b. in which sellers experience buyers as petty chislers seeking to live at their (the sellers) expense
c. which is confirmed by the relations between tenants and landlords living under rent controls in places like New York City and by relations between motorists and service stations in the oil shortage
d. all of the above
73. Shortages lead sellers to regard customers not only as valueless, but as a positive nuisanceas a source of trouble and expense, not a source of livelihood. This occurs because, in fact, under a system of shortages and waiting lines, that is just what customers become. Under such a system, when a seller renders a customer some service or goes to some ex-
74. When the government sets prices, its prices are backed by the threat of physical force, and are necessarily against the mutual self-interests of buyers and sellers. The government invariably sacrifices either the seller to the buyer (by forcibly imposing lower prices), or the buyer to the seller (by forcibly imposing higher prices). The government's price, imposed by force, is the controlled price.
pense on his behalf, he is no longer doing it for the sake of gaining or keeping the customer's business and thereby earning his own livelihood, because having the customer's business no longer depends on performing the service or incurring the expense. The seller can have the customer anyway, or, if not that customer, then any one of ten or a hundred or a thousand other customers. If the seller is to continue to provide the service or incur the expense for the sake of the customer, he can only do so out of a sense of altruistic duty, not out of the sense that in serving the customer he serves himself.
75. Repeal of rent controls would restore harmony between landlords and tenants because a. free markets rents would rise to the point of reducing the quantity of rental housing demanded somewhat below the supply available, with the result of establishing a significant vacancy rate b. in the face of vacancies available at rents comparable to those they were presently paying, tenants would feel free to leave if they were dissatisfied with their present landlords c. the absence of waiting lists would mean that landlords who lost tenants would experience an actual economic loss and be motiviated to please tenants so as to avoid such loss
d. all of the above
76. Price controls and shortages bring about the disappearance of lower-priced models and a decline in the quality of higher-priced models as a disguised way of raising prices.

## The following is a three-part question.

76. Under a severe shortage, quality and service are cut to the point that buyers are offered models that would never appear in a free market in any price range. What happens is that sellers are led to cut corners in order to make relatively small savings to themselves and which have a great impact on the buyers. For example, situations can exist in which it is advantageous to a seller to save a few cents in manufacturing costs that later imposes many dollars in repair costs on the buyer. The harm inflicted on the buyers does not cause the sellers any economic loss, because at the controlled price there is a surplus of buyers eager to buy even a very inferior product.
77. In the same way that price controls and shortages make it impossible for a consumer to select his model on the basis of cost, they also make it impossible for a businessman to select his methods of production on the basis of cost. For one or more of the factors of production he requires may simply be unobtainable, because a price control has created a shortage of it. Under price controls, businessmen must select those methods of production for which the means happen to be available, and not necessarily those which have the lowest costs.
78. The inability to find the right factors of production as the result of shortages, frequently results in a decline in the quality of products as well, and should be viewed as a further and major cause of declining quality.
79. The deterioration of quality and service that results from shortages is itself a powerful source of higher costs both to businessmen and consumers. If, for example, a machine is produced or serviced in an inferior way, then even if its price remains the same, it will cause higher costs of maintenance and repair and may have to be replaced sooner.
80. Shortages of supplies and the mere threat of shortages themselves directly raise the costs of production. The effect of a shortage of a factor of production is to delay production. This causes the capital invested in all the other, complementary factors of production that depend on it, to have to be invested for a longer period of time than would otherwise be necessary. For example, a shortage of building-nails causes capital to be invested in half-finished houses and in piles of lumber for an unnecessary period of time. Since interest must be paid on capital for the full time it is invested, the effect of all such delays is to raise the interest cost of production.
81. The mere anticipation of shortages of supplies leads businessmen to hoard supplies of all types. This requires that production be carried on with a larger capital investment-in the additional stocks of supplies and in facilities for storing them, which, in turn, means extra interest costs and extra costs on account of the storage facilities.
82. Price controls and shortages also raise costs because of the loss they cause of the valuable time of executives in searching for sources of supply and in performing all the paperwork required to comply with the government's price controls and any associated regulations, such as rationing.
83. Shortages and the threat of shortages also directly raise costs to consumers because
a. they must buy goods that do not last as long or need more frequent repairs as the result of the decline in quality that shortages create
b. consumers too suffer effects analogous to wasted investment-for example, consumers who could not obtain gasoline could not use their cars or enjoy
their country homes until such time as they could obtain gasoline, and to that extent, the money they had spent for these complementary consumers' goods represented a kind of wasted investment c. consumers too suffer effects analogous to the need for more investment-namely, they too are led to hoard supplies and thus to tie up larger sums of money in stocks of goods and, quite possibly, incur additional costs on account of acquiring extra storage facilities-for example, extra home freezers, if there should be the threat of a food shortage
d. of the wasted man-hours spent in waiting lines during every shortage, which, while not a money cost, are nonetheless a real hardship and burden and can well be at the expense of actual working time
e. all of the above
84. Under price controls and shortages, normal cost reductions, based on improvements in efficiency, cease to pay, even if they are still within a firm's power to make, because their effect is merely to postpone the day that the firm is permitted to obtain relief by raising its prices on the basis of demonstrating higher costs. The only cost reductions that pay under price controls are the ones that can be made effortlessly, namely, cost reductions at the expense of qual-ity-the kind of cost reductions that would not pay in a free market.
85. The willingness of the government to allow higher controlled prices on the basis of demonstrated higher costs of production leads to a. multiple controlled prices of the same good in cases in which different parts of the supply are produced at different costs of production b. a system of transfer payments from sellers obtaining supplies at a lower controlled price to sellers obtaining supplies at a higher controlled price in conditions in which both sets of sellers are required to make their sales at the same controlled selling price
c. both (a) and (b)
86. Price controls and shortages a. mean that consumers who get to stores when supplies of goods arrive can snap them up to the point of leaving nothing for latecomers b. prevent consumers with greater wealth or income from benefitting from it by being able to outbid consumers with lesser wealth or income c. prevent consumers of equal wealth or income but with greater need or desire for particular goods or services from outbidding consumers with lesser need or desire for those goods or services
d. introduce chaos into the distribution of consumers' goods to individuals
e. make government rationing appear necessary
f. all of the above
87. Price controls and shortages create chaos in the geographical distribution of goods among local markets by creating a situation in which
a. supplies can be taken away from any given area and the area is prohibited by price contols from calling them back by offering higher prices and greater profitability
b. supplies can be brought into an area and not reduce price or profitability but merely the severity of the local shortage until the local shortage is entirely overcome, at which point the price must drop to find buyers of additional units c. the movement of supplies between geographical areas is made arbitarary and random within the limits of what is required to totally overcome a local shortage, because only then will considerations of price and profitability again become operative d. all of the above
88. The severity of shortages in particular lo$\overline{\text { calities can depend on the time of year in which the }}$ price controls are imposed-for example, price controls imposed on gasoline in summer time will favor resort areas in the following winter, while price controls imposed in winter time will strangle resort areas in the following summer.
89. Minor events, like the washout of a bridge, or small bureaucratic adjustments in the controls can cause sudden, major swings in supply between different geographical markets.
90. Price controls and shortages introduce chaos into the distribution of factors of production among their various uses and make it possible for some products of a price-controlled factor of production to be faced with extremely severe shortages, while other products are faced with only minor shortages.
91. The position of the various products in the preceding question can suddenly be reversed by minor changes in the uncontrolled prices of complementary factors of production, by small bureaucratic changes in the price controls, or by anything that results in the slightest changes in the relative profitability of the various products of the factor of production.
92. The season of the year in which price controls are imposed is relevant to the extent to which different products of a factor of production are faced with shortages. For example, price controls imposed on oil and oil products in the winter time, when gasoline prices are low relative to heating oil prices, will result in an especially severe shortage of gasoline the following summer, because of the freezing of that price relationship. For the same reason, if the controls were imposed in the summer time, the heating oil shortage would be especially severe in the following winter.
93. Price controls and shortages create tre$\overline{\text { mendous instability in supply. The supply of every- }}$ thing subjected to controls becomes subject to sudden, massive, and unpredictable shortages.

## 94. Hoarding

a. comes into existence in response to the existence of shortages and the fear of shortages; it is the attempt to secure supplies when they are available in preparation for their being unavailable b. represents a new and additional demand that under price controls operates to increase the severity of the shortages
c. both (a) and (b)
95. Under price controls, the most vital and urgent employments of a factor of production are prevented from outbidding not only its most marginal employments, but, from the standpoint of a free economy, employments that could not even qualify as submarginal, namely the accumulation of hoards as a safeguard against shortages.
96. The abolition of price control puts an end to hoarding by allowing the price of a good to rise sufficiently high to limit the quantity demanded, including the hoarding demand, to the supply available. At that point, the good is available to whoever is willing to pay the market price and the need to hoard is eliminated.
97. It follows from the preceding question that following the repeal of price controls and prices rising to levels high enough to cope with the desire to hoard, prices will actually decline somewhat, in response to the disappearance of the hoarding demand.
98. The effect of a shortage of any particular commodity is to cause the unsatisfied demand for that commodity to spill over and add to the demand for other commodities.
99. "Selective" or partial price controls, that is, price controls imposed merely on certain goods only, are contrary to any rational purpose the government might have in imposing them. This is because their effect is to inhibit the profitability and thus the production of the goods the government deems important while leaving uncontrolled the profitability of the goods the government considers unimportant. At the same time, the profitability and thus the production of the goods the government considers unimportant is positively stimulated by the spillover of demand into the markets for the uncontrolled goods that results from the shortages of the controlled goods.
100. The effect of selective or partial price controls is to
a. raise the prices of uncontrolled goods because of the spillover of demand from the controlled goods
b. raise the general price level insofar as they apply to the production of goods on which the production of other goods depends, such as oil or electric power, and reduce their production and thus cause a reduction in the aggregate amount of production and supply
c. both (a) and (b)

101. Price controls<br>a. save people money<br>b. cause them to spend less money for the goods they want, but cannot obtain because of the resulting shortages, and more money for other goods that they want less

102. Rent control on part of the supply of rental housing has the effect of raising rents on the part of the supply that remains free of rent controls. This is because insofar as it leads to part of the supply going to tenants who could not have obtained it in the absence of rent control, it equivalently reduces the supply of housing available on the market and correspondingly raises its price.
103. Rent controls and housing shortages across broad regions have the potential for bringing about the compulsory assignment of boarders to homes and a system of internal passports so that it requires the government's permission to move to various places within one's own country. In such conditions, which existed in Soviet Russia, such measures appear as necessary to prevent large numbers of people from otherwise being homeless and to restrain the severity of housing shortages in areas of the country that are relatively desirable in which to live and into which large numbers of people might otherwise move.
104. Rent controls in the United States have not resulted in the kind of conditions described in the preceding question because the controls have applied only to local jurisdications surrounded by other jurisdictions in which there were no controls and in which housing could be found.
105. Rent control serves to increase the effective cost of constructing new rental housing insofar as the prospect of its later on being extended to the new housing makes it necessary to recover one's investment more rapidly and thus to crowd the depreciation of the housing into the years one can expect it to remain free of controls.
106. By keeping property values down, and thus the revenues that can be collected from property taxes, rent controls contribute to the imposition or increase in local sales and income taxes.
107. The effect of the immediate abolition of rent control would largely be that the present "beneficiaries" of rent control would simply have to change places with an equally large but generally unrecognized class of victims of rent control-those who presently cannot find an apartment they can afford to rent in the rent-controlled area but must live with inlaws, roommates, or outside the area. The repeal of rent control would place the apartments of its "beneficiaries" on the market, thereby enlarging the market supply and reducing market rents to the point of apartments becoming affordable by people who cannot presently afford them.
108. The "beneficiaries" of rent control would suffer far less hardship following its repeeal than the unseen victims of rent control have suffered under it, because repeal would be followed by a sharp increase in the supply of rental housing and thereafter by a progressive increase and improvement in the supply of rental housing making rental housing more and more affordable.
109. There are no beneficiaries of rent control in the long run because its seeming benefits in the short run are made possible by the consumption of the capital invested in rental housing, with the ultimate result being the destruction of rental housing. And in the interval, the "beneficiaries" live in deteriorating conditions, valueless to their landlords yet afraid to move out of fear of being unable to duplicate the rental "bargain" they have.
110. The effect of repealing rent controls in an otherwise unregulated housing market would not be to make people sleep in the streets because
a. open-market rents would fall, as the result of an expanded supply available for the market, not rise to the level of open-market rents reflecting the restricted supply that is available for the market as the result of rent control
b. those unable to afford their own apartments even with the lower open-market rents that would exist without rent control would be able to share apartments with others and in that way be able to find housing at a rent they could afford
c. both (a) and (b)
111. Government housing regulations that impose minimum standards too costly for poor people to afford have the potential to result in people having to sleep in the streets, in the same way, say, that government standards prohibiting automobiles more than ten years old, would serve to deprive poor people of the ability to drive cars, since such old cars are often all that they can afford.
112. Just as rent controls applied to part of the stock of rental housing serve to raise rents on the part that is not subject to rent controls, so price controls applied to domestically produced oil served to raise the price of oil produced outside the country, notably in OPEC countries. Like partial rent controls, the price controls on oil enabled part of the supply of oil to be consumed in submarginal uses and thus reduced the supply available for the open market and thereby raised the price of oil on the open market.
113. The repeal of U.S. price controls on oil reduced the price received by the OPEC cartel even before the production of oil was increased, simply by causing existing supplies to be withdrawn from submarginal uses and be made available on the market, where the effect of greater supply was to reduce price.
114. The windfall profits tax on the oil industry, enacted in conjunction with the repeal of price con-
trols, contributed to subsequent widespread bankruptcies in the oil industry because it correspondingly deprived oil producers of the ability to finance expansion out of profits and made them borrow money instead.

Then when oil prices plunged, as the result of expanded production, instead of merely losing back profits, producers lost borrowed money and went bankrupt.

## PARTC. UNIVERSALPRICE CONTROLS AND THER CONSEQUENCES

115. Price controls tend to spread until all prices and wages in the economic system are con-trolled-i.e., partial price controls lead to universal price controls.
116. Price controls spread because a. price controls on products require controls on the prices that constitute the costs of production, if the production of the product is not to be made unprofitable and cease, and then on the further prices that constitute the further costs of production of materials, machinery, and the like, going all the way back in the chain of production b. price controls on labor (wage controls) must be extended to more and more occupations to prevent workers from leaving the already controlled occupations and taking jobs in better paying uncontrolled occupations
c. price controls must be extended not only to the prices of the factors of production, which prices constitute the costs of production, but also, in cases in which factors of production have more than one product, to the prices of the other products of the factors of production-for example, price controls on milk for drinking and on raw milk lead to price controls on butter, cheese, and the other milk products lest they become more profitable uses for raw milk than milk for drinking d. all of the above
117. The shortages of individual goods that exist under universal price controls tend to be far more severe than the shortages that exist under partial or selective price controls because of the spillover of demand from all other goods in a state of shortage.
118. The nature of shortages under universal price controls could be seen in Soviet Russia, where the shortages were so severe that when people saw a line forming, they would automatically get on it, even without knowing what goods were available, because it was better to obtain practially any good than hold otherwise unspendable money.

## 119. Universal price controls existed

a. in Nazi Germany
b. in the United States in World War II
c. briefly under President Nixon, when he imposed a ninety-day freeze on all prices and wages in August 1971
d. their equivalent exists under socialism, as for example in the former Soviet Union and its satellites
e. all of the above
120. Excess demand under price controls builds up even though people's incomes are controlled and even though the sum of the controlled prices times the quantities of goods available for sale does not exceed those incomes. It occurs as the result of government spending financed by the creation of new and additional money succeeding in obtaining supplies and thus causing a part of people's incomes to back up on them, so to speak, as unspendable funds. Then, in the next year, the people may be paid the same incomes, but their available funds now equal the sum of those incomes plus the unspendable funds from the year before. If the government again makes purchases out of newly created money, then additional unspendable funds accumulate.
121. Shortages under universal price controls a. are both far more widespread and far more severe than under partial price controls
b. destroy production in all the ways that partial price controls do
c. destroy production in ways beyond partial price controls
d. result in shortages of capital and labor, in which the production of any product can be randomly expanded at the expense of the production of any other product
e. result in disproportions in the supplies of the various capital goods, which serve to undermine the ability to produce and lead to a process of continuing capital decumulation
f. result in people losing the incentive to earn more money, and to quitting their jobs, a process which is capable of causing a cumulative, self-reinforcing decline in production
g. all of the above
122. Universal price controls and the shortages they create result in chaos in the allocation of capital and labor among the various branches of production in the economic system, because price controls prohibit a rise in prices and profits when capital and labor are withdrawn from an industry and the existence of shortages prevents a fall in prices and profits when additional capital and labor are brought into an industry. Thus any industry can be expanded at the expense of any other industry, with nothing to counteract or limit the process.
123. Because of the spillover of demand caused by shortages, and the fact that under universal price controls the spillover into each industry is the sum of the spillovers from all other industries, the shortage facing any given industry may not be capable
of being overcome, irrespective of any increase in the industry's output, and thus nothing whatever may be present to limit the relative overexpansion of an industry.
124. As the result of the shortages created by universal price controls, capital and labor can be withdrawn from any industry and placed in any other industry, and there is no effect on the rate of profit anywhere.
125. Under universal price controls and shortages, even though the consumers want more of one good and less of another, say, more shoes and fewer shirts, the producers can go ahead and do the exact opposite and yet suffer no financial penalties.
126. The chaos in the relative production of capital goods that results from universal price controls and shortages undermines the subsequent ability to produce, including the subsequent ability to produce capital goods. If, for example, the steel industry is unduly expanded at the expense of the coal industry, say, the economic system's subsequent ability to produce will be impaired: not only the extra steel mills, but part of the existing steel mills may be inoperable for lack of fuel.
127. Like a human body, whose total performance cannot exceed the power of its brain, heart, lungs, or any other vital organ, the overall performance of an economic system cannot exceed the power of any one of a large number of vital industries. If some are unduly expanded at the expense of others, the effect is to reduce the functioning of the whole.
128. The ability of the economic system to produce is undercut by disproportions
a. among major industries, like steel and coal
b. within the output of individual industries-for example, the production of too many trucks to haul farm products and of not enough tractors to harvest them
c. in the production of just a few key products here and there-like ball bearings, lubricants for machinery, spare parts, even ordinary screws, and so on, a shortage of any one of which or of any one special type of which, such as ball bearings of a particular size, must cause a widespread paralysis and the grossest inefficiencies in production d. all of the above
129. The problem of disproportions in the supply of capital goods is further compounded by the declines that result from producers just not having to care any longer about the quality of their products or about economies in producing them.
130. In Soviet Russia, hydroelectric stations were built without generators and without the existence of industries to supply; wheat could not be harvested because the necessary tractors had not been built, or, if they had been built, they lacked spare parts, or were in the wrong place, or quickly became inopera-
ble; factories could not operate because they lacked materials; new buildings and new machines were worthless, because of shoddy construction due to lack of care or lack of the necessary materials.

## The following is a five-part question.

131. Since capital goods are continuously used up in production and must be replaced out of production, a severe reduction in the ability to produce capital goods, because of malportions among them and because of the various other inefficiencies that are caused by universal price controls, results in a smaller supply of capital goods being produced than is consumed in production.
132. As the result of a smaller supply of capi$\overline{\text { tal goods }}$ being produced than is consumed in production, the stock of capital goods falls.
133. Once the stock of capital goods falls, production must decline further, because it will be carried on with fewer capital goods.
134. If the smaller supply of capital goods is used as inefficiently as was the larger supply, because of continuing chaos in production, it will not be possible to replace the smaller supply of capital goods either. Thus, once again production will decline.
135. The process of less production causing fewer capital goods causing less production, can go on until the economic system is carried back all the way to the level of barbarism.
136. Universal price controls result in a severe labor shortage because
a. every industry is eager to employ more labor, inasmuch as whatever extra products it can produce with more labor will be snapped up by goods-hungry buyers
b. the inefficiencies in production under universal price controls imply a need for more labor per unit of output and thus intensify the labor shortage c. shortages of consumers' goods and the accumulation of surplus unspendable funds leads workers to quit their jobs since there is no point in working to earn money they cannot spend and the funds they have are sufficient to enable them to get by for an extended period; this worsens the shortage both of labor and consumers' goods d. all of the above
137. Like the process of capital decumulation, the labor shortage under universal price controls is a factor making for a self-reinforcing, cumulative decline in production, because workers quitting their jobs reduces the supply of consumers' goods and thus further intensifies the shortage of consumers' goods, which, in turn, further reduces the incentives to work and earn money and thus leads to still more workers quitting.
138. The combination of inflation and price controls and the shortages they created promoted a delusion of prosperity in the United States in World War II, by making it extremely easy to earn money, which included finding employment; people ignored the fact that much of the money they earned was currently unspendable, that major categories of civilian goods were not being produced, and that the goods that were available were of reduced quality; they looked forward to spending the money after the war.
139. The government's typical response to the chaos resulting from price controls and shortages is to seize the power to determine what goods are produced, in what proportions, by what methods, and to whom they are distributed.
140. The U.S. government's response to the chaos that resulted in connection with price controls on oil and the resulting oil shortage was the creation of a new government agency-the Federal Energy Administration (now the Department of Energy), which had the power to tell the various oil companies how much of each of the various petroleum products they were to produce and to which industries, firms, and regions they were to distribute those products.
141. The meaning of ownership is the power to determine the use and disposal of property. If the government determines what a firm is to produce, in what quantity, by what methods, and to whom it is to sell its output and at what prices, then it is the government that determines the use and disposal of the firm's property. The government, therefore, becomes the real owner of the firm - the de facto owner.
142. The government's assumption of the fur$\overline{\text { ther powers required to deal with the economic chaos }}$ caused by universal price controls and shortages represents the de facto socialization of the economic system, because it gives to the government all the essential powers of ownership.
143. Socialism on what von Mises calls "the $\overline{\text { German }}$ or Nazi pattern," in contrast to "Socialism on the Russian or Bolshevik pattern," in which the government openly nationalizes all of the means of production, is the de facto socialism that results from universal price controls and the government's response to the shortages and chaos that result.
144. Nazi Germany was a capitalist country only in outward guise and appearance. In it, private ownership of the means of production existed in name only. All substantive economic decisions were made by the government; the Nazi government held and exercised all the actual powers of ownership-the setting
of prices and wages, the determination of what was to be produced, in what quantities and locations, and by what methods, and to whom the products were to be distributed.
145. While Nazi Germany was a socialist country, Sweden is not a socialist country, nor was Great Britain or Israel when they were governed by socialist parties. The great bulk of the means of production in the economy of these latter countries was and is privately owned and they did not have price controls and shortages nor, therefore, the government's de facto seizure of ownership.
146. Private ownership of the means of production in countries such as Sweden has, to be sure, labored under all sorts of restrictions, prohibitions, and compulsions, but still it has been private ownershipproduction has been carried out characteristically at the initiative of private owners for the sake of private profit.
147. Economies such as Sweden, and that of the United States too, are more appropriately described as "hampered market economies" or "hampered capitalist economies" rather than as "mixed economies," inasmuch as socialism, understood along the lines of universal price controls and the destruction of the price system, cannot actually be combined with a functioning price system, which last represents capitalism.
148. The expression "mixed economy" should only be used if it is understood that what is meant is an economy based on private ownership of the means of production but more or less severely hampered by an extensive list of socialistically motivated acts of government intervention-i.e., a hampered capitalist economy.
149. The existence of isolated socialized industries, such as the postal service and passenger railroad service, does not warrant characterizing a country as socialist. So long as such industries operate in the context of a market and market prices based on a foundation of private ownership of the means of production and the profit motive, they represent, in effect, merely a blemish on an otherwise capitalist body.
150. Examples of genuinely socialist economies are those of the Communist countries, most of which no longer exist, Nazi Germany, and those of normally capitalist or market economies for the duration of their imposition of all-round price controls, as in World War II.

| Question \# | Correct |  | Correct |  | Correct |  | Correct |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Answer | Question \# | Answer | Question \# | Answer | Question \# | Answer |
| 1 | d | 39 | F | 77 | T | 115 | T |
| 2 | d | 40 | T | 78 | T | 116 | d |
| 3 | T | 41 | b | 79 | T | 117 | T |
| 4 | b | 42 | F | 80 | T | 118 | T |
| 5 | T | 43 | F | 81 | T | 119 | e |
| 6 | T | 44 | T | 82 | T | 120 | T |
| 7 | d | 45 | T | 83 | e | 121 | g |
| 8 | c | 46 | b | 84 | T | 122 | T |
| 9 | T | 47 | T | 85 | c | 123 | T |
| 10 | T | 48 | T | 86 | f | 124 | T |
| 11 | a | 49 | b | 87 | d | 125 | T |
| 12 | T | 50 | F | 88 | T | 126 | T |
| 13 | T | 51 | T | 89 | T | 127 | T |
| 14 | T | 52 | T | 90 | T | 128 | d |
| 15 | b | 53 | f | 91 | T | 129 | T |
| 16 | T | 54 | T | 92 | T | 130 | T |
| 17 | b | 55 | F | 93 | T | 131 | T |
| 18 | T | 56 | T | 94 | c | 132 | T |
| 19 | a | 57 | F | 95 | T | 133 | T |
| 20 | T | 58 | f | 96 | T | 134 | T |
| 21 | T | 59 | g | 97 | T | 135 | T |
| 22 | T | 60 | d | 98 | T | 136 | d |
| 23 | T | 61 | T | 99 | T | 137 | T |
| 24 | e | 62 | T | 100 | c | 138 | T |
| 25 | T | 63 | T | 101 | b | 139 | T |
| 26 | T | 64 | T | 102 | T | 140 | T |
| 27 | T | 65 | T | 103 | T | 141 | T |
| 28 | T | 66 | e | 104 | T | 142 | T |
| 29 | T | 67 | b | 105 | T | 143 | T |
| 30 | d | 68 | T | 106 | T | 144 | T |
| 31 | d | 69 | T | 107 | T | 145 | T |
| 32 | T | 70 | T | 108 | T | 146 | T |
| 33 | F | 71 | g | 109 | T | 147 | T |
| 34 | T | 72 | d | 110 | c | 148 | T |
| 35 | T | 73 | T | 111 | T | 149 | T |
| 36 | T | 74 | d | 112 | T | 150 | T |
| 37 | T | 75 | T | 113 | T |  |  |
| 38 | F | 76 | T | 114 | T |  |  |

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## Chapter 8, Part A

1. The defining characteristic of socialism is government ownership of the means of production. It is irrelevant to the nature of socialism whether
a. socialism has been established openly, through the explicit nationalization of all industry, or through the enactment of price and wage controls and the governmnent's seizure of the power to determine what is produced, in what proportions, by what methods, and to whom it is to be distributed, which gives the government de facto ownership of the means of production under the outward guise and appearance of private ownership of the means of production
b. socialism has been brought about through violent revolution or a democratic election c. its professed goal is universal brotherly love or the supremacy of a particular race or class d. all of the above
2. The findings of economics concerning socialism apply to all variants of socialism, including
a. the socialism of the Communists
b. the socialism of the Nazis
c. the socialism of the Social Democrats
d. any economic system actually based on government ownership of the means of production e. all of the above
3. The findings of economics concerning socialism do not apply to countries such as Great Britain, Israel, and Sweden, which, though governed for extensive periods by political parties espousing the philosophy of socialism, did not implement socialism as their actual economic system.
4. A vital principle to grasp about socialism is that its economic consequences are essentially the same as those which result from universal price controls.
5. The essential economic identity between socialism and universal price controls consists in the fact that both of them destroy the same thing, namely, private ownership of the means of production and its offshoots the profit motive and the price system.
6. Price controls destroy private ownership of the means of production in the very fact of destroying the right to bid and ask prices. In a division-oflabor economy, in which buying and selling are indispensable to production and all other economic activity, the right to bid and ask prices is a fundamental, indispensable right of ownership. Without it, all other rights of ownership are meaningless.
7. The right to own a factory or store is meaningless if the owner is prohibited from charging or paying the prices required to keep his factory or store in existence. Essentially, price controls are fully as destructive of the rights of ownership as socialism itself. And, of course, when price controls are compounded
by shortages, the government's response to the consequences is to seize total control over the means of production and establish de facto socialism.
8. What makes price controls produce the chaos they do is precisely the fact that they interfere with the property rights of businessmen. Specifically, they prohibit businessmen from using their capitals in the ways that would be most profitable to themselves. If they did not interfere with the right of businessmen to use their capitals in the most profitable way, then they could produce none of their chaotic effects.
9. Among the elements of chaos that have been shown to result from price controls are
a. shortages and the destruction of vital industries
b. the impotence of consumers accompanied by hatred between buyer and seller
c. an impetus to higher costs
d. chaos in the personal distribution of goods to consumers
e. chaos in the geographical distribution of goods among various local markets
f. chaos in the distribution of a factor of produc-
tion among its various products
g. chaos in the distribution of capital and labor among the various industries
h. all of the above
10. Each of the elements of chaos described in the preceding question results from just one thing: interference with the businessman's property rights and profit motive.
11. Businessmen do not voluntarily sell their goods too cheaply and thus cause shortages. In order for them to do so, their property rights must be violated and they must be forced to do so.
12. Businessmen would not abandon the pro$\overline{\text { duction }}$ of any goods if they were able to obtain profitable prices for them. What causes the abandonment of the production of vital goods is that the government violates the property rights of businessmen and prevents them from charging profitable prices for those goods.
13. Businessmen would never drive away $\overline{\text { customers offering them profitable business. What }}$ makes businessmen drive away customers is that price controls compel them to charge prices that create shortages and thereby make customers economically valueless and a source of expense rather than profit.
14. Businessmen would not run up the costs of production if those costs came out of profits, as they would have to in the absence of price controls and shortages. But in the face of shortages, there is no resistance to a rise in costs.
15. Businessmen do not voluntarily sell out their entire stocks of goods to whomever happens to arrive first, leaving those who come later to go away
empty-handed, when they know that the latter would be willing and able to pay more than some of the early comers. They behave this way only when their property rights are violated and they are prohibited from raising prices to the point required to reserve supplies for late comers.
16. Businessmen would not voluntarily ignore the incomes and preferences of consumers in distributing their goods. They do so only when their property rights are violated and they are prohibited from setting prices that accord with the incomes and preferences of the consumers.
17. Businessmen would not for long saturate some geographical markets at low prices, while starving others offering them high prices. But if their property rights are violated and prices are prohibited from rising even though markets are starved, and cannot fall even when supplies increase because the effect is merely to reduce the severity of a shortage, then such chaos can exist.
18. Businessmen would not use a factor of $\overline{\text { production to produce some products to excess at low }}$ prices, while producing not enough of other products offering them high prices. But again, if their property rights are violated and prices are prohibited from rising even though not enough of some products are being produced, and prices cannot fall when other products are produced to comparative excess because the effect is merely to reduce the severity of their shortage, then, indeed, such chaos can exist.
19. Businessmen would not knowingly and voluntarily overinvest in some industries at low profits or loses, while underinvesting in other industries offering high profits. But if their property rights are violated and prices and profits are prohibited from rising because of price controls, while shortages prevent prices and profits from falling, then the pattern of investment becomes random and can totally contradict the actual wishes of the consumers.
20. What causes all of the above types of economic chaos is the violation of the property rights of businessmen and thus preventing them from doing what is profitable to themselves.
21. The wider principle that emerges from the above questions is that the entire price system and all of its laws and harmonies depend on one essential fact: the observance of private property rights and thus the freedom of businessmen to act for their own profit.
22. Private property rights and the profit motive are the foundation and the motive power that underlie and drive the entire price system.
23. Private property rights and the profit motive underlie and actuate
a. the uniformity-of-profit principle
b. the various principles of price and wage uniformity
c. the cost-of-production principle
d. the principle that prices are set high enough to limit demand to the supply
e. the principle that factors of production are channelled to their most important employments f. all of the above
24. All of the economic laws pertaining to prices and all of their benevolent consequences are the result of just one thing: private property rights and the profit motive.
25. Socialism destroys all private property rights in means of production. And in so doing, it destroys the operation of the profit motive and the entire price system.
26. Socialism produces the same chaotic effects as price controls, because it destroys the same thing as price controls, namely, the one and only source of economic order and harmony in the world: private property rights and the profit motive.
27. The essential fact to grasp about socialism, which explains why it is essentially identical to price controls, is that it is simply an act of destruction. Like price controls, it destroys private ownership and the profit motive, and that is essentially all it does. It has nothing to put in their place.
28. Socialism is not actually an alternative economic system to private ownership of the means of production. It is merely a negation of the system based on private ownership-a massive act of sheer destruction.
29. In destroying the price system, socialism
$\overline{\text { destroys }}$
a. economic calculation as the basis of economic planning by individuals and business firms
b. the means of coordinating the separate economic plans of all the different parties c. the intellectual division of labor in the planning process
d. all of the above
30. Socialism
a. presents itself as a system in which economic activity will be "centrally planned," thereby avoiding the "anarchy of production" that allegedly exists under capitalism
b. as the result of its destruction of the price system and thus the intellectual division of labor in the planning process, places itself in the position in which economic planning must be centralized, because the separate plans of independent planners no longer have a monetary basis and cannot be coordinated
c. both (a) and (b)
31. Central planning requires that in the planning of each aspect of production, the direct and indirect effects on the entire rest of the economic system be taken into account, since in using factors of produc-
tion that might be used for the production of other things, the production of each thing correspondingly limits the production of other things, and judgments must be made as to which overall arrangement is best.
32. In trying to plan the production of a simple item, such as shoes, a socialist state must take account of the fact that shoes can be produced
a. in varying quantities
b. in various styles or combinations of styles
c. by various methods or combinations of methods, such as by machine or by hand, including the choice between using various proportions of machine or hand production in different parts of the overall process
d. from different materials or combinations of materials, such as leather, rubber, and canvas, and in different geographical locations, again, in both instances, in varying proportions
e. and that each of the above choices has a different effect on production in the rest of the economic system
f. all of the above
33. Under capitalism, decisions concerning the various matters described in the preceding question are made on the basis of economic calculations. Thus a. shoe production as a whole tends be carried to the point where further production would make the shoe industry relatively unprofitable in comparison with other industries
b. the styles are those which the consumers are willing to make profitable
c. the methods of production, the materials used, the geographic locations are all the lowest cost except insofar as they provide special advantages for which the consumers are willing to bear the extra cost
d. all of the above
34. The economic calculations which are the basis for the decisions about production under capitalism in the preceding question
a. take into account the effect of those decisions on production throughout the rest of the economic system, because that effect is reflected in the prices of the various factors of production b. in favoring, other things being equal, production at the least possible cost, serve to make production in the individual instance consistent with maximum production in the rest of the economic system
c. both (a) and (b)
35. In contrast to capitalism and its use of economic calculation, socialism and its absence of a price system require that the planner or planners must grasp the physical connections, direct and indirect, between the production of each thing and the production of every other thing.
36. Because each of the different choices re$\overline{\text { specting the production of any one thing makes a dif- }}$ ferent combination of factors of production unavailable for alternative employments (for example, shoes produced by hand reduce the number of handicraft workers available for other purposes, those produced by machine reduce the number of machine makers and the amount of fuel available for other purposes, shoes produced in Minsk leave less labor available for other purposes in Minsk than if they were produced in Pinsk, and so on), it follows that in order to intelligently make the kind of choices that are needed, the planners of socialism would have to be able to know the direct and indirect impact of each of those choices on the rest of the economic system.
37. In drafting its plans for shoe production, or any other good, a socialist government is obliged to consider
a. the extent of shoe production in relation to the production of all other goods using the same factors of production
b. such questions as whether shoe production might be expanded with factors of production drawn from the production of some other good, and whether the production of that other good might be maintained by drawing factors of production from a third good, and so on
c. all of the industries using any of the factors of production used in the shoe industry, what de-
pends on the output of those industries, and what alternative factors of production are available to those industries
d. all of the industries using the alternative factors of production just referred to, what depends on their products, and what further alternative factors of production may be available to them, and so on
e. and at each step, the possibility of expanding the overall supply of the factor of production in question, and, if so, by what means, where, and at the expense of what
f. all of the above
38. In order to deal with the innumerable economic relationships among all the different aspects of production, the economic planning of socialism would require
a. a superhuman intellect to be able to grasp the physical connections among all the various industries and to be able to trace the consequences of alterations in any one industry on all the others
b. the ability to hold in mind at one time a precise inventory of the quantities and qualities of all the different factors of production in the entire economic system, together with their exact geographical locations and a full knowledge of the various technological possibilities open to them, i.e., all of the millions of separate farms, factories, mines, warehouses, and so forth, down to the last repair shop, together with a knowledge of the quantity
and quality of all the machines, tools, materials, and partly-finished goods that they contained, and exactly what they were potentially capable of accomplishing and when
c. the ability to project forward in time all of the different new combinations of factors of production that might be produced out of the existing factors, together with where and precisely when they would come into existence and the technological possibilities that would then be open to them d. the ability to make the projection just described for an extended period of time-say, a generation or more-in order to avoid the possibly wasteful production of machines and buildings lasting that long
e. the ability to pick out of all the virtually infinite number of different possible permutations and combinations of what might be produced and when, that one that on some undefined and undefinable basis it considered "best," and then order it and all the steps incorporated in it to be undertaken as its economic plan
f. all of the above
39. Under capitalism the economic system is planned in the light of the magnitude of knowledge indicated in the preceding question, but the knowledge is held in small portions by large numbers of individuals and is manifested in prices, which then serve to coordinate the plans and actions of all the various individuals.
40. Under capitalism,
a. different individuals in combination-that is, when their knowledge is added together-do know the precise quantities, qualities, locations, and technological possibilities open to all the various factors of production in the economic system b. everybody's production is based on the sum of all of this knowledge, because the knowledge is reflected in the prices of all the various factors of production and products
c. for example, the price of wheat at any given time reflects the knowledge of each owner of wheat concerning the amount, quality, and location of the wheat he owns; it also reflects the knowledge of each user of wheat about the technological possibilities open to wheat
d. the knowledge just described enters into the supply and demand and hence the price of wheat e. it is the same with every other good: its price reflects the sum of existing knowledge about the amount of it available, the technological possibilities open to it in production, and every other relevant consideration
f. the future supply, locations, and production possibilities of factors of production are taken into account in the anticipation of their future prices g. all of the above
41. Unanticipated events, negative or positive, require the replanning of the entire economic sys-
tem, because in each of these cases, it is necessary to determine which specific products will be produced in lesser or greater quantity, where, by what methods, and to what extent.
42. Thus, for example, if a a socialist economy were confronted with the wreck of a tank train carrying a shipment of oil and thus an unexpectedly reduced supply of oil, it would have to replan the economic system in order to decide where to take out the loss. It would have to look at all of the different uses for oil, all the possible remote consequences of its withdrawal from this or that area of production, and it would have to look at all of the alternative employments of factors of production that might be used to replace the lost oil, and all the permutations and combinations entailed in that, and then decide. By the same token, if, as a result of good fortune, a socialist economy had an unexpected increase in the supply of oil, it would have to replan the entire economic system to find the right uses for the extra supply of oil.
43. A capitalist economy
a. routinely goes about such replanning, on the basis of the price system
b. responds easily and smoothly to unforeseen changes in economic conditions, because such changes simply bring about a change in the structure of prices and thus generate the most efficient response on the part of all concerned
c. both (a) and (b)
44. In a capitalist economy,
a. a reduction in the supply of oil, to continue with that example, acts to raise the price of oil b. the rise in price diminishes the consumption of oil in its marginal employments and simultaneously encourages its production-and, of course, at the least possible expense to other productive activities
c. users of petroleum replan their use of oil and oil products in the light of the availability of alternative fuels and their price; they replan their consumption and production activities, cutting back and possibley abandoning some
d. in all uses of oil and oil products in production, the plans of customers are taken into account by virtue of estimates of their willingness to pay or not pay prices that cover the higher cost of continuing the operation
e. routine replanning goes on throughout the rest of the economic system in response to changes in spending patterns resulting from changes in expenditures for oil and oil products
f. all of the above
45. The insuperable difficulty of socialist $\overline{\text { planning }}$ is that, because of the destruction of the price system under socialism, and thus of the possibility of division of labor in the planning process, it is necessary to plan the production of the entire economic system as an indivisible whole, with one planner having
to plan the entire economic system. But the planning of the economic system as an indivisible whole is simply impossible.
46. Because of the impossibility of planning the economic system as an indivisible whole, by one planner, it should not be surprising that in reality, the actual planning of socialist countries is undertaken by separate government ministries, each responsible for different industries or regions, with even the individual factories undertaking part of the planning process.
47. The-necessarily-decentralized planning of socialism causes chaos, because without a price system-without the foundation and mainspring of the price system, i.e., private ownership of the means of production and the profit motive-the individual planners must operate without coordination and at cross purposes, since nothing is present to harmonize and integrate their separate plans. In such conditions, the very success of any given plan serves to cause the failure of other plans, by virtue of depriving them of factors of production required for their being carried out.
48. The repeated, chronic failure of individual, partial plans under socialism results in part from the fact that every industry's suppliers are in the position of being disinterested monopolists, because they do not have profit-and-loss incentives and need not fear competition.
49. The Soviet quota system assigned physical production goals to each factory, farm, and mine in the Soviet Union, which they were required to meet. Penalties were imposed for failure to meet the goals and incentives were provided to exceed them.
50. The Soviet quota system produced conditions identical to those that exist under a system of universal price controls and universal shortages, for it meant that there was a ready and waiting employment for more factors of production in every branch of production, with the result that any branch was capable of expanding at the expense of any other, more important branch.
51. The physical quotas assigned usually lacked precision. Thus the quota for screw production might be set in terms of overall pounds of screws or a simple overall number of screws. In the one case, the result was the production of a relatively small number of very heavy screws; in the other, a very large number of very small screws. Such results contributed to the economic chaos of the Soviet Union.
52. What gave rise to the Soviet quota system and its stress on meeting and exceeding quotas was the fact that a socialist government
a. cannot rationally plan
b. wants to expand production, but is unable to trace the connections among the different industries
c. is unable to determine-and is not even aware that it is necessary to determine-the effects of producing more of any one item on the ability to produce other items
d. sees the particular product it wants to produce in each case, but, because it lacks a price system, has no concept of the cost of producing that product or, therefore, of what other products it must forgo in the process
e. can do no more than simply gives orders to produce as much as possible of everything
f. all of the above
53. Socialism's inability to determine costs and consequent lack of concern with costs produces exactly the same kind of labor shortage as exists under universal price controls.

## 54. A labor shortage exists under socialism

because
a. a socialist government desires to produce more of everything and its inefficiency in how it produces anything in particular compounds the problem by increasing the amount of labor required for everything
b. shortages of consumers' goods lead workers to work less, since there is no point in doing work that does not result in one's being able to obtain consumers' goods
c. both (a) and (b)
55. The extent of the labor shortage under socialism is such that factory managers in the Soviet Union routinely hoarded labor, that is, kept it on the payroll in idleness, merely to have it available as and when the need for it might arise.
56. Shortages of consumers' goods are a necessary feature of socialism even without inflation. They exist as a result of the following factors:
a. the chaos in the production and geographical distribution of the various goods: at any time, goods can cease being produced, or cease being sent to particular localities; this can occur because particular plans are fulfilled that snatch away the necessary factors of production or perhaps the very consumers' goods themselves from other plans
b. when the preceding occurs, the managers of the local stores and warehouses of the socialist society have no incentive and no authority to raise prices
c. nor do the managers have the incentive or authority to try to anticipate such events and build up stockpiles, which would be "speculation"
d. the managers also have no incentive or authority to bring in supplies from other areas (or send supplies to other areas), for that would be another form of activity possible only under capitalism, namely, arbitrage
e. all of the moral and political pressures of a socialist society work against prices being raised

## f. all of the above

57. The moral and political pressures of a socialist society work against prices being raised because a. a basic moral postulate of socialism is that goods should be free to whoever needs them, or, if not free, then at least as inexpensive as possible b. in the political realm the pressures are exactly the same as those which make rent control so popular in New York City, namely, whoever succeeds in buying at the low price sees his benefit and applauds the government officials responsible; on the other hand, those who are victimized by the shortage the too-low price creates rarely see any connection between the too-low price and their inability to obtain the goods they want; they view the low price as being in their interest, too, and hope to be able to buy at that price
c. both (a) and (b)
58. The shortages of consumers' goods under socialism are worsened by
a. the desire to hoard that necessarily accompanies them
b. the socialist's government's issuance of additional money to the consumers, which, expands aggregate demand in the face of a given, frozen level of prices
c. the general decline in production that takes place
d. all of the above
59. The most fundamental fact about socialism is that government ownership of the means of production constitutes an attempt to make intelligence and initiative in production a monopoly of the state.
60. Production depends on the possession of means of production. If the means of production are monopolized by the state, because it arbitrarily claims to own them all, then no one is free to produce on his own initiative and to regard his own intelligence and judgment as the ultimate authority for his action. In a socialist economy, no one can produce without the permission, indeed, without the orders, of the state.
61. Socialism's attempted monopoly of intelligence and initiative in production is the cause of its anarchy of production, because this monopoly prohibits all of the independent planning of millions of free, self-interested individuals that is required to run an economic system in a rational and ordered way.
62. Corollary consequences of socialism's monopoly character are
a. the necessary technological backwardness of socialism
b. the utter powerlessness of the plain citizen under socialism
c. both (a) and (b)
63. Under capitalism, whoever sees a profitable opportunity for action
a. is free to act on his own initiative
b. is powerfully motivated to act by the prospect of the profit he can make
c. is restrained from rash action by the risk of losing his own money
d. can turn to any one of hundreds or even thousands of independent sources of financing by offering to share his profits with potential backers e. all of the above
64. Under capitalism, the actions of the individual innovator constitute a challenge to the established ways of doing things. For if what he is doing is in fact an improvement over present products or methods of production, then those producing the present products or practicing the present methods must copy his or be driven out of business.
65. Because of its freedom of initiative, its in$\overline{\text { centives to use that initiative, and its freedom of com- }}$ petition, the products and methods of production of capitalism tend to be literally the very best that anyone in the entire society can think of, and to improve further as soon as anyone can think of any still better idea.
66. In contrast to capitalism, under socialism a. the exercise of individual initiative in production is illegal, because of the state's monopoly on the means of production and the illegality of acting outside it's economic "plan"; thus, if an individual does manage to think of some improvement under socialism, he must submit it to the government b. the necessity of submitting all new ideas to the government for its approval and implementation means that there is only one or, at most, a handful of chances for the approval and implementation of an idea
c. whatever officials the individaul turns to in the government have no economic incentives to adopt his idea, whatever its possible merit, and will be inclined to reject it, in order to spare themselves the difficulties and uncertainties that are always entailed in implementing an innovation-such as the need to find new suppliers of raw materials, obtain new workers, or discharge or relocate present workers; the officials will not want to run the risk of the innovation being judged a failure and thus arousing the displeasure of those in a position to do them harm; in addition, if the innovation were somehow to succeed, by whatever arbitrary standard success is judged under socialism, the effect on the officials would likely be merely the difficulties of establishing the new arrangements and then having their assigned production quotas increased
d. all of the above
67. Under socialism, very few new ideas are thought of, fewer still are implemented, and virtually none at all are of benefit to the plain citizen.
68. Under socialism, the fact that the plain citizen is no longer the customer, "who is always
right," but the serf, who must take his rations and like it results from
a. the utter inability of the plain citizen to determine what is produced by the way he spends his money, because of the lack of profit and loss incentives and freedom of competition under socialism, the presence of which are necessary if changes in consumer spending are to have an effect on production
b. the fundamental moral-political postulate of a socialist society, which is that the individual does not exist as an end in himself, but as a means to the ends of "Society"
c. both (a) and (b)
69. Holding the individual to be the means to the ends of "Society" means that he is placed in a servile relationship to the rulers of the socialist state, because "Society" is not an independent entity with a will and voice of its own and thus the alleged ends of Society are necessarily ends divined, interpreted, and determined by the rulers of the socialist state, which means that under socialism the individual is actually nothing more than a means to the ends of the rulers.
70. A socialist government has no compelling reason to supply the plain citizen with anything more than is necessary to prevent an uprising.
71. In contrast to the politicians, democratic or totalitarian, the people who really do work to improve the economic conditions of the general public, who-literally-stay up nights thinking of ways to provide them with such things as grocery stores, more and better shoes and means of transportation, and everything else they may possibly want, are capitalists, who are continually motivated by the prospect of making or losing a fortune and who can act on their own initiative.
72. The only kind of technological developments that a socialist government is interested in are those which are of value to its rulers, above all, improvements in weapons production and in the kinds of things that add to the rulers' prestige, such as 'sputniks'-or pyramids.
73. Because civilian technology is openended and thus very broad-based, being made to explore avenues that initially are of value only as subjects of novelty and curiosity, such as the automobile, radio, and personal computer in their early days, repression of the free development of civilian technology in response to consumer demand and profit and and loss incentives serves in the long run to cut the ground from under the development of military technolgy. The tank, for example, could not have been developed in the absence of the prior development of the automobile, which there would have been no basis for developing under socialism.
74. The ability of the civilian economy to benefit from military technology depends on the existence of a capitalist economic system, which provides
the profit-and-loss incentives and the freedoms of initiative and competition necessary to make applications of military technology to civilian purposes.
$\qquad$ 75. Without the aid of capitalist countries, so$\overline{\text { cialism must revert to feudalism as the result of its in- }}$ ability to coordinate the different branches of production and thus its chronic shortages of supply of vital items, which creates the need for economic selfsufficiency. A series of crop failures and resulting famines, for example, in addition to killing off much of the population would lead most of the survivors to flee the cities for the countryside, where they would have a better chance of obtaining food.
75. The economic inefficiencies of the Soviet Union shed light on its inability to accumulate capital despite a reputedly very high degree of concentration on the production of capital goods, because the resulting output is so low per unit of capital goods expended that it is difficult or impossible to produce a supply of capital goods great enough to equal the supply used up in production.
76. Capital accumulation under socialism is possible only at the cost of human life, on the scale imposed by Stalin. For only if the concentration on the production of capital goods is so great that inadequate resources are left over for the production of consumers' goods is it possible for socialism to produce more capital goods than it consumes.
77. Market socialism is an imaginary theoretical construction in which capitalism's price system is appended to the body of socialism.
78. Under market socialism profits will allegedly serve as a "parameter," that is, as a guide to what to do-though, of course, no one will actually profit from doing what he is supposed to do.
79. The way socialism is to achieve a price system is by dividing the socialist economy up into separate sections or firms. Each will be assigned a balance at the government's central bank. The government will set prices for all goods and services. At least on paper, these firms will then buy from and sell to each other; they will also sell to consumers and pay wages. They will pay interest on capital to the government's central bank and even to other enterprises, and they will record profits and losses.
80. Market socialsim is similar to socialism on the German or Nazi pattern, in that seemingly separate, independent enterprises will exist.
81. The difficulties of market socialism can be grasped most simply by starting with the existence of capitalism and then imagining two alternative things to occur: (1) the government imposes price and wage controls, (2) the government obtains the power to expropriate any firm's or individual's capital and turn it over to any other firm or individual at its discretion.
82. Advocates of market socialism assume that the government can set prices and then vary them in just the same way that this is done under capitalism, a belief which is totally contradicted by actual experience of price controls.
83. Rent controls and price controls on oil are set in exactly the same way that landlords and oil companies would set their rents and prices, which is why these parties were always very well satisfied with the controls.
84. Government price-control officials do $\overline{\text { not and cannot control prices in the way a free market }}$ would have set them. For the driving force of the free market's prices is the self-interests of the different individuals concerned, acting in an environment of freedom of competition. Government control of prices nullifies this driving force.
85. Market socialism in its logically consistent form wants to entrust the supreme management of
the socialist economic system to firms and individuals who will have absolutely no security of property or incentives of ownership, and then to give them discretion as to its investment. Their powers of discretion in investment would be genuine powers of ownership, but they would last no longer than the state desired. They would be in the position of people facing the constant threat of expropriation.
86. Market socialism in its logically consistent form might achieve an economic system at the level of, say, Turkey under the arbitrary, despotic rule of the sultans, when no one could be secure in the possession of any property, when no one dared to improve his house or fields, let alone build a factory, for fear of having them seized by the government.
87. The world-wide abandonment of socialism means that the debate over market socialism is now closed and the correctness of von Mises's position definitively established.

## Chapter 8, Part B

89. Where the government owns all the print$\overline{\text { ing presses }}$ and meeting halls and is the sole employer, freedom of press and speech is impossible.
90. It is not accidental, but logically necessary that wherever socialism has actually been enacted, as in the Communist-bloc countries and Nazi Germany, violent and bloody means have been used to achieve it and/or maintain it. And where socialist parties have come to power but abstained from wholesale violence and bloodshed, as in Great Britain, Israel, and Sweden, they have not enacted socialism, but retained a so-called mixed economy, which they did not radically or fundamentally alter.
91. Even if democratically elected, a socialist government must begin with an enormous act of force, namely, the theft of all privately owned means of production.
92. It takes the Communists to establish socialism, for the same reason that those who seriously want to steal must go armed and be prepared to kill those whom they plan to rob, should the latter offer resistance, which they almost certainly will in a case in which their property is to be taken en masse without compensation.
93. The social democrats are unwilling to take the bloody steps necessary to establish socialism and so leave the existing economic system essentially unchanged.
94. The leaders of a socialist society find $\overline{\text { themselves in a dilemma in that socialism assumes re- }}$ sponsibility for people's lives and promises them a life of bliss but delivers a life of hell. In the face of inevitable public outrage logically directed at the rulers, the maintenance of power requires hysterical propaganda, periodic purges, and a reign of terror. In the absence of
these measures, socialism would be characterized by an endless series of coups and civil wars.
95. The requirements merely for effectively $\overline{\text { imposing }}$ a system of price controls are an army of spies and informers, draconian penalties for their violation, and administrative tribunals to convict and punish the transgressors.
96. Black market activity under Russianstyle socialism implies the theft of state property and under both Russian and German-style socialism, the crime of sabotage, because it disrupts the execution of the national economic plan. Hence, it is not surprising that such "economic crimes" under socialism result in the execution of those found guilty.
97. Under socialism it is dangerous to be a $\overline{\text { production manager, because one may find onself }}$ being blamed for inevitable plan failures. To avoid this, production managers under socialism need strong political connections and subordinate officials available for sacrifice.
98. Forced labor is implied in the very idea of socialist planning. If the state is to plan the production of all commodities, it must also plan the skills that the workers will possess who are to produce those commodities, and where those workers are to live and work. It is incompatible with socialist planning for private individuals to have the freedom to acquire the skills they want and to live where they want. Such freedom would alone make socialist planning impossible.
99. What brings about forced labor under socialism even though it cannot plan is the existence of a labor shortage that results from socialism's attempt to encourage the maximum possible production of each item. In such conditions, vital and urgent employments
of labor can be deprived of labor. To prevent this, the socialist state exercises the power to order labor into the employments it considers vital and urgent.
100. Forced labor existed in the Soviet $\overline{\text { Union in }}$ that
a. millions were forced to toil in concentration camps-the infamous Gulag system, which in the Stalin years may have held as many as 20 to 30 million slave laborers, a large proportion of whom died in captivity
b. all people living on collective farms-as much as 40 percent or more of the Soviet populationwere prohibited from moving away from those farms without the permission of the collective farm managements
c. at harvest time, all available urban workers could be forced into the countryside to help bring in the harvest
d. every graduate of a university or technical school in the Soviet Union was compulsorily assigned to a job for a period of two to three years following graduation e. every remaining worker in the Soviet Union was compelled to have a labor book that detailed all of his previous employment, including comments by the government officials who were his former employers, reasons for changing jobs, and so on. This arrangement discouraged the worker's leaving any given job against the government employer's wishes, and was, in fact, a forcible deterrent to changing jobs inasmuch as one could not obtain employment without presenting it f. it was illegal in the Soviet Union to be unemployed
g. all of the above
101. During World War II, workers in Great Britain, Australia, and Canada could not quit or change their jobs without government permission, and they could be ordered to work wherever the government required them. Similar legislation was proposed to the Congress of the United States by President Roosevelt in his State of the Union Message of January 1944 but was not enacted.
102. By its nature socialism is a system of aristocratic privilege, in which the citizens are viewed as means to the ends of the rulers, an outcome which follows inexorably from viewing the individual as the means to the ends of society.
103. In the Soviet Union, a system of aristocratic privilege was manifested in such facts as
a. government assignment of different grades of housing based on rank in the government or Communist Party
b. government determination of who could and who could not buy an automobile
c. the government's maintainance of special stores that were closed to the general public and which exclusively served high government and party officials and their favorites in the arts and sciences; these stores carried many kinds of Western imports, from clothing to tape recorders, and the limited supplies of whatever worthwhile goods as were produced in the Soviet Union itself; while such things as meat were unavailable throughout most of the Soviet Union for months on end, the privileged customers of these stores were supplied with caviar
d. all of the above
104. The existence of a system of aristocratic privilege is incompatible with the slogan from each according to his abilities to each according to his needs.
105. A socialist society has no incentives of $\overline{\text { any kind. }}$
106. A socialist society has incentives that are geared to the achievement of the values of the rulers, not to the achievement of the values of the plain citizens. Its system of incentives is comparable to that of an army, in which there are incentives for privates to attempt to be promoted to corporal, and so on, but in which the purpose is to make the army a more effective instrument in achieving the goals of the commanding general, not the goals of the privates.
107. In contrast to socialism, the incentive system of capitalism compels the "captains of industry" to serve the needs of everyone.
108. As a result of a socialist state's twin powers over the individual's work and consumption, everyone's life comes to depend unconditionally on the good graces of every government official with power or influence. In such circumstances, not only are people stopped by terror from criticizing anything the government or any government official does, but a competition breaks out in the positive praise and adulation of the government and its officials.
109. The socialist society that so many intellectuals have yearned for is a society in which the only way that intellectuals can advance is by means of displaying the most abject servility to Neanderthals.
110. While private slave owners in the days of slavery were at least motivated to treat their slaves with the same consideration they gave their livestock, forced labor under socialism goes even beyond slavery and results in mass murder, because under socialism, the slaves are "public property"-the property of the state-and those who have charge of the slaves, therefore, have no personal economic interest in their lives or well-being. The slaves of socialism are slaves, but they are no one's property and therefore no one's loss.

Answers to Questions 1-110 on Chapter 8

| Question \# | Correct | Question \# | Correct |  | Correct | Question \# | Correct |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Question \# |  | Question \# |  | Question \# |  | Question \# | Answer |
| 1 | d | 36 | T | 71 | T | 106 | T |
| 2 | e | 37 | f | 72 | T | 107 | T |
| 3 | T | 38 | f | 73 | T | 108 | T |
| 4 | T | 39 | T | 74 | T | 109 | T |
| 5 | T | 40 | g | 75 | T | 110 | T |
| 6 | T | 41 | T | 76 | T |  |  |
| 7 | T | 42 | T | 77 | T |  |  |
| 8 | T | 43 | c | 78 | T |  |  |
| 9 | h | 44 | f | 79 | T |  |  |
| 10 | T | 45 | T | 80 | T |  |  |
| 11 | T | 46 | T | 81 | T |  |  |
| 12 | T | 47 | T | 82 | T |  |  |
| 13 | T | 48 | T | 83 | T |  |  |
| 14 | T | 49 | T | 84 | F |  |  |
| 15 | T | 50 | T | 85 | T |  |  |
| 16 | T | 51 | T | 86 | T |  |  |
| 17 | T | 52 | f | 87 | T |  |  |
| 18 | T | 53 | T | 88 | T |  |  |
| 19 | T | 54 | c | 89 | T |  |  |
| 20 | T | 55 | T | 90 | T |  |  |
| 21 | T | 56 | f | 91 | T |  |  |
| 22 | T | 57 | C | 92 | T |  |  |
| 23 | f | 58 | c | 93 | T |  |  |
| 24 | T | 59 | T | 94 | T |  |  |
| 25 | T | 60 | T | 95 | T |  |  |
| 26 | T | 61 | T | 96 | T |  |  |
| 27 | T | 62 | c | 97 | T |  |  |
| 28 | T | 63 | e | 98 | T |  |  |
| 29 | d | 64 | T | 99 | T |  |  |
| 30 | c | 65 | T | 100 | g |  |  |
| 31 | T | 66 | d | 101 | T |  |  |
| 32 | f | 67 | T | 102 | T |  |  |
| 33 | d | 68 | c | 103 | d |  |  |
| 34 | c | 69 | T | 104 | F |  |  |
| 35 | T | 70 | T | 105 | F |  |  |

# CHAPIER 9 <br> INFUENCE OF THE DIVISION OF LABOR ON THE INSTITUIIONS OF CAPITALSM 

## PARTA: PRIVATE ONWERSHIP OF THE MEANS OF PRODUC TION

1. The belief that only the owners gain from privately owned means of production is manifested in a. the belief that if you advocate capitalism, you must be a capitalist
b. the media's surprise when a blue-collar district votes for a pro-free-enterprise candidate
c. the belief back in the days of the cold war that in order to save a country from communism, it was necessary to create more capitalists d. all of the above
2. In a non-division-of-labor society, a. privately owned means of production, such as a farmer's field and his tools and animals, are used to produce for the consumption of their owners and the owners' families
b. the beneficiaries of the privately owned means of production are the owners and the owners' families
c. in order to benefit from means of production, one must be an owner of the means of production d. all of the above
3. In a division-of-labor, capitalist market economy, such as our own,
a. privately owned means of production are used overwhelmingly to produce for the market and only to an insignificant extent to produce for the consumption of their owners
b. in order to benefit from privately owned means of production, it is not necessary to be an owner of the means of production but merely to be in a position to buy the products
c. the privately owned means of production physcially serve nonowners as well as owners, and, indeed, the nonowners to a far greater extent than the owners
d. all of the above
4. The factories and machinery of General $\overline{\text { Motors and the oil wells, pipelines, and refineries of }}$ Exxon produce products which are consumed for the most part by
a. businessmen and capitalists, out of profit and interest income
b. by ordinary people, out of wages and salaries
5. In a division-of-labor, capitalist market $\overline{\text { economy, such as our own, privately owned means of }}$ production are the source of the demand for the labor of the nonowners of the means of production.
6. The more numerous and more wealthy the $\overline{\text { capitalists }}$ are, the greater is the demand for the labor of wage earners and thus the higher is the level of
wages and the greater the ability of wage earners to consume the products of the means of production.
7. The benefit to the nonowners from other people's private property in the form of means of pro-duction-of capital-is that it is the source of
a. the supply of what the nonowners buy
b. the demand for what the nonowners sell
c. both (a) and (b)
8. The benefits of privately owned means of $\overline{\text { production to nonowners are generally recognized, as, }}$ for example, in the case of tenants in New York City, who recognize the value to themselves of having landlords who are rich and own many excellent buildings rather than poor and own only a small number of old and run-down buildings.
9. The accumulation of capital and thus the demand for the labor of the nonowners of means of production and the supply of goods produced and available for the nonowners to buy is the greater, the more secure is the institution of private ownership of the means of production and thus the greater the prospective benefits from saving and accumulating capital.
10. The institution of private ownership of the means of production operates to the benefit of the nonowners of the means of production by providing them with the benefit of profit-and-loss incentives and the freedoms of individual initiative and competition in the production of the goods and services they (the nonowners) buy.
11. The benefit of privately owned means of production to nonowners is the greater and the more rapidly increasing, the more the property rights of the owners are respected.
12. The benefit of privately owned means of $\overline{\text { production to nonowners is the greater and the more }}$ rapidly increasing, the more the property rights of the owners are respected. This is the case because of
a. the encouragement given to saving and capital accumulation by respect for property rights
b. the encouragement given to improvements in products and methods of production by the prospect of keeping more of the profits earned thereby and the concomitant absence of taxes and subsidies that perpetuate the use of inefficient methods of production and the production of products no longer desired by the consumers
c. the major positive effects on capital accumulation of the freedom to use methods of production that achieve the highest possible output per unit of existing capital goods
d. all of the above
13. The institution of private ownership of the means of production is to the material self-interest
a. of the owners
b. of everyone, both owners and nonowners
14. The benefit that owners of the means of production derive from them that nonowners do not is
a. the receipt of profit and interest
b. the ability to consume a portion of the profits or interest and the potential of consuming the accumulated capital
15. Profits and interest that are saved and invested
a. represent a special benefit that the owners of the means of production receive and that the nonowners do not
b. operate in the same way as the original capital, to which they are added, and serve to benefit the nonowners by means of raising the demand for their labor and increasing the supply of the goods and services they buy
16. The potential enjoyed by the owners of capital of consuming their capital is
a. typically taken advantage of
b. usually not taken advantage of by large capitalists but is of great psychological comfort simply as a potential
17. The consumption of the businessmen and capitalists includes such things as the support of opera companies, universities, and hospitals, and to this extent is of benefit to a substantially wider circle of people than just their own families.
18. Advocates of the redistribution of wealth $\overline{\text { typically }}$ regard the wealth of capitalists as a vast supply of consumers' goods, most of which the rich capitalists do not need but which poor starving wage earners and others desperately need.
19. Enacting a policy of redistribution of wealth is in fact a policy of "eating the seed corn," in that the overwhelming bulk of the wealth of the capitalists is not in supplies of personal consumers' goods but in means of production, including funds for the payment of wages; it could be used to serve the consumption of the poor only at the expense of reducing the ability to produce and the ability to employ labor, which would result in greater poverty than had existed before.
20. What is available from the significantsized capitalists for redistribution without directly and immediately encroaching on their capitals is merely what they consume.
21. The attempt to limit the consumption of capitalists destroys their motivation to accumulate capital or maintain capital they have already accumulated, because capital that can never be consumed or used to augment one's consumption is of no value. Thus the re-
sult of a redistributionist policy confined to seizing what the capitalists consumed would serve to reduce production by more than the amount seized.
22. A policy of strict protection of property $\overline{\text { rights, as }}$ opposed to any form of policy of redistribution of wealth, makes possible continued increases in the goods and services going to nonowners of means of production, repeatedly doubling and redoubling their real incomes.
$\qquad$ 23. Government ownership of business enterprises
a. should be welcomed by people because then the business firms become theirs
b. should be opposed by everyone because it serves to deprive consumers of the benefit of profit-and-loss incentives and the freedoms of individual initiative and competition in the production of the goods and services they buy
23. The superiority of public ownership over private ownership is confirmed by the level of service and efficiency displayed by the US Postal Service and Amtrak in comparision with private suppliers of communications and transportation services.
24. Public ownership of means of production provides the same special benefits of ownership as does private ownership of the means of production in that the dividend payments it makes enable its owners to consume, while the value of its shares and the potential of selling them provides a nest egg for its owners.
25. Public ownership of means of production a. provides dividends for its owners to consume b. is the cause of higher taxes, to cover the deficits entailed in its inherently inefficient operation
26. A major factor bearing on the superiority of privately owned enterprises over governmentowned enterprises is the fact that the former are characterized by what von Mises calls profit management, while the latter are characterized by what he calls bureaucratic management.
27. The institution of inheritance is of benefit to heirs; nonheirs derive benefits from it only insofar as inheritances are taxed and the proceeds spent for the public benefit.
28. The institution of inheritance a. promotes the accumulation of capital to the extent that funds are accumulated and maintained for the purpose of being transmitted to heirs b. by virtue of (a) serves to increase the demand for the labor of nonheirs and the supply of products available for nonheirs to buy
c. the existence of the institution of inheritance is in the material self-interest of everyone
d. all of the above
29. Only capitalists are advocates of policies favoring capital accumulation, because only capitalists have something to gain from capital accumulation, in-
asmuch as more capital increases neither the demand for labor nor the supply of consumers' goods.
30. The true advocates of the interests of the masses are politicians urging policies of capital consumption.
31. Inheritance taxes serve to reduce capital accumulation and thus hold down both the demand for labor and the supply of consumers' goods, on both of which the well-being of nonheirs depends.
32. Taxes that fall heavily on saving and capital accumulation include
a. the inheritance tax
b. the progressive income tax
c. the corporate income tax
d. the capital gains tax
e. social security taxes
f. all of the above
33. Government budget deficits and inflation undermine capital accumulation.
34. From the point of view of any given individual, the most beneficial tax cut is a cut in the taxes that he himself pays. It follows from this that if one is a wage earner, a tax cut that reduced one's own taxes by, say, $\$ 1,000$ per year and the taxes of tens of millions of other wage earners by that amount, would be more beneficial than a tax cut of the same overall aggregate amount going to business and rich capitalists.
35. The economic interests of wage earners and capitalists are mutually opposed.
36. Private ownership of land and natural resources encounters special hostility because of the belief that landowners are in a position to pocket all of the gains of economic progress simply by waiting for population growth and accompanying diminishing returns to raise land rents.
37. In fact, private ownership of land operates to provide the incentive basis for continuous and rapid increases in the productivity of land, which serves to increase the supply of agricultrual products and of minerals and thus to reduce their prices and thereby land rents and the economic significance of land rent.
38. In 1750, the source of most wealth in Great Britain was ownership of land. By 1850, it was commerce and industry.
39. The economic significance of land rent in the 19th century was reduced by great improvements in the productivity of land due to the greater operation of the incentives provided by private ownership, which was made possible by
a. the establishment of private ownership of land in the territory of the United States from the eastern seaboard to well west of the Mississippi river
b. the enclosure movement in Great Britain, which brought about the privatization of large areas of land previously owned and controlled communally
c. the establishment of private property rights in land on the European continent, where, prior to the French Revolution, most land was in the hands of the feudal nobility, as a monopoly privilege under which they alone had a legal right to own it
d. all of the above
40. Today, the economic significance of mining rents derived from the ownership of oil deposits has been increased by policies opposed to private property rights in land.
41. A policy of privatization of lands presently owned by the Federeal government in the western states and in Alaska, and of the continetal shelf, and of full respect for the property rights of its owners would result in a substantial increase in the supply both of oil and its substitutes, such as coal, atomic power, and natural gas. This would reduce the price of oil and the mining rents derived from the ownership of oil fields.
42. Insofar as it prevents improvements in agriculture and mining, the environmental movement operates to increase the economic significance of land rent.
43. Again and again, especially in Europe and Asia, the ownership of land can be traced back to violent appropriation from previous owners. Nevertheless, once land ceases to pass by violent appropriation and a free market in land is established, in which land thereafter passes by purchase and sale, the stain of violent appropriation is progressively washed away. For each set of owners is obliged to devote his land to the demands of the market, a market in which everyone's purchasing power is more and more based on having successfully served the market in the past.
44. In cases in which large landed estates $\overline{\text { exist that are less economic than would be the same }}$ land divided into numerous small parcels
a. land reform consisting of the forcible breakup
of the estates is necessary
b. a free market would bring about the breakup voluntarily by making the sum of the value of the small parcels greater than the value of the present estates, in the same way as it does when farmland is subdivided for housing plots, commerce, and industry; the alleged need to resort to forcible land reform implies the opposite of this condition
45. Just as it is not necessary for the consumers of products to own the means of producing those products, but merely to be free to buy them, so it is not necessary for a country to have sovereignty over the industries and natural resources that supply its citizens,
but merely for its citizens to be free to buy from those sources of supply, wherever they might be located.
46. The citizens of Germany need iron and steel products. But the iron mines are in France, not Germany. Therefore, the self-interest of Germans requires the conquest of France.
47. A country that pursued a policy of protection of property rights, including the equal protection of the property rights of foreign investors, coupled with policies of free trade in imports and exports, and free immigration, would give the maximum possible benefit of its industries, land, and natural resources to the world as a whole. Conquest of such a country by a socialist, fascist, or any other such power would be against the material self-intersts of all other countries and probably even against the material self-interest of the conqueror, since the policies it would impose
would serve to reduce what is available from the country for its benefit too.
48. The development of a backward
country's natural resources by foreign capital
a. represents economic exploitation of the poor for the sake of profit
b. enables the world to gain from the resources in question
c. increases the local demand for labor and thus local wage rates, and, by providing foreign exchange earned by the sale of the resources around the world, makes possible the import of goods incapable of being produced locally
d. all of the above
e. (b) and (c) but not (a)

## Part B: ECONOMIC INEQUALTY

50. The prevailing belief concerning economic inequality is that
a. one man's gain is another man's loss
b. the rich get richer and the poor get poorer
c. one man's gain is not another man's loss
d. one man's gain is another man's gain
e. all of the above
f. (a) and (b)
51. The proposition that one man's gain is another man's loss
a. rests on the assumption that the amount of wealth in the world is a fixed, static sum b. does not apply in division-of-labor society, since it makes possible a continuous increase in the total of the wealth produced
c. both (a) and (b)
52. In a division-of-labor society, differences $\overline{\text { in wealth }}$ and income among individuals are the result of
a. being unfairly favored or ignored by the distribution fairy
b. differences among individuals in their capacity for looting wealth from nature and/or from one another
c. differences in their positive productive contribution, as judged by the market
53. In a division-of-labor society, the expres-
sion "distribution of wealth" realistically refers to a. an actual, physical distribution of wealth by the distribution fairy
b. the arithmetical expression of the wealth produced by various individuals or groups as a percentage of the total of the wealth produced in the society

The following is a five-part question. A desert island is occupied by Crusoe and Friday. Initially, they each gather five coconuts per day. But then Crusoe finds a way to gather ten coconuts per day, while Friday continues to gather only five per day. Taking total output as representing "national income,"
54. Calculate the respective shares of national income initially going to Crusoe and Friday.
55. Calculate the respective shares of national income going to Crusoe and Friday after Crusoe's increase in production.
56. If unequal shares of national income $\overline{\text { going to groups comprising equal percentages of the }}$ population is unjust, then it is unjust in the present case for Crusoe to increase his production.
57. Crusoe's increase in production will be the source of Friday increasing his production once he copies Crusoe's improved method of gathering coconuts.
$\qquad$ 58. By the time Friday copies Crusoe's improved method, Crusoe may have gone on to a still further improvement, in which case economic inequality would both exist alongside general economic improvement and be a foundation of such improvement.
59. In a division-of-labor society, one man's gain is other men's gain on the foundation of
a. the process of productive emulation, which is present in competition
b. the nature of free exchange, in which both parties must benefit
c. the sharing of the growing gains from the division of labor in the form of increasing quanitities and improving quality of goods
d. all of the above
60. The notion of a distribution of wealth leads to the conclusion that it is unjust for one person to produce more than another.

The following is a five-part question.
61. Great fortunes are accumulated by a. earning a low rate of profit and consuming it all b. earning a low rate of profit and saving it all c. earning a high rate of profit and consuming it all
d. earning a high rate of profit over many years and in each year saving and reinvesting the far greater part of it
62. The earning of a high rate of profit over many years typically requires the introduction of a series of important innovations, since competition eliminates the premium profit earned on any given innovation as soon as it can.
63. To the extent that profit is saved and reinvested, i.e., added to capital, it increases the demand for labor and the supply of products.
64. Both in their origin and in their use, great $\overline{\text { fortunes are a source of gains to everyone who partici- }}$ pates in the economic system.
65. Henry Ford's accumulation of $\$ 1$ billion after having started with about $\$ 25,000$ was the reflection of a series of important innovations he made in the production of automobiles, such as the moving assembly line and interchangeable mass-produced parts. These were the basis of his continuing high rate of profit. The saving and reinvestment of those profits was the basis of the physical expansion of the Ford Motor Company from a single barn-like structure when it started, to the vast plants, and all the equipment they contained, at the time of Ford's death. In effect, Ford's profits were the reflection of the improvements he provided for the automobile-buying public and his fortune was the means of physically producing and delivering them to that public on an expanded scale.
66. What is true of the origin and disposition $\overline{\text { of Ford's }}$ fortune is true, mutatis mutandis (i.e., with the necessary changes), of great business fortunes in general.
67. Relative rates of growth or decline in accumulated wealth are the result of a combination of relative rates of profit and relative degrees of saving out of profits.
68. If 10 percent of the population in a divi$\overline{\text { sion-of-labor society owns } 90 \text { percent of the wealth of }}$ the society, what that signifies is that
a. some people have contributed more to production than others-in the more important cases, introducing a series of major improvements into production, and then saving and investing very heavily out of the higher incomes they earned
b. the 90 percent of the wealth that is owned by the 10 percent then serves the 90 percent of the population that did not contribute as much to production
c. because of the freedom of the 10 percent to create and earn the wealth and income they do, there is incalculably more wealth
d. because of the freedom of the 10 percent to create and earn the wealth and income they do, there is more saving and the means of production that exist at any given time are more efficiently used, both of which facts are causes of the continuous further increase in the supply of means of pro-duction-of capital goods-that are used to produce overwhelmingly for the benefit of the 90 percent of the population that allegedly owns only 10 percent of the wealth of the economic system e. all of the above
69. If 10 percent of the population in a divi-sion-of-labor society, capitalist society owns 90 percent of the wealth of the society, what that actually signifies is that
a. 90 percent of the wealth of the society is not only owned but was also created and earned by the 10 percent who own it (or by their parents or grandparents)
b. 10 percent of the society makes possible the far greater part of the real incomes of the 90 percent
c. both (a) and (b)
70. According to the Marxian doctrine on economic inequality
a. the inequality between capitalist and worker is essentially no different than the inequality that prevailed in earlier periods of history between master and slave or between lord and serf
b. all of history is the record of one continuous class struggle that has been carried on in different forms and under different guises-in the Ancient World, between master and slave; in the Middle Ages, between lord and serf; in modern times, between capitalist and worker
c. the worker under capitalism is a slave-a "wage slave"
d. the capitalist is an "exploiter," even more ruthless than the feudal lord or ancient slave owner e. all of the above
71. The essential differences between economic inequality under capitalism and economic inequality under feudalism are
a. economic inequality under feudalism is the result of theft by the nobility from the serfs, with the result that the enrichment of the nobility is at the expense of the impoverishment of the serfs
b. economic inequality under capitalism is the result of differences in positive productive contribution, in which the greater productive contribution of the businessmen and capitalists serves to in-
crease the wealth available to all and from which all gain
c. both (a) and (b)

The following is a five-part question. John Kenneth Galbraith wrote: "The worker in a Calcutta jute mill who loses his job-like his American counterpart during the Great Depression-has no high prospect of ever finding another. He has no savings. Nor does he have unemployment insurance. The alternative to his present employment, accordingly, is slow but definite starvation. So though nominally a free worker, he is compelled. The fate of a defecting southern slave before the Civil War or a serf before Alexander II was not appreciably more painful. The choice between hunger and flogging may well be a matter of taste." (The New Industrial State, 2d ed. rev., p. 141.)
72. Galbraith claims that what we think of as constituting free labor is so in name only, while in substance it is the same as slavery. Thus, as in the novel 1984, for Galbraith, "freedom is slavery."
73. An essential difference, ignored by Gal$\overline{\text { braith, in }}$ the relationship between a slave owner and the suffering of his slave, on the one hand, and an employer and the suffering of his poor, hungry worker, on the other, is that the slave owner and his whip are the cause of the slave's suffering, while the employer and the wages he pays are the cause of the alleviation and prevention of the worker's suffering hunger
74. A further essential difference, ignored by Galbraith, is that what keeps a worker at his job under slavery is physical force: chains, whips, and guns; while in the case of the worker in the Calcutta jute mill, physical force would probably need to be applied to keep the worker from his job, because it is the positive source of what keeps him alive and what he desperately wants to have, not what he desperately wants to run away from.
75. Yet another vital aspect of freedom ignored by Galbraith is that it is essential if the worker is to be able choose the best of whatever employment opportunities may be open to him, and that even if no other such opportunities are currently open to him, it is almost certain that some will be at some point. The free worker can then choose the best among them; the slave cannot.
76. Lack of employment opportunities is it$\overline{\text { self the result of the violation of freedom, i.e., the free- }}$ dom to offer and accept the lower wage rates which would serve to increase the quantity of labor demanded to the point of sufficient jobs being available to provide opportunities for alternative employment.
77. According to feudalism, landed estates $\overline{\text { were not the property of any given individual, but of }}$ his bloodline, and thus of his unborn children and
grandchildren, and their descendants, as much as himself. On this basis, the sale of land by the nobility or its possible loss as collateral on loans was forbidden.
78. The feudal nobility were not landowners in the proper sense of the term, because
a. they lacked essential rights of owners, in that they could not sell the lands that were allegedly theirs, nor fire workers who became unnecessary, nor seek to attract workers from the estates of other noblemen
b. they possessed powers that are no part of ownership, such as those of "low" and "high" justice (i.e., the respective powers to flog and hang) c. their position was actually that of government officials, analogous in effect to that of hereditary commanders of military bases
d. all of the above

The following is a six-part question.
79. Socialism views the individual not as an end in himself, but as a means to the ends of "society."
80. The ends of "society" can easily be learned by asking it in person, or, if you know its phone number or address, by means of a telephone call or correspondence.
81. The ends of "society" can never be directly known, since "society" is not a real, living entity, but only an idea or abstraction, and thus any ends that it may allegedly have must first be interpreted or divined by a special class of people, namely, the rulers of the socialist state.
82. Socialism's view of the individual as a means to the ends of "society" reduces to the view of the individual as a means to the ends of the rulers of the socialist state.
83. Socialism, rather than capitalism, by the $\overline{\text { nature of }}$ its view of the purpose of the individual, represents a revival of the conditions of feudal-type inequality.
84. The existence, in the days of the Commu$\overline{\text { nist bloc, of special stores, housing, schools, and hospi- }}$ tals reserved exclusively for members of the Communist Party and government elite followed from the nature of socialism's view of the purpose of the individual.
85. The law of diminishing marginal utility is used to justify attempts to equalize wealth and income, e.g., by means of progressive income taxes, on the grounds that the marginal utility of a unit of wealth is less to a richer, higher income individual than it is to a poorer, lower income individual and thus that an increase in overall marginal utility to society can be achieved by transferring units of wealth from the rich to the poor.
86. The use of the law of diminishing marginal utility to justify the seizure of others' wealth or income ignores the fact that
a. "society" is not a living, valuing being and is thus incapable of experiencing marginal utility of any kind
b. all judgments of value and marginal utility must always be those of specific individuals c. to any given individual the marginal utility of his $n^{\text {th }}$ unit of wealth or income can be and usually is greater to him than the marginal utility to him of the first unit of wealth enjoyed by strang-ers-e.g., that he values a desert in his own stomach above the value he attaches to essential nutrition in the stomach of a stranger
d. from the perspective of the individual, the loss of his desert for the purpose of feeding an anonymous stranger most likely represents a loss of utility, which is demonstrated by the fact that when they are free to choose, most people continue to eat desert (or at least substantially beyond the minimum essential for bare survival) rather than sacrifice it for the benefit of others
e. all of the above
87. If an individual benefits from something, he implicitly benefits from what created and now maintains that something. Thus an individual who benefits from his ownership of an automobile, say, implicitly indirectly benefits from the automobile factory that produced the automobile and all of the other complementary means of production directly or indirectly required to produce his automobile. He also benefits from the gas he buys to keep his car running and the oil changes needed to maintain its performance.
88. The selfish thing for the owner of a car to do is to refuse to buy gas for his car, because the gas benefits the car, not him.
89. The selfish thing for a parent who loves $\overline{\text { his child }}$ to do is to refuse to buy food for his child, since the food benefits the child, not him.
90. The selfish thing for a person who values $\bar{a}$ friend to do is never to help that friend, because only the friend would benefit, not him.
91. Human beings can be selfishly concerned with the well-being of the rest of mankind
a. in the same way that when they watch movies or read novels, they are concerned with innocent victims escaping harm and generally value happy endings
b. up to a point that is probably no greater than their concern with literature and art c. both (a) and (b)
92. The solution to the problem of massive, overwhelming poverty on a global scale is
a. private charity
b. governmental foreign aid
c. knowledge of the science of economics and the establishment of capitalism, to make it possible for average people everywhere to support themselves in abundance
93. The doctrine of external benefits goes beyond the egalitarian version of diminishing marginal utility in that, according to its logic, if a painting is stolen from the private collection of a millionaire who does not appreciate it very highly, and is stolen not merely by someone who appreciates it more, but by someone who exhibits it to multitudes of others, many of whom also appreciate it more, then what is present is not only the alleged gain in marginal utility that exists by virtue of the painting falling into the hands of the more-appreciative thief, but also the further alleged gain of the more-appreciative multitude's enjoyment, which is an alleged "external benefit" of the theft.
94. As an attempt to wring benefits for others from sacrificial victims, by means of force, the exter-nal-benefits doctrine destroys the basis of the existence of benefits to others being a value to an individual, for he is being asked to value the satisfactions of his tormentors. It is thus a self-nullifcation.

The following is a four-part question. "Abilities are much more equally distributed than are incomes . . . . While human traits seldom differ by more than a factor of 3, high incomes today are more than 100 times greater than the lowest." (Paul Samuelson and William Nordhaus, Economics, 13th ed. (New York: McGrawHill Book Company, 1989), p. 649.)
95. The meaning of the above quotation is that economic inequality has little or nothing to do with ability, inasmuch as the "distribution" of income does not follow the pattern of distribution of ability, as indicated, for example, by IQ tests. In the case of IQs, approximately 99 percent of the population has an IQ between 50 and 150 , i.e., the inequality is rarely greater than a factor of 3 .
96. According to the logic of the above quotation, what would be necessary for intelligence to be the explanation of inequalities of income would be if the earnings of those with IQs of 150 were only three times as high as those with IQs of 50, rather than one hundred or more times as high - in other words, if the earnings of geniuses were only three times those of morons, rather than a hundred or more times those of morons.
97. The "distribution" of income and wealth $\overline{\text { is more skewed than the normal curve, because con- }}$ trary to the above quotation, the effect of intelligence, when present in appropriate combination with other necessary factors, is exponential, not linear. That is, each additional few points of intelligence, or, better, productive ability (however that might be precisely gauged) should be expected to yield exponentially increasing results. Those of average ability, represented by IQs of 100 , should be expected to earn substantially more than twice as much as morons, represented by IQs of 50. Productive geniuses who revolutionize the
work of hundreds of thousands of individuals and the consumption of hundreds of millions, should be expected to earn and accumulate many thousands of times the wealth and income of the average person, which, in fact, is what they do. In connection with productive geniuses, moreover, it should be recognized how crucial is that extra measure of intelligence and ability which separates them from individuals who are merely very bright, and which gives the geniuses the ability to conceive of the new and original, not merely repeat what others have done, which is all that even the merely very bright can do.
98. The "distribution" of income and wealth is more skewed than the normal curve, in part because the success of men of exceptional ability so radically increases the wealth and income of all individuals of lesser ability. This makes the negative deviations from the mean value of wealth and income much smaller than the positive deviations. Thus, while productive geniuses may earn a thousand or more times what the average individual earns, productive morons, to coin a phrase, earn many times more than one one-thousandth of what a person of average ability earns.
99. The equality-of-opportunity doctrine a. views opportunities as fundamentally external to the individual-in effect, as various dishes carried by waiters on trays, which, under capitalism, are arbitrarily served to some and withheld from others b. wants the government to seize control not, it says, of the distribution of wealth and income, but merely of the distribution of these dishes, as it were-that is, of the opportunities to earn wealth and income-and so give everyone an equal chance
c. provides a basis for the confiscation of inheritances, public education through the postgraduate level, and laws preventing private discrimination on the basis not only of such factors as race, religion or national origin, but also age, medical condition, and physical handicap, which laws are advocated as necessary to the provision of equal opportunities
d. is a fallback position for advocates of economic equality
e. all of the above
100. Besides inequality of financial inheritance, other factors that affect the opportunities a child has, including his opportunity to earn wealth and income, are
a. the intelligence of his parents, their education and vocabulary, their system of values, and their love for him and treatment of him, not to mention their level of income and the kind of material life they lead and thereby expose him to while he is growing up
b. his genetic inheritance, especially as it relates to his intelligence, looks, and health
c. both (a) and (b)
101. To achieve equality of opportunity, it would be necessary not only to abolish or otherwise equalize financial inheritances, but also to bring children up in the same environment, i.e., in government orphanages, and give them equal genetic inheritances, i.e., adopt a program of eugenics and genetic engineering.
102. The doctrine of equality of opportunity $\overline{\text { is as much against the nature of reality as is the doc- }}$ trine of the out-and-out equality of wealth and income.
103. The last time the appointment of a new $\overline{\text { President }}$ of General Motors was considered, my name did not appear on the short list of candidates, or even on the long list. Thus I did not have any equality of opportunity in connection with the choice of a new President by GM's board of directors. The same is true in relation to the appointment of virtually all company presidents over the course of my lifetime. As far as my chances of being made a company president are concerned, I have never been able to play on a level field. In fact, it would be more accurate to say that I've been totally off any kind of field, in a deep ditch. In all such cases only individuals who had already achieved highlevel executive positions were considered for the job of president. Those who, like myself, had not been a high-level executive, were simply not given an opportunity to be considered.
104. Opportunities
a. are occasions on which successful action is possible
b. exist every time there is the possibility of improving oneself in any way, such as in terms of knowledge and skill
c. are never a matter merely of external circumstances that are served up on a plate, as it were, but always depend on what the individual himself brings to the external circumstances in the way of skills and abilities, which in turn are the cumulative product of what the individual has done with his life up to that point, reflecting his initial choices to use his genetic inheritance to deal with external circumstances in ways that developed certain skills and abilities, and then further choices to use those skills and abilities to deal with further external circumstances in ways that developed still further skills and abilities, and so on up to the present moment
d. are created by individuals on the basis of previous choices that have developed various skills and abilities
e. all of the above
105. A child who chooses to use his mind to learn arithmetic thereby creates an indispensable precondition for the potential opportunity to learn algebra. Unless and until he learns arithmetic, there can be no possibility of any opportunity for him to learn algebra.
106. The individual who exploits the opportunity to become a worker in a factory thereby creates a
possible basis for his later on becoming a foreman there. If he becomes a foreman, he creates a possible basis for later promotion to a higher managerial position, and so on.
107. Opportunity presents itself as the rungs of a ladder. Each rung is open only to those who have climbed within reach by ascending previous rungs.
108. It is ludicrous to think that what a person does is the outcome merely of his environment and genes. In between the environment and the genes is a lifetime of choices, each of which has a vital bearing on the individual's ability to deal with his environment and to make further choices.
109. It is not necessary that people make the choices that develop their skills and abilities at any precise moment. There is considerable leeway. And it is never completely too late to start. For example, someone can learn to read even in old age and then begin rapidly to build on that foundation.
110. In a free society, everyone, whatever his starting point in life, is able to raise himself very far, if that is what he chooses to do. He can miss many, many opportunities, and still there will be more. He can begin improving his ability to exploit them at any time, and start moving up from that moment.
111. The freedom of opportunity means the ability to exploit the opportunities afforded by reality, without being stopped by the initiation of physical force.
112. Given man's limitless need and desire for wealth and the fact that production is limited only by the availability of labor, it follows that employment opportunities are potentially far in excess of the ability of people to work and that choices must be made between which employment opportunities are to be exploited and which are not to be exploited.
113. What explains the side-by-side existence of virtually limitless employment opportunities and mass unemployment is violations of the freedom
of people to exploit employment opportunities, as in the case of employers being prohibited from paying, and wage earners from receiving, wage rates below coercively imposed labor-union scales or legal minimum wages, which lower wage rates would expand the quantity of labor demanded and open up jobs for all who wanted a job.
114. If two individuals in a free society were born equal in every respect, except that one had richer parents than the other, and if they both actively and constantly chose to develop their skills and abilities from birth on, the one with the richer parents would probably always be ahead of the one with the poorer parents.
a. this is an embarrassment to a free society
b. it is perfectly just that things be this way, because what else is wealth for if not to provide benefits compared with not having it?; moreover, the greater wealth of the one can benefit the other not only in the ways explained in connection with the discussion of the general benefits from the institution of inheritance, but also in the more specific way of the two possibly becoming unequal partners in an arrangement that enables the poorer partner to increase his wealth far more rapidly than he otherwise could, thanks to the use of the richer one's capital
115. On the basis of the fact that the individual creates his own opportunities, it is possible for a child born to poor parents, and suffering numerous other disadvantages, ultimately to far outstrip in his accomplishments practically everyone else, including children born to extremely wealthy parents and enjoying all manner of other initial advantages.
116. One of the consequences of the equality-of-opportunity doctrine is that it causes some parents deliberately to do less for their children than they otherwise would, on the grounds that other parents are unable to do as much.

## Part C: ECONOMIC COMPEIIIION

117. Competition in the animal kingdom is a. competition in the grabbing off of limited supplies of nature-given necessities, such as nuts and berries growing on trees or zebras and gazelles roaming the forest or plain
b. won by those animals with the keenest senses, the greatest speed, and the strongest teeth and claws; they get the food; the older, weaker animals die of starvation and disease
c. the law of the jungle, the survival of the fittest d. all of the above
118. Animals must take their environment as they find it; they lack the power to adapt it to themselves. Thus, for example, lions in the jungle are inca-
pable of enlarging the supply of the animals they require as food.
119. In sharpest contrast to the animals, man's possession of reason enables him to identify the conditions on which his well-being depends and to take effective action in improving those conditions, from actually growing food for the animals he wants to eat, to reshaping the chemical elements of the earth into an ever expanding array of products, from air conditioners to zippers, and doing all of it ever more efficiently.
120. Economic competition, in contrast to competition in the animal kingdom, is competition in the positive creation of new and additional wealth.

## 121. IBM and Apple, General Motors and

 Toyota, are in competitiona. for limited supplies of computers and automobiles growing on the computer and automobile trees
b. in the positive creation of new and better computers and automobiles
122. Economic competition has in common $\overline{\text { with athletic competition an upward ratcheting of stan- }}$ dards accompanied by continual efforts to match and exceed the rising standards.
123. The effect of competition among food growers and pharmaceutical manufacturers on the hungry and the sick is to
a. grab away their food and medicines
b. provide them with food and medicine, and more and better as time goes on
124. Because it is competition in the positive creation of new and additional wealth, in the nature of the case there are no long-run losers as the result of economic competition.
125. Everyone is related to the process of $\overline{\text { economic competition in his capacity both as a con- }}$ sumer and as a producer.
a. as a consumer, he simply benefits from all of the competition that takes place in the production of whatever he buys
b. as a producer, he may sometimes lose his job or ownership position as the result of the competition that takes place in the good he produces, in which case, his benefit from this specific competition may be delayed until such time as he has reestablished his position as an income earner and now benefits in his capacity as a consumer even from the improvement that initially displaced him c. both (a) and (b)
126. Under economic competition, individuals can sometimes lose their jobs, or even ownership positions, as the result of the adoption of labor-saving improvements or of the products their firms produce being made obsolete. In such cases, there are short-run loss periods of different length for unskilled workers, skilled workers, and those who lose invested fortunes.
127. The short-run loss periods for a. unskilled workers can be as short as a few days or weeks
b. skilled workers can be as long as several years-however long it takes to acquire a comparable level of skill and ability in a different line of work and thereby earn a level of income comparable to what one earned initially
c. the losers of invested fortunes, can be as long as the rest of their lives
d. all of the above
128. Blacksmiths and horsebreeders who were displaced by the automobile
a. died of starvation
b. ended up with the benefits of the automobile and of more efficient transportation in the production of virtually all of the products they bought, thanks to trucks displacing horse-drawn wagons
129. Once individuals who lose a given competition succeed in acquiring a level of skill and ability in a different line of work comparable to what they possessed in their initial line of work, and thereby reestablish their position as income earners, they end up benefitting even from the very improvements in production that initially caused them a loss.
130. Under continuing competition and resulting economic progress, a young man who loses an invested fortune (presumably inherited) as the result of competition, and who is thus reduced to the status of an average wage earner, could nevertheless ultimately still come out ahead in terms of his material standard of living, assuming that there is enough economic progress to make the standard of living of the average wage earner two generations later surpass that of millionaires when the fortune was lost.
131. A sixty-five year-old man who loses an invested fortune will probably never reestablish his position as an income earner. And if he loses his fortune in his youth, the fact that in his old age his standard of living as an average wage earner may finally surpass what it was when he was a millionaire is not sufficient compensation, since he will not be alive long enough to make up for his loss. Thus, the losers of invested fortunes who cannot quickly reacquire their fortunes can legitimately claim that economic competition reduces their standard of living.
132. The losers of invested fortunes who can$\overline{\text { not quickly reacquire their fortunes, and skilled work- }}$ ers who lose their jobs and cannot acquire skills and earning capacity in other lines of work comparable to what they had before, can legitimately claim that a. economic competition harms them b. that it now gives them less than it used to give them, while still giving them virtually everything they have, inasmuch as it underlies virtually the whole of what is produced and the efficiency with which it is produced
133. Those who denounce competition as the "law of the jungle" implicitly support the real law of the jungle, insofar as they imply a case for the use of physical force to maintain their standard of living through suppressing the economic competition of others, an act which constitutes the human equivalent of living by means of teeth and claws.
134. Economic competition, rather than being in conflict with economic security, is in fact an essential foundation of economic security, in that it underlies the existence and availability of the material goods on which economic security depends.
135. The hardships of those who lose their jobs as the result of economic competition would be al-
leviated if there were more freedom of competition rather than less, for what anyone who loses his job requires is the fullest possible freedom to compete in the rest of the economic system, so that he will be able to exploit the best of the opportunities available to him.
136. Seniority systems artificially increase the length of the short-run loss periods.
137. Restrictions on economic competition create a seeming need for further such restrictions, in that, by closing off opportunities for employment, they make the consequences of losing a given competition more severe.
138. The law of comparative advantage shows that there is room for everyone in the economic competition of a division-of-labor society, even if he is productively less capable than other people in every respect.
139. If country A is only half as efficient as $\overline{\text { country B }}$ in the production of every good, then
a. country A simply cannot compete with country B
b. country A can compete with country B, pro-
vided its wages rates are half of those of $B$
140. Country $B$ is more efficient than country A in the production of every good without exception. Its productive superiority ranges from twice as efficient to ten times more efficient, with an average superiority of five times the efficiency. (Twice as efficient means B requires only half the labor of A . Ten times as efficent meant that it requires only one-tenth the labor.) Thus
a. country A simply cannot compete with country B b. country A will outcompete country B in the production of all goods in which its productive inferiority is less than a factor of five, provided its wages rates are one-fifth of those that prevail in country B
141. Free international trade does not cause unemployment if a country's relative wage rates are free to adjust to correspond to its relative productivity level.
142. Select the best of the choices below. a. Free international trade promotes world peace.
b. Government-supported labor-union interference stands in the way of free international trade by preventing the necessary adjustment of relative wage rates to the relative productivity of labor, thereby making substantial unemployment the price of free trade.
c. Free international trade depends on free labor markets domestically.
d. all of the above
143. A productive genius as great as Edison can benefit from being able to employ the humblest cleaning lady, despite the fact that he could almost certainly clean his office in the barest fraction of the time it takes her to clean it. His gain is the release of his
time for tasks in which his comparative advantage is greater, indeed, infinite.
144. Even though it might take Edison onetenth the time to clean his office as it takes the humble cleaning lady of the previous question, she can easily outcompete Edison for the job of cleaning lady if the hourly wage that would have to be paid to Edison is a thousand or more times higher than the hourly wage that has to be paid to her.
145. The fact that Edision is there to do the job of Edison is very much to the material self-interest of the humble cleaning lady, because it will enable her to obtain goods which, left to herself, she would probably never have been able even to imagine, such as electric light and the phonograph.
146. The pyramid-of-ability principle shows how the competitive success of the more able serves to raise the productivity and standard of living of the less able in a division-of-labor society.
147. The scarcity of labor in relation to people's need and desire for products and services guarantees that in a free market there is room for all in the economic competition of a division-of-labor society, with comparative advantage and relative wage rates determining who will go where.

The following is a six-part question.
148. When a more qualified individual succeeds in outcompeting a less qualified individual, his gain is also the gain of the consumers of the product he produces or helps to produce.
149. If I could be president of a major corpo$\overline{\text { ration, } m y ~ i n c o m e ~ a n d ~ s t a n d a r d ~ o f ~ l i v i n g ~ w o u l d ~ d r a-~}$ matically improve. However, I have no hope of obtaining such a position through free competition. Thus free competition stands in the way of my standard of living.
150. If, despite my lack of qualification, I became the president of a major corporation and misdirected the labor of hundreds of thousands of workers and the use of tens of billions of dollars of capital, the magnitude of the losses I caused to others would far exceed the increase in my own income and wealth.
151. If, throughout the economic system, others equally unqualified as myself came to occupy similar positions of major responsibility which they proceeded to abuse, I would lose back in my capacity as a consumer far more than I gained in greater income and wealth. I would not be able to trust the airlines I flew, or the medications I consumed, or the surgeon who might be called upon to operate on me. It is to my self-interest, and the self-interest of everyone, that more qualified individuals be free to outcompete less qualified individuals-from more qualified executives outcompeting less qualified executives down to more
qualified workmen, such as mechanics, plumbers, and electricians, outcompeting less qualified workmen.
152. When understood as a principle operating throughout the economic system, the competitive success of the more qualified individuals over the less qualified individuals is the source of gains
a. only to the more qualified individuals, who win the competitions
b. to the less qualified individuals, who lose the competitions, as well as to the more qualified individuals who win the competitions
153. In a division-of-labor society with a free market, the less qualified individuals who lose the competitions must
a. die of starvation
b. find other jobs, in which their comparative lack of ability is least and is more than offset by their acceptance of lower wage rates, which assures that these are competitions that they win
154. Select the best of the choices below. a. The law of comparative advantage shows the gains to the more able of cooperating with the less able in a division-of-labor society.
b. The pyramid-of-ability principle shows the gains to the less able of cooperating with the more able in a division-of-labor society.
c. Both principles are aspects of the wider principle of the harmony of rightly understood material selfinterests of all men in a division-of-labor society. d. all of the above
155. Competition is
a. in conflict with social cooperation
b. the process of organizing and improving the efficiency of the division of labor, which is the sum and substance of social cooperation
156. Competition is the process of organizing the division of labor with respect to
a. persons for jobs, e.g., who will be company president, who will be janitor, and who will fill any other position
b. products for markets, i.e., which products and which models will supply which markets to what extent
c. which methods of production will be used and to what extent
d. all of the above
157. Population growth in a non-division-of$\overline{\text { labor society can represent a competitive conflict of }}$ interests as the larger numbers more and more encounter the effects of diminishing returns.
158. In contrast, population growth in a divi$\overline{\text { sion-of-labor society }}$
a. makes possible an extension of the division of labor
b. increases the liklihood of technological progress by virtue of increasing the numbers of people
engaged in the discovery and application of new scientific and technological knowledge
c. can easily more than offset the effects of diminishing returns through accelerating the pace of technological progress
d. all of the above
159. The large populations of great cities is what makes possible the great variety of shops and cultural attractions to be found in them, in that, in them, even needs and desires that appear in only modest frequency amount to sufficiently great absolute numbers to make it worthwhile for people to specialize in meeting those relatively infrequent needs and desires.
160. If, on a given day, only one person in a hundred thousand is interested in buying a 19th century mystery novel, that nevertheless represents the potential of a hundred customers per day in a city of ten million inhabitants.
161. Freedom of immigration into a division-
of-labor, capitalist society would
a. reduce the wage rates of unskilled labor relatively to the wages of skilled labor
b. probably enable the middle class to afford to employ servants
c. serve to accelerate the rate of economic progress as immigrants with talent, and the talented children of immigrants, came into an environment in which they were free to develop and apply their talents d. all of the above
162. The existence of a fixed quantity of money, and a corresponding fixed volume of spending in the economic system, would represent a situation in which
a. there was a genuine conflict of interests as a result of the fact that the competition of larger numbers of workers would drive down wage rates b. the competition of larger numbers of workers would drive down prices as well as wage rates, and to a greater degree than wage rates insofar as it served to increase the productivity of labor, i.e., the output per worker
163. The existence of a fixed quantity of money, and a corresponding fixed volume of spending in the economic system, would represent a situation in which an increase in output on the part of one group relative to that of other groups would serve to increase the money income of that one group while equivalently reducing the money income of all other groups. This would
a. represent a conflict of interests among the groups
b. not represent a conflict of interests among the groups, because the resulting fall in prices would offset the fall in money incomes, and the fall in prices would be greater than the fall in the money income of any group to the extent that it increased its productivity.

| Question \# | Correct Answer | Question \# | Correct Answer | Question \# | Correct Answer | Question \# | Correct Answer | Question \# | Correct Answer | Question \# | Correct Answer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | d | 29 | d | 57 | T | 85 | T | 113 | T | 141 | T |
| 2 | d | 30 | F | 58 | T | 86 | e | 114 | b | 142 | d |
| 3 | d | 31 | F | 59 | d | 87 | T | 115 | T | 143 | T |
| 4 | b | 32 | T | 60 | T | 88 | F | 116 | T | 144 | T |
| 5 | T | 33 | f | 61 | d | 89 | F | 117 | d | 145 | T |
| 6 | T | 34 | T | 62 | T | 90 | F | 118 | T | 146 | T |
| 7 | c | 35 | F | 63 | T | 91 | c | 119 | T | 147 | T |
| 8 | F | 36 | F | 64 | T | 92 | c | 120 | T | 148 | T |
| 9 | T | 37 | T | 65 | T | 93 | T | 121 | b | 149 | F |
| 10 | T | 38 | T | 66 | T | 94 | T | 122 | T | 150 | T |
| 11 | T | 39 | T | 67 | T | 95 | T | 123 | b | 151 | T |
| 12 | d | 40 | d | 68 | e | 96 | T | 124 | T | 152 | b |
| 13 | b | 41 | T | 69 | c | 97 | T | 125 | c | 153 | b |
| 14 | b | 42 | T | 70 | e | 98 | T | 126 | T | 154 | d |
| 15 | b | 43 | T | 71 | c | 99 | e | 127 | d | 155 | b |
| 16 | b | 44 | T | 72 | T | 100 | c | 128 | b | 156 | d |
| 17 | T | 45 | b | 73 | T | 101 | T | 129 | T | 157 | T |
| 18 | T | 46 | T | 74 | T | 102 | T | 130 | T | 158 | d |
| 19 | T | 47 | F | 75 | T | 103 | T | 131 | F | 159 | T |
| 20 | T | 48 | T | 76 | T | 104 | e | 132 | b | 160 | T |
| 21 | T | 49 | e | 77 | T | 105 | T | 133 | T | 161 | d |
| 22 | T | 50 | f | 78 | d | 106 | T | 134 | T | 162 | b |
| 23 | b | 51 | c | 79 | T | 107 | T | 135 | T | 163 | b |
| 24 | F | 52 | c | 80 | F | 108 | T | 136 | T |  |  |
| 25 | F | 53 | b | 81 | T | 109 | T | 137 | T |  |  |
| 26 | b | 54 | 50:50 | 82 | T | 110 | T | 138 | T |  |  |
| 27 | T | 55 | 2:1 | 83 | T | 111 | T | 139 | b |  |  |
| 28 | F | 56 | T | 84 | T | 112 | T | 140 | b |  |  |

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## Chapter 10

## The Meaning of Freedom and of Freedom of Competition

1. According to the rational concept of freedom,
a. freedom means the absence of the initiation of physical force-in particular, on the part of the government
b. viewed in a positive light, freedom is the freedom to do whatever one is otherwise capable of doing, unconstrained by the initiation of physical force
c. the inability to perform logical contradictions, to violate the laws of mathematics or of nature, or to resort to physical force against others without fear of apprehension and punishment are not violations of freedom
d. all of the above
2. According to the anarchic concept of freedom,
a. freedom is the ability to do whatever one may wish to do
b. is violated by obstacles that stand in the way of the realization of one's desires
c. both (a) and (b)
3. According to the anarchic concept of freedom, "freedom of competition"
a. is violated by the existence of high capital requirements that most people cannot meet b. is violated by the need for technological knowledge and managerial skills that most people do not possess
c. would be promoted if goods could be produced in simple barn-like structures rather than in costly modern factories
d. would be promoted if the level of technological knowledge and managerial skill required were within the range of all, or at least of the majority of people
e. all of the above
4. High capital requirements
a. constitute a violation of the freedom of competition
b. exist as the result of the freedom of competition
c. are the result of the fact that other producers in the industry, who are probably using large amounts of capital in their operations, are charging low prices; their low prices necessitate that to be profitable, one must have low costs of production, which, in turn, are achieved by the employment of large sums of capital
d. all of the above
e. none of the above
f. (b) and (c) but not (a)

## 5. According to the political concept of mo-

 nopoly,a. monopoly is a market, or part of a market, reserved to the exclusive possession of one or more sellers by means of the initiation of physical force by the government, or with the sanction of the government
b. monopoly exists insofar as the freedom of competition is violated, with the freedom of competition being understood as the absence of the initiation of physical force as the preventive of competition
c. where there is no initiation of physical force to violate the freedom of competition, there is no monpoly
d. the freedom of competition is violated only insofar as individuals are excluded from markets or parts of markets by means of the initiation of physical force
e. monopoly is something imposed upon the mar-
ket from without-by the government
f. all of the above
6. According to the
a. political concept of monopoly,
b. the economic concept of monopoly,
monopoly is something which emerges from the normal operation of the economic system, and which the government must control.
7. The political concept of monopoly is the corollary of the rational concept of freedom in general and the rational concept of the freedom of competition in particular.
8. According to the political concept of monopoly, monopoly is, as it was originally understood to be, an exclusive grant of government privilege, such as was extended by English monarchs in earlier centuries to the British East India Company and to various guilds of producers or merchants.
9. According to the original meaning of monopoly, the British East India Company was a monopoly because
a. it was the only company conducting trade between England and India
b. it was the only company legally allowed to conduct trade between England and India
10. According to the political concept of monopoly, leading present-day examples of monopoly are
a. exclusive government franchises
b. licensing laws
c. tariffs
d. minimum-wage and prounion legislation
e. government-owned and government-subsidized enterprises
f. the antitrust laws
g. all of the above
11. Examples of exclusive government franchises have included, and for the most part still include, electric, gas, and water service, cable television, local telephone service, and, in many localities, local bus service.
12. Exclusive government franchises constitute monopolies according to the political concept of monopoly, because they reserve markets to the exclusive possession of the holders of the franchises, and do so by means of the government's initiation of force.
13. What is essential to the monopoly constituted by exclusive government franchises is the fact that
a. there is only one seller
b. the market is reserved to the exclusive possession of that seller by means of the initiation of physical force
14. For many years, Alcoa was the only supplier of aluminum ingot in the United States. Nevertheless, according to the political concept of monopoly, this fact did not make Alcoa a monopoly
15. What made it possible for Alcoa to be the sole supplier of aluminum ingot was
a. its ability and willingness to produce and sell its aluminum at prices that were profitable to it, but yet too low for any potential competitor to be profitable
b. the initiation of physical force on its behalf by the government.
16. If the freedom of competition resulted in $\overline{\text { only one electric or gas company supplying a given }}$ area, that would not make that company a monopoly according to the political concept of monopoly.
17. Under the freedom of competition, in $\overline{\text { order for a company to be the sole supplier of gas or }}$ electricity, it would have to offer its customers lower rates and than any other supplier offered and would almost certainly have to offer its customers contractual guarantees concerning its rates, so that they would not have to fear temporary arbitrary increases in the period in which competitors did not yet have the time required to enter the field.
18. Exclusive private franchises, such as Mc$\overline{\text { Donalds, }}$ are not monopolies according to the political concept, because granting them represents merely the choice of private property owners to decide who is and who is not to receive the use of their property, whereas the government, as the agent of the people-of each and every person equally-and properly having no property of its own whose use it can give or withhold, in denying anyone the right to undertake an economic activity simply initiates the use of force.
19. Licensing laws create monopolies by virtue of initiating force to reserve markets to the exclusive possession of the license holders.
20. Examples of monopolies created by licensing laws are the occupations of
a. accountant
b. barber
c. beautician
d. constructrion contractor
e. dentist
f. lawyer
g. liquor store owner
h. optician
i. pharmacist
j. physician
k. psychologist

1. teacher
m. taxicab driver
n. all of the above
2. Only the holders of the licenses are legally allowed to pursue the field in question. All others are excluded by means of the initiation of physical force.
3. The fields controlled by licensing laws are monopolies even though they contain numerous sellers, because they reserve markets to the exclusive possession of the license holders by means of the initiation of physical force and thereby keep out of those fields suppliers who otherwise would be in them-suppliers with whom the public would be glad to deal voluntarily, without any form of force or fraud being present.
4. The effect of licensing-law monopoly is to
a. reduce the quantity of services received by the buyers
b. raise the prices of the services buyers are allowed to receive
c. raise the incomes of the license holders
d. reduce the incomes of those who are excluded from the licensed fields and forced to crowd into other, less-well-paying fields
e. all of the above
5. Licensing laws are defended on the grounds that they are necessary to public health or safety and to guarantee some minimum level of competence and service.
6. It may be the case that licensing sometimes does serve to raise the minimum level of competence and expertise in a field and thus to guarantee to the buyers a higher level of service than they would have received in its absence. But even if this is true, it is not by any means an advantage to the buyers. It merely means, in many cases, that buyers are forced to buy a higher level of service than they want or need and, if they cannot afford the higher level of service,
are forced to do without the service they could have had.
7. The effect of a licensing law that raises the minimum level of service that can be provided is comparable, in essence, to a law that would require that the minimum quality of automobiles on the road be no less than, say, that of a five-year-old Chevrolet of average quality. While such a law would undoubtedly raise the average quality level of the cars that remained on the road, it would also operate to prevent many people from driving-namely, those who could not afford anything beyond the quality of the cars they presently drove and whose cars were below the quality of the average five-year-old Chevrolet.
8. The effect of liberalizing or abolishing medical licensing would be to
a. increase the ability of the poor to afford medical care by increasing the supply of medical care availale on the low end of the scale b. reduce the demand for and thus the rates of medical practioners further up on the scale of service to the extent that their patients turned to practitioners previously denied entry into the market c. increase the ability of everyone to afford the services of the more highly qualified medical practitioners
d. all of the above
9. In the absence of medical licensing, a. it would not be the case that barbers and butchers would be able to compete as doctors, any more than they can compete in the automobile or steel industry
b. competition would establish educational, performance, and other requirements
c. it would still be fraud to claim a degree, or any other form of private certification, that one did not have
d. new competition in medicine would come from people who today must be content to be registered nurses, pharmacists, paramedics, biologists, and so forth, but who could become qualified to practice important aspects of medicine presently monopolized by the licensed physicians, and do so with a high degree of competence e. all of the above
10. A free market would meet the legitimate $\overline{\text { objectives of licensing laws by such means as private }}$ certification, insistence on an established reputation or on endorsements from those with established reputations and whose judgment one trusted.
11. The advantage that the absence of government licensing would offer to individuals that is not possible under such licensing is that
a. the supply of the service would be greater and the price correspondingly lower b. not only would there almost certainly be more than one private certification agency in any given
occupation, but the individual would always have the right to step outside the system and decide entirely for himself
c. no one would be compelled to accept the judgment of government officials or of any other group of people concerning the products or services he might buy
d. there would permanently be more chances for new ideas being tried, and thus improvements would come far more rapidly than is possible today
e. it would not be necessary that before trying a new cure for a disease, or a new method of constructing a building, a person would have to wait upon the pleasure of any group of government officials to approve it or depend exclusively on their state of knowledge
f. all of the above
12. The existence of freedom carries with it the possibility that people will make wrong and even foolish choices. But there is no alternative. That possibility exists with or without freedom. The great advantage of freedom is that each individual has the right to make his own choices and need not be bound by the ignorance or stupidity of others.
13. It is no doubt true that under the freedom of competition, some individuals would act irresponsibly and at the first opportunity turn to quacks. The existence of such people, however, is no reason for denying freedom to everyone else, who would use it to great advantage. Moreover, under freedom, stupidity of choice serves as its own punishment.
14. If the misuse of freedom by the ignorant and the foolish is what is feared, then a better case can be made for the licensing of politicians and government officials than of doctors or the members of any other profession or trade. This is because here, when people turn to charlatans, the consequences are suffered by all. But, of course, there can be no such thing as the licensing of politicians and government officials, for who would license them, but other politicians and government officials? And what could be more dangerous than to allow politicians and government officials to have such power?
15. The premise of a free country is that the $\overline{\text { citizens are intelligent enough to run their own affairs }}$ and, in the time left over from their own affairs, the affairs of their government as well. Citizens who are not qualified to pass judgment on the qualifications of their doctor or building contractor (or on the qualifications of the experts whose advice they accept) are even less qualified to pass judgment on matters of foreign policy or domestic policy.
16. In the light of the uniformity-of-profit $\overline{\text { principle }}$, it follows that if licensing requirements and other government regulations in connection with the establishment and operation of hospitals were abolished, the cost of hospital stays would be driven down
to the point of covering only the necessary costs of providing the hospital stays plus only as much profit as required to earn a competitive rate of profit, and that the necessary costs would be progressively reduced while the quality of the stays progressively improved.
17. Under the influence of the anarchic concept of freedom, many people's idea of the right to medical care is that of an alleged right which is to be implemented without regard to the willingness of others to cooperate. The government is to take money from the taxpayers, at the point of a gun, to implement this alleged right to medical care and it is to hold a gun to the heads of physicians and hospitals to make them supply medical care on the terms and by the methods it imposes.
18. In contrast to the anarchic concept, the meaning of the right to medical care implied by the rational concept of freedom is that of the right to all the medical care one can afford to buy and chooses to buy from any willing provider.
19. The present high cost of medical care is
the result of
a. the violation of the right to medical care understood in the light of the rational concept of freedom,
b. collectivization of the costs of medical care
c. compelling some individuals to pay for the medical care of others
d. implementation of the anarchic concept of the right to medical care
e. all of the above
20. Protective tariffs constitute monopoly legislation according the political concept of monopoly, because they attempt to reserve the market, or a share of the market, to the exclusive possession of domestic producers, by means of the initiation of force.
21. Protective tariffs and licensing laws highlight the fact that monopoly, according to the political concept,
a. is not limited to the case of sole producers protected by the initiation of physical force
b. applies equally to cases of very large numbers of producers whose market is protected by the initiation of physical force
c. can serve to protect tens of thousands of small, inefficient producers against competition d. exists wherever markets or parts of the market are reserved to the exclusive possession of some to the exclusion of others by means of the initiation of force
e. correspondingly denies the freedom of competition to those who are forcibly excluded
f. all of the above
22. Monopoly legislation can protect the less efficient many against the competition of the more efficient few, or even just one, as, for example, in the case of protecting large numbers of individual taxicab own-
ers from the potential competition of a small number of large fleets of taxicabs, or protecting large numbers of small shops from the competition of small numbers of large department stores and chain stores.
23. Monopoly exists, and the freedom of competition is violated, not because there happens to be just one seller in a market when all have the legal right to enter, but when there are millions in the market and all but one are allowed to enter, with that one otherwise able and willing to enter. For example, a monopoly would exist in the automobile market even if it were comprised of thousands of small automobile companies and everyone in the world were allowed to enter it with the single exception of the original Henry Ford. Such exclusion of Ford would constitute a monopoly, in violation of the freedom of competition.

## 43. Minimum-wage and prounion legislation

 operate toa. prevent less-efficient workers from competing with more efficient workers in terms of labor cost per unit by preventing them from compensating for their lower productivity by means of accepting correspondingly or more-than-correspondingly lower incomes
b. attract the competition of relatively more
skilled workers to the field
c. exclude the less able and the disadvantaged from the market
d. monopolize markets in favor of more-skilled workers
e. all of the above
44. In creating a deficiency in quantity of labor demanded in relation to the supply of labor available and thus an artificial surplus of workers and the necessity of choosing among them, minimum-wage and prounion legislation create an opportunity for the play of such factors as personal favoritism, cronyism, and racial and other forms of group prejudice. This is because, with the ability to compete by means of lower wage rates eliminated, wherever there are no discernible differences in skill among the applicants for jobs, it is such factors that tend to determine the decision of who will be employed.
45. Minimum-wage and prounion legislation $\overline{\text { have had particularly harmful effects on blacks, espe- }}$ cially teenagers, and have often resulted in lifelong unemployment and welfare dependency.
46. Governmental actions that serve to increase housing costs are
a. zoning laws that impose minimum size lots or a maximum height of buildings
b. building codes that mandate expensive provisions that are not essential
c. the compulsory withdrawal of land from development
d. compelling home builders to deal with labor unions and thus to suffer the artificially high wage rates and inefficiencies imposed by the unions
e. rising property taxes
f. rent controls, insofar as they serve to reduce the supply of housing available for the market
g. urban renewal
h. all of the above
47. The governmental actions described in the preceding question, when combined with high gov-ernment-imposed minimum housing standards for health and safety, serve to cause homelessness.
48. Government-imposed minimum housing standards on a local basis have the unintended effect of worsening the housing conditions of the poor elsewhere by virtue of pushing more of them into the areas that remain free of such housing standards.
49. Government-owned and government-subsidized enterprises represent monopolies, according to the political concept of monopoly, in that their markets are reserved to them by means of the initiation of force against the taxpayers who must finance their operations.
50. Competitors of government-subsidized enterprises cannot gain their markets even if they are more efficient and offer better products, for the subsidized enterprises are enabled to sell their products at a loss, and even to give them away free of charge.
51. Public education represents monopolization of a major part of the education market against the competition of private education.
52. What public education accomplishes is that education is supplied without the benefit of the incentive of profit and loss in an environment of freedom of competition
53. If education had to operate prvately, and thus in the same basic economic context as the automobile industry or grocery business,
a. a powerful incentive would exist to improve quality and reduce costs, because this would be the way to increase profits
b. any school or chain of schools that introduced any perceptible improvement in education would have a substantial increase in its profits, because it would be giving students and their parents more for their money and thus they would want to deal with it, not its less efficient competitors
c. if any school or chain of schools succeeded in cutting its costs and could operate profitably at a lower level of tuition, it would also enjoy a large expansion in business, as a larger part of the market came to prefer to deal with it, because its tuition charges were now lower than its competitors' d. in response to the competitive pressure of the loss of business to the schools which improved their quality and efficiency, all the other schools would be compelled to improve their quality and efficiency, or else be driven out of business e. as the schools in the group just described caught up, it would no longer be possible for the
schools that had introduced the improvements to continue to make exceptional profits; to go on making exceptional profits, they would now have to introduce further improvements, with the same ultimate results
f. the uniformity-of-profit principle and its effects would apply to education
g. the basis would exist for continuous improvements in quality and efficiency, for the benefit of the buying public
h. all of the above
54. Under public education,
a. there is no incentive of profit and loss
b. there is little or nothing to be gained by introducing improvements
c. there is little or nothing to be lost in failing to match any improved performance of others d. a loss of students, whether it results from an improvement in the performance of other schools or from a decline in the performance of one's own school, does not mean a loss out of the school superintendent's pocket or out of the pocket of anyone who sits on the local school board e. all of the above
55. The position of private education today, and that of education as a whole, is analogous to what the position of the automobile industry would be if the production of all the low- and medium-priced models were in the hands of the government, which subsidized their production to the point of giving these models away for nothing-indeed, of compelling every adult to accept one for nothing-while the privately owned portion of the automobile industry were confined to the production of very expensive models, and essentially prohibited from cutting its costs.
56. The system of public education a. in making it impossible for private schools to be commercially successful, prevents all those improvements in quality and efficiency from coming into being that would take place in education under the competitive quest to make profits and avoid losses, and which would eventually bring a much higher quality education within the reach of all than is now available even to the wealthiest b. precludes any significant competitive barrier to deterioration in the education the public schools themselves offer
c. has the potential to decline in quality all the way to the point where it becomes clear to most people that what it offers is no longer worth even a zero price
d. all of the above
57. According to the political concept of monopoly, the antitrust laws
a. prevent capable newcomers from entering an industry-for example, they would almost certainly operate to prevent General Motors from entering the steel industry in any significant way
b. prevent the capable firms within an industry from acquiring the markets of the less capable ones by absorbing them in mergers, by buying them out, or by driving them out
c. reserve markets to the exclusive possession of all but those who in a state of freedom of competition would occupy them
d. monopolize markets precisely against the most capable and efficient firms, which, in their absence, would be able to be in those markets, and which instead, because of their existence, are today forcibly excluded from them
e. constitute promonopoly legislation
f. all of the above
58. Socialism represents the most extreme $\overline{\text { form of monopoly in that the government of a socialist }}$ society forcibly appropriates all the means of production and thereafter forcibly reserves the entire market of its country to its own exclusive possession.
59. The effect of monopoly is often to enable high cost producers to survive, rather than securing exceptionally high profits for anyone.
60. The monopolies made possible by tariff protection, government subsidies, and the antitrust laws often do not result in any exceptional profitability on the part of the monopolists.
61. Patents on new inventions, copyrights on books, drawings, musical compositions, and the like, and trademarks and brandnames
a. reserve markets, or parts of markets, to the exclusive possession of the owners of the patents, copyrights, trademarks or brandnames, and they do so by means of the use of physical force inasmuch as it is against the law to infringe on these rights
b. do not rest on the initiation of physical force, because in all of these cases, the government stands ready to use physical force merely in defense of a preexisting property right established either by an act of personal creation or by the fact of distinct identity
c. do not constitute monopolies
d. all of the above
62. The existence of patents and copyrights, and trademarks and brandnames,
a. like all other protection of property rights, serves to increase the supply of goods and ser-vices-by making it possible for those who are the cause of the increase to benefit from the improvements they make
b. serves to reduce prices and to increase everyone's buying power as time goes on.
c. both (a) and (b)
63. The long-run effect of the abolition of pa$\overline{\text { tents and copyrights would be to make prices higher }}$ than they otherwise would be, because of a substantial reduction in new inventions, since no one would invest years of effort and perhaps millions of dollars of capital in the development of a new invention only to find that as soon as he brought it to market, a competitor who purchased a working model would have the benefit of all that effort and capital just for the price of the working model, and that he, the innovator, would probably be unable to profit from his efforts because of the rapid fall in the price of the product that would follow in such a situation.
64. The abolition of patents and copyrights would serve to establish the monopoly of the dull and incompetent by forcibly depriving the intelligent and competent of the benefit of their intelligence and competence, and thereby forcibly excluding them from the market.
65. The abolition of trademarks and brandnames would result in producers losing the incentive to increase or even maintain the quality of their goods, inasmuch as their goods would be rendered indistinguishable from those of everyone else, and consumers would thus have no way of singling them out for purchase.

## nopoly,

66. According to the political concept of mo-
a. all monopoly is based on government intervention, which restricts the freedom of entry and competition
b. the significance of monopoly is that it forcibly bars from the market sellers who would otherwise be capable of being in the market and thus restricts the range of choice buyers have in suppliers and compels them to deal with less efficient suppliers and to accept higher costs and poorer quality than a free market would require them to accept c. both (a) and (b)
67. It follows from the political concept of monopoly, that the program of the announced enemies of monopoly should not be, as it has been for many years, the breakup of big business or the government's growing control over big business. Rather, it should be the progressive elimination of government intervention into the economic system.

## The Economic Concept of Monopoly

68. The economic concept of monopoly a. is in sharpest contrast to the political concept of monopoly
b. holds that monopoly emerges from the normal operation of the economic system-not on the basis of the initiation of physical force, but on the basis of mere economic circumstances, and that it
nonetheless produces evils of such magnitude that the government must suppress or control it by means of force
c. claims that monopoly exists whenever there is only one supplier of a given good in a given territory
d. views the essential feature of monopoly as the "oneness" of the seller, irrespective of how he has achieved his position
e. all of the above
69. The economic concept of monopoly can be construed in such a way that it embraces hardly anything or almost everything.
70. The existence of monopoly
a. was viewed as minimal before the 1930 s
b. has been viewed as almost all pervasive since the 1930s
c. both (a) and (b)
71. The concepts of "oligopoly" and "monopolistic competition" have served to greatly enlarge the perception of the prevalence of "monopoly."
72. "Oligopoly" is supposedly characterized by the existence of a relatively small number of sellers in a given market.
73. Depending on the circumstances, an oligopolist is held to behave either exactly as a "monopolist" would behave in terms of the price he charges and the output he produces, or to occupy some middle ground between a monopolist and a "pure competitor."
74. The concept of "monopolistic competition"
a. is supposed to describe cases in which there are a large number of sellers of only slightly dissimilar products
b. implies that an element of monopoly is present to whatever extent one product is different from another
c. claims that the unique elements of a product constitute its "monopolistic" aspect
d. all of the above
75. The concept of "monopolistic competition" views companies such as Pepsi Cola and Coca Cola as
a. competitors
b. monopolists
c. both (a) and (b)
76. Full-bodied competition-viz., "pure-and-perfect competition"-is now held to exist only as a rare exception.
77. The essential requirements for the existence of pure-and-perfect competition are the existence of a vast number of sellers all selling perfectly identical, homogeneous products.
78. The acceptance of the contemporary theory of the comparative extent of monopoly and compe-
tition has led to a rewriting of economic history to account for the fact that competition was traditionally considered to be the norm.
79. Despite the fact that after the Civil War fewer producers remained in many branches of industry, there was nevertheless an increase in the number of producers in actual competition with one another.
80. The alleged consequences of monopoly range from the most dire and extreme, in the form of the specter of a single giant firm coming to own the entire economic system, to what must be regarded as absolutely trivial, in the form of the
pure-and-perfect-competition doctrine's criticism of big business as being monopolistic merely for refusing to sustain unnecessary losses.
81. The doctrine of the tendency toward the formation of a single giant firm controlling the entire economic system
a. played a major role in the doctrine of the alleged inevitability of socialism, inasmuch as the giant firm was regarded as representing the creation of the structural framework of a socialist society and differing from socialism only in the motivation and character of its board of directors b. played a major role in support for antitrust legislation, in part in the belief that it was necessary to prevent the coming of socialism
c. contradicts the essential nature of the gains derived from the division of labor
d. all of the above
82. The only place that centralized control over all the means of production has been established was under socialism, by means of force, and was perpetuated only by means of force and in opposition to the actual material self-interests even of the members of the various socialist regimes.
83. The experience of socialism confirms the fact that monopoly is a political phenomenon, not an economic phenomenon.
84. The phenomenon of bad mergers and the subsequent need for spinoffs and breakups confirms the fact that there is no tendency toward the formation of a single giant firm under capitalism.
85. The formation of conglomerates, containing separate divisions each with its own management, would not be a feasible means of overcoming the conflict between a megacombine and the essential gains from the division of labor, because a businessman with confidence in his own ability to succeed in an industry he knows and understands, and in which his income is determined exclusively by his own success or failure, would not be willing to exchange such a position for one in which he receives a much smaller share of the profits of a conglomerate, which are the outcome of the success or failure of many others, whom he is unlikely to consider as capable as himself.

## The following is a two-part question.

Imagine an industry composed of 10 firms, each presently doing 10 percent of the industry's business, and owned by individuals each of whom expects that under his management his firm will grow to the point of doing 50 percent of the industry's business.
86. Calculate the percentage of the merged $\overline{\text { company's stock that would have to be given to the }}$ owners of the ten fimrs to compensate them for the loss of what they believe they would have by remaining independent.
87. It is not possible to merge such firms, because it is impossibled to make the merger appear worthwhile in comparison with the anticipated gains from remaining independent.
88. Successful mergers, by increasing the capital of the particpants, serve to provide the basis for the formation of new firms, if not in the industry where a given merger occurs, then in other industries.
89. The continuous formation of large numbers of new firms, some of which grow to considerable size serves to keep the proportion of the total capital of the economic system in the hands of the merged firms from growing.
90. A major potential source of the formation of new firms in virtually every industry is key executives of the existing firms who believe that they could do better on their own. If not for the personal income tax, such executives would be able to accumulate far more personal wealth in their present positions. In the absence of restrictions on stock trading based on "inside" knowledge, their accumulations of personal wealth would be greater still. In such conditions, it would be possible to start even new domestic automobile and steel companies requiring an initial investment of a billion dollars or more.
91. The tax laws have encouraged unecono$\overline{\text { mic mergers as a means of reducing corporate and per- }}$ sonal tax liability.
92. The effect of insider trading based on advance knowledge of a development that is favorable to a company is
a. to enable stockholders who have decided to continue to hold the stock to gain that much sooner b. to induce some stockholders who were planning to sell the stock, upon seeing the rise caused by the insiders' buying, to hold it instead and thus to enjoy gains they would otherwise not have had c. to enable stockholders who have made up their minds to sell their shares to sell them at a better price, thanks to the demand for them coming from the insiders
d. all of the above
93. If the insiders sell in advance on the basis of their inside knowledge of negative developments (which they themselves have done nothing to cause), they are not responsible for the loss that is suffered by those who continue to hold the stock, because that loss would come in any case, when the bad news finally became public knowledge.
94. In the absence of insider selling, the decline in price would come more precipitously and dramatically, rather than being preceded by declines caused by the insiders' selling.
95. Insiders' selling and the lower stock price $\overline{\text { it causes can provide a clue to other stockholders to }}$ begin selling and to potential buyers to abstain from buying. Those who decide to buy in any case, are enabled to buy at a lower price.
96. If the gains of the insiders, who know what they are doing, must be transferred to those who do not, the latter will not be able to keep those gains for very long. For they will have no basis on which to argue for the retention of their unearned, accidental gains from society as a whole. If knowledge is not an adequate basis for earning a profit that others do not earn, the mere accident of owning the right stock at the right time can hardly be such a basis.
97. Mergers are economically sound
a. when they achieve economies of scale
b. in cases in which companies carry complementary product lines, which can easily be sold by the same sales force
c. when they achieve important economies in connection with advertising expenditures and/or the raising of capital
d. when they enable more competent individuals to gain control over the management of additional capital, as when a better-run firm gains control of the assets of a poorer-run firm
e. all of the above

## The following is a two-part question.

98. Imagine that in a small-scale plant, manu$\overline{\text { facturing }}$ cost is $\$ 10$ per unit of product, while in a large-scale plant, thanks to economies of scale, manufacturing cost can be brought down to only $\$ 1$ per unit, provided the facility operates at a sufficient percentage of its capacity. Assume that initially, however, transportation costs are $50 \&$ per mile per unit. Calculate how many miles closer to the market a small-scale plant needs to be to have an advantage in total, delivered cost over the large-scale plant.
99. Assume now that major improvements in the transportation system reduce transportation costs in the preceding example from $50 \phi$ per mile per unit to $1 \notin$ per mile per unit. Calculate how many miles closer to the market a small-scale plant now needs to be to
have an advantage in total, delivered cost over the large-scale plant.
100. In the post-Civil War era, major improvements in transportation, notably the large-scale building of railroads and the development of steampowered iron and then steel ships, brought about major reductions in transportation costs, which gave a competitive advantage to large-scale manufacturing over small-scale manufacturing and thereby created the need for widespread mergers.
101. In the period following the Civil War, corporate law did not immediately provide a mechanism whereby one corporation could be combined with another one. The trusts were a device for accomplishing that purpose.
102. Under a trust arrangement, the stock$\overline{\text { holders of separate corporations turned their shares }}$ over to trustees, who then had the power to vote the shares and run the corporations. By assembling the
shares of two or more corporations in the hands of the same trust, it was possible to operate the corporations as a single unit and thus achieve a merger.
103. Between 1870 and 1914, the era of trustbuilding and the development of big business, a. the resulting monopoly power resulted in widespread declines in production and increases in prices
b. production in the industries controlled by the trusts rapidly increased and prices fell
104. The 1911 Supreme Court decision that broke up Standard Oil sharply criticized that company for raising the price of petroleum and reducing its quality.

## 105. The Supreme Court broke up Standard

 $\overline{\text { Oil }}$a. because of the harm that company had caused
b. despite the good it had achieved

## The Predatory Pric ing Doc trine

106. The predatory-pricing doctrine claims that a large firm, because it is big and rich, and possibly operates in many different markets at the same time,
a. can afford losses which a small firm cannot, because the latter is small and poor
b. finds it to its interest temporarily to slash its price and sell at a loss, in order to force the small firm out of business
c. will be able, after it has driven its small competitors out of business, to raise its price to a higher level than ever before d. will be able to keep new competitors out by their fear of being ruined by a repetition of preda-tory-price cutting
e. can succeed in unconscionably gouging the helpless public, which, in simple innocence, has taken the large firm's lure of a temporarily lower price
f. all of the above
107. The influence of the predatory-pricing doctrine serves to make people regard all the achievements of big business in reducing prices and improving quality as having no reality, but as being merely a prelude to a subsequent price gouge.
108. The attempt to practice predatory pricing will result in increasing the price received by the intended target rather than decreasing it if the lower, predatory price attracts a new and additional quantity demanded which, because of a lack of productive capacity on the predatory firm's part, must be met with supplies that are now made unavailable for satisfying the firm's regular quantity demanded. In this case, the item actually becomes scarcer for the firm's regular customers, and they will now have to turn to the
smaller firm, where their competition will actually drive up the price.
109. In order for a firm practicing predatory pricing to be able to succeed in imposing a lower price on the intended target,
a. it must possess sufficient additional productive capacity to meet any resulting expansion in quantity demanded at the lower, predatory price b. and then, if it should actually succeed in closing down the small competitor and thereupon raise its price, which is its presumed plan, it must continue to maintain this additional capacity, even though it no longer uses it in production, as a means of imposing low prices on potential new entrants
c. the amount of additional capacity necessary to impose the predatory price will be increased to the extent that the prospect of a small competitor's entry followed by a plunge in price leads people to postpone their purchases until such time as the small comopetitor's entry occurs
d. it must go to considerable expense
e. all of the above
110. If it were the case that as soon as the small competitor is driven out, the large firm can sharply increase its price, while so long as the small competitor remains in business the price is held below the level of his costs, the interests both of the industry's suppliers and of the producers of goods complementary to is products would lie with subsidizing the continued existence of the small competitor, as the means of maintaining the demand for their products.
111. If it is the case that the large, predator firm, which has succeeded in becoming the sole sup-
plier and presently obtains a high price, will slash its price as soon as it is confronted with a small, competing firm, people are placed in a position in which they can use that very knowledge to
a. sell short the commodity the predator sells and profit from the fall in price that will result
b. sell short the stock of the predator company,
which will fall when its price and profitability fall
c. profit precisely by forming small competing firms against whom the predator will slash price d. all of the above
112. To the extent that the predatory big and $\overline{\text { rich firm is larger in the same market, it must take the }}$ price cut and the resulting loss on a correspondingly larger volume than the small and poor firm. This is because it cannot cut the price only to the customers of the small firm, because that leaves the small firm free to cut price by a much smaller amount to an equal number of customers of the large firm. If the small firm is not to be able to sell to anyone except at the low price imposed by the large firm, the large firm must make that low price available to all of its own customers as well as to the customers of the small firm.

## The following is a seventeen-part question.

The price of a product is $\$ 1$. There are only two producers: "Big John" and "Little Joe." "Big John" currently produces and sells 9 units of the product, while "Little Joe" currently produces and sells only 1 unit of the product. The unit cost of both producers is 904 .
113. Calculate the sales revenues of "Big John."
114. Calculate the total costs of "Big John."
115. Calculate Big John's total profit.
$\overline{\text { Joe" }}$
116. Calculate the sales revenues of "Little

## Joe.

117. Calculate the total costs of "Little Joe."
118. Calculate Little Joe's total profit.

Now imagine that in order to make Little Joe suffer a loss and thus drive him out of business, Big John slashes his price from $\$ 1$ to $80 ¢$.
119. Calculate Little Joe's loss.
120. Calculate Big John's loss.
121. Find the number of times by which Big $\overline{\text { John's loss is greater than Little Joe's loss. }}$

Now assume that Big John's cost per unit is less than Little Joe's, i.e., while Little Joe's cost per unit continues to be $90 \notin$, Big John's cost per unit is only $80 \notin$.
122. Again calculate Big John's total profit when the selling price is $\$ 1$.
123. Calculate Big John's total profit when the selling price is $80 \Varangle$.
124. Calculate the amount by which Big John's profit is reduced by his practice of predatory price cutting.
125. Find the number of times by which the $\overline{\text { reduction }}$ in profits experienced by Big John is greater than the reduction in profits experienced by Little Joe.
126. The fact that the large firm may have lower unit costs than the small firm does not change the principle that its profit reduction is a multiple of the smaller firm's profit reduction to the extent that its volume in the same market is greater.

Now assume that Little Joe's cost per unit is only $80 \notin$, while that of Big John remains at 904 .
127. Calculate the reduction in Big John's profit needed to make make Little Joe's profits go from $+20 \phi$ to $-10 \phi$.
128. Calculate the size of the loss Big John now needs to suffer in order to impose a $10 \notin$ on Little Joe.
129. The implication of the preceding questions is that the small firm can be in a better position to withstand its relatively smaller losses than is the large firm to withstand its multiple losses.
130. Practicing predatory pricing would necessitate setting one's price below the target's operating costs, not his total costs, and then keeping them there for the life of his plant and equipment. Only this would serve to keep his plant and equipment out of operation.
131. Neither sustaining losses or major profit reductions for years in order to drive out one's small competitors, nor buying out the small competitors at premium prices, can actually pay, because
a. both methods imply that later on, once Little Joe's capacity is out of the way by one method or the other, it is absolutely necessary for Big John to charge a premium price merely in order to recoup the reduction in profits he has sustained or the premium price for Little Joe's assets that he has paid
b. but any premium price he charges in the future, after Little Joe's capacity is out of the way, will only serve to attract new competitors, to whom the premium price will offer the prospect of a premium rate of profit
c. because of its highly self-destructive nature, and for all of the other reasons explained, these competitors cannot be kept out by the fear of still more predatory pricing
d. all of the above
132. The permanent, long-run price that Big John can obtain is limited by the costs of production-
the full costs-of potential new entrants, together with an allowance for the competitive rate of profit on their capital. These costs set an objective limit above which the price cannot be maintained in the absence of legal protection from competition-namely, that provided by monopoly according to the political concept. As a result, the large firm cannot in fact later on charge the premium price that is necessary to recoup the profits it must forgo or the additional expense it must incur.
133. If the large firm must accept a price that is limited by outsiders' costs, the extent of its gains if it should succeed in capturing the business of a smaller rival would be merely his share of the market, at selling prices not significantly higher than the selling prices that prevailed before he began his effort to drive them out.
134. It follows from the answer to the preceding question that more than one company in an industry is the normal case.
135. What must be present to make it worthwhile for a large, low-cost firm that already does the bulk of an industry's business to cut its price below what is required to enable its smaller rivals to stay in business, is the prospect of a major expansion of profitable volume at the lower price, since merely gaining their existing volume is not sufficient.
136. If the condition explained in answer to the preceding question is present, becoming the sole producer would not pay if the large firm's cost advantages are of a kind that can be patented and thus shared with other producers in exchange for royalty payments. For then, the firm could make additional profits on 100 percent of an expanded market without having to accumulate by itself all the capital required to supply the market.
137. If the only substantive gain from price cutting is the volume of business presently carried on by one's competitors, then it follows that it is more efficient small firms that have much more to gain by following an aggressive pricing policy than more efficient large firms. For example, a large firm, with 90 percent of the market, has only the 10 percent share of its rivals to gain. But a small firm, with 10 percent of the market, has the 90 percent share of its rivals to gain.
138. The claims of "dumping" made against Japan in the years in which its industry was still a small fraction of that of the United States are tantamount to a claim that Little Joe practices predatory pricing against Big John.
$\qquad$ 139. Japan's success in exporting was the result of
a. selling below its costs
b. subsidies from the Japanese government
c. intelligent guidance from its Ministry of Inter-
national Trade and Industry
d. all of the above
e. none of the above
140. Success in exporting depends on
a. selling below costs
b. achieving costs below those of one's foreign competitors and selling close to or below their costs while selling well above one's own costs
141. Subsidies to business by the Japanese government are drawn from
a. the vast and causeless resources of the Japanese government
b. taxes on successful Japanese business firms
142. The direction of investment by a government ministry is necessary to
a. make business firms do what is profitable to themselves
b. compel business firms to do what they judge to be less profitable or unprofitable to themselves
143. The chain-store variant of the predatory pricing doctrine
a. refers to cases in which the larger firm is larger by virtue of its presence in more than one mar-ket-for example, chain stores that compete with local merchants, or conglomerates that compete with smaller firms in a variety of different industries
b. differs from the predatory pricing doctrine as it has been considered up to now insofar as if the larger firm were to slash its price for the purpose of making its smaller rival run at a loss, it would not have to suffer a reduction in its own revenues and profits in proportion to its overall greater size, but only in proportion to its greater size in the particular market concerned
c. both (a) and (b)
144. Shark, Incorporated has a capital of \$1 billion, which is invested in 1,000 branches scattered around the country. One of its branches is currently attempting to drive the tiny firm of Minnow \& Mother into bankruptcy for the purpose of then being able to gouge the local consumers by sharply increasing prices and reaping an additional \$100,000 per year in profit foreverafter. To achieve its objective, Shark can rationally afford to temporarily lose
a. its entire $\$ 1$ billion of capital
b. no more than $\$ 1$ million of its capital if the prevailing rate of return is ten percent per annum
145. The overwhelming bulk of the larger capital of a chain of stores, or other multi-market firm, is irrelevant to the size of the losses it might rationally be willing to sustain on a temporary basis in order to become the sole seller in a local market and thereafter forever reap a premium profit in that market.
146. The size of the firms that would be in a position to match even the largest chains in the ability to sustain temporary losses in a rational-or at least a semi-rational-expectation of being able ultimately to earn an above average rate of profit by doing so
a. need exceed only the discounted present value of the assumed additional profits
b. must be at least as large as that of the chains
147. The effect of losing any part of the capital one had calculated that it was reasonable to lose in an effort to secure a monopoly position in a local market is to deprive one of the ability to meet the competition of a newcomer who has made the same calculation but has not yet lost any of his capital.
148. The fact that any firm that attempted to practice a policy of predatory pricing in local markets would be exposed to the competition of other firms that had not yet lost any funds, and that if those other firms pursued this policy, they would in turn find themselves in the same position in relation to still other outsiders means that there is no way of actually securing the kind of premium profits imagined by the predatorypricing doctrine and that all that can result from the attempt is the pouring of money down a bottomless well.
149. Whoever would attempt to practice a policy of predatory pricing in local markets would find himself in the position of having made a larger-thannecessary capital investment, which he would later need to recover through higher-than-necessary prices and more than a competitive rate of profit, but would be unable to recover in the actual conditions of the market. The capital he expended in the effort to achieve the illusory extra profits would place him in the same position as someone who had constructed his store or bought the land for it at an unnecessarily high price.
150. Selling under long-term contract can a. provide the small competitor of a large, wouldbe practitioner of predatory pricing automatic protection against such practice and can do so even while allowing customers to decide not to actually buy the quantities they have contracted for b. make the predator finance the small firm's costs in order to gain its business
c. both (a) and (b)
151. While long-term contract pricing may $\overline{\text { often not }}$ be feasible at the level of retailers' customers, market factors such as greter convenience and service operate to protect small retailers from being dislodged even by permanently lower prices charged
by larger firms. At the same time, the existence of the smaller suppliers and their ability to do a larger volume of business contributes to preventing the larger firms from raising their prices.
152. The predatory-pricing doctrine implies that real prices in retailing and elsewhere over the last 130 years or so, i.e., since the days of the general store, whale oil, and the local blacksmith shop, have
a. risen
b. fallen
153. A large firm bent on cutting off vital supplies to a small competitor (which is the doctrine of predation with respect to suppliers) would have to be able to
a. succeed in cutting off all of the possible sources of supply of the small competitor for the good or service in question, since he requires the availability of only any one of those possible sources in order to be supplied
b. make dealing with it rather than the small competitor more profitable to every actual and potential supplier to whom the small competitor might turn, and to offer more to them not only than the small competitor is currently capable of doing, but also is potentially capable of doing in the future c. both (a) and (b)
154. The prospect of the large firm charging high prices in the event it succeeds in cutting off vital supplies to its small competitors should make suppliers
a. its allies
b. allies of the small competitors
155. It would not make matters easier for the large firm if there were only one or a few suppliers or potential suppliers who would need to be secured against the small firm, because then the consequence would be that any one of the suppliers or potential suppliers with sufficient capacity to meet the requirements of the small firm would be in a position to demand a lion's share of whatever additional profits might be earned by virtue of the absence of the small competitor and the consequent alleged ability to charge substantially higher prices.

## The Marginal-Revenue Doctrine

156. Marginal revenue is the change in total revenue that accompanies an increase or decrease in quantity produced and sold.

## The following is a five-part question.

157. You are given the following information. At a price of $\$ 15$ per unit, 100 units are de-
manded. At a price of $\$ 9$ per unit, 200 units are demanded. Calculate marginal revenue per unit.

If, in the preceding question, cost per unit is $\$ 8$ and remains at $\$ 8$ dollars as output changes, calculate total profits when output is
158. 100 units.
159. 200 units.
160. Calculate the profit in producing 100 units at a cost of \$8 per unit and a selling price of \$9 per unit.
161. On the basis of the concept of marginal revenue, it is argued that the firm in the preceding questions is motivated to restrict its production to 100 units even though a second 100 units considered by itself, i.e., apart from the effect on the price of the first 100 units, would be profitable.
162. On the basis of the doctrine of marginal revenue, it is claimed that to the degree that a firm is large relative to the size of the market it serves, it is motivated to restrict its production to a quantity of product that is less than what would be produced if the effect on the price of the quantity already being sold were ignored.
163. According to the supporters of the mar$\overline{\text { ginal-revenue doctrine, given the elasticity of demand }}$ for the product of the industry, the smaller is a given firm relative to the industry as a whole,
a. the less will be the reduction in price that results from any given percentage increase in its output
b. the more motivated it will be to expand its production and cut the price of the product c. both (a) and (b)
164. A large firm can be denounced both for monopolistically restricting supply if it does not produce the extra output that supposedly should be produced, and for being a monopolist if it does produce that extra output.
165. If the increment of output that supposedly should be produced is profitable in its own right, i.e., is profitable when considered apart from the effect of its production on the price of the quantity that is already being produced, a large firm that must experience the price reduction on its present quantity, does not have the alternative of deciding between a larger industry-wide quantity at a lower price and a smaller industry-wide quantity at a higher price, but only between whether it will produce the larger quantity at the lower price or a smaller quantity at the lower price while some other firm produces the additional quantity.
166. Where competition is physically possible and is peaceful-that is, in which the same or a similar good is capable of being produced by others without violation of anyone's intellectual property rights-and is legally free, the decision of any seller or group of sellers to produce less, or not to produce at all, cannot lastingly establish a selling price that is above the cost of production, plus allowance for the going rate of profit, of potential competitors.
167. The cost of production of potential new $\overline{\text { entrants constitutes an objective given that limits one's }}$ price. One's only choice is to sell either a smaller vol-
ume at that cost-limited price or a larger volume at that cost-limited price or a still larger volume at a lower price. But one cannot get a higher price.
168. According to the textbook,
a. if one allows for the time that may be required for new firms to enter a field, one can say that irrespective of the elasticity or inelasticity of the demand for the product of an industry as a whole, the elasticity of the demand for the product of any individual firm, however large, is virtually infinite if it charges a price above outsiders' costs plus allowance for the going rate of profit
b. under the freedom of competition the elasticity of demand for the product of any individual company or group of companies at a price above outsiders' costs plus allowance for the going rate of profit, is determined by the sum of the elasticity of demand for the product of the industry as a whole plus the elasticity of supply of competitors and potential competitors
c. while the demand curve facing the industry as a whole may be almost perfectly inelastic, or, indeed, actually be perfectly inelastic, as in the case of table salt, the demand curve facing any individual firm in the industry tends to be perfectly elastic at a price above outsiders' costs plus allowance for the going rate of profit
d. all of the above
169. The absence of legal freedom of entry is what makes it possible for firms without trade secrets or patent or copyright protection to set price on the basis of consideration of the industry's elasticity of demand, above the point of outsiders' costs plus an allowance for the going rate of profit.
170. Legal freedom of entry is an essential foundation of competitive price determination.
171. The prices normally charged for goods such as necessities and spare parts, which are generally faced with highly ineleastic demand curves, are based on
a. the elasticity of demand
b. cost of production
172. If sellers could base the price of table salt on the elasticity of demand for table salt, it would be
a. higher
b. radically higher
c. lower
d. radically lower
than it is today.
173. Contractual agreements
a. can make cost of production rather than the elasticity of demand the determinant of prices b. that tie price to cost of production can contain a major element of variability that make the price conform to changes in market conditions; for example, a contractually determined price of compo-
nents or supplies might contain a provision for variability with the price of the principle raw materials used in their production
c. can serve to make buyers the major beneficiaries of any supply reductions and price increases that sellers might otherwise be motivated to bring about
d. all of the above
174. Using our previous example in which a
 and 200 units at a price of $\$ 9$ per unit, but with the modification that it is contractually obligated to sell 100 units at a price of $\$ 9$, identify the beneficiary of the higher price if the company now decides to produce only 100 units and thereby establishes a price of $\$ 15$.
a. the company
b. the company's customers who have the contractual right to buy 100 units at $\$ 9$ and who are enabled by the product's scarcity to sell it at $\$ 15$
175. Even if there were just one producer of table salt, it would probably not be possible for him even temporarily to take advantage of the inelasticity of demand for table salt by reducing his production and raising his price if a sufficient portion of his output were sold under contract and with buyers having the option to increase their purchases at the contractually set price.
176. Even though when the excise tax on cigarettes is increased, the price immediately rises and is accompanied by relatively little decline in the quantity of cigarettes demanded, it generally does not pay an individual tobacco company or combination of all the present tobacco companies taken together to attempt to raise price by the equivalent of an excise tax increase, which is why they don't do it.
177. Böhm-Bawerk
a. agrees with Ricardo that in many instances cost of production is the direct determinant of price rather than the good's own utility or marginal utility
b. holds that marginal utility in other lines of production is the ultimate determinant of cost of production
c. both (a) and (b)
178. In cases in which cost of production rather than considerations of the elasticity of demand determines prices, there is no implication that cost of production can make anything more valuable than corresponds to its marginal utility, but only that it can make something less valuable than corresponds to its direct marginal utility.
179. The notion that cost of production has no significant explanatory role in economics comes from Jevons, not from Böhm-Bawerk and Wieser.
180. After devoting chapter after chapter to developing a theoretical analysis that is entirely depen-
dent on the concept of marginal revenue, Samuelson and Nordhaus are surprised to find that a. it is largely irrelevant to the real world and that they have no theory to explain the actual facts of pricing
b. case after case shows that markup pricing is the norm in imperfectly competitive markets
c. both (a) and (b)
181. If a firm can assume that a. its own costs of production are no higher than its competitors' or potential competitors', then in setting its prices in conformity with its costs-that is, above its costs only by enough to earn the going rate of profit-it ensures that it is not likely to be undersold to any great extent or to attract newcomers to its field
b. its own costs are significantly below those of its competitors, then it will want to set its price not too far above its competitors' costs, as a maximum, so that it can earn high profits while they are not in a position to accumulate much capital and expand at its expense, and also in order not to provide an incentive for others to enter the industry
c. its costs are above those of its competitors, then except to the extent its product may be of premium quality over theirs, it must simply match the prices they set
d. all of the above
182. Absence of knowledge of the connection between prices and costs, and the belief that the price of each and every product must be determined by the specific demand for and supply of the product-by its own independent marginal utility-is what has led contemporary economics
a. to the expectation that without the presence of a vast number of individually insignificant firms, sellers will be in a position to exploit the product's elasticity of demand
b. to regard big business per se in a way that should be reserved for one or a few firms operating under monopolistic legal protection against competition, but not when operating under the freedom of competition
c. in the last analysis, to find that its theory simply does not fit the facts and that it has no applicable theory
d. all of the above
183. The adoption of lower-cost methods of production, even when protected by patents, soon serves to reduce prices somewhere-if not in the industry where introduced, then in another industry or industries insofar as the funds released from the production of the given item bring about an expansion of the production of other items.
184. Cost of production serves to limit the $\overline{\text { price that it is profitable to charge for a good produced }}$ under patent or copyright protection insofar as
a. what the patent or copyright protects is a more efficient method of producing a good that is already being produced, in which case the price of the good is limited by the cost of producing it by the older, less efficient methods
b. what the patent or copyright protects is an improvement in the methods of satisfying a need that previously had been satisfied by other goods less effectively, in which case the price of the new good is still limited by the prices and costs of production of the older goods that satisfy the need less effectively
c. both (a) and (b)
185. Because of their newness and the difficulties of estimating their elasticity of demand, the prices of patented or copyrighted products, such as books, movies, and CDs, are typically set in a more or less standard way, on the basis of cost of production, though with the addition of a substantially greater-than-usual profit margin accompanied by the attempt to achieve the maximum possible volume along with the higher-than-normal profit margin.
186. It is generally a sound business policy to reinvest the proceeds of an extremely high profit margin and rate of profit in order to earn a larger amount of profit on the strength of a lower profit margin and rate of profit applied to a greater volume of sales and quantity of capital invested in the production of the good (or more advanced versions of the good), because this policy
a. helps to guard against others being tempted to enter into competition through the development of comparable new products or methods of production of their own, which even patent or copyright protection cannot prevent
b. can achieve reductions in unit costs and improvements in product quality stemming from the
adoption of more capital-intensive methods of production
c. serves further to increase the capital requirement of any potential competitor and thus further to reduce the likelihood of the actual appearance of such a competitor
d. is the way to transform a temporary bonanza into greater and more lasting success
e. all of the above
187. The ability to practice price discrimination would make it possible to price life-saving patented drugs in a way that did not deprive the marginal buyers of their life's savings.
188. The combination of collectivized payment of medical expenses, widespread opposition to price discrimination, and FDA delays in the approval of new drugs serve to make drug prices higher than they would otherwise be.
189. Pricing under long-term contract has the potential to make possible unregulated private ownership of the various utilities, such as electricity, water, and gas, telephone and sewage services, the provision of bridges and tunnels, and fire-fighting services.
190. The injustices associated with the exercise of eminent domain would be greatly reduced if a. its exercise were limited merely to cases in which a handful of capricious individuals could otherwise frustrate the construction of necessary projects such as the construction of roads and pipelines
b. the owners of the property sought were offered substantially above-market prices rather than substantially below-market prices
c. both (a) and (b)

## Cartels

191. Cartels are associations of independent producers of a good who agree to limit their production of it in order to obtain a higher price on the resulting smaller supply.
192. Every cartel faces a problem of decid$\overline{\text { ing which producers must curtail production how }}$ much.
193. Profitable cartels typically face the problem of
a. deciding which producers must curtail production how much
b. controlling the reinvestment of the profits of their members, because if the firms are profitable and want to reinvest their profits in expanding production in the industry, the cartel's price will fall in efforts to find buyers for the additional output
c. the profitable price attracting outside entrants to the field, which not only makes the cartel's price fall, but also deprives the cartel's members of volume they could have had
d. all of the above
194. Apart from the handful of cases such as diamonds, in which there are very few physical sources of supply, the special problems faced by profitable cartels imply that cartels can succeed under capitalism only when they serve merely to reduce the extent of losses, i.e., raise a price from a point of more severe losses to a point of less severe losses or modest profits. In this case, the problems of controlling the reinvestment of profits and the attraction of outside entrants do not come up.
195. The prices that the few successful cartels in mining can charge in a free economy may be limited by
a. the cost and price of various substitutes, which, however imperfectly, can be used in place of the item for various purposes
b. the possibility that additional deposits of the item exist, which would be capable of commercial exploitation at a sufficiently high level of prices c. both (a) and (b)
196. In a free economy, even successful car$\overline{\text { tels, such }}$ as the diamond and mercury cartels, are under continuous pressure to improve their methods of production and lower their costs and the real prices they charge, so long as the producers of substitutes can improve their methods of production, so long as new substitutes can be developed, and so long as the real costs of exploiting submarginal deposits can be reduced.
197. What is true of the price charged by a successful cartel is that at any given time it is higher than would be the case if the same known physical quantity of the good were found in widely scattered deposits.
198. The effect of the higher price charged by a successful cartel is to slow down the rate at which the limited known supplies are consumed and thus to serve, as von Mises described it, as a means of conservation.
199. Cartels as an economic problem, as in the case of the Imperial German cartels, the OPEC oil cartel, and present-day American agriculture under government price supports and supply restrictions, are the result of government intervention, and where they are formed or maintained on this basis, they represent part of the genuine and very serious problem of monopoly.

## The Pure-and Perfect-Competition Doc trine

200. The doctrine of pure and perfect competition condems business as monopolistic for refusing to sustain unnecessary losses.
201. The doctrine of pure and perfect competition is the standard by which contemporary economic theory and the Antitrust Division of the Department of Justice decide whether an industry is "competitive" or "monopolistic," and what should be done about it if they find that it is not "competitive."
202. While normally, one thinks of competition as denoting a rivalry among producers, in which each producer strives to match or exceed the performance of other producers, the doctrine of pure and perfect competition claims that rivalry is incompatible with competition.
203. While competition as normally understood rests on a base of individualism, the pure-and-perfect-competition doctrine rests on
a. "the tribal premise," i.e., the collectivist view that the individual human being is a cell in a greater organism, known variously as Mankind, the State, the Nation, or the Tribe b. a tribal concept of property, according to which no property is to be regarded as truly private but rather as being held in trusteeship for its alleged true owner, "society" or the "consumers," who allegedly have a right to the property of every producer and suffer him to continue as owner only so long as society receives what it or its professorial spokesmen consider to be the maximum possible benefit
c. the rationing theory of prices, according to which a price is viewed not as the payment received by a seller in the free exchange of his private property, but as a means of rationing his
products among those members of society or the sovereign consumers who happen to desire them, with prices being justified on the grounds that they are a means of rationing superior to the issuance of coupons and priorities by the government d. a collectivist concept of cost, according to which cost is not an outlay of money made by a buyer to obtain goods or services through free exchange, but the value of the most important alternative goods or services society must forgo by virtue of obtaining any particular good or service e. all of the above
204. According to the tribal concept of property,
a. society has a right to 100 percent of every seller's inventory and to the benefit of 100 percent use of his plant and equipment
b. the exercise of this alleged right is to be limited only by the consideration of society's alleged alternative needs
c. a producer should retain some portion of his inventory only if it will serve a greater need of society in the future than in the present d. a producer should produce at less than 100 percent of capacity only to the extent that society's labor, materials and fuel, which he would require, are held to be more urgently needed in another line of production
e. all of the above
205. According to the doctrine of pure and perfect competition and its underlying collectivism, a. supply means the goods that are here-in the possession of sellers-and the potential goods that the sellers would produce with their existing plant
and equipment, if they considered no limitation to their production but marginal cost
b. demand means the set of quantities of the goods that buyers will take at varying prices c. every price is supposed to be determined at whatever point is required to give the buyers the full supply and to limit their demand to the size of the supply
d. all of the above
206. According to the doctrine of pure and perfect competition and the rationing theory of prices, a. every seller's goods and the use of his plant and equipment belong to society and should be free of charge to society's members unless and until a price is required to ration them b. up to the point of price being necessary to serve as a rationing device, the goods of sellers should be free goods, like air and sunlight c. prior to the point of price being necessary to serve as a rationing device, any value that the goods of sellers have is the result of an "artificial, monopolistic restriction of supply"-of a deliberate, vicious withholding of goods from "society" by their private custodians
d. all of the above
207. Marginal cost is a. always the extra cost that must be incurred from a given, present starting point
b. different with different starting points
c. usually held to be the cost of the labor, materials, and fuel required to produce an additional unit of a product, the cost of the plant and equipment being regarded as "sunk costs"
d. regarded as representing the value of the most important alternative goods or services that society forgoes in obtaining an additional unit of a given good
e. all of the above
208. The pure-and-perfect-competition doctrine regards
a. an excess of price over marginal cost as representing a situation in which society can gain more of something it values more highly at the expense of less of something it values less highly
b. an excess of marginal cost over price as representing a situation in which society loses something it values more highly and gains something it values less highly
c. the equality of price with marginal cost as the achievement of a social optimum, in which society obtains the maximum benefit from the allocation and use of its scarce resources
d. all of the above
209. According to Samuelson and Nordhaus, only when prices of goods are equal to marginal costs is the economy squeezing from its scarce resources and limited technical knowledge the maximum of outputs.
210. The "imperfect competitor"-viz., the "monopolist," the "oligopolist," or the "monopolistic competitor"-is condemned because
a. he does not produce goods up to the point where their alleged social cost-as measured by marginal cost-is equal to what the last unit of the good is allegedly worth to "society"-as measured by market price
b. he contrives to keep his output a little scarce, and keep price above marginal cost because what maximizes his profit is to set not price but marginal revenue equal to marginal cost
c. society does not get quite as much of the imperfect competitor's good as it allegedly wants in terms of what that good allegedly costs society to produce
d. he refuses to accept unnecessary losses
e. all of the above
211. The alleged sin of the "imperfect competitor" is manifested in
a. the example of the primitive fishing village whose fleet has a catch so abundant that the marginal utility of fish would be zero or negative and whose owners decide to throw some fish back into the sea, in order to obtain a positive price on the reduced supply that remains
b. the earning of a royalty or profit by virtue of the use of an idea, which by its nature is capable of being employed without limit and which can achieve value only by its use being deliberately limited
c. the earning of depreciation on existing plant and equipment whose services do not qualify as scarce
d. all of the above
212. The earning of depreciation charges is held to be improper short of capacity operation of the plant and equipment in question because it signifies the receipt of a price for plant-and-equipment services that are not yet scarce.
213. The doctrine of pure and perfect competition regards depreciation as properly recoverable only in circumstances similar to those in which Ricardo held land rent to come into existence, namely, a scarcity of the services of the grade of capacity or land in question.
214. Competition in contemporary economics is viewed as the means by which prices are driven down either to equality with marginal cost or to the point where they exceed marginal cost only by whatever premium is necessary to ration the benefit of plant and equipment operating at full capacity.
215. Pure and perfect competition is the set of conditions required to make profit-seeking businessmen set their prices equal to marginal cost.
216. According to the doctrine's supporters, the requirements of pure and perfect competition are a. uniform products offered by all the sellers in the same industry
b. perfect knowledge
c. quantitative insignificance of each seller
d. no fear of retaliation by competitors in response to one's actions
e. constant changes in price, and perfect ease of investment and disinvestment
f. all of the above
217. An example that would meet the requirements listed in the previous question would be
a. the competition that exists between Ford and General Motors
b. the competition that exists between Dell and Hewlett Packard
c. the competition that would exist between four hundred and one movie theaters, all in the same neighborhood and all showing the same picture, which all potential viewers had already seen many times yet desired to see still again while being indifferent to any possible differences between the theaters except for the smallest difference in price, and if the theaters were tent-like affairs rather than durable structures
218. In the conditions described in the last choice in the preceding question,
a. any theater owner who cut his price by as little as one mill would supposedly be able to regard doing so as the means of filling all of his empty seats b. the gain in business of any one theater as the result of cutting its price would come mainly from other theaters, but the loss of business to any one of the other theaters would be too small to provoke a response, since, for example, 400 empty seats in a given theater might be filled by drawing a mere single customer from each of 400 other theaters
c. all the theater owners would be driven to continually cut their prices in the belief that doing so served only to expand their volume to the level of capacity operation
d. the profit motive would quickly drive price to equality with marginal cost
e. all of the above
219. The pure-and-perfect-competition doctrine's
a. stress on the need for a large number of individually insignificant sellers as an essential condition of driving price to equality with marginal cost rests on the need for the individual businessman to be able to assume that his cutting price will have no perceptible effect on the business of any of the other sellers and thus will not be the cause of their cutting price
b. incompatibility with the existence of a small number of significanct-sized sellers derives from the fact that in such a case cutting price would have a major, perceptible effect on the business of others, who would therefore be driven to cut price in response, and the knowledge that this is what
would happen would prevent the price cut from being made in the first place, with the result that price would not be driven to marginal cost c. both (a) and (b)
220. The pure-and-perfect-competition doctrine's stress on the need for product uniformity rests on the greater responsiveness of customers to price changes in such conditions. If in contrast to 401 theaters showing the identical movie, they showed different movies, customers would be less likely to shift their business among the various theaters in response to infinitesimal price differences, and so a theater owner would have less incentive to trim his price.
221. Having to set prices equal to marginal costs in conditions in which operations were below full capacity, would imply prices of zero or not very far above zero for
a. airlines and railroads whose planes or trains had empty seats
b. movie theaters, baseball stadiums, and opera houses that had empty seats
c. toll bridges and tunnels not confronted with
heavy traffic
d. all of the above
222. According to Samuelson and Nordhaus, in conditions in which setting price equal to marginal cost means incurring chronic losses, the solution is to
a. abandon the setting of prices equal to marginal cost
b. have the government subsidize the producer
223. According to the logic of the the pure-and-perfect-competition doctrine and its underlying doctrine that prices are justified only as a rationing device, the only time that
a. movie theaters, baseball stadiums, and opera houses, whose marginal costs of admitting an additional customer are virtually zero, should be able to charge a positive price is when they are at capacity operation
b. airlines and railroads, whose marginal cost of carrying an additional passenger is little more than the additional fuel that may be required, should be able to charge a price above such marginal cost is when they have no empty seats c. steel mills, automobile factories, and almost all other manufacturing firms should be able to charge a price above their marginal costs of labor, materials, and fuel, is when the grade of manufacturing capacity in question has become scarce d. all of the above
224. The effect of imposing marginal cost pricing would be
a. the widespread incurrence of massive losses when operations were at less than full capacity b. a great reduction in the volume of capacity in existence, to the point that the capacity that remained would be in a state of scarcity often
enough so that the premium earnings in such periods would be sufficient to offset the losses in the periods of less-than-capacity operation
c. a corresponding reduction in the ability of the economic system quickly to meet increases in demand without having to build new and additional capacity
d. all of the above
225. The standard of 'efficiency' used to justify the doctrine of marginal-cost pricing is one according to which the economy of Soviet Russia was more efficient than that of the United States, because even though there was less of everything in Soviet Russia than in the United States, what there was, was used more fully.
226. The ideal of the pure-and-perfect-competition doctrine" implies a state of affairs in which producers are unable to take business away from other producers, because
a. if a producer is operating at full capacity, he cannot meet the demand of a single additional buyer, let alone compete for that demand b. a producer cannot compete for additional business if he is operating merely at the full capacity of a given grade of plant and equipment and his idle capacity is of a kind whose operating cost is greater than the currently prevailing price
c. if a producer is not producing at full capacity even of a given grade of plant and equipment and is charging a price equal to his "marginal cost," he still cannot compete for the business of any additional buyers because he is forbidden to "differentiate" his product or to advertise it
d. all of the above
227. Ironically, what the pure-and-perfectcompetition doctrine seeks is the abolition of competition among producers and its replacement with a competition among consumers for scarce supplies.
228. The pure-and-perfect-competition doctrine is to the left of Marxism in that Marxism denounced capitalism merely for the existence of profits, while it denounces capitalism because businessmen refuse to suffer unnecessary losses, which they would have to suffer if they treated their plant and equipment as costless natural resources that acquired value only when they happened to be scarce.
229. Choose the most completely true answer.
a. empirical studies based on the assumption that marginal cost is equal to total average cost plus an allowance for earning a competitive rate of profit lead to the finding that monopoly profits are insignificant in the economic system as a whole, accounting perhaps for about $.5 \%$ of GDP b. empirical estimates of the burden of monopoly profits do not distinguish between above-average-profits that are the result of positive productive contribu-
tion and those which are the result of restrictions of production based on the initiation of force c. what reconciles the enormous concentration on the problem of monopoly in contemporary economic theory with its insignificance in practice is that contemporary economic theory regards the failure to sustain unnecessary losses as a problem of monopoly and spends much of its time focusing on this d. all of the above
230. The supporters of the pure-and-perfectcompetition doctrine accuse capitalism of lacking price competition, because their notion of price competition is that of the process of driving prices down to the level of "marginal cost" or to the point where they "ration" the benefit of "scarce" capacity, which process is typically absent.
231. Price competition is given by every firm that charges prices too low for other firms to be profitable and is an omnipresent feature of capitalism.
232. Price competition exists even in the midst of inflation in that even under inflation, every firm is still interested in improving the productivity of the labor it employs and to the extent it succeeds in doing so, it is able to hold its price increases below the wage increases it must pay, with the result that other firms in the same line of business are compelled to increase the productivity of the labor they employ or else suffer reduced profits or losses and eventually go out of business.
233. The competitor who cuts his price is fully aware of the impact on other competitors and that they will try to match his price. He acts in the knowledge that some of them will not be able to afford the cut, while he is, and that he will eventually pick up their business, as well as a major portion of any additional business that may come to the industry as a whole as the result of charging a lower price. He is able to afford the cut when and if his productive efficiency is greater than theirs, which lowers his costs to a level they cannot match.
234. The ability to lower the costs of production
a. enables an efficient producer to be profitable at prices too low for less efficient producers to be profitable
b. enables an efficient producer who lowers his prices, to gain most of the new customers in his field because his lower costs become the source of additional profits, the reinvestment of which enables him to expand his capacity and thus to supply the increase in quantity demanded at a lower price
c. is the foundation of the ability to take business away from others in the field
d. permits a producer to forestall the potential competition of outsiders who might be tempted to enter his field, drawn by the hope of making prof-
its at high prices, but who cannot match his cost efficiency and, consequently, his lower prices
e. is the base of price competition
f. all of the above
235. Price competition, under capitalism, is the result of a contest of efficiency, competence, ability.

## 236. Price competition

a. is not the self-sacrificial chiseling of prices to marginal cost or their day-by-day, minute-by-minute adjustment to the requirements of "rationing scarce capacity"
b. is the setting of prices-perhaps only once a year-by the most efficient, lowest-cost producers, motivated by their own self-interest c. varies in extent in direct proportion to the size and the economic potency of these producers d. is more powerful when it comes from a General Motors or Toyota than when it comes from a microscopic-sized wheat farmer
e. all of the above
237. Price competition frequently forces $\overline{\text { some of the sellers in an industry to sell at a price that }}$ is equal to or not far above their marginal costs, yet, at the same time, is substantially above the marginal costs of the more efficient, more competitively capable firms. This is part of the process by which the more efficient firms gain the business of the less efficient firms, which will be unable to replace their assets and thus unable to continue in business on the present scale.
238. More efficient firms typically sell at prices below the marginal costs of a substantial portion of the capacity of the less efficient firms. Such prices are what keeps that less efficient capacity from serving the market, and thus competitively reserves the market to the more efficient firms.
239. It can be to the rational self-interest of a $\overline{\text { large firm }}$ to cut its price in response to a fall in demand, even though the industry demand curve is highly inelastic and other firms will quickly match its cut. This will be the case when the drop in demand idles capacity with a relatively low marginal cost of operation, while other firms continue to supply the market with capacity that has a relatively high marginal cost of operation. In this case it is to the self-interest of the firm with the lower-cost capacity to cut the price in order to make way in the market for its capacity. Cutting the price below other firms' higher marginal costs is the means of eliminating the higher-cost capacity of those firms from the market.
240. Alfred Marshall's doctrine of the "representative firm"
a. conceives of an industry as consisting of a mere multiplication of so many interchangeable, identical "representative firms"
b. proceeds on the assumption that all the firms in an industry have exactly equal efficiency and equal costs
c. rules out any basis for price cutting, since no one can have any rational basis for expecting to succeed by doing so, because the moment anyone cuts his price, the other producers, who are assumed to be equally efficient, cut theirs in response
d. serves to blind contemporary economists to the existence of price competition outside of the conditions of "pure and perfect competition" e. all of the above
241. An implication of Marshall's doctrine is that the only possible gain for a producer in cutting his price is the same gain that would exist if there were only one producer. On this basis, contemporary economics concludes that what it calls "oligopoly" is essentially the same in its effects as "monopoly," because it appears to it that it will pay an "oligopolist" to cut his price only when it would pay a "monopolist."
242. Contrary to Marshall's doctrine, competition, centering precisely on an inequality in the productive efficiency of firms, is the means by which continuous progress and improvement are brought about, in terms both of falling real prices of products and ever better products.
243. Cost of production operates to a. set many prices, such as those of spare parts and other goods with highly inelastic demands, far below what they would be if they were determined on the basis of the direct marginal utility of the good concerned
b. establish prices at a point that is above what they would be if producers did in fact have to regard their plant and equipment and intellectual property as not deserving to command an allowance in the price of the product because their renditions of service were not scarce
c. both (a) and (b)
244. Setting prices above what they would be if producers had to regard their plant and equipment and intellectual property as not deserving to command an allowance in the price of the product short of the point of their being scarce, serves in the long run to keep prices below what they would be if based on the product's own, direct marginal utility and to progressively lower real prices, because
a. it makes possible the existence of the capacity required to quickly increase the production of goods whose own, direct marginal utility may be very high and thereby to hold their prices to the lower level corresponding to cost of production b. being able to profit from intellectual property, including trade secrets and all manner of technological and other knowledge not yet widely disseminated, whose services are never physically scarce, is what underlies the incentive and ability to go on introducing further productive innovations, which steadily reduce prices in real terms c. both (a) and (b)

The following eight questions are drawn from the text by Samuelson and Nordhaus.
245. A perfect competitor's output in the $\overline{\text { short run }}$ is the quantity that:
a. sets MC equal to $\mathrm{MR}=\mathrm{P}$
b. sets $\mathrm{AVC}=\mathrm{P}$
c. minimizes ATC
d. sets $\mathrm{ATC}=\mathrm{P}$
e. none of the above are correct
246. In the situation of imperfect competition, the relation between market price P and marginal revenue MR for each supplying firm is that:
a. P is less than MR at all or most output levels
b. $P$ is greater than MR at all or most output levels
c. P is the same as MR at all output levels
d. $P$ is either less than MR at particular output levels or the same as MR
e. none of the above, since $P$ is not related to MR
247. A monopoly finds that, at its present level of output and sales, marginal revenue equals $\$ 5$ and marginal cost is $\$ 4.10$. Which of the following will maximize profits?
a. Leave price and output unchanged
b. Increase price and leave output unchanged
c. Increase price and decrease output
d. Decrease price and increase output
e. Decrease price and leave output unchanged

Use the following Table to answer the next two questions:

| $\mathbf{P}$ | $\mathbf{Q}$ | Revenue | Profit |
| :---: | :---: | :---: | :---: |
| $\$ 5$ | 7 |  |  |
| $\$ 4$ | 12 |  |  |
| $\$ 3$ | 17 |  |  |
| $\$ 2$ | 22 |  |  |
| $\$ 1$ | 27 |  |  |

248. Consider the demand curve implied in the above Table. If the imperfectly competitive firm is able to produce at any output level, then the price and quantity which maximize total revenue are:
a. $P=5 ; q=7$
b. $P=4 ; q=12$
c. $P=3 ; q=17$
d. $P=2 ; q=22$
e. $P=1 ; q=27$
249. Suppose an imperfect competitor faces the demand curve defined in the above Table, and its MC is constant at $\$ 2.00$. If the firm is able to produce at any output level, then it maximizes profits at:
a. $P=5 ; q=7$
b. $P=4 ; q=12$
c. $P=3 ; q=17$
d. $P=2 ; q=22$
e. none of the above if fixed costs are less than \$1.00
250. If the firm described in the previous question has no fixed costs, its profits are:
a. $\$ 48$
b. $\$ 54$
c. $\$ 24$
d. $\$ 4$
e. $-\$ 12$
251. If a firm finds out that its marginal revenue is greater than its marginal cost, it should:
a. increase production and sales
b. decrease production and sales
c. encourage the entry of other firms into the mar-

## ket

d. keep raising its selling price till marginal revenue equals marginal cost
e. change nothing because profits are maximized
252. Falling marginal revenue facing an individual firm is incompatible with:
a. growth of the firm
b. perfect competition
c. oligopoly
d. barriers to entry
e. none of the above

| Question \# | Correct | Ques- | Correct |  |  |  | Correct |  |  |  |  |  |  |  |  | Ques- | Correct Answer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | d | 31 | T | 61 | d | 91 | T | 121 | 9 | 151 | T | 181 | d | 211 | d | 241 | T |
| 2 | c | 32 | T | 62 | c | 92 | d | 122 | \$1.80 | 152 | a | 182 | d | 212 | T | 242 | T |
| 3 | e | 33 | T | 63 | T | 93 | T | 123 | zero | 153 | c | 183 | T | 213 | T | 243 | c |
| 4 | f | 34 | T | 64 | T | 94 | T | 124 | \$1.80 | 154 | b | 184 | c | 214 | T | 244 | c |
| 5 | f | 35 | T | 65 | T | 95 | T | 125 | 9 | 155 | T | 185 | T | 215 | T | 245 | a |
| 6 | b | 36 | T | 66 | c | 96 | T | 126 | T | 156 | T | 186 | e | 216 | f | 246 | b |
| 7 | T | 37 | T | 67 | T | 97 | e | 127 | \$2.70 | 157 | \$3 | 187 | T | 217 | c | 247 | d |
| 8 | T | 38 | e | 68 | e | 98 | >18 | 128 | \$1.80 | 158 | \$700 | 188 | T | 218 | e | 248 | c |
| 9 | b | 39 | T | 69 | T | 99 | >900 | 129 | T | 159 | \$200 | 189 | T | 219 | c | 249 | b |
| 10 | g | 40 | f | 70 | c | 100 | T | 130 | T | 160 | \$100 | 190 | c | 220 | T | 250 | c |
| 11 | T | 41 | T | 71 | T | 101 | T | 131 | d | 161 | T | 191 | T | 221 | d | 251 | a |
| 12 | T | 42 | T | 72 | T | 102 | T | 132 | T | 162 | T | 192 | T | 222 | b | 252 | b |
| 13 | b | 43 | e | 73 | T | 103 | b | 133 | T | 163 | c | 193 | d | 223 | d |  |  |
| 14 | T | 44 | T | 74 | d | 104 | F | 134 | T | 164 | T | 194 | T | 224 | d |  |  |
| 15 | a | 45 | T | 75 | c | 105 | b | 135 | T | 165 | T | 195 | c | 225 | T |  |  |
| 16 | T | 46 | h | 76 | T | 106 | f | 136 | T | 166 | T | 196 | T | 226 | d |  |  |
| 17 | T | 47 | T | 77 | T | 107 | T | 137 | T | 167 | T | 197 | T | 227 | T |  |  |
| 18 | T | 48 | T | 78 | T | 108 | T | 138 | T | 168 | d | 198 | T | 228 | T |  |  |
| 19 | T | 49 | T | 79 | T | 109 | e | 139 | e | 169 | T | 199 | T | 229 | d |  |  |
| 20 | n | 50 | T | 80 | T | 110 | T | 140 | b | 170 | T | 200 | T | 230 | T |  |  |
| 21 | T | 51 | T | 81 | d | 111 | d | 141 | b | 171 | b | 201 | T | 231 | T |  |  |
| 22 | T | 52 | T | 82 | T | 112 | T | 142 | b | 172 | b | 202 | T | 232 | T |  |  |
| 23 | e | 53 | h | 83 | T | 113 | \$9 | 143 | c | 173 | d | 203 | e | 233 | T |  |  |
| 24 | T | 54 | e | 84 | T | 114 | \$8.10 | 144 | b | 174 | b | 204 | e | 234 | f |  |  |
| 25 | T | 55 | T | 85 | T | 115 | 90 cents | 145 | T | 175 | T | 205 | d | 235 | T |  |  |
| 26 | T | 56 | d | 86 | 500\% | 116 | \$1 | 146 | a | 176 | T | 206 | d | 236 | e |  |  |
| 27 | d | 57 | f | 87 | T | 117 | 90 cents | 147 | T | 177 | c | 207 | e | 237 | T |  |  |
| 28 | e | 58 | T | 88 | T | 118 | 10 cents | 148 | T | 178 | T | 208 | d | 238 | T |  |  |
| 29 | T | 59 | T | 89 | T | 119 | 10 cents | 149 | T | 179 | T | 209 | T | 239 | T |  |  |
| 30 | f | 60 | T | 90 | T | 120 | 90 cents | 150 | c | 180 | c | 210 | e | 240 | e |  |  |

## CHAPTER 11 THE DIVISION OF LABOR AND THE CONCEPT OF PRODUCTIVE ACTIVITY

## PARTA: THE ROLE OF MONEYMAKING IN PRODUC TIVE AC TIVITY

1. The prevailing concept of productive activity is that it is synonymous with manual labor.
2. The IRS regards profits, interest, dividends, and capital gains as "earned income," and wages and sararies as "unearned income."
3. Labor union leaders, and many or most members of labor unions, and probably most of the general population, believe that the true producers of the products are the working men and women who toil on assembly lines or stand on their feet all day, while the bosses take a major slice off the top, in the form of profits and similar incomes.
4. A leading reason for the advocacy of socialism has traditionally been the belief that its establishment would give all income back to its true producers, i.e., the manual workers.
5. The belief that productive activity and manual labor are synonymous is held by
a. labor unions
b. the IRS
c. socialists, especially Marxists
d. all of the above
6. If productive activity is viewed as limited to manual labor, then the following major participant(s) and/or activity(ies) of a capitalist society are necessarily viewed as unproductive and/or parasitic
a. businessmen and capitalists
b. retailing
c. wholesaling
d. advertising
e. the banking and financial system including the stock market and commodity markets
f. all of the above
7. The belief that productive activity and manual labor are synonymous is reasonable in the context of
a. a division-of-labor society
b. a non-division-of-labor society
c. both (a) and (b)
d. neither (a) nor (b)
8. The doctrine that productive activity and manual labor are synonymous is a heritage from the conditions of the non-division-of-labor societies of old.
9. In the context of a division-of-labor society, money-making is an essential aspect of productive activity, because in such a society, the earning of money is necessary if an individual's activity is to en-
able him to be in a position to obtain the goods and services of others and thus to secure the benefits of life in a such a society.
10. Manual labor and the physical making of goods are not sufficient to enable an individual to obtain the goods and services of others. There is the further requirement that the activity earn money, with which to buy others' goods and services.
11. In the context of a division-of-labor society, manual labor that does not earn money does not serve to sustain the individual who performs it and is not productive.
12. The activities of a paid housekeeper and an unpaid housewife who perform identical physical labor are
a. perfectly equivalent
b. differ in the essential respect that the activities of the paid housekeeper make it possible for her to obtain the goods and services of other people and thus to sustain herself, while those of the unpaid housewife do not
13. If GNP/GDP were a true measure of productive activity, it would make an imputed allowance for the activities of unpaid housewives, whose labor does not differ in any significant way from those of paid housekeepers. Failure to allow for the labor of housewives leads to the understatement of GNP/GDP by trillions of dollars every year.

## The following is a five-part question.

14. In the context of a division-of-labor soci$\overline{\text { ety, the starting point of virtually all physically produc- }}$ tive activities is an outlay of money to purchase materials, tools, equipment, and other means of production.
15. In the course of production, means of production are physically consumed-i.e., used up or worn out-and sooner or later need to be replaced.
16. Insofar as physically productive activities $\overline{\text { are carried on for the purpose of earning money, the }}$ money earned makes possible replacement purchases of the means of production physically consumed in the process of production, and to this extent the means of production are not simply used up and gone but are continually replaced, by virtue of the activity in which they are used up.
17. Insofar as physically productive activities are not carried on for the purpose of earning money, the means of production physically used up in the process of production cannot be replaced by virtue of that process of production, but are simply used up and gone.
18. In the context of a division-of-labor society, activity that physically results in the production of a product represents consumption if it is not carried on for the purpose of earning money, since means of production are physically used up in the product's production and cannot be replaced by virtue of its production. The process is a "consumptive production."
19. The concept of productive activity ulti$\overline{\text { mately rests on the promotion of human life and well- }}$ being and must always be consistent with that ultimate purpose. Thus, to qualify as productive, the money brought in, in a process of productive activity must be obtained through voluntary trade, not physical force.
20. A successful bank robbery brings in money and is therefore a productive activity.
21. Productive expenditure is
a. buying for the purpose of selling
b. self-sustaining and a source of funds
c. a means by which one grows richer
d. made implicitly for the purpose of earning a profit
e. synonymous with reproductive expenditure, in that it is money which is both laid out and brought back by virtue of productive expenditure
f. all of the above
22. Consumption expenditure is
a. buying not for the purpose of selling, but for any other purpose
b. a using up of funds
c. a means by which one grows poorer
d. synonymous with unproductive expenditure e. all of the above
23. Two people, both beginning with identically the same sum of money (we might imagine two brothers sharing equally in an inheritance), the one productively expending his funds, the other unproductively expending his funds, will almost necessarily arrive at opposite stations in life. The one will be richer; the other will be impoverished.
24. In the preceding example, the party who will be impoverished is the one making productive expenditures; the party enriched is the one making consumption expenditures.
25. Capital goods are
a. goods purchased for the purpose of making subsequent sales
b. the source of the funds required for their replacement, and of more besides, to the extent that the sales revenue they help to bring in shows a profit
c. like productive expenditures, self-sustaining and a source of funds
d. the same as producers' goods
e. all of the above
26. In order to qualify as capital goods, it is necessary that the goods purchased themselves be subsequently sold.
27. In order to qualify as capital goods, it is sufficient that the goods purchased contribute to the production of goods or services that are subsequently sold, as is the case with materials or machinery purchased by a manufacturer rather than by a dealer.
28. Consumers' goods are goods
a. purchased not for the purpose of making subsequent sales
b. require an outside source of funds if their purchase is to be repeated
c. like consumption expenditures, represent a using up of funds
d. all of the above
29. A roast beef purchased
a. by a housewife is a consumers' good
b. by a restaurant is a capital good
c. both (a) and (b)
30. The distinction between capital goods
and consumers' goods is
a. exclusively one of the purpose for which the goods are purchased-for business purposes (i.e., the making of subsequent sales at a profit) or not for business purposes
b. a matter of their physical characteristics
c. both (a) and (b)
31. Machines, materials, tools, implements, and structures are
a. often consumers goods
b. capital goods
32. Washing machines, sewing machines, automobiles, corn flakes, roast beefs, lathes, drill presses, earthmoving equipment are
a. consumers' goods
b. capital goods
c. sometimes consumers' goods, sometimes capital goods, depending on the purpose for which they are purchased
33. The heavy construction equipment of the Army Corps. of Engineers is
a. consumers' goods
b. capital goods
34. If the Army Corps. of Engineers owned a factory for the purpose of producing its construction equipment, that factory would be
a. a consumers' good
b. a capital good
35. Government is essentially a consumer and its expenditure, consumption expenditure.
36. The government
a. does not buy for the sake of selling
b. uses up the funds it expends, in that the funds are not recovered in sales revenues
c. must turn to the taxpayers or the printing press in order to be able to continue spending
d. all of the above
37. The leading exception to the proposition that government is a consumer is the IRS, which brings in revenues far in excess of its expenditures.
38. The expenditures of a gang of safecrackers for such things as nitroglycerin and a get-away car are productive expenditures in that they serve to bring in far more money than is laid out.
39. Producers' labor is
a. labor employed for the purpose of its employer making subsequent sales
b. the source of funds making possible a repeated payment of its wages
c. similar in nature to capital goods and productive expenditure
d. all of the above

## 40. Producers' labor is

a. essentially just the labor of salesmen, since
they alone make sales
b. the labor of all the employees of business firms, who are employed for the purpose of the firm making subsequent sales, to which their labor directly or indirectly contributes or which it facilitates in some way
41. Consumers' labor is
a. labor employed not for the purpose of the employer making subsequent sales
b. not a source of funds making possible its continued receipt of wages
c. similar in nature to consumers' goods and consumption expenditure
d. all of the above
42. The distinction between producers' labor and consumers' labor is from the perspective of
a. the employer
b. the wage earner
43. An individual grows richer by the [intelli$\overline{\text { gent] purchase of capital goods and employment of }}$ producers' labor, and poorer by the purchase of consumers' goods and consumers' labor.
44. Examples of consumers' labor are
a. maids employed by housewives
b. butlers, cooks, and chauffers employed by very wealthy individuals
c. government employees-e.g., the clerks and secretaries in all the bureaus, the teachers in the public schools, policemen, firemen, the members of the armed forces
d. all of the above
45. Producers' loans are
a. loans taken out for the purpose of making subsequent sales
b. are normally a source of funds for the payment of interest and principal on the loans and of a profit to the borrower besides
c. both (a) and (b)
46. Consumers' loans are
a. loans taken out not for the purpose of making subsequent sales
b. loans on which the principal and interest must be paid out of a source of funds not provided by the loans themselves, such as the income from the borrower's job
c. both (a) and (b)
47. Loans taken out by the government represent consumer loans, since the government does not earn revenue or income by virtue of its borrowing and must pay interest and principal out of a source of funds not provided by the loans themselves, i.e., out tax revenues.
48. An essential difference between government borrowing and private consumer borrowing is that in the case of private consumer borrowing, it is the borrowers who must pay the principal and interest, while in the case of government borrowing, it is a different party who must repay, namely, the taxpayers-a group which includes the lenders.
49. Capital is
a. in general, wealth reproductively employed
b. in the context of a division-of-labor society, the wealth employed by business enterprises c. both (a) and (b)
50. Consumers' wealth is wealth that exists $\overline{\text { but is in the process of being consumed without provid- }}$ ing the funds required for its maintenance and replacement, such as owner occupied housing, home appliances, furniture, and personal automobiles.
51. The prior expenditure reflected in the possession of goods-whether productive expenditure in the possession of capital goods, or consumption expenditure in the possession of consumers' goods-is their book value.
52. Book value can be said to reflect a putting of money into goods.
53. Investment is the putting of money into goods for the purpose of making subsequent sales.
54. Just as the concept of property possessing market value is wider than the concept of wealth, the concept of capital value is wider than the concept of capital, and includes, in addition to the value of actual capital goods, the value of intangibles such as stocks and bonds, patents and copyrights, goodwill, and of loans made to consumers for homes, automobiles, vacations, and the like.
55. While capital value reflects prior productive expenditure, not all productive expenditure results in capital value, because not all productive expenditure is invested; some of it, such as expenditures for advertising and administrative overhead, is typically expensed rather than being added to any asset account.
56. Expenditures for consumers' goods that are necessary to keep one alive and able to work
a. qualify as productive expenditures
b. do not qualify as productive expenditures because earning money is not their purpose but merely their consequence, i.e., their byproduct
57. If expenditures for consumers' goods that are necessary to keep one alive and able to work were treated as productive expenditures,
a. they would have to be deducted as costs from one's earnings, and one's net income would then have to be stated merely as the remainder rather than as one's actual total earnings
b. the net income of wage earners would have to be regarded not as their wages but as the profit they made on those wages c. since the purpose of the concept of net income is to show the financial gain from an activity, the gain would be held to begin only after all provision had been made for keeping oneself alive d. there is no greater gain from working and earning money than being able to stay alive, which means that the money that must be expended to accomplish this should not be excluded from net income, thus should not be counted as a cost and therefore should not be counted as a productive expenditure in the first place
e. all of the above
58. Consumption expenditures imposed by the earning of an income, such as the employment of a housekeeper or babysitter by a working mother, having to eat one's lunches out, having to incur transportation expense getting to and from work, having to incur the costs of winter clothing and fuel for heating one's home if one works in a cold area, should be counted as productive expenditures and costs of earning one's income
a. in order to reduce one's taxable income
b. because such expenditures really are made for the purpose of earning money rather than as a matter of one's personal convenience in the context of earning money
59. Consumption expenditures of a kind that save money, such as the purchase of a home in comparison with renting, or the purchase of a washing machine in comparison with using a laundromat a. should be treated as productive expenditures because they are income producing in that they reduce one's expenses, and the absence of an expense is the equivalent of money earned b. should not be treated as productive expenditures because they represent merely smaller con-
sumption expenditures, and smaller consumption expenditures are still consumption expenditures: i.e., the purchase of the house or the washing machine does not provide the funds to make possible its replacement purchase, which is still dependent on an outside source of funds

## The following is a two-part question.

60. Government expenditures that increase the capacity of the citizens to pay taxes, such as, perhaps, expenditures for highways and river and harbor improvements, are
a. productive expenditures
b. consumption expenditures that have beneficial, productive effects for others
61. The government collects the additional tax revenues because the taxpayers
a. voluntarily choose to pay them, in exchange for the goods and services the government has provided
b. want to avoid being sent to prison
62. Workers employed in a charity's fund raising activities should
a. be regarded as producers' labor since their work serves to bring in money
b. not be regarded as producers' labor since the money brought in is charitable donations, not payments made in exchange for the receipt of goods or services
63. Other than for tax purposes, treating expenditures for personal, vocational education as productive expenditures, and thus the net incomes of the workers who incurred them as profits rather than wages, would entail radical conceptual change in order to deal with a relatively small set of concretes. At the same time, it would have no bearing on the amount or rate of profit that is of actual concern. To avoid such a fruitless procedure, it is far simpler for all practical purposes to regard such productive expenditures of wage earners as consumption expenditures.
64. Improvements in an individual's personal capacities, including his ability to earn an income, should not be regarded as capital or any kind of wealth because, unlike capital and wealth, they cannot be separated from the individual's person and sold off as a source of funds that would enable him to live for a time without working.

## The following is a two-part question.

65. The artificial capital constituted by the market value of slaves in a society that sanctions slavery operates to prevent the formation of genuine capital, in that it creates the appearance of wealth and capital where it does not exist in reality and leads to the failure to accumulate genuine capital in the belief
that sufficient such capital already exists and therefore need not first be accumulated.
66. The owner of a factory in the pre-CivilWar North counted as his capital the value of his factory and its equimpent and inventories. He did not count his workers in his calculation of his capital. The owner of a plantation in the pre-Civil War South counted in the calculation of his capital the market value of his slaves and, in effect, considered himself, wealthy mainly because of the mere fact that he had workers. The prevalence of this delusion is largely what caused the South to be so much poorer in actual physical assets than the North.

## The following is a five-part question.

67. Adam Smith distinguished between productive and unproductive labor on the basis of whether the labor was employed
a. to produce a tangible physical product that endured after the labor was performed or a service that disappeared in the instant in which it was created
b. for the purpose of bringing in subsequent sales revenues or not bringing in subsequent sales revenues
c. both (a) and (b)
68. Of the two criteria Adam Smith used in distinguishing between productive and unproductive labor,
a. the question of whether or not a tangible physical product is created is actually irrelevant
b. the valid and valuable distinction is whether or not the employment of the labor is for the purpose of making subsequent sales
c. both (a) and (b)
69. The latter distinction in the previous two questions is what explains
a. whether or not an employer grows rich or poor by the employment of any given type of labor b. why in Smith's words, "The sovereign, for example, with all the officers both of justice and war who serve under him, the whole army and navy, are unproductive labourers. . . . Their service, how honourable, how useful, or how necessary soever, produces nothing for which an equal quantity of service can afterwards be procured. The protection, security, and defence of the commonwealth, the effect of their labour this year, will not purchase its protection, security, and defence for the year to come."
c. both (a) and (b)
70. The owner of a restuarant or theater can grow rich by the employment of workers whose services vanish in the instant in which they are created. He does so because the wages he pays them serve to bring in sales revenues that enable him not only to re-
peat the payment of their wages but also to earn a profit.
71. In contrast to the restaurant or theater owner of the previous question, a government-owned shipyard, say, that employs large numbers of construction workers consumes its funds, despite the production of massive, enduring tangible products, because the funds expended do not serve to bring in sales revenues to the government.
72. The doctrine of imputed income a. claims that the absence of a cost constitutes an income-for example, that the saving of expense in owning a home compared with having to rent comparable accommodations constitutes equivalent extra income to the homeowner
b. ends up treating the sum that the homeowner saves on rent, plus the whole cost of owning and operating his home, as a pament of rent, despite the fact that no rent is paid-a payment of rent to himself
c. regards the homeowner's consumption expenditures incurred in connection with owning and maintaining his home as business productive expenditures to be deducted from the fictional gross rent that he allegedly receives from himself
d. treats the difference between the fictional rental revenue and the fictional business productive expenditures and costs as the homeowner's net rental income and adds it to GNP/GDP e. all of the above
73. The concept of imputed income could be applied to the saving of expense provided by a. the ownership automobiles, furniture, and even clothing, as well as housing, with a corresponding further enlargement of GNP/GDP
b. being married and not having to pay for the services that are provided by one's spouse without charge
c. not having all manner of possible illnesses or disabilities
d. all of the above
74. The concept of imputed income can turn beggars into millionaires, by crediting them with massive incomes based on the lack of all kinds of major expenses, such as the saving of expense from not having cancer or heart disease, or needing a psychiatrist, even though they may not be able to afford to buy a cup of coffee.
75. The concept of imputed income has the $\overline{\text { potential to raise taxes, to the extent that it would be }}$ used not only to artifically bloat people's incomes but also to make those bloated incomes subject to taxation.
76. The doctrine of opportunity cost holds that the absence of an income constitutes a cost-for example, that the wages and interest that the self-employed owner of a shop foregoes because he works in
his shop and has his capital invested in it, should be counted as costs of his business.
77. The doctrine of opportunity cost a. can lead to the conclusion that a business certified to be profitable by its accountant is nevertheless unprofitable
b. can lead to the conclusion that the owner of that business who has managed both to consume out of the profit reported by its accountant and add to his net worth, to the extent he has consumed less than the reported accounting profit, has nevertheless lost money
c. both (a) and (b)

## The following is a three-part question.

78. An example of the opportunity-cost doctrine is that a small business and its accountant report a profit of $\$ 75,000$ in a given year. Nevertheless, someone who accepts the opportunity-cost doctrine claims that the business has actually lost $\$ 25,000$, because its owner could have earned $\$ 50,000$ a year in wages or salary doing the same or less work as an employee somewhere else and could have earned $\$ 50,000$ in interest on his capital if he had invested it elsewhere. When these additional costs, which, taken together, amount to $\$ 100,000$, are subtracted from the reported profit of $\$ 75,000$, the result, according to the opportu-nity-cost doctrine, is a loss of $\$ 25,000$.
79. In the preceeding example, despite the opportunity-cost doctrine's claim of a loss of $\$ 25,000$, the business owner has managed to consume $\$ 40,000$ and add $\$ 35,000$ to his net worth. If the business had actually lost $\$ 25,000$ while its owner drew $\$ 40,000$ from it for his own consumption, the firm's net worth would have declined by $\$ 65,000$, not increased by $\$ 35,000$.
80. The opportunity-cost doctrine reconciles its implication of a $\$ 65,000$ decline in the firm's net worth with the fact that the firm's net worth has in-
creased by $\$ 35,000-$ a discrepancy of $\$ 100,000-$ by claiming that the business owner, who did not earn any wages or interest, and whose failure to do so was alleged to constitute the additional costs of $\$ 100,000$, by introducing the contradictory claim that the business owner did after all earn the wages and interest he didn't earn. He not only has non-existent costs in the amount of $\$ 100,000$ but also non-existent income in the amount of $\$ 100,000$. He allegedly earns the wages and interest he didn't earn, as well as incurring them as additional costs deducted from his profit. Thus, instead of the $\$ 75,000$ profit he and his accountant believe he has, he has $\$ 100,000$ of fictional wages and interest income alongside a fictional loss of $\$ 25,000$.
81. It follows from the opportunity-cost doc$\overline{\text { trine that }}$ precisely to the degree that one is confronted with profitable ways to invest one's capital, and precisely to the degree that one's services are in great demand, one's profit income must be less, because one's opportunity costs of choosing any given alternative will be correspondingly greater.
82. It follows from the opportunity-cost doctrine that someone who makes a small accounting profit and who has little or no alternative opportunities for the employment of his labor or profitable use of his meager capital earns a higher profit than someone who makes a huge accounting profit but also has alternative opportunities for earning money that yield almost as much income or more.
83. It follows from the opportunity-cost doc$\overline{\text { trine that }}$ if one invests a million dollars in stock A, which doubles in value, but might have invested that million in stock B, which triples in value, one has lost a million dollars and perhaps should contemplate jumping from a tall building. It also follows, that if one loses a million dollars but might have lost two million dollars, one has gained a million dollars, and perhaps should at least throw a party.

## PARTB: THE PRODUCTIVE ROLE OF BUSINESSMEN AND CAPITALSIS

84. The productive role of businessmen and $\overline{\text { capitalists is to raise the productivity of manual labor, }}$ and thus its real remuneration, by means of
a. creating division of labor
b. coordinating the division of labor
c. improving the efficiency of the division of labor
d. all of the above
85. Businessmen and capitalists create division of labor by means of
a. founding and organizing business enterprises
b. providing capital
c. making productive expenditures
d. all of the above
86. Business firms are the central units of the division of labor, in that the division of labor exists both between the various individual business enterprises, all of which engage in specialized areas of activity, and within each individual business enterprise that comprises the labor of more than one person.
87. The provision of capital is essential to the existence of the division of labor in its vertical aspect, in that it makes possible the existence of a necessary division of payments in the productive process. In its
absence, the only source of payments to producers would be the ultimate consumers, with the result that many groups of producers would be compelled to wait intolerable lengths of time between the completion of their contribution to production and their receipt of payment.
88. The provision of capital contributes to the division of labor in its horizontal aspect-that is, the extent to which it can be carried at any given stage of production. This is because greater division of labor at any given stage of production requires the existence of larger-scale production, which in turn requires the existence of greater amounts of capital.
89. The saving and productive expenditure of businessmen and capitalists is what makes possible the existence of a class of wage earners separate and distinct from the sellers of products, and thus of the existence of the division of labor insofar as it depends on the existence of wage earners.
90. Businessmen and capitalists coordinate the division of labor
a. among the various firms and industries by the very fact of seeking to make profits and avoid losses, which serves, via the uniformity-of-profit principle, to keep the various branches of the division of labor in proper relative size
b. within each individual firm insofar as they perform the functions of management, management being largely the coordination of the activities of separate individuals working within an establishment
c. both (a) and (b)
91. Businessmen and capitalists improve the efficiency of the division of labor by means of a. their competitive quest for higher profits, which leads to the continuous introduction of new and improved products and more efficient methods of producing existing products, the benefits of which are continuously passed forward to the consumers
b. their saving and productive expenditure, which results in a growing supply of capital goods by means of assuring a sufficiently high relative production of capital goods
c. their efficiency in the use of existing capital goods, which also serves to increase the supply of capital goods
d. progressively increasing the supply of capital goods, which is essential to a rising productivity of labor and rising real wages
e. all of the above
92. The essential productive role of the stock and bond markets, the banking system, and financial markets and financial institutions in general is to
a. promote the investment of savings
b. the efficiency of the investment of savings
c. the overall degree of saving
d. all of the above
93. In the absence of financial markets and financial institutions,
a. the only way that anyone could invest his savings would be either under his own direct management, in his own business, or under the management of a trusted friend or relative b. a substantial portion of savings would not be invested but held in the form of cash
c. the efficiency with which funds were invested would be sharply curtailed by the narrowness of the alternatives available for investment
d. all of the above
94. The effect of the additional saving and in$\overline{\text { vestment }}$ and greater efficiency of investment brought about by the existence of financial markets and financial institutions is
a. to raise the demand for and productivity of labor and the general standard of living b. similar to the productive role of businessmen and capitalists themselves insofar as they provide capital and are responsible for a growing supply of capital goods
c. both (a) and (b)
95. Since the stock market deals overwhelmingly in already outstanding shares, rather than in new issues of stock, it does not play a significant role in channeling funds to business firms.
96. The existence of the stock market and the ready ability it gives people to sell the stocks they have bought, greatly promotes the purchase of the stocks in the first place, since people to know that they can easily disinvest.
97. A stockmarket investor's sale of already outstanding shares that he owns can be a means whereby he obtains the funds for direct investment in his own business.
98. A company's stock price determines the extent to which ownership of the company must be turned over to outsiders as the condition of raising additional capital.
99. The stock market makes it possible for $\overline{\text { firms that demonstrate their success to obtain capital at }}$ a much faster rate than they could if they had to rely exclusively on the reinvestment of their profits. This is because a firm's demonstration of the ability to earn a high rate of profit on its existing capital operates to raise the price of its outstanding shares and thus to make it possible and worthwhile for the firm to obtain substantial additional capital from the sale of additional stock
100. The existence of the stock market serves to penalize poor management and to offer a protection against the abuse of stockholders by corporate managements.
101. The effect of poor management, or of the abuse of stockholders, is
a. a low price of the firm's stock relative to the value of the firm's assets
b. an invitation to an outside takeover of the firm, the firing of its present management, and, very often, the sale of some or all of its assets to other firms which are capable of putting them to better use
c. both (a) and (b)
102. Government restrictions on hostile takeovers improve the stockmarket's ability to penalize bad managements.
103. The productive contribution of retailing and wholesaling rests on the fact that in a division-oflabor society,
a. the producer and consumer are different persons
b. the supply of every product originates in a great concentration, in the hands of a relatively small number of producers and in order for any benefit to be derived from these supplies, they must be moved into the hands of the vast body of consumers
c. retailing and wholesaling, along with exchange and money, are the means whereby goods are brought from their producers to their consumers d. all of the above
104. The failure to appreciate the value of retailing and wholesaling rests on the failure to keep in mind the existence of the division of labor and then to approach the subject of production and consumption as though all that were required to consume was physically to produce.
105. In a view of the economic world dominated by the image of conditions in a pre-division-oflabor society, it appears that retailing and wholesaling are useless appendages to what really counts: i.e., the mere physical production of goods.
106. What is accomplished by retailing and wholesaling is
a. nothing but the addition of "markups" by useless "middlemen" to the prices charged by manufacturers and farmers, which prices are all that the consumers justly ought to be made to pay b. an enormous increase in the benefit derived from physical production in bringing goods from their producers, where the far greater part of the supply would be useless if it had to remain with the producers, to their consumers, who value the supplies far more highly
c. Retailing and wholesaling are responsible for a major reduction in the amount of time and money that would otherwise need to be spent in obtaining goods, and for an equally major increase in the variety and quality of goods available.
d. all of the above
e. (b) and (c) but not (a)
107. Retailing and wholesaling make possibile the saving of expense to
a. consumers of not having to send their own purchasing agents, trucks, and so forth out to the dozens or hundreds of manufacturers or farmers
whose products the retail store carries
b. producers of not having to send out their own salesmen and establish their own distribution outlets wherever they sought to sell their goods c. both (a) and (b)
108. The existence of wholesalers makes pos-
sible
a. a radical reduction in the number of transactions that would otherwise have to exist between retailers and manufacturers, and a corresponding reduction in costs
b. economies of large-scale purchases and lowcost storage, which are largely passed on to retailers and consumers
c. both (a) and (b)
109. It is inherently unjust for the retail price of a good, such as potatoes or eggs, to rise at the same time that the price paid to the farmers or manufacturers who physically make the good falls.

## The following is a three-part question.

110. In the case of inexpensive bulky goods, like potatoes, or goods which require special handling and packaging, like eggs, the price of the good to the producer may well account for less than half of the total cost of bringing the good to the consumer, because other costs, such as transportation and packaging, play such a large role.
111. In such cases, even though from a $\overline{\text { strictly physical point of view the product is hardly }}$ changed when it reaches the consumer from what it was when it left the producer, the price to the producer represents no greater proportion of the total cost than, say, the price of steel represents in the cost of an automobile.
112. In such cases, a fall in the price of the $\overline{\text { good to the producer may very well be accompanied }}$ by a rise in other components of its total cost that are more than offsetting and thus raise its total cost and necessitate a rise in the retail price of the good.
113. The existence of the division of labor is what makes advertising necessary, in that the producer and consumer are separate persons and the consumer thus has no automatic knowledge of what is available, where, or on what terms.
114. The productive role of advertising is to supply the knowledge desribed as lacking in the previous question.
115. Even when people already know what goods are available and where and on what terms, advertising still has the effect of increasing the amount of benefit that is derived from the same amount of physical production. Advertising accomplishes this by increasing the awareness people have of the availability of various goods and by thus inducing them to try goods they would not otherwise have tried, or tried as soon, which they then discover that they prefer to goods they were previously consuming and would otherwise simply have gone on consuming.
116. There is an important gain from advertising even in conditions in which its use leads to a rise in the price of the type of product being advertised, in that it leads consumers to try different things and often to find that they are better satisfied as a result.
117. There is an inherent limit to any rise in price that advertising might ever cause, in that those who chose to advertise less and thus to incur less cost on account of advertising would be in a position to advertise their lower costs and prices.
118. There is such a thing as diminishing returns to advertising. Once a certain degree of awareness of a product is established, additional advertising serves to increase awareness less and less and even to become annoying. Any producer spending excessively for advertising will find himself at the mercy of other producers, who advertise adequately, but less than he does and who can advertise their lower prices based on lower advertising costs.
119. Normally advertising serves to reduce prices, by encouraging new competition and the introduction of new and improved products.
120. In the absence of extensive advertising of new products, people's main guide to what to consume would be personal experience, which necessarily would favor the established firms, since they are the only existing firms with which people have had experience. Extensive advertising, however, allows new en-
trants into an industry to gain entree into people's awareness alongside of the established firms.
121. Advertising reduces prices and promotes the introduction of new and improved products by shortening the period of time required for a product to gain a mass market
a. and thus achieve the economies of large-scale production
b. and over which it would otherwise be necessary to earn compound profits on outlays for such things as research and development, thereby increaing the extent to which such outlays would necessitate a higher price of the product
c. both (a) and (b)
122. It usually does not pay to advertise products which people will buy only once and then advise others against buying.
123. The expenditure for advertising is comparable to a seller's posting a bond with the public, insofar as it is usually necessary, if the advertising is to be effective, that those who are induced to try a product buy it again and recommend it to others. A large advertising budget can be taken as signifying the seller's conviction that this will be the case with his product.
124. The rule for success in advertising is to advertise products of the kind that when tried will be liked and recommended by the buyers. Apart perhaps from people who are highly suggestible, the advertisers have little or no power over what it is that when tried will be liked and recommended.
125. People consume what advertisers tell them to. This is confirmed by the fact that advertising has the power to make people prefer candles to electric light, and the horse to the automobile. The competitive success of electric light and the automobile is the result of the fact that the advertisers chose to advertise in favor of them rather than against them.

## PARTC: BUSINESSMEN AND CAPITAUSTS: CLASSICALECONOMICS VERSUS THE MARXIAN EXPLOITATION THEORY

126. The leading source of the denial of the $\overline{\text { productive role of businessmen and capitalists and of }}$ the hostility to profits and interest is the Marxian exploitation theory.
127. The essential claim of the Marxian exploitation theory is that all income naturally and rightfully belongs to the wage earners, but that under capitalism the wage earners receive only bare, minimum subsistence, while everything over and above this is expropriated by the capitalist exploiters in the form of profits, interest, and land rent, or, in the terminology of Marx, "surplus-value."
128. The classical economists held ideas, notably, "the labor theory of value" and "the iron law of wages," which are almost universally assumed to lead inexorably to the Marxian exploitation theory.
129. The labor theory of value claims that the prices of goods are in proportion to the quantities of labor directly or indirectly required to produce them, that, for example, if the total quantity of labor required at all stages of production to produce an automobile is five times the quantity of labor required to produce a motorcycle, the price of the automobile will tend to be five times as high as that of the motorcycle.
130. The classical economists held the labor theory of value only with major qualifications.
131. The iron law of wages held by the classical economists claims that the combination of population growth and the operation of the law of diminishing returns drives real wage rates toward an equilibrium of minimum subsistence.
132. In the view of the author, what Marx $\overline{\text { meant by the labor theory of value and the iron law of }}$ wages are two very different sets of ideas than what the classical economists meant, and are in fact gross distortions of what the classical economists meant.
133. In the view of the author, the main contribution of classical economics to the Marxian exploitation theory was
a. the labor theory of value
b. the iron law of wages
c. its errors and confusions pertaining to the conceptual framework of the exploitation theory, which assumes that all income due to the performance of labor is wages and that profits are a deduction from what is originally, naturally, and rightfully wages
134. In the view of the author, the validity of the conceptual framework of the exploitation theory is accepted by the opponents of Marx as much as by Marx.
135. In the view of the author, despite whatever support certain aspects of classical economics may have given to the Marxian exploitaion theory, a. essential elements of classical economics provide the basis for demolishing both the conceptual framework of the exploitation theory and the whole of the specific substance of the exploitation theory
b. classical economics makes it possible to understand such propositions as why profits, not wages, are the original and primary form of income and that precisely because of the work of businessmen and capitalists, wages can rise out of all connection with minimum subsistence-literally without limit
c. both (a) and (b)
136. The classical economists' doctrine of the wages-fund held that at any given time there is a determinate total expenditure of funds for the payment of wages in the economic system, and that the wages of the employees of business firms are paid by businessmen and capitalists, out of capital, which is the result of saving; not by consumers in the purchase of consumers' goods.

## The following is a nine-part question.

137. In the view of the author, the abandonment of classical economics doctrine of the wages fund in the late 19th century, and with it, its perspec-
tive on saving and capital, made possible the acceptance of Keynesianism and the policy of inflation, deficits, and ever expanding government spending in the 20th century.
138. In the view of the author, with roughly the same time lag, the abandonment of classical economics' doctrine that cost of production, rather than supply and demand, is the direct (though not the ultimate) determinant of the prices of most manufactured or processed goods led to the promulgation of the doctrines of "pure and perfect competition," "oligopoly," "monopolistic competition," and "administered prices," with their implicit call for a policy of radical antitrust or outright nationalizations to "curb the abuses of big business."
139. In the view of the author, the ideas of $\overline{\text { Adam Smith on the subject of productive activity are }}$ among the best and the worst in the literature of economics.
140. Adam Smith
a. essentially recognized the necessity of moneymaking in order for an activity to be productive and its connection to the distinction between production and consumption
b. essentially identified government as a consumer
c. maintained that the only productive parties in the economic system are wage earners
d. regarded businessmen, capitalists, and landowners as having no productive function, and as existing as parasites upon the labor of the wage earners
e. all of the above
141. Adam Smith
a. equated labor with wage earning
b. declared that "the produce of labour constitutes the natural recompence or wages of labour" and believed that if an income is due to the performance of labor, it must be wages c. denied that profits could be an income attributable to the labor of those who make profits because of the fact that profits tend to vary with the size of the capital invested
d. believed that the profits earned on capital bear no relation to the quantity, the hardship, or the ingenuity of the businessman's labor
e. declared that "As soon as land becomes private property, the landlord demands a share of almost all the produce which the labourer can either raise or collect from it. His rent makes the first deduction from the produce of the labour which is employed upon the land."
f. declared that ". . . profit makes a second deduction from the produce of the labour which is employed upon land" and that "The produce of almost all other labour is liable to the like deduction of profit."
g. all of the above
142. Adam Smith can properly be called the $\overline{\text { father of }}$ the Marxian exploitation theory because he provided the conceptual framework of that theory.
143. The conceptual framework of the exploitation theory, that Adam Smith provided, is the pri-macy-of-wages doctrine.
144. The "primacy-of-wages doctrine," advanced by Adam Smith and taken over by Karl Marx, claims that wages are the original and primary form of income from which profits and all other nonwage incomes emerge as a deduction with the coming of capitalism and businessmen and capitalists.
145. The conceptual framework of the exploitation theory and its supporting beliefs easily lead to the assertion of the wage earner's right to the whole produce or to the full value of that produce.
146. Adam Smith understood the essential role of private ownership of land in progressively increasing the output from the land and in raising living standards while holding down the economic significance of land rent.
147. Adam Smith understood the vital role of businessmen and capitalists and private ownership of the means of production in increasing the standard of living of wage earners.
148. Smith understood that the division of $\overline{\text { labor and }}$ the rise in living standards that it brings depends on the accumulation of capital.
149. Smith implied that the division of labor, and the consequent rise in the productivity of labor, has no connection with the activities of businessmen and capitalists, nor with the institution of private property in land, and might have developed just as well in their absence.
150. Adam Smith is usually regarded as the leading advocate of capitalism in the history of economic thought.
151. Smith's view of an alleged "early and rude state of society," in which all income is wages and no income is profit, and the alleged effects of the coming of capitalism and capitalists is repeated by Marx in his $C-M-C$ and $M-C-M^{\prime}$ sequences that he says respectively desribe "simple circulation" and "capitalistic circulation."

## The following is an eight-part question.

152. In the view of the author, a. "Profit" is the excess of receipts from the sale of products over the money costs of producing them.
b. A "capitalist" is one who buys in order subsequently to sell for a profit, i.e., a capitalist is one who makes productive expenditures.
c. "Wages" are money paid in exchange for the performance of labor-not for the products of labor, but for the performance of labor itself. d. all of the above
153. On the basis of above definitions, it fol$\overline{\text { lows that }}$ if there are merely workers producing and selling their products, the money which they receive in the sale of their products is not wages.
154. In buying commodities, one does not pay wages, and in selling commodities, one does not receive wages. What one pays and receives in the purchase and sale of commodities is not wages but product sales revenues.
155. The proposition that in buying commodities one does not pay wages was propounded by the great classical economist John Stuart Mill, who held that "Demand for commodities is not demand for labour."
156. In the precapitalist economy imagined by Smith and Marx, all income recipients in the process of production are workers. But, in the view of the author, the incomes of those workers are
a. not wages
b. they are, in fact, profit
c. both (a) and (b)
157. In the view of the author, all income $\overline{\text { earned in }}$ producing products for sale in the precapitalist economy is profit or "surplus-value" and no income earned in producing products for sale in such an economy is wages. For not only do the workers of a precapitalist economy earn product sales revenues rather than wages, but also those workers have zero money costs of production to deduct from those sales revenues.
158. The workers of a precapitalist economy have zero money costs precisely because they have not acted as capitalists. They have not bought anything in order to make possible their sales revenues, and thus they have no prior outlays of money to deduct as costs from their sales revenues. Having made no productive expenditures, they have no money costs.
159. Because the workers of Smith's "early $\overline{\text { and rude state of society" and Marx's "simple circula- }}$ tion" had product sales revenues and zero money costs to deduct from those sales revenues, it follows that profits, rather than wages, are the original and primary form of income.

## The following is a six-part question.

As we have seen, Adam Smith and Karl Marx postulated a simple state of affairs in which manual laborers produced and sold products, kept the whole sales proceeds, and did not act as capitalists, i.e., did not buy for the sake of subsequently selling. They believed that in such circumstances all income was wages, and
no income was profits. They held that profits came into existence only with the development of "capitalistic circulation" (buying for the sake of selling) and were a deduction from what was originally all wages. To test these propositions, you are given the following information: Receipts from the sale of products are 1000 , all of which is consumed and which constitutes a fresh 1000 of receipts from the sale of products in the next period.
160. State the amount of productive expenditure present.
161. State the amount of wages paid in the production of products.
162. State the amount of money outlays to be $\overline{\text { deducted }}$ from sales revenues as costs.
163. State the amount of profits earned on the sales revenues. _164. State the amount of nominal capital in existence.
165. State the rate of return on capital.
166. Businessmen and capitalists are not re$\overline{\text { sponsible }}$
a. for the phenomenon of profit, which exists prior to their appearance and equals the entire sales revenues received by the workers of Smith's
"early and rude state of society" and Marx's "simple circulation"
b. but rather for the phenomena of productive expenditure, wages, and costs, and for the reduction in the proportion of income that is profit and rise in the proportion of income that is wages
c. both (a) and (b)
167. While important passages in Adam Smith's The Wealth of Nations support the primacy-ofwages doctrine, the doctrine of John Stuart Mill that "demand for commodities is not demand for labor" opposes it.
168. Ricardo's doctrine that profits fall as wages rise and rise as wages fall supports the primacy-of-profit doctrine and the harmony of interests of wage earners and capitalists, rather than class warfare, when it is realized that it is capitalists, not consumers, who pay the wages expended in the production of products for sale. For then, it follows that if, as in the precapitalist economy, there are no capitalists, then there are no wages paid in production, and if there are no wages paid in production, the full income earned in Ricardo's framework must be profits.
169. The fact that profits are an income due to the performance of labor can be observed all around us in the present day world, but is systematically obliterated by contemporary economic theory.
170.
a. Everyday, accountants report the incomes of small proprietors, whose labor bulks overwhelmingly large in the success or failure of their operations, as profits.
b. Despite the fact that that these profit incomes are obviously attributable to the performance of labor by these small businessmen, the doctrine of "opportunity cost" serves to obliterate this fact by renaming the profit as wages, interest, and losses, and leaving as profit only the extent to which the profit exceeds all the opportunity costs.
c. both (a) and (b)

## The following is an eleven-part question.

171. In the complex conditions of modern society and of "capitalistic circulation," profit continues to be a labor income, indeed, the income of the most important workers, whose labor is now mainly one of thinking, planning, and decision making, rather than manual labor.
172. The variation of profits with the size of the capital invested is perfectly consistent with their being attributable to the labor of businessmen and capitalists because
a. such labor tends to be predominantly of an intellectual nature-a work of thinking, planning, and decision making
b. capital is the means by which businessmen and capitalists implement their plans-it is their means of buying the labor of helpers and of equipping those helpers and providing them with the materials of work
c. the possession of capital serves to multiply the efficacy of the businessmen's and capitalists' labor, for the more of it they possess, the greater is the scale on which they can implement their ideas
d. all of the above
173. Equal labor does not necessarily produce equal products. It produces unequal products when unequal means are employed. It is always labor which produces, however, because it is labor which supplies the guiding and directing intelligence in production.
174. Guiding and directing intelligence, not muscular exertion, is the essential characteristic of human labor, and the basis for attributing all production to labor.
175. All labor is the "labour of direction." It is because the man directs the tool, that he, and not the tool, produces the product. The tool, whether an ordinary shovel, a steam shovel, dynamite, or an atomic explosive, does not produce, but is the means by which the man who employs it produces.
176. Guiding and directing intelligence in production is supplied by businessmen and capitalists
on a higher level than by wage earners-a circumstance which further reinforces the primary productive status of profits and profit earners over wages and wage earners.
177. In the view of the author, the fact that profits are an income attributable to the labor of businessmen and capitalists, and the further fact that their labor represents the provision of guiding and directing intelligence at the highest level in the productive process, requires a radical reinterpretation of the doctrine of labor's right to the whole produce.
178. In the view of the author, properly understood, labor's right to the whole produce is satisfied when first the full product and then the full value of that product comes into the possession of businessmen and capitalists, for they, not the wage earners, are the fundamental producers of products.
179. In the view of the author, the employees of the firm are accurately described by the common expression "help." They are the helpers of the businessmen and capitalists in the production of their-the businessmen's and capitalists'-products.
180. In the view of the author, the realization of labor's right to the whole produce is exactly what occurs in the everyday operations of a capitalist economy, inasmuch as it is businessmen and capitalists who are the owners first of the products and then of the sales proceeds received in exchange for the products.
181. By the standard of attributing results to those who conceive and execute their achievement at the highest level, one must attribute to businessmen and capitalists the entire gross product of their firms and the entire sales receipts for which that product is exchanged.
182. The underlying standard of attribution used in the preceding questions is the same as that normally employed in fields outside of economic activity. For example, one attributes the discovery of America to Columbus, the victory at Austerlitz to Napoleon, the foreign policy of the United States to its President. These attributions are made despite the fact that Columbus could not have made his discovery without the aid of his crew, nor Napoleon have won his victory without the help of his soldiers, nor the foreign policy of the United States be carried out without the aid of the employees of the State Department. The help these people provide is perceived as the means by which those who supply the guiding and directing intelligence at the highest level accomplish their objectives. The intelligence, purpose, direction, and integration flow down from the top, and the imputation of the result flows up from the bottom.
183. By the standard of attribution to the guiding, directing intelligence at the highest level, the products of the old Ford Motor Company and Standard Oil Company are to be attributed to Ford and

Rockefeller, and today those of Microsoft are to be attributed to Gates.

## The following is a five-part question.

184. If the payment of incomes to capitalists whose role in production might be judged to be passive, such as, perhaps, most minor stockholders and many recipients of interest, land rent, and resource royalties, represented an exploitation of labor, it would be an exploitation of the labor
a. not of wage earners
b. but of businessmen and the active capitalists, from whose profit incomes they are a deduction c. would mean that individuals like Ford and Rockefeller were exploited by such people as widows and orphans, who largely make up the category of passive capitalists
d. all of the above
185. In fact there is no genuine exploitation in the case described in the preceding question, because the payment of such incomes is a source of gain to those who pay them. They are paid in order to acquire assets whose use is a source of profit over and above the payments which must be made.
186. Furthermore, the recipients of such incomes need not be at all passive; they may very well earn their incomes by the performance of a considerable amount of intellectual labor. Anyone who has attempted to manage a portfolio of stocks and bonds or investments in real estate should know that there is no limit to the amount of time and effort that such management can absorb, in the form of searching out and evaluating investment possibilities, and that the job will be better done the more such time and effort one can give it.
187. In the absence of government intervention in the form of the existence of national debts, loan guarantees, and insurance on bank deposits, the magnitude of truly passive income in the economic system would be quite modest. This is because most forms of investment require the exercise of some significant degree of skill and judgment. Those not able or willing to exercise such skill and judgment would either rapidly lose their funds or would have to be content with very low rates of return in compensation for safety of principal and, in many cases, would have to bear the expense of the deduction of management fees by trustees or other parties.
188. In a laissez faire economy, without per$\overline{\text { sonal or corporate income taxes (a real exploitation of }}$ labor) and without legal restrictions on such business activities as insider trading and the award of stock options, the businessmen and active capitalists are in a position to own an ever increasing share of the capitals they employ. With their high incomes they can progressively buy out the ownership shares of the passive capitalists. In this way, under capitalism, those work-
ers-the businessmen and active capitalists-who do have a valid claim to the ownership of the industries in fact come to own them.
189. Böhm-Bawerk, who is regarded as the leading critic of the exploitation theory, bases his critique on
a. the primacy-of-profit doctrine
b. the primacy-of-wages doctrine
190. According to Böhm-Bawerk, profits/interest are a justified deduction from what is originally all wages.
191. The labor theory of value as held by the classical economists
a. admitted the existence of numerous cases in which prices were determined simply by demand and supply, by the utility and scarcity of goods, and to which neither the labor theory of value nor even determination by cost of production applied b. especially Ricardo, recognized the important role in the determination of relative prices of the time which must elapse between the payment of wages and the sale of the ultimate consumers' goods, over which time the rate of profit had to compound; goods produced by equal quantities of labor but over unequal such periods of time would have permanently unequal prices
c. especially Ricardo, implicitly recognized the role of the rate of profit
d. recognized the role of differences in wage rates between skilled and unskilled labor and between different countries
e. all of the above
192. The labor theory of value held by Marx claimed to apply to all goods and services without exception and that relative quantity of labor alone was the explanation of relative value.
193. The labor theory of value held by the classical economists can be harmonized with recognition of the productive role of businessmen and capitalists by virtue of
a. the fact that the activities of businessmen and capitalists progressively reduce the quantities of labor required to produce goods, and thus reduce their prices
b. recognizing that wage rates are among the prices not determined by quantity of labor but by supply and demand, with the result that the activities of businessmen and capitalists progressively reduce prices while leaving wage rates unchanged, thereby progressively raising real wage rates
c. both (a) and (b)
194. The "iron law of wages" claims that the natural, equilibrium level of wages is minimum subsistence.
195. According to the classical economists, such wages
a. were the result of the combination of population growth and the operation of the law of diminishing returns, including the need to resort to progressively inferior lands as population grew b. existed as a tendency, not as an absolute fact and could be escaped by means of capital accumulation and economic progress
c. both (a) and (b)
196. According to the version of the iron law of wages propounded by Marx, wages
a. were arbitrarily set at minimum subsistence by the fiat of the capitalists, not by virtue of the effects of population growth and diminishing returns b. could not rise above minimum subsistence on the basis of economic progress, but would be immediately reduced by the capitalists in response to any cheapening in the price of the wage earner's necessities
c. would be reduced even below the level of minimum subsistence as the result of capital accumulation in the form of a rise in fixed capital relative to "variable" capital (the doctrine of progressive impoverishment of the masses)
d. all of the above
197. The "iron law of wages" could seem reasonable in the early 19th century, when Ricardo wrote, because all of human history prior to that time seemed to confirm it, in the same way that it seemed to confirm the proposition that land rents tended to constitute a growing proportion of the total, combined income of a nation's inhabitants.

Answers to Questions 1-198 on Chapter 11

| Question \# | Correct Answer | Question \# | Correct Answer | Question \# | Correct Answer | Question \# | Correct Answer | Question \# | Correct Answer | Question \# | Correct Answer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | T | 34 | a | 67 | C | 100 | T | 133 | C | 166 | C |
| 2 | F | 35 | T | 68 | C | 101 | c | 134 | T | 167 | T |
| 3 | T | 36 | d | 69 | C | 102 | F | 135 | c | 168 | T |
| 4 | T | 37 | F | 70 | T | 103 | d | 136 | T | 169 | T |
| 5 | d | 38 | F | 71 | T | 104 | T | 137 | T | 170 | c |
| 6 | f | 39 | d | 72 | e | 105 | T | 138 | T | 171 | T |
| 7 | b | 40 | b | 73 | d | 106 | e | 139 | T | 172 | d |
| 8 | T | 41 | d | 74 | T | 107 | c | 140 | e | 173 | T |
| 9 | T | 42 | a | 75 | T | 108 | c | 141 | g | 174 | T |
| 10 | T | 43 | T | 76 | T | 109 | F | 142 | T | 175 | T |
| 11 | T | 44 | d | 77 | c | 110 | T | 143 | T | 176 | T |
| 12 | b | 45 | c | 78 | T | 111 | T | 144 | T | 177 | T |
| 13 | F | 46 | c | 79 | T | 112 | T | 145 | T | 178 | T |
| 14 | T | 47 | T | 80 | T | 113 | T | 146 | F | 179 | T |
| 15 | T | 48 | T | 81 | T | 114 | T | 147 | F | 180 | T |
| 16 | T | 49 | c | 82 | T | 115 | T | 148 | F | 181 | T |
| 17 | T | 50 | T | 83 | T | 116 | T | 149 | T | 182 | T |
| 18 | T | 51 | T | 84 | d | 117 | T | 150 | T | 183 | T |
| 19 | T | 52 | T | 85 | d | 118 | T | 151 | T | 184 | d |
| 20 | F | 53 | T | 86 | T | 119 | T | 152 | d | 185 | T |
| 21 | f | 54 | T | 87 | T | 120 | T | 153 | T | 186 | T |
| 22 | e | 55 | T | 88 | T | 121 | c | 154 | T | 187 | T |
| 23 | T | 56 | b | 89 | T | 122 | T | 155 | T | 188 | T |
| 24 | F | 57 | e | 90 | c | 123 | T | 156 | c | 189 | b |
| 25 | e | 58 | a | 91 | e | 124 | T | 157 | T | 190 | T |
| 26 | F | 59 | b | 92 | d | 125 | F | 158 | T | 191 | e |
| 27 | T | 60 | b | 93 | d | 126 | T | 159 | T | 192 | T |
| 28 | d | 61 | b | 94 | C | 127 | T | 160 | zero | 193 | C |
| 29 | c | 62 | b | 95 | F | 128 | T | 161 | zero | 194 | T |
| 30 | a | 63 | T | 96 | T | 129 | T | 162 | zero | 195 | C |
| 31 | a | 64 | T | 97 | T | 130 | T | 163 | 1000 | 196 | d |
| 32 | c | 65 | T | 98 | T | 131 | T | 164 | zero | 197 | T |
| 33 | a | 66 | T | 99 | T | 132 | T | 165 | infinity |  |  |

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## MONEY AND SPENDING (Chapter 12)

## The Quantity Theory of Money

1. The quantity theory of money claims that the main determinant of the amount of money that is spent is the amount of money that
a. exists
b. is owed
c. was spent in the year before
d. all of the above
2. The quantity theory of money holds that $M$ $\overline{x V=D}$, where $M$ is the quantity of money in existence, $V$ is the average number of times a unit of money is spent, and $D$ is the amount of money spent.
3. In the quantity theory-of-money equation, $D$ is usually to be understood as the aggregate demand (amount of spending) specifically for consumers' goods, i.e., as $D_{c}$.
4. In the quantity-theory-of-money equation, $\bar{V}$ is usually to be understood as the average number of times a unit of the money supply is spent specifically in buying consumers' goods, i.e., as "consumption velocity" or "income velocity."

## 5.

a. GDP is essentially the sum of consumption spending (private and government) plus gross investment
b. Since approximately 85 to 90 percent of GDP consists of consumer spending, the quantity-the-ory-of-money equation can be understood as providing an approximate expression of nominal, i.e., current-dollar GDP
c. both (a) and (b)
d. neither (a) nor (b)
6. In 2001, nominal GDP was reported as approximately $\$ 10.2$ trillion. If the money supply is taken as $\$ 2.5$ trillion, calculate velocity.
7.
a. The money supply is essentially the sum of currency in circulation outside the banking system plus checking deposits
b. Until 1994, the money supply was accurately reported in the statistic known as $M_{1}$. Currently, the money supply can best be measured by taking the sum of $M_{1}$ plus accumulated sweep accounts plus retail money market mutual fund accounts
c. both (a) and (b)
d. neither (a) nor (b)

## 8.

a. Different magnitudes of aggregate spending require different measures of velocity
b. The aggregate demand for consumers' goods and GDP are related to the money supply via "consumption velocity" or "income velocity."
c. Aggregate spending of all kinds, including for stocks, bonds, and real estate is related to the money supply via the concept of "transactions velocity."
d. all of the above
9. An increase in the quantity of money operates to raise the volume of spending in the economic system to a higher annual level simply by being spent and respent so long as it is in existence.
10. Where $P$ is the general consumer price $\overline{\text { level, } D_{c}}$ is the aggregate demand (spending) for consumers' goods, and $S_{c}$ is the aggregate supply of consumers' goods produced and sold, the general consumer price level equals $D_{c} / S_{c}$.
11. Calculate the effect on the general consumer price level if the quantity of money and the aggregate demand for consumers' goods increase by $4 \%$ over the course of a year while aggregate production and supply increase by $2 \%$.
12. If the situation described in the preceding question were to be repeated year after year, how long would it take for the general consumer price level to double?
13. How long would it take the general consumer price level to double if the annual increase in the quantity of money and volume of spending were $10 \%$ while the annual increase in production and supply were $2 \%$ ?
14. Increases in prices occur insofar as the in$\overline{\text { crease in }}$ the quantity of money and volume of spending outstrips the increase in production and supply.
15.
a. A commodity money is one in which the monetary unit is a quantity of a physical commodity
b. Historically, gold and silver are the leading examples of commodity monies
c. All money begins as a commodity money
d. Paper money originates as a secure, transferable claim to commodity money payable on demand by the issuer
e. all of the above
16. Paper money which is not redeemable in commodity money is known as "fiat money."

## 17. The concept of paper money excludes

 checkbook money.$\qquad$
18.
a. A major difference between commodity money and fiat money concerns their potential rates of increase.
b. Specifically, the rate of increase of a gold or silver commodity money is almost certain to be relatively small because of the comparative rarity of these elements in nature and because increases
in their production and supply depend on costly mining operations
c. On the other hand, the rate of increase in a fiat money is potentially limitless, since there is no significant rarity of the necessary elements in nature and the process of increase is virtually costless d. all of the above
e. none of the above
19. Assume that over a generation the quantity of money and volume of spending increase tenfold, while production and supply double. How great is the percentage rise in the general consumer price level?

## 20.

a. The formula for the general consumer price level shows demand as a numerator and supply as a denominator
b. In the light of this formula, it is simply inconceivable that prices could rise without demand rising or supply falling, or both
c. both (a) and (b)
d. neither (a) nor (b)
21. It is no more likely for prices to rise under a system of fiat paper money than under a system of commodity (i.e. gold or gold and silver) money.
22. Gold and silver moneys were often accompanied by long periods of falling prices, as in the generation preceding the discovery of the California gold fields and the generation from 1873-1896.

## Origin and Evolution of Money and the Contemporary Monetary System

23. The essential condition that must be present in order for a barter exchange to take place is the existence of a double coincidence of wants, i.e., a state of affairs in which each of two parties possesses a good that the other desires and values the good in the possession of the other above the good he possesses and that the other desires.
24. In the absence of a double coincidence of wants, some of our more intelligent ancestors began to resort to indirect exchanges.
25. 

a. An indirect exchange is one in which an individual exchanges his good or service for a good which he himself does not desire to consume or to use in production but rather as a means of making a further exchange
b. An indirect exchange is resorted to in cases in which a double coincidence of wants is lacking and it occurs to someone to exchange the good he has for something that he himself may not want but which the other party wants, i.e., the party who has the good our man wants
c. Goods that are sought for the purpose of being reexchanged are called media of exchange
d. all of the above
e. none of the above
26.
a. Before a good can be used as a medium of exchange, it must have a recognized value as an ordinary commodity
b. Goods that are more widely and more frequently desired as ordinary commodities have a greater likelihood of becoming media of exchange than goods that are less widely and less frequently desired as ordinary commodities
c. In the course of history, numerous goods have served as media of exchange
d. all of the above
27.
a. A generally accepted medium of exchange constitutes money
b. The process of a medium of exchange developing into money is cumulative and self-reinforcing c. The use of a good as a medium of exchange represents an additional source of demand for it and operates to raise its value, thereby reducing the extent to which it is used for its ordinary, commodity purposes
d. all of the above
28. In some parts of Europe in the mid 1940s cigarettes developed into a kind of quasi-money. In the process non-smokers became eager to accept cigarettes in exchange for their goods and smokers reduced their smoking because of the resulting higher value of cigarettes.
29. Historically, gold and silver in particular $\overline{\text { came to be money as civilization developed. This was }}$ because
a. In an environment of fixed settlements, the precious metals are the most suitable physical commodities for most people to save
b. The growing use of gold and silver as a store of value set the stage for their use as media of exchange
c. The growing use of gold and silver as media of exchange added relative stability to their value and thus favored their use as a medium in which to write contracts and state debts
d. The making of contracts payable in gold or silver reinforced the use of gold and silver as media of exchange by creating a class of people needing to obtain them to meet their contractual obligations e. all of the above
30. Paper currency and checkbook money a. came into existence as secure claims, payable on demand, in gold or silver coin and could not have come into existence without being a claim to a preexisting, commodity money b. In establishing a uniform, gold-backed paper currency, that people could regard as "as good as gold," the National Bank Act of 1863 played a
critical role in fostering the use of paper money in the United States in place of gold coin
c. By the outbreak of World War I, two generations of experience with the day-to-day use of paper money and virtual disappearance of gold coin from circulation had created the potential for paper money to be acceptable even without redeemability into gold
d. all of the above
31. The great bulk of the American people's gold came into the governments hands
a. in World War I, as the result of a wartime amendment to the Federal Reserve Act of 1913 b. in 1933, when the New Deal ordered all privately held monetary gold to be turned into the Federal government
32. The Federal Reserve's possession of the gold previously held by the private banking system made possible a substantial increase in the supply of dollars by virtue of a pyramiding of the gold reserves.
33. After 1933 people continued to accept paper dollars, even though they were no longer redeemable in gold, because the paper dollars had acquired a history of acceptability, in which everyone's experience taught that paper dollars were and would continue to be generally acceptable and led virtually everyone to be willing to go on accepting them.
34. Even though after 1933 the law required the Federal Reserve to hold substantial gold reserves against the dollars it created, for many years this requirement did not impose an effective limit on the Fed's ability to increase the supply of dollars because of its possession of substantial excess gold reserves.
35. Excess gold reserves are gold reserves held in excess of the gold reserves legally required to be held.
36. From 1935 to the end of World War II, the Fed possessed large and growing excess gold reserves
a. as the result of the rise in the official price of gold from $\$ 20.67$ per ounce to $\$ 35$ per ounce
b. as the result of the influx of large amounts of gold from the rest of the world, especially Western Europe
c. both (a) and (b)
37. The excess gold reserves of the Fed were gradually eliminated in the twenty years following World War II in the attempt to hold the world price of gold at $\$ 35$ per ounce.
38. In 1965, as the exhaustion of the Fed's excess gold reserves threatened, Congress abolished the Fed's gold reserve requirements.
39. Abandonment of external convertibility of the dollar at the rate of $\$ 35$ per ounce was not inevitable, despite the fact that its maintenance in the face of rising prices for almost everything other than gold
served to make gold cheaper and cheaper relative to almost everything else and had to create an ever rising industrial demand for gold.
40. The potential for a spontaneous remonetization of gold
a. is created under conditions of substantial inflation, in which there is a growing use of gold as an inflation hedge
b. Would be greatly increased if it were legal for businessmen to discriminate between precious metal coins and paper currency of the same face value
c. both (a) and (b)
d. neither (a) nor (b)
41. "Fiduciary media"
a. are transferable claims to standard money, redeemable by the issuer on demand, and accepted in commerce as the equivalent of standard money, but for which no standard money actually exists
b. are backed by debt
c. create the potential for a deflation of the money supply because of bankruptcies of business firms that are indebted to banks and consequent bank failures
d. represent the far greater part of the present-day money supply
e. the process of their being wiped out played a major role in the great depression of the 1930s
f. all of the above
42. Standard money
a. unlike, fiduciary media, is not a claim to anything further but has ultimate, final debt-paying power
b. under a gold standard is gold coin or bullion
c. at the present time consists of irredeemable paper dollars
d. all of the above
43. The "monetary base"
a. is the sum of currency in circulation outside the banks plus the checking deposits of the Federal Reserve system
b. represents the supply of standard money
c. both (a) and (b)
44. Fiduciary media come into existence a. when a bank lends out currency that has been deposited with it in a checking account b. when a bank creates and lends out a new and additional checking deposit on the basis of the currency or other reserves that it has obtained through its receipt of a checking deposit
c. both (a) and (b)
d. neither (a) nor (b)
45. The checking deposits of a bank can be viewed
a. as fully covered up to the limit of the bank's standard money reserves and then as totally uncov-
ered to the extent that the deposits exceed the bank's standard money reserves b. as uniformly partially covered by a fractional reserve to the extent that the bank has standard money reserves
c. both (a) and (b)
46. The opposite system of fiduciary media $\overline{\text { is the } 100}$ percent reserve system.
47. Under the 100 percent reserve principle, $\overline{\text { checking }}$ deposits and banknotes are 100 percent backed by standard money.
48. The 100 percent reserve principle applies only to checking deposits and banknotes, i.e., only to actually spendable money, not to savings deposits or time deposits, which cannot be spent until they are withdrawn.
49. Under fractional reserve banking, paper currency and banknotes are backed only fractionally by standard money and for the rest by debt.
50. Fractional-reserve demand deposits possess a deflationary potential that,
a. once unleashed, tends to be self-reinforcing and cumulative, ultimately capable of wiping out all fiduciary media
b. was unleashed during the 1929 depression c. to be avoided, requires the government's ability to create large sums of new and additional standard money to whatever extent may be necessary to assure the redeemability of all or most outstanding fiduciary media
d. all of the above
51. A 100 percent reserve monetary system would make the money supply absolutely independent of the failure of any debtors and thus make sudden, drastic reductions in the money supply virtually impossible.
52. In a banking system that was free of government interference, the creation of fiduciary media would be greatly limited by
a. the loss of reserves by banks creating fiduciary media to banks that were not creating fiduciary media or not creating them as rapidly
b. the loss of reserves by the whole banking system as the result of the public's need to increase its holding of currency as the overall supply of money increased
c. both (a) and (b)
53. Over the course of many years, government policy has promoted fractional reserve banking by means of
a. increasing the supply of standard money, with the effect both of reducing or preventing clearing losses by expanding banks and of meeting the public's growing demand for currency holdings, in both ways reducing or preventing the loss of re-
serves as the banks expanded the supply of fiduciary media
b. central bank rediscounting of commercial bank assets, thereby encouraging the commercial banks to hold assets other than standard money as a source of reserves when necessary
c. imposing deposit insurance and bank examinations, thereby increasing the public confidence's in the banking system and permitting the banks to operate with a lower level of reserves than would otherwise have been necessary
d. permitting temporary suspensions of payments by the banks to their depositors, thereby enabling the banks to hold a lower level of reserves than would have been necessary to avoid suspensions of payments
e. all of the above
54. Short of prohibiting fiduciary media, the government could greatly reduce their issuance simply by means of doing nothing that encourages their issuance.
55. President Andrew Jackson's specie circu$\overline{\text { lar represented a refusal by the government to accept }}$ fiduciary media in the payment of taxes.
56. The Federal Reserve's "open-market op-
eration"
a. is its buying and selling of securities, typically of the US government, in the open market, with the effect of increasing or decreasing the standard money reserves of the banking system and the public's holdings of currency
b. operates substantially more on the side of buying than on the side of selling
c. is the principal mechanism by means of which it puts new and additional standard money into the economic system, since it buys securities with money that it itself creates
d. is the mechanism by means of which government budget deficits are financed by the creation of new and additional standard money.
e. all of the above
57. The demand for money for holding re$\overline{\text { flects the }}$ need and desire of people to hold money.
58. A rise in the demand for money for hold$\overline{\text { ing is the cause of a rise in the velocity of circulation }}$ of money and its fall is the cause of a fall in the velocity of circulation of money.
59. The demand for money for holding de-
clines and as
a. the security of property improves
b. financial markets and financial institutions develop
c. improvements in transportation and the development of clearing houses occur
d. all of the above
60. As the security of property declines
a. the demand for precious-metal money for holding rises
b. the demand for fiat paper money for holding declines
c. both (a) and (b)
61. The fact that the demand for money for holding declines and thus velocity rises as the result of economic improvements such as greater security of property and the development of financial markets and financial institutions means that these developments have an inflationary effect in that in raising velocity they raise the demand for consumers' goods and thus the prices of consumers' goods.
62. When the demand for money for holding declines as the result of economic improvements such as greater security of property and the development of financial markets and financial institutions, the resulting rise in velocity is largely in the form of total transactions velocity rather than income or consumption velocity, because the same improvements entail the development of greater division of labor and thus more buying and selling at stages other than the sale of consumers' goods. At the same time, these improvements serve to increase the production and supply of consumers' goods.
63. In the context of an economic system with developed financial institutions and financial markets,
a. funds that are saved are put back into the spending stream almost immediately, while funds that are held for consumption may not be spent until the consumption purchases they are held for actually take place
b. the effect of saving is to increase the availability of credit, which represents an important substitute for the holding of cash
c. saving operates to raise the income velocity of money, by virtue of (a) and (b)
d. all of the above
64. In the conditions in which the velocity of circulation of a gold money rises, there is unlikely to be any fall in the purchasing power of gold as a result.
65. The more rapidly the quantity of money $\overline{\text { increases, the less will be the demand for money for }}$ holding and thus the greater will be the velocity of circulation of money, including income velocity.
66. The reason that the more rapidly the quantity of money increases, the more the demand for money for holding declines is that
a. the more rapidly do prices rise and the more it appears advantageous to reduce cash holdings in order to buy sooner rather than later
b. the easier it becomes to profitably liquidate inventories and other noncash assets, with the result that the holding of such assets appears to be a better source of cash in the future than the holding of
actual cash, and thus takes the place of the holding of cash
c. the higher, after a time, do interest rates tend to be, with the result that it becomes worthwhile to lend out progressively smaller and shorter-term sums that otherwise would have been retained in cash holdings
d. to the extent that the increase is in the form of credit expansion (i.e., the creation of new and additional money for the purpose of being lent out), the easier and more profitable it becomes to substitute the prospect of obtaining credit for the holding of cash
e. all of the above
67. Increases in the quantity of money that take place in the form of credit expansion, i.e., are used to finance the granting of new and additional loans,
a. initially serve to reduce the rate of interest
b. when absorbed into the spending stream serve to raise sales revenues, profit margins, and the rate of profit, and thereby to increase the demand for loanable funds and to reduce the supply of loanable funds, with the result that the rate of interest now tends to rise to reflect the higher rate of profit
c. both (a) and (b)
68. Once the increase in the quantity of money created by credit expansion becomes absorbed into the spending stream, the only way to prevent interest rates from rising is by accelerating the increase in the quantity of money, which then makes the rate of profit rise still higher and further increases the demand for loanable funds and reduces the supply of loanable funds, requiring a still further acceleration in the rate of increase in the money supply if the rate of interest is not to rise. Thus to avoid rapid destruction of the monetary system, there is no practical alternative but to allow the rate of interest to follow the rate of profit on up as the quantity of money increases.
69. Interest is the price of money. Thus, the larger the money supply, the lower must be the rate of interest.
70. Interest is
a. the price of money
b. the difference between the sum of money borrowed and the larger sum that must be repaid
71. The changes in the velocity of circulation of money in the period 1929-1945 are inconsistent with a positive relationship between velocity and changes in the quantity of money.
72. The changes in the velocity of circulation of money in the period 1946-1981 are inconsistent with a positive relationship between velocity and changes in the quantity of money.
73. The changes in the velocity of circulation of money in the period 1981 to the present are in-
consistent with a positive relationship between velocity and changes in the quantity of money.
74. The present monetary system has the potential both for major inflation and for major deflation.

## The Balance of Trade and Payments

75. The "balance of trade" is a. the difference between the sum of all of a country's exports and the sum of all of its imports b. typically described as favorable to the extent that its exports exceed its imports and unfavorable to the extent that its imports exceed its exports c. both (a) and (b)
76. The "balance of payments" is a. a broader concept than the balance of trade, being the difference between the sum of all of a country's receipts from abroad and all of its outlays to abroad
b. typically described as favorable to the extent that its outlays to abroad exceed its receipts from abroad and unfavorable to the extent that its receipts from abroad exceed its outlays to abroad c. both (a) and (b)
77. The doctrines of the balance of trade and the balance of payments imply international economic conflict, since they imply that each country should seek a "favorable" balance that in the nature of the case must be regarded as "unfavorable" to other countries and thus that an implicit goal of every country is the infliction of harm on other countries.
78. The doctrines of the balance of trade and the balance of payments were first propounded by
a. the Classical economists
b. the Mercantilists
c. the Physiocrats
79. So long as the only significant international economic dealings were in the form of imports and exports, the concepts of the balance of trade and the balance of payments could be taken as interchangeable.
80. When the doctrines of the balance of trade and balance of payments originated
a. gold and silver were money
b. most European countries had no significant gold or silver mines within their borders c. an excess of exports over imports was sought as the means of accumulating "treasure" within a country, which could later be used for financing foreign military ventures
d. an excess of exports over imports was the means for achieving an increase in the quantity of money in such countries
e. an excess of exports over imports came to be considered favorable for all the reasons that people believe an increase in the quantity of money is favorable
f. all of the above
81. In the eyes of the supporters of the balance of trade/payments doctrines, the individual items in the balances are all essentially separate and independent of one another, with the result that the overall balance is regarded as essentially fortuitous, capable of being "harmed" by anything that would enlarge this or that import or other category of outlay or reduce this or that export or other category of receipt, and "improved" by anything that would enlarge this or that export or other category of receipt or reduce this or that import or other category of outlay.
82. In the eyes of the supporters of the balance of trade/payments doctrines, each export or receipt from abroad constitutes an equivalent addition to the money supply of a country, while each import or other outlay to abroad constitutes an equivalent subtraction from the money supply of a country.
83. In the eyes of the supporters of the balance of trade/payments doctrines, in the absence of government intervention to prevent it, imports and other outlays to abroad have the potential of completely draining a country of its money supply.
84. Concern with an unfavorable balance of trade or payments under a gold standard may have some plausibility, but under the conditions of a fiat paper money, in which any part of the money supply that might be lost to abroad can easily be replaced by means of printing more money, it makes no sense whatever.
85. To some extent the position of the dollar as an international money entails some actual loss of dollars to abroad each year, but such loss,
a. far from being a proper source of worry, simply represents a modest lessening of the degree of domestic inflation of the money supply b. is analogous to the loss of gold experienced every year by a gold-producing country, such as South Africa, with the difference that the paper money that is exported costs next to nothing to produce
c. both (a) and (b)
86. The far greater part of what is recorded as an unfavorable balance of payments represents a. an actual outflow of money
b. an increase in short-term foreign lending to the citizens of the country, or to its government, the proceeds of which are not counted on the receipts side because they are short term
87. Insofar as it represents short-term foreign lending to a country's citizens or its government, the actual significance of an "unfavorable balance of payments" is favorable, because it represents capital investment in the country and/or a mitigation of the consequences of its government's borrowing.
88. The various items in the balance of payments accounts are not independent, but rather are mutually interconnected. For example, the so-called unfavorable balance of trade (the excess of imports over exports) that the United States has experienced in recent years is precisely the result of the excess of receipts by the United States over outlays in the vital area of lending and investing. This excess is what provides the money to pay for the excess of imports over exports.
89. It is in the very nature of foreign investment that it be accompanied by a so-called unfavorable balance of trade in the country receiving the investment, because the way that one country physically invests in another is by sending in the equipment and materials to build up the recipient country's means of production, and by sending in consumers' goods to supply the workers involved. For example, Western investment in building up Saudi Arabia's oil industry entailed the arrival of many shiploads of Western goods in Saudi Arabia, bringing in the necessary equipment, construction materials, and consumers' goods for Western workmen.
90. The purchase of imports does not repre$\overline{\text { sent any significant carrying out of money from the }}$ United States or any reduction in total, overall spending for goods and services in the United States. On the contrary, the imports represent new and additional wealth brought into the United States, where they are added to the supply of domestically produced goods and made available for purchase by the same total expenditure of money that would otherwise take place.
91. The rise in the foreign exchange value of a country's money that foreign investment in the country causes not only does not cause unemployment in that country, but actually tends to be accompanied by less unemployment in that country, because the foreign investment serves to increase the demand for labor in that country.
92. The prohibition or forced reduction of $\overline{\text { auto and steel imports would reduce unemployment in }}$ those industries but, in the absence of wage rate reductions, increase unemployment in the rest of the economic system, since reduced imports of autos and steel would be accompanied by reduced exports of other goods and/or increased imports of other goods.
93. The results of the reduction or elimination of foreign investment and the excess of imports over exports that is the accompaniment of net foreign investment would include a rise in prices resulting from the loss of the supply of goods representing the excess of imports over exports, and a reduction in employment and/or wage rates resulting from the fall in the demand for labor that rested on foreign investment.
94. What is called a favorable balance of $\overline{\text { trade can }}$ in fact be fully as much unfavorable as an allegedly unfavorable one is favorable, as, for example,
if it results from such a thing as the granting of foreign aid the proceeds of which are used to finance exports. Such a case is comparable to the doorman of a restaurant giving money to passersby on the condition that they will spend it in eating at that restaurant.
95. Under an international gold standard, a. the world's money supply, other things being equal, would tend to be distributed among the various individual countries in proportion to the relative size of their respective economies, which implies that there would be relatively increasing money supplies in countries with above average rates of economic progress and relatively decreasing money supplies in countries with below average rates of economic progress
b. consistent with the operation of the principle just named, a country with extensive gold mines would most likely experience an "unfavorable" balance of payments, while a country without them would most likely experience a "favorable" balance of payments; otherwise, the money supplies of the different countries would not correspond to the relative size of their respective economies
c. given the relative size of the various countries' economies in the world, and given the world's quantity of money, the balance of trade and payments of all countries always tends toward balance d. labor union activities, by virtue of retarding or preventing the rise in the productivity of labor and in causing unemployment, operate to reduce the size of a country's economy in comparison to what it would otherwise have been and thus to reduce its share of the world's money supply in comparison with what it would otherwise have been
e. to the extent that labor union activities reduce the quantity of money that can accompany full employment in a country's economy, they reduce the height of money wage rates that can accompany full employment in that country
f. all of the above
96. Under a system of various fiat moneys in the economies of the different countries,
a. the world's money supply is distributed among the different countries in essentially the same way as it is under an international gold standard b. the distribution of the world's money supply can be found in the combination of the number of units of the various currencies and their respective currency exchange rates, so that, for example, if the United States has a money supply of $\$ 2$ trillion while Japan has a money supply of $¥ 140$ trillion, and the exchange rate is 140 yen to the dollar, the US money supply is twice that of Japan c. if the economy of one country grows relatively to that of another, either the number of units in its money supply will tend to grow in the same proportion relative to the number of units in the
money supply of the other country, or its exchange rate will rise in proportion to the relative increase in the size of its economy, or some combination of these two will occur
d. all of the above
97. Under an international gold standard, the creation of fiduciary media in any one country operates to cause a drain of gold from that country, because a. its creation of fiduciary media is tantamount to an enlargement of the world's money supply b. the country cannot, other things being equal, retain a quantity of money greater than corresponds to the relative size of its economy in the world economy, so that if, for example, the increase in its supply of fiduciary media is equivalent to a 1 percent increase in the world's supply of money, while its economy is ten percent of the world's economy, the country can retain only one tenth of the amount by which it has increased the world's money supply
c. other countries will most likely wish to receive their portion of the additional world supply of money in gold, rather than the paper of the expanding country
d. all of the above
98. Under a system of various fiat moneys in the economies of the different countries, the creation of additional money, whether fiduciary media or standard money, in any one country will cause it either to lose foreign currency reserves or, lacking sufficient such reserves, suffer a devaluation of its currency relative to foreign currencies.
99. What explains an "unfavorable" balance of payments in the sense of an actual outflow of money from a country is that the citizens of the country have an insufficient demand for that money to keep it in the country. In essence, they wish to hold a quantity of money corresponding to the relative size of their country's economy in the world, plus or minus an amount that corresponds to the special circumstances of their country and their psychology. They do not wish to hold the larger quantity of money that presently exists in their country, most probably as the result of credit expansion or other domestic inflation of the money supply. And as a result, they seek to spend it abroad and not replace it.
100. In the circumstances described in the $\overline{\text { preceding question, it is futile to try to keep the excess }}$ quantity of money in the country by such measures as blocking this or that category of imports or encouraging this or that category of exports, for so long as the money is present in the country and the citizens do not wish to hold it, it will serve to raise domestic prices relative to foreign prices. This in turn encourages imports and discourages exports, with the result that as soon as one category of import is prohibited, people turn to one or more others, and as soon as an additional line of exports is forced into existence, some other line or
lines of exports becomes uncompetitive or imports are stepped up.
101. In contrast to the circumstances apply$\overline{\text { ing to the last two questions, when the citizens of a }}$ country do have a demand for its existing quantity of money, no amount of outlays to abroad will for very long deprive them of any part of that quantity of money. As illustration, imagine, for example, that a new foreign aid bill is passed and that, as part of it, an army of tax collectors is dispatched into the streets to seize money from every passerby and from every shopkeeper and businessman. The money, we can imagine, is then loaded into armored cars, rushed to nearby airports, and then flown to various foreign capitals a. This foreign aid will not for very long be at the expense of the cash holdings of the American people. The American people cannot afford such a reduction in their cash holdings. They will be compelled to replace those cash holdings b. To replace their cash holdings, they will have to sell more and buy less, and borrow more and lend less. The effect of this will very soon be a combination of lower domestic prices and higher domestic interest rates
c. The effect of this in turn is decreased American imports and increased American exports, and decreased American lending to abroad and increased American borrowing from abroad. This goes on until American cash holdings are restored to approximately their former level
d. all of the above
102. In the light of the answer to the preced$\overline{\text { ing question, the observation of Adam Smith that "the }}$ attention of government never was so unnecessarily employed, as when directed to watch over the preservation or increase of the quantity of money in any country" seems simplistic.
103. What needs to be understood in connection with the balance of trade and payments viewed as source of changes in the quantity of money in a country is that the change in the stock of money in people's pockets, like the change in the stock of food in their refrigerators, is fully within their control and that their decisions about changes in the stock determine the relationship between their receipts and outlays, not that the relationship between their receipts and outlays determines the change in the stock.
104. A man owns a refrigerator into which from time to time he puts food and from which from time to time he takes food.
a. The change in the stock of food in the refrigerator is caused by the difference between the extent to which food is put into and taken out of the refrigerator. If no food is put into the refrigerator while the man continually withdraws food from it, he will be in danger of running out of food. Steps will have to be taken to reduce his withdrawals of
food from the refrigerator and increase his deposits of food into the refrigerator
b. The man's decision about whether to increase or decrease the stock of food in the refrigerator is the cause of the difference between the food that he puts into the refrigerator compared with the food that he takes out of the refrigerator. For example, if he plans to throw a party, he will be sure to stock the refrigerator and not to take from it items that he wants to save for his guests. Similarly, if he plans to go on vacation, he will tend to use up what he has in the refrigerator and not replace it. Changes in the stock of food in the refrigerator are entirely within the man's power and not a cause for concern.
105. In a free market, all other things being equal, the balance of payments of a country tends toward zero
a. because the effect of a positive balance of payments is to increase the quantity of money in a country that experiences it, while the effect of a negative balance of payments is to decrease the quantity of money in a country that experiences it b. the effect of an increase in the quantity of money in a country is raise the prices of goods produced in that country, while the effect of a decrease in the quantity of money in a country is reduce the prices of goods produced in that country c. the effect of higher prices of goods produced in a country is to discourage exports from it and encourage imports into it, which, in turn, serves to reduce its balance of payments, while the effect of lower prices of goods produced in a country is to encourage exports from it and discourage imports into it, which, in turn, serves to increase its balance of payments; thus positive balances diminish and negative balances increase
d. all of the above taken together
106. In a free market, the balance of payments of a country tends toward zero
a. in the absence of further changes in the world's quantity of money
b. in the absence of further changes in the relative size of the economies of the different countries
c. in the absence of further changes in the specific needs for cash holdings in the various countries, such as the degree of security of property and the development of financial institutions and financial markets in the various countries
d. all of the above taken together
107. It follows from the principle that the balance of payments of a country tends toward zero a. that a unilateral tariff reduction by a country and any resulting surge in its imports would soon be followed by a diminution of the increase in its imports and an increase in its exports, until its balance of payments was in balance-provided that
wage rates and thus costs and prices in that country were free to fall
b. that in a country in which wage rates and thus costs and prices were free to fall, the adoption of international free trade, even unilaterally, would not entail any lasting unemployment but a shift in employment from the relatively less efficient production of goods for domestic consumption to the relatively more efficient production of goods for export, with the attendant consequence of a higher standard of living at home and abroad
c. that an essential requirement of being able to adapt to international free trade and its possible consequence of a temporary outflow of money is the absence of legislation aimed at artificially raising wage rates or forcibly maintaining any given level of wage rates
d. all of the above
108. In the light of the proposition that the balance of payments tends toward zero, it follows that if a country pursued a policy of international free trade, while all other countries absolutely and successfully prohibited the importation of its goods, that ultimately that country would cease importing, because the decrease in its money supply and equivalent increase in the money supply of the rest of the world would so reduce the level of wages, costs, and prices in it compared to the level of wages, costs, and prices, in the rest of the world, as to remove the incentive of its citizens to buy anything abroad.

## Invariable Money

109. Depending on circumstances, changes $\overline{\text { in prices reflect }}$
a. changes taking place on the side of goods, such as changes in the supply of various goods and changes in the need or desire for various goods
b. changes taking place on the side of money, notably an increase or decrease in the supply of money or an increase or decrease in the demand for money for holding, such as occurs whenever there is inflation or deflation
c. both (a) and (b)
110. The variability of the value of money coming from the side of money applies even to a pure gold or silver standard-i.e., to a 100 -percent-reserve gold or silver standard-if for no other reason, then because the supply of gold and silver tends steadily to increase as the result of their continued mining and substantially smaller annual loss or disappearance. This serves either to make prices higher from year to year or at least to make them fall by less than they would have in the absence of such change on the side of money.
111. In order for a money to serve as an invariable standard of value, it would have to be such
that changes in prices would reflect exclusively changes operating on the side of goods, not money.
112. The kind of money that would render all changes in the prices of goods having to come from changes on the side of goods and not from changes on the side of money,
a. would be one in which the total annual expenditure to buy newly produced goods-and equivalently, total business sales revenues in selling same-was a fixed, constant amount, such as one trillion dollars or twenty trillion dollars, i.e., any definite, fixed dollar amount
b. A fixed total expenditure for newly produced goods and equivalently fixed total business sales revenues in selling same, would be the result of a fixed quantity of money times a fixed velocity of circulation of money in relation to newly produced goods
c. Under such an invariable money, all changes in the general consumer price level would reflect increases or decreases in the supply of consumers' goods-they would, indeed, be inversely proportionate to such supply changes
d. Under such an invariable money, all changes in the relative prices of individual consumers' goods, such as the price of apples relative to the price of oranges, or the price of both relative to the price of automobiles or steel, would reflect a combination of changes in their relative supplies and in the relative need or desire for them at the margin. (In the case of goods like automobiles and steel, whose prices are typically determined in the first instance on the basis of their cost of production, the relevant supplies and demands are of/for means of production.)
e. Under such an invariable money, a definite elasticity of aggregate demand is implied equal to unity, because a constant expenditure implies that quantity demanded changes in inverse proportion to price-e.g., doubles when the price level halves, halves when the price level doubles f. all of the above
113. The concept of invariable money implies a. that every measure of velocity must remain unchanged
b. only velocity in relation to the demand for newly produced goods must remain unchanged
114. Ricardo believed that in order for gold to serve as an invariable standard of value an ounce of gold would always have to be the product of the same quantity of labor of the same degree of skill and ability.
115. Hazlitt expresses no opinion, explicit or implicit, concerning an invariable money.
116. The concept of an invariable money as a tool of analysis represents the adoption of a procedure analogous to that of mechanics when it conceives of such a thing as the velocity of a moving body as the joint outcome of the operation of separate, distinct forces.
117. The assumption of an invariable money is made, implicitly, by everyone who thinks about economic phenomena on the assumption of all other things being equal, for among those other things is almost always the total volume of spending in the economic system.
118. The concept of invariable money and recognition of the fact that money is not in fact invariable sheds light on the respective roles of a system of fiat paper money and the businessman's profit motive in the causation of the rising prices we have seen almost all around us.
119. Among the uses that will be made of the concept of invariable money in the chapters ahead are a. the isolation of the distinct determinants of the average rate of profit in the economic system b. recognition of important cases in which money income and real income can move in opposite directions
c. analysis of the nature of inflation and deflation
d. analysis of the effect of increases in production and accompanying falling prices on the rate of profit and on the difficulty of repaying debt e. analysis of the role of saving in capital accumulation and of the effect of saving on the average rate of profit
f. analysis of the causes of capital accumulation
g. all of the above

| Questtion\# | Correct Answer | Questtion\# | Correct Answer | Questtion\# | Correct Answer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | a | 41 | F | 81 | T |
| 2 | T | 42 | d | 82 | T |
| 3 | T | 43 | c | 83 | T |
| 4 | T | 44 | c | 84 | T |
| 5 | c | 45 | C | 85 | c |
| 6 | 4.1 | 46 | T | 86 | b |
| 7 | c | 47 | T | 87 | T |
| 8 | d | 48 | T | 88 | T |
| 9 | T | 49 | T | 89 | T |
| 10 | T | 50 | d | 90 | T |
| 11 | 2\% | 51 | T | 91 | T |
| 12 | 35 years | 52 | c | 92 | T |
| 13 | 9 years | 53 | e | 93 | T |
| 14 | T | 54 | T | 94 | T |
| 15 | e | 55 | T | 95 | f |
| 16 | T | 56 | e | 96 | d |
| 17 | F | 57 | T | 97 | d |
| 18 | d | 58 | F | 98 | T |
| 19 | 500\% | 59 | d | 99 | T |
| 20 | c | 60 | c | 100 | T |
| 21 | F | 61 | F | 101 | d |
| 22 | T | 62 | T | 102 | F |
| 23 | T | 63 | d | 103 | T |
| 24 | T | 64 | T | 104 | b |
| 25 | d | 65 | T | 105 | d |
| 26 | d | 66 | e | 106 | d |
| 27 | d | 67 | c | 107 | d |
| 28 | T | 68 | T | 108 | T |
| 29 | e | 69 | F | 109 | c |
| 30 | d | 70 | b | 110 | T |
| 31 | a | 71 | F | 111 | T |
| 32 | T | 72 | F | 112 | f |
| 33 | T | 73 | F | 113 | b |
| 34 | T | 74 | T | 114 | T |
| 35 | T | 75 | c | 115 | F |
| 36 | c | 76 | a | 116 | T |
| 37 | T | 77 | T | 117 | T |
| 38 | T | 78 | b | 118 | T |
| 39 | F | 79 | T | 119 | g |
| 40 | C | 80 | f |  |  |

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## PRODUCTIONISM

## (Chapter 2, Sections 1 - 3, 6 and 8; and Chapter 13, Part A)

1. Productionism holds that the fundamental problem of economic life is how steadily to increase the ability to produce in the face of a limitless need and desire for wealth.
2. Consumptionism holds that man's need and desire to consume are essentially fixed and given, and that the ability to produce threatens constantly to outrun them, with the result that the fundamental problem of economic life is not the production of wealth, but the production of consumption.
3. Productionism is closely connected with a. the quantity theory of money
b. Say's Law of Markets
c. the proposition that a general or absolute overproduction is impossible
d. all of the above
4. Productionism is closely connected with the proposition that
a. the productive process generates an aggregate real demand that is equal to aggregate supply and grows precisely as aggregate supply grows
b. the productive process generates an aggregate monetary demand that in the absence of government interference is sufficient to buy the aggregate supply at a profit
c. what is saved is spent
d. saving is the source of most spending in the economic system and underlies both a growing aggregate real demand for goods and services and a growing aggregate monetary demand for them e. all of the above
5. Productionism is closely connected with a series of further propositions, among them
a. that man's nature as a rational being underlies a limitless need and desire for wealth
b. that the division of labor is essential for a high and rising productivity of labor
c. the law of comparative advantage
d. that real wages and thus the average worker's standard of living are determined by the productivity of labor
e. all of the above

## 6.

a. The leading philosophic basis for consumptionism, that has become increasingly more influential in recent decades, is the belief that man is fundamentally no different than the lower animals and thus does not have fundamental needs that extend beyond theirs.
b. When confronted with the fact that man's desires obviously do extend beyond the range of an animal's, consumptionists can be expected to reply that this is the result of "social and cultural conditioning" and the work of advertisers and that
the desires are "unnatural," "artificial," and "created."
c. both (a) and (b)
d. neither (a) nor (b)
7. Every increase in the demand for the product of a particular industry that is based on the need or desire for its product intensifying and thus pushing ahead of the needs and desires for the products of other industries and coming to the forefront, must be accompanied by an equivalent decrease in the demand for the products of other industries.
8. The need and desire for goods count in de$\overline{\text { mand only insofar as they operate to determine to }}$ which of various possible competing alternatives demand is directed.
9. To those concerned only with a particular industry, it correctly appears that because any given industry, at one time or another, could experience an increase in demand by virtue of the need or desire for its product gaining in priority relative to the need and desire for the products of other industries, that all industries might gain in this way at the same time.
10.
a. The preceding question describes a case of adding up as additional demands what are in fact a series of mutually exclusive alternatives, each of whose individual existence is predicated on an equivalent decline in demand in the rest of the economic system.
b. The preceding question is an example of what logicians call "the fallacy of composition," that is, invalidly generalizing from what occurs in part of a system to the system as a whole.
c. both (a) and (b)
11. Businessmen who think of the effect of things exclusively on their own company or industry and not, at the same time, on the rest of the economic system, are easily led to the conclusion that
a. what is required to increase demand in the economic system is the creation of additional needs and desires
b. what explains low profits in the economic system is too much production
c. are often led to accept a consumptionist view of things on the basis of misinterpreting their experience
d. all of the above
12. In contrast to the businessmen described in the previous question, those who look at the effect of things not only on an individual company or industry but also on the rest of the economic system realize that
a. when the emergence of a greater need or desire for a particular product serves to increase the demand for that product, it simultaneously most likely reduces the demand for some other product or products to the same extent because people's overall means of purchase do not suddenly become greater and there is no reason to suppose that the one thing they will give up is the satisfaction and security they derive from holding the amount of money they presently hold
b. that the role of needs and desires in connection with demand is that the needs and desires that are judged relatively more urgent are satisfied and those that are judged relatively less urgent are not satisfied; that needs and desires overall far exceed people's ability to satisfy them and that more needs and desires do not increase overall demand but merely change its direction, from some things to other things
c. given the total amount of money spent to buy products and the total amount of money spent to produce them, the total amount and average rate of profit in the economic system does not depend on the physical volume of production in the economic system and is not reduced by a larger volume of production
d. when the production and sale of a greater supply of any particular product serves to reduce the rate of profit that is earned on the product, the actual reason is that the product has gotten into a situation of relative oversupply, i.e., it is being produced too heavily relative to other products, which, in the nature of the case, are being produced in insufficient quantity relative to the product in question and are thereby rendered more profitable to the same extent that this particular product is rendered less profitable e. all of the above
13. Businessmen who think of the effect of things exclusively on their own company or industry and not, at the same time, on the rest of the economic system, are often led to accept a consumptionist view of things on the basis of misinterpreting their experience.
14. In contemporary terms the proposition of Adam Smith that "the desire of food is limited in every man by the narrow capacity of the human stomach; but the desire of the conveniences and ornaments of building, dress, equipage and household furniture seems to have no limit or certain boundary" can be stated as "The man who has no automobile would like to be able to afford one. The man who has an automobile would like to be able to afford a newer, better one. The man who has several new automobiles of the highest quality would like to be able to afford a yacht or a plane. If he is rich enough to afford both a yacht and a plane, then he would like to be able to afford a yacht on which the plane can land, and so on."
15. The sense in which one can legitimately $\overline{\text { say that a lack of desire for wealth constitutes an eco- }}$ nomic problem is that
a. it renders demand inadequate to purchase the supply
b. it deprives people of the motive to work and produce
16. Among the philosophical convictions $\overline{\text { that must }}$ be present to induce people to desire additional wealth strongly enough to go out and actually produce it are
a. those underlying limited government, economic freedom, and the security of property b. the conviction that the material world is fully real and operates according to causal laws that man's mind can grasp and apply
c. that the individual is a self-responsible causal agent capable of improving his life in the future by means of his actions in the present d. all of the above
17. The fundamental basis in human nature $\overline{\text { for the desire for goods outstripping the willingness }}$ and ability to produce goods is
a. the success of the advertising industry in inculcating the conviction that more is better than less and that big is better than small b. the cultural heritage of the society in which we live, with its emphasis on material achievement irrespective of the cost to the environment
c. the limitless range of the mental in comparison with the physical and thus the fact that the range of our imaginations is always incomparably greater than the power of our arms d. all of the above
18. The desire for goods continues to outstrip the willingness and ability to produce goods no matter what the advances in the ability to produce because
a. the advertising industry never sleeps
b. the cultural heritage of the society in which we live always demands more from us c. no matter how much we may augment the power of our arms by means of tools and machinery, at the same time, as part of the same process, we augment the power of our imaginations, in that the new knowledge required to provide the tools and machines also opens up new vistas in terms of what can be produced
d. all of the above
19. The fundamental basis in human nature for man's need for goods having no limit is a. man's possession of reason gives him the potential for a limitless range of knowledge and awareness, hence of action and experience
b. goods are the material means of acting and experiencing
c. both (a) and (b)
d. neither (a) nor (b)
20. There is an inherent, ineradicable scarcity of human labor because
a. there is a limitless need and desire for goods and services
b. human labor is always the limiting factor in the production of goods and services
c. both (a) and (b)
21. The scarcity of labor in relation to the goods and services we would like to have is indicated by the fact that practically everyone would like to earn five or more times the income he now earns
a. and that to earn this income at his present rate of pay for a forty-hour week, he would have to work more hours than there are in the week
b. and that to produce the goods and services that would constitute a five-or-more-times higher level of real income in the present state of technology and productivity of labor, five or more times the labor would have to be employed than is now employed
c. both (a) and (b)
22. We could work ourselves into the hospital from exhaustion long before we could produce all the goods and services we would like to have.
23. Each of us is easily capable of forming desires whose fulfillment requires the labor of multitudes, and yet by the laws of arithmetic, the average member of any society can never obtain more than the labor, or products of the labor, of just one person.
24. The fundamental and essential nature of economic life is this: the need and desire for additional wealth are there and the nature-given means of producing it are there; all that is lacking is the ability of human labor to transform the nature-given means of production into additional wealth.
25. The adoption of labor-saving machinery is held to be a cause of unemployment on the basis of the belief that
a. there is a fixed, limited need and desire to consume
b. the higher productivity of labor that improved machinery makes possible causes the ability to produce at the point of full employment to exceed the allegedly fixed, limited need and desire to consume
c. the supply of goods and services corresponding to the allegedly fixed, limited need and desire to consume can be produced with a correspondingly smaller quantity of labor as improvements in machinery take place
d. all of the above
26. According to Hazlitt, the effect of ma-
chinery is
a. to cause unemployment
b. to cause additional employment
c. to increase production and raise the standard of living
27. The belief, at the core of consumption-
$\overline{\text { ism, that }}$ man's need and desire for wealth is fixed, implies that
a. there is only a fixed stock of work to be done in the world
b. that improvements in machinery reduce the work available to be done by people
c. that to the extent that the members of some groups obtain additional employment, equivalently less employment remains for the members of other groups
d. that it is necessary and valuable to make work
e. all of the above
28. According to Hazlitt, the effect of "spread-the-work" schemes is
a. a reduction in efficiency insofar as they take the form of arbitrary job classifications requiring the employment of unnecessary workers to accomplish a given result, and a reduction of employment elsewhere in the economic system by virtue of people having to pay higher prices to cover the higher costs resulting from the inefficiencies and thereby being deprived of the funds to buy the products of other industries b. a subsidization of previously unemployed workers by workers already employed, insofar as the schemes take the form of a reduction in hours worked per worker, are not accompanied by attempts to offset the reduced hours with higher hourly wage rates, and provided that there are a sufficient number of unemployed in every industry to take up the slack provided by the reduction in hours
c. greater unemployment in the economic system as a whole insofar as the schemes are accompanied by increases in hourly wage rates in order to offset the effects of the reduction in hours
d. all of the above
e. none of the above
29. Consumptionism and its notion that what is scarce is not goods but the need and desire for goods, supports the belief that by increasing the need and desire for goods
a. war and destruction are a source of prosperity, via the greatly enhanced need for weapons production during the war and the need for replacement of damaged or destroyed property that takes place during and after the war
b. a policy of additional peace-time government spending, even if it were for pyramid building, is a source of prosperity by virtue of adding to the need and desire for goods and services and thereby to employment
c. advertising is a source of prosperity, precisely by virtue of its alleged inherent fraud of leading people to desire things that they do not really need, because in so doing it adds to the demand for goods and labor
d. a higher birthrate is a source of prosperity, by creating new and additional consumers, each one with his respective new and additional desiresprovided the new and additional consumers do not attempt to work and produce and thereby add to the supply of labor and ability to produce as much as they add to the supply of needs and desires e. a policy of imperialism is a source of prosperity by virtue of adding to the outlet for goods the needs and desires of large numbers of desperately poor potential consumers
f. all of the above
30. In his discussion of "the blessings of destruction" Hazlitt
a. refers to the belief that many people have that war and destruction are sources of prosperity b. describes the confusion between need and demand
c. describes the confusion between more money and more purchasing power
d. illustrates the mistaken habit of looking only at part of the economic picture rather than the whole e. all of the above
31. Consumptionism's notion of a limited $\overline{\text { need and }}$ desire for goods lead to the belief that a. the presence of great wealth in a country is a liability, in that it represents the using up of the allegedly limited stock of needs and desires for wealth, thereby leaving the country relatively poor in terms of its remaining stock of unmet needs and desires for wealth and thus in its ability to support employment and production b. the absence of wealth in a country is an asset, in that it represents a correspondingly limited using up of the allegedly limited stock of needs and desires for wealth, thereby leaving the country relatively rich in terms of its remaining stock of unmet needs and desires for wealth and thus in its ability to support employment and production
c. both (a) and (b)
d. neither (a) nor (b)
32. The actual effect of government spending on employment and prosperity is
a. to increase demand and employment in certain lines
b. to equivalently reduce demand and employment in other lines
c. to deprive the individual taxpayer of the power to decide how his income shall be spent
d. all of the above
33. Hazlitt believes that war and government spending undertaken for the purpose of stimulating employment
a. reduce the average standard of living
b. cause unemployment
c. both (a) and (b)
34. According to consumptionism, a larger population contributes to prosperity by virtue of
a. increasing a country's ability to produce
b. increasing a country's need and desire to consume
c. increasing a country's need and desire to consume and not increasing its ability to produce
d. all of the above
35. The actual effect of an increase in population on aggregate demand is
a. to divert aggregate demand from lines serving the needs of adults to lines serving the needs of children, in the period when the larger population is in its childhood
b. to increase overall aggregate demand in the period when the larger population is in its childhood only insofar as parents are led to work and produce more in order to be able to provide for their children without suffering an equivalent reduction in what they provide for themselves
c. to increase overall aggregate demand when the larger population reaches adulthood insofar as the additional people go to work and enlarge the total of what is produced
d. all of the above
36. The consumptionist belief in the existence of a fixed need and desire for goods leads to the belief that
a. the opening up of export markets, especially to poor countries, is helpful to employment by enabling the country's labor force to serve the needs and desires of additional people
b. the increase in imports reduces the extent to which the needs and desires of the country's population are served by its own labor force and correspondingly reduces employment opportunities for that labor force
c. the ideal arrangement in foreign trade from the point of view of promoting employment in the country is to export as much as possible and import as little as possible
d. all of the above
37. The notion of a fixed need and desire for $\overline{\text { goods leads to the belief that the gain from foreign }}$ trade is in importing, not exporting.
38. Advertising is inherently fraudulent, according to consumptionism, because it attempts to lead people to desire goods and services that, according to consumptionism's very limited theory of needs, they have no rational basis for desiring.
39. The actual relationship between advertising and aggregate demand is
a. advertising diverts demand from some lines to others by making people aware of the alternatives b. advertising increases aggregate demand insofar as it leads people to work and produce more in
efforts to earn the additional income to buy the advertised goods
c. both (a) and (b)
40. The belief that falling prices are deflation a. implies that increases in production cause depression and thus unemployment
b. represents support for consumptionism
c. both (a) and (b)
41. The role of technological progress in relation to capital accumulation is
a. to provide new and additional uses for an expanding supply of capital goods that results from saving
b. to keep up the rate of profit and interest in the face of an expanding supply of capital goods that results from saving
c. both (a) and (b)
d. that of a major source of capital accumulation
42. According to consumptionism, technological progress
a. raises the rate of profit and interest by provid-
ing new and additional investment opportunities
b. increases the supply of consumers' goods, thereby causing falling prices and deflation c. both (a) and (b)
43. Consumptionism claims that a. the gain from foreign trade is in the exports, not the imports
b. the gain from an increase in population is in the additional people's need and desire to consume, not in their contribution to production c. nonproducing consumers are a source of benefit to producers by providing an excess of consumption over production equal to the producers' alleged deficiency of consumption d. all of the above
44. Acceptance of the consumptionist prem$\overline{\text { ise leads serious people to regard capitalism as flawed }}$ by fundamental paradoxes and thus to be prone to seek an alternative.
45. In the light of his views on the economic effects of war and pyramid building, Keynes must be classified as a productionist.

## SAY'S LAW (Chapter 13, PARTB)

46. Monetary demand is
a. the goods and services the monetary demand actually buys
b. the amount of expenditure of money
47. Real demand is the amount of money re$\overline{\text { ally spent }}$ in the purchase of goods and services.
48. Real demand is
a. the monetary demand adjusted for the wage and price level
b. the quantity of goods and services that the monetary demand, whatever it is, is capable of actually buying
c. both (a) and (b)
49. An example of a monetary demand is
a. one trillion dollars
b. one billion dollars
c. ten trillion dollars
d. one hundred dollars
e. all of the above
50. The cause of a steadily rising aggregate monetary demand is
a. an increase in the quantity of money
b. an increase in the production of ordinary goods and services, such as shoes and television sets
51. A smaller monetary demand can constitute a larger real demand if prices are more than proportionately lower.
52. Increases in production and supply create real demand by virtue of a. raising the level of money incomes and thereby increasing purchasing power b. driving down prices and increasing the buying power of any given level of income and expenditure
53. Over a period of years, the quantity of money and volume of spending in the economic system double. Over the same period of years, aggregate production and supply remain constant.
a. state the change in aggregate monetary demand
b. calculate the change in the general consumer price level using the formula $\mathrm{P}=\mathrm{D}_{\mathrm{c}} / \mathrm{S}_{\mathrm{c}}$
c. calculate the change in aggregate real demand
54. Over a period of years, the quantity of money and volume of spending in the economic system double. Over the same period of years, aggregate production and supply also double.
a. state the change in aggregate monetary demand
b. calculate the change in the general consumer price level using the formula $\mathrm{P}=\mathrm{D}_{\mathrm{c}} / \mathrm{S}_{\mathrm{c}}$
c. calculate the change in aggregate real demand
55. Over a period of years, the quantity of money and volume of spending in the economic system remain constant. Over the same period of years, aggregate production and supply double.
a. state the change in aggregate monetary demand
b. calculate the change in the general consumer price level using the formula $\mathrm{P}=\mathrm{D}_{\mathrm{c}} / \mathrm{S}_{\mathrm{c}}$
c. calculate the change in aggregate real demand
56. Increases in production and supply are es$\overline{\text { sential to create more real demand, because }}$
a. increases in monetary demand taken by them-
selves serve merely to raise prices in the same proportion, with the result that the larger monetary demand buys no more, i.e., constitutes no more real demand, than did the smaller monetary demand before it
b. only to the extent that there is an increase in production and supply will an increase in monetary demand be able to represent an increase in real demand, because only to that extent will prices not rise by as much as the increase in monetary demand
c. both (a) and (b)
57. In the absence of more monetary demand, increases in production and supply create more real demand by means of driving down prices and correspondingly enlarging the purchasing power of the same amount of monetary demand.
58. Increases in production and supply are both necessary and sufficient to create more real demand.

## 59. Say's Law most closely relates to

a. supply
b. demand
c. real demand
d. aggregate real demand
e. aggregate real demand as determined by aggregate supply
60. In a barter economy, the producers of potatoes, a good faced with an inelastic demand, double their production and supply, with the result that the exchange value of potatoes falls by more than half, say, to one-third.
a. As a result, the supply of goods offered in exchange for potatoes is now only two-thirds as large as before and thus there is a one-third fall in the real demand for potatoes caused by the doubling of their supply.
b. Aggregate real demand in the economic system as a whole, however, does not fall as the result of the fall in the real demand for potatoes, because the goods that the producers of things other than potatoes no longer exchange with the potato growers, they exchange with each othere.g., the reduced demand for potatoes in terms of shirts is offset by an enlarged demand for shoes, eggs, bars of iron, etc., in terms of shirts, and similarly for all the other goods in terms of which the demand for potatoes has fallen; i.e., the fall in the other-goods demand for potatoes is offset by an equivalent rise in the other-goods demand for other goods.
c. The doubled supply of potatoes constitutes a doubled potato demand for other goods.
d. All elements of the matter considered, the doubled supply of potatoes is accompanied by a precisely equivalent increase in economy-wide, aggregate real demand.
61. The losses of the potato growers in the preceding question are more than offset by the gains of producers in the rest of the economy because
a. the reduction in the real demand for potatoes is accompanied by an equivalent rise in the real demand for goods other than potatoes
b. the real demand for goods other than potatoes is also increased to the extent of the increase in the supply of potatoes
c. both (a) and (b)
62. In the case of an inelastic industry de$\overline{\text { mand for }}$ an individual good, such as potatoes, an increase in supply serves to reduce the volume of goods received by the producers in the industry concerned. Consequently, there is a reduction in the real demand for the products of this industry as the result of the increase in their supply and therefore Say's Law does not hold up in this case.
63. In the case of an inelastic industry de$\overline{\text { mand for an individual good, such as potatoes, an in- }}$ crease in supply serves to reduce the volume of goods received by the producers in the industry concerned.
a. Consequently, there is a reduction in the real demand for the products of this industry as the result of the increase in their supply.
b. There is nonetheless an increase in aggregate real demand that is precisely equivalent to the increase in aggregate supply in the economy as a whole.
c. both (a) and (b)
64. In a monetary economy, once again the supply of a good confronted with an inelastic demand, such as potatoes, doubles. The result is that this time the money price of the good falls by more than half, again, for the sake of simplicity, say, to one-third. The result is
a. the potato growers take in two thirds the money they previously took in b. producers in the rest of the economy take in equivalently more money, as the buyers of potatoes now spend one-third of the money they used to spend in buying potatoes in buying goods other than potatoes
c. the same total aggregate monetary demand is now a larger real demand to the extent that the increase in the supply of potatoes constitutes an increase in total aggregate supply
d. all of the above
65. Even though an industry as a whole may lose when its supply increases, the individual producers within the industry who are responsible for the increase in its supply can nevertheless gain at the expense of a still greater loss on the part of the produc-
ers in the industry who have not increased their production.
66. If gradual, the adoption of improvements in the ability to produce can be accompanied by gains to all who adopt them, while the accompanying losses to the industry as a whole are suffered exclusively by the producers who fail to adopt the improvements.
67. The potato growers, who initially lose as the result of the doubling of the supply of potatoes, will
a. never be able to make up their loss
b. later on be able to gain from the improvement in the ability to produce potatoes
c. gain from the improvement in the ability to produce potatoes once enough potato growers leave potato growing and move into other lines of production
d. all of the above
68. Examples concerning the potato industry are provided
a. to convey information about the potato industry
b. as an illustration of the conditions faced by any industry with an inelastic demand for its products
c. both (a) and (b)

## The following six questions belong together, with later questions presupposing the context established by the earlier questions.

69. We start with a situation in which an industry confronted with an inelastic demand-again, for the sake of illustration, the potato industry-has increased its production, with the result that its sales revenue and the total income of its members have been reduced. In response to their lower incomes, some of the potato growers will give up potato growing and relocate in other industries, in which incomes have actually been elevated as part of the same process which has depressed the incomes of the potato growers. As a result of their movement into other lines
a. the production of potatoes will decline and the price of potatoes will rise
b. the incomes of the remaining potato growers will increase
c. the income of producers in industries outside of potato growing will decline somewhat as the result of the influx of former potato growers
d. all of the above
70. The process of adjustment described in the preceding question will go on until the incomes of the remaining potato growers are once again on a par with those outside of potato growing.
71. Meanwhile, though having risen from its low of one-third, the price of potatoes settles at a level far below its original level of one. In fact, if the dou-
bling of the supply of potatoes was brought about by virtue of the average potato grower being able to produce twice as many potatoes with the same labor as before, the price of potatoes will tend to settle at a price of one-half of its initial price, since at that price the remaining growers' incomes will come all the way back up to where they were before the increase in the supply of potatoes.
72. In the new equilibrium, assuming there has been no increase in the quantity of money and volume of spending, the potato growers, ex-potato growers, and those who never were potato growers all end up with their initial money incomes, buy potatoes at half the initial price, and, to the extent that they buy less than twice the quantity of potatoes as originally, spend less money in buying potatoes, and with the money left over from the purchase of potatoes are able to afford more of other goods. An expanded production of these other goods is made possible precisely on the foundation of labor released from potato growing.
73. The overall, long-run result of the increase in the ability to produce potatoes is that those who remain in potato growing come out ahead, the ex-potato growers come out ahead, and those who were non-potato growers from the beginning come out ahead.
74. The initial doubling in the supply of potatoes, when judged from the perspective of the final equilibrium, represents a
a. a relative overproduction of potatoes
b. a relative underproduction of goods other than potatoes
c. both (a) and (b)
75. If the production of everything-from matches and salt to swimming pools and yachts-suddenly doubled overnight
a. a general overproduction would exist
b. as much under production would exist as overproduction
c. both (a) and (b)
76. "'Overproduction' is never partial and relative, but always general and absolute."
77. The economic system benefits even from an increase in the ability to produce goods with which people may already be fully sated, such as table salt. The source of the benefit in such a case is the ability to reduce the amount of labor applied to the production of the good with which people are sated and thus to have additional labor available to expand the production of other goods, with which, for the most part, people are very far from being sated.
78. The concentration of an increase in the $\overline{\text { ability to }}$ produce in the particular industry in which it originates often represents a less efficient use of the improvement than is possible if that particular industry expands less than the full amount by which the im-
provement would allow it to expand, and allows other industries to expand instead.
79. In the preceding question what decides which is the more efficient use is the marginal utility of additional supplies of the products of the industry where the improvement in efficiency takes place compared with the marginal utility of additional supplies of other products that could be produced in larger quantity if the necessary additional labor were made available from this industry. The relative marginal utilities determines the relative prices and profitability of the different products as their supply is increased.
80. What appears as an overproduction in an individual industry would often cease to appear as an overproduction if other industries could increase their production sufficiently.
81. The belief that a fall in general business profitability is the result of too much production reflects the fallacy of composition.
82. The general profitability of business a. depends on the difference between aggregate sales revenues and aggregate costs
b. is independent of the level of physical production of ordinary goods, that is, of goods other than the monetary commodities gold and silver on a precious metal standard
c. both (a) and (b)
83. The profitability of an individual industry is not independent of its level of physical production and will
a. decline as its production increases
b. decline as its production increases insofar as the increase in its production causes a decline in the marginal utility of its products relative to the marginal utility of products elsewhere in the economic system that can be produced with the same means of production
84. The profitability of an individual industry will not decline in the face of an increase in its production if at the same time the production of other industries increases to the point of equivalently reducing the marginal utility of their larger supplies.
85. The profitability of business in the aggregate depends on
a. the level of physical production in the economic system
b. the difference between the dollar amount of sales revenues and the dollar amount of costs irrespective of the level of physical production
86. The difference between the dollar amount of sales revenues and the dollar amount of costs is roughly equal to the difference between the demand for consumers goods and the demand for labor, i.e., to net consumption.
87. The sharp decline in profits and the greater difficulty of repaying debts that are the hallmarks of depressions are the result of
a. falling prices caused by increased production
b. a monetary contraction resulting in a decline in aggregate sales revenues

## UNEMPLOYMENT (Chapter 13, Part C)

88. The repeated existence of long periods of mass unemployment proves that
a. there is no inherent, ineradicable scarcity of human labor
b. money wage rates can often be unduly high relative to the demand for labor for protracted periods
89. In a free labor market the existence of unemployment operates to drive down money wage rates by virtue of the competition of the unemployed for jobs and the desire of employers to take advantage of being able hire equally good but unemployed workers at lower wage rates.
90. In a free labor market the existence of unemployment is self-liquidating insofar as the reduction in money wage rates it brings about operates to increase the quantity of labor demanded.
91. In a free labor market the existence of unemployment automatically tends to reduce money wage rates to the level required to achieve full employment.
92. The fall in wage rates brought about in a free labor market in the process of eliminating unemployment is a fall not only in money wage rates but also an equivalent fall in real wage rates, i.e., in the buying power of the worker's wages.
93. The fall in money wage rates brought about in a free labor market in the process of eliminating unemployment is not accompanied by a fall in real wage rates insofar as prices also fall and insofar as the burden of supporting the unemployed is reduced.
94. If, in the process of eliminating unemployment, output per worker remains the same, it follows that the increase in employment would be accompanied by a proportional increase in the production and supply of consumers' goods and thus, assuming constant monetary demands both for consumers' goods and for labor, a fall in the prices of consumers' goods proportional to the fall in wage rates.
95. Real wages actually rise in connection with the fall in money wages that is necessary to achieve full employment
a. if the increase in production and fall in prices is approximately the same as the increase in employment and fall in wage rates
b. by virtue of the elimination of the burden of supporting the unemployed
c. both (a) and (b)
96. The fall in wage rates and prices that is necessary to eliminate unemployment in a free labor market results in a reduction in the average rate of profit in the economic system.
97. In a context in which the aggregate demands for consumers' goods and labor remain the same, albeit at a lower level following a financial contraction, the fall in wage rates and prices that is necessary to eliminate unemployment does not result in a fall in the aggregate amount or average rate of profit in the economic system. This is because the difference between a given amount of demand for consumers' goods and a given amount of demand for labor implies a more or less unchanged difference between aggregate sales revenues and aggregate costs, hence a more or less unchanged amount of aggregate profit.
98. In a context in which the aggregate demands for consumers' goods and labor remain the same, increases in the production and supply of consumers' goods
a. reduce prices in inverse proportion
b. reduce unit costs in inverse proportion
c. reduce profits per unit in inverse proportion
d. leave total, aggregate profits unchanged because the reduction in profit per unit is offset by the increase in the number of units
e. all of the above
99. Since mass unemployment would be eliminated by a fall in wage rates, which would increase the quantity of labor demanded, it follows that anything that stands in the way of a fall in wage rates operates to perpetuate mass unemployment.
100. Among the obstacles that have stood in the way of a fall in wage rates and the achievement of full employment are
a. minimum wage legislation
b. prounion legislation
c. welfare legislation
d. employer altruism
e. executive branch pressure not to reduce wage rates
f. all of the above
101. The fall in wage rates was held back in the early 1930's by the intervention of President Hoover, who at a series of White House conferences obtained the agreement of the leading businessmen of the country not to reduce wage rates. Hoover believed that a fall in wage rates was equivalent to a fall in total wage payments and would thus result in a reduction in consumer spending and a deepening of the depression.
102. The failure of wage rates to fall sufficiently in the early ' 30 s led to a deepening of the depression by causing major postponements of investment spending, awaiting the necessary fall in wage rates. The reductions in investment spending in turn further reduced sales revenues, profits, and the ability of business firms to repay debts, thereby precipitating more bank failures and further declines in the quantity of money and volume of spending in the economic system.
103. When wage rates fall to the full employment point, payroll spending actually tends to increase rather than remain the same, because funds that had been held back from investment spending, awaiting the necessary fall in wage rates, now come out into the spending stream.
104. The sharply higher unemployment rates currently prevailing in France and Germany in comparison with the United States have nothing to do with greater government interference in wage rates in those countries but rather are the result of preparations for the adoption of the Euro currency unit.
105. Governmental encouragement of fiduciary media precipitates mass unemployment by bringing about increases in the level of spending in the economic system that are not sustainable. When spending drops, the quantities of goods and labor demanded at the prevailing level of prices and wages correspondingly falls, resulting in the emergence of corresponding unemployment.
106. Continuous economic progress would a. hold back investment because investments made in the future would be more efficient than investments made in the present
b. would not hold back investment because today's investments would be as much more efficient compared with the investments of the past as the future's investments would be compared with today's
107. The prospect of falling prices due to economic progress should be expected
a. to result in a postponement of consumer spending because of the prospect of being able to buy more cheaply in the future
b. to result in a rise in consumer spending because of the prospect of being materially better off in the future
c. to have no significant overall effect on consumer spending
108. Full employment was not achieved $\overline{\text { under the New Deal in the 1930s, despite a policy of }}$ large-scale money creation and rapid increases in total spending because the far more powerful labor-union movement created under the New Deal was able to increase wage rates at a substantial rate even in the midst of mass unemployment, with the result that the larger payrolls achieved by inflation could not employ corre-
spondingly more labor or, indeed, enough additional labor to make any major headway in eliminating unemployment.
$\qquad$ 109. In principle, a policy of inflating the money supply and thus artificially increasing the volume of spending is unlikely by itself to achieve full employment. This is because if monopoly labor unions and other government intervention prevent unemployment from being eliminated by a fall in wage rates, the same forces will likely operate to cause a rise in wage rates in the face of a rising demand for labor and thus to make the rising demand for labor incapable of eliminating the unemployment.
109. What made possible the achievement of full employment in World War II was
a. the creation of a huge supply of additional needs in the form of the need for tremendous quantities of tanks, aircraft, and numerous other weapons
b. massive wartime inflation of the money supply and consequent rapid increase in the volume of spending in the economic system c. massive wartime inflation of the money supply and consequent rapid increase in the volume of spending in the economic system, coupled with wage and price controls
110. The combination of wartime inflation $\overline{\text { and price }}$ and wage controls made it possible for the increase in spending to represent a more or less corresponding increase in the quantities of goods and labor demanded.
111. The additional employment achieved by $\overline{\mathrm{a}}$ policy of inflation and government budget deficits represents a decline in the standard of living of most people insofar as the reemployed workers are employed in connection with government projects. This is because such workers are remunerated with the output of other people while their own output is of little or no value to those others, being called into being in fact for no other essential purpose than to secure them employment and income.
112. The full employment achieved in World $\overline{\text { War II represented a situation in which roughly half of }}$ the net output of the economic system was consumed in the war effort, e.g., in flying bullets, exploding
bombs and artillery shells, and in the rifles, cannons, tanks, planes, and ships required to fire or launch them. The effect was that while everyone worked and worked long and hard, the average member of the economic system obtained the material benefit of roughly only half of his labor.
113. Many people believed that World War $\overline{\text { II represented a period of prosperity because they mea- }}$ sured their prosperity in terms of the amount of money they earned, which sharply increased as the result of the wartime inflation, and also felt themselves well off because of the unprecedented ease with which they could earn money. The ease with which money could be earned was an effect of the combination of the wartime inflation and price and wage controls, which, together, resulted in substantial shortages of goods and labor, making it very easy to find buyers for practically anything one had to sell.
114. Only the end of World War II and the return to peace made possible full employment with prosperity.
115. Full employment could be achieved and maintained
a. through a monetary system free of contractions
in aggregate spending
b. the establishment of a labor market free of government interference
c. both (a) and (b)
116. Von Mises denies that the fall in money wage rates needed to eliminate unemployment is accompanied by a fall in real wage rates.
117. Depressions are caused by excess inventory accumulation, proving once again that too much wealth can be a cause of poverty.
118. Excess inventories and depressions are both the result of the same cause, namely, inflation in the form of credit expansion.
119. Inventories can be viewed as deficient rather than excessive in a depression insofar as a larger volume of inventories would represent more capital and thereby act as a protection against the widespread bankruptcies that are an essential characteristic of depression.

| Questtion\# | Correct Answer | Questtion\# | Correct Answer | Questtion\# | Correct Answer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PART A |  | 41 | d | 81 | T |
| 1 | T | 42 | C | 82 | C |
| 2 | T | 43 | d | 83 | b |
| 3 | d | 44 | T | 84 | T |
| 4 | e | 45 | F | 85 | b |
| 5 | e | PART B |  | 86 | T |
| 6 | c | 46 | b | 87 | b |
| 7 | T | 47 | F | PART C |  |
| 8 | T | 48 | c | 88 | b |
| 9 | F | 49 | e | 89 | T |
| 10 | c | 50 | a | 90 | T |
| 11 | d | 51 | t | 91 | T |
| 12 | e | 52 | b | 92 | F |
| 13 | T | 53 | $2 \mathrm{x}, 2 \mathrm{x}$, none | 93 | T |
| 14 | T | 54 | 2 x , none, 2 x | 94 | T |
| 15 | b | 55 | none, 1/2, 2 x | 95 | c |
| 16 | d | 56 | c | 96 | F |
| 17 | C | 57 | T | 97 | T |
| 18 | C | 58 | T | 98 | e |
| 19 | c | 59 | e | 99 | T |
| 20 | c | 60 | d | 100 | f |
| 21 | c | 61 | c | 101 | T |
| 22 | T | 62 | F | 102 | T |
| 23 | T | 63 | c | 103 | T |
| 24 | T | 64 | d | 104 | F |
| 25 | d | 65 | T | 105 | T |
| 26 | c | 66 | T | 106 | b |
| 27 | e | 67 | c | 107 | c |
| 28 | d | 68 | b or c | 108 | T |
| 29 | f | 69 | d | 109 | T |
| 30 | e | 70 | T | 110 | c |
| 31 | c | 71 | T | 111 | T |
| 32 | d | 72 | T | 112 | T |
| 33 | a | 73 | T | 113 | T |
| 34 | c | 74 | c | 114 | T |
| 35 | d | 75 | b | 115 | T |
| 36 | d | 76 | F | 116 | c |
| 37 | F | 77 | T | 117 | F |
| 38 | T | 78 | T | 118 | F |
| 39 | c | 79 | T | 119 | T |
| 40 | c | 80 | T | 120 | T |

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## Chapter 14, Part A

1. According to the exploitation theory, capitalism is a system of virtual slavery, serving the narrow interests of a comparative handful of "exploiters"-the businessmen and capitalists-who, driven by insatiable greed and power-lust, exist as parasites upon the labor of the masses.
2. The essential claim of the Marxian exploitation theory is that all income naturally and rightfully belongs to the wage earners, but that under capitalism the wage earners receive only bare, minimum subsistence, while everything over and above this is expropriated by the capitalist exploiters in the form of profits, interest, and land rent, or, in the terminology of Marx, "surplus-value."
3. Marx's "absolutist" version of the labor theory of value differs in many ways from the labor theory of value of the classical economists.
4. Marx's "absolutist" version of the labor theory of value ignores the role of
a. demand and supply
b. time
c. the rate of profit
d. differences in the value of labor
e. all of the above
in determining the relative value of commodities
5. Marx's "absolutist" version of the labor theory of value
a. claims that the quantity of labor directly or indirectly expended to produce a product is the one and only circumstance governing its value
b. implies that newly fermenting grape juice and 10-year old wine made from such grape juice must have the same value, if they are products of the same quantity of labor
c. implies that the only thing which can explain why one product is more valuable than another is that it is the product of a larger quantity of labor d. implies that the products of a fully automated factory would not differ in value from the capital goods consumed to produce them
e. implies that the only thing which explains why a product is more valuable than the capital goods that have been consumed in its production, and whose value passes over into it without increase or decrease, is the application of fresh labor in producing the product
f. all of the above
6. Marx's version of the labor theory of value implies that all value is added exclusively by the application of fresh labor.
7. The Marxian version of the "iron law of wages" claims that wages are determined by the quantity of labor required to produce the commodities constituting the wage earner's minimum subsistence.
8. Profit or "surplus value," according to Marx, is caused by virtue of the wage earner adding to the value of the capital goods he uses up in production a value corresponding to the number of hours of his labor, while he is paid a wage that corresponds only to the smaller number of hours required to produce his necessities.
9. According to Marx
a. "surplus value" embraces profits, interest, and land rent (i.e., all incomes other than wages and salaries)
b. necessary labor time is the time required to produce the wage earner's necessities (minimum subsistence)
c. surplus labor time is the amount of time by which the working day exceeds the necessary labor time
d. surplus value corresponds to surplus labor time
e. all of the above
10. According to Marx, capital has two components: "variable capital" and "constant capital."
11. According to Marx, constant capital a. is the capital invested in materials, machinery, and structures
b. passes over into the product with no alteration in its value
c. is not value creating
d. all of the above
12. According to Marx, "variable capital" is a. the part of capital that pays wages
b. value creating in that the wages it pays correspond only to the number of hours of labor required to produce the wage earner's necessities, while the number of hours of labor obtained for those wages is the larger number of hours represented by the full working day
c. the source of profit or "surplus value"
d. all of the above
13. According to Marx, the "rate of exploitation" equals the ratio of
a. profits to wages
b. "surplus value" to "variable capital"
c. "surplus labor time" to "necessary labor time"
d. all of the above

## The following is a seven-part question.

You are given the following assumptions: The working day is 12 hours. "Necessary labor time" is 6 hours. The labor time embodied in the materials and machinery and other fixed capital used up is 48 hours. To each hour of labor embodied in a product, there corresponds $\$ 1$ of product value.
$\qquad$ 14. Calculate "surplus labor time."
$\qquad$ 15. Calculate "the rate of exploitation."
$\qquad$ 16. Calculate the daily wage in dollars.
17. Calculate the monetary value of the product.
18. Calculate the monetary cost of producing the product.
19. Calculate the monetary profit in producing the product.
20. The monetary profit is
a. the same as
b. greater than
c. less than
the monetary value of the "surplus labor time."
21. According to the Marxian exploitation theory, profit rests on the same foundation as the gains of a slave owner, namely, the worker's ability to work for more hours than is required to produce his subsistence or products of equivalent exchange value.
22. According to Marx,
a. the wage earner under capitalism is free only nominally; in substance he is a slave
b. the capitalist is essentially the same as a slave owner or feudal aristocrat
c. all of human history is the record of one continuous class struggle
d. all of the above
23. According to Marx, all improvements in production either pass the wage earners by, to the extent they occur in goods that remain beyond the wage earners' reach, or are the occasion for a cut in wage rates to correspond to the lower price of their necessities.
24. Marxism implies that under laissez-faire $\overline{\text { capitalism, business publications would feature a set of }}$ financial statistics that they presently do not carry, namely, the prices of the things constituting the wage earner's minimum necessities, such as mud cabin rentals and the price of loin-cloths and the very cheapest bread, to which the capitalists would peg wages, quickly reducing them every time the prices of such necessities fell.
25. Marx's doctrine of the progressive impoverishment of the masses holds that under capitalism, wages decline from subsistence to sub-subsistence-that "capitalism cannot maintain its slaves even in their slavery."
26. The basis of the doctrine of the progressive impoverishment of the masses is supposedly
a. the fact that the capitalists are more calculatingly greedy than previous exploiters
b. the tendency toward a declining rate of profit as capital is accumulated, predominantly in the form of constant capital

## c. both (a) and (b)

The following is a three-part question. Assume that initially the total capital invested in the economic system is 100 monetary units, of which 25 is "variable capital" and 75 is "constant capital," and that the "rate of exploition" is 100 percent. In addition, assume that while everything else remains the same, the total capital invested in the economic system doubles over a period of years and that the entire increase in the amount of capital invested is in the form of constant capital.
27. Calculate the initial average rate of profit in the economic system.
28. Calculate the average rate of profit in the economic system after the doubling of capital invested.
29. According to Marx, in order to forestall such a declining rate of profit, the capitalists will raise the rate of exploitation by such means as
a. reducing hourly wage rates, thereby necessitating a longer working day and thus the working of additional surplus labor time and the corresponding creation of additional surplus value b. reducing hourly wage rates to the point of rendering the labor of the adult male worker insufficient to support his family and necessitating that the labor of his wife and children be added to his labor, with a corresponding creation of still more surplus labor time
c. speeding up the general pace and intensity of work, in order to reduce the number of hours of labor required to produce the wage earner's minimum necessities and thereby again increase surplus labor time and surplus value
d. cheapening the wage earner's diet, say, by substituting for relatively expensive wheat bread such cheaper items of food as potatoes or rice e. all of the above
30. The influence of the exploitation theory is present in people's beliefs about the functioning of a. the present, highly interventionist, welfarestate economic system
b. laissez-faire capitalism, under which there would be no minimum-wage, maximum-hours, pro-union, or child-labor legislation
c. the economic system in the 19th Century and the early part of the 20th Century, when there were no such laws as described in (b)
d. all of the above
e. (b) and (c) but not (a)
31. The Marxian exploitation theory is the basis on which people understand both the very bad economic conditions of the past and the source of their improvement, namely, the lack of government economic intervention under laissez-faire and its subsequent progressive introduction.
32. People believe for the most part that
a. the wage increases caused by unions and mini-mum-wage laws come out of profits and correspondingly benefit the average worker, i.e., in effect represent forcing employers to proceed as though the necessary labor time were greater, with the result merely that surplus labor time and surplus value are less
b. maximum-hours and child-labor legislation are at the expense merely of profits and represent a corresponding benefit for the average wage earner, i.e., in effect represent a reduction merely in surplus labor time and surplus value c. both (a) and (b)
33. From the perspective of Marxism, the confiscatory taxation of profits, interest, dividends,
capital gains, and land rents represents "the expropriation of the expropriators."
34. The Marxian exploitation theory underlies the present-day "liberals"" beliefs
a. concerning the effects of minimum-wage, prounion, maximum-hours, and child-labor legislation b. their belief in the justice of the confiscatory taxation of the capitalists' incomes and the use of the proceeds to support social welfare spending, which arrangement they regard as constituting a measure of restitution to the victims of "exploitation"
c. both (a) and (b)

## Chapter 14, Part B, The Productivity Theory of Wages

## 35. The exploitation theory appears plausible because

a. wage earners need to work in order survive and are willing, if necessary, to work for minimum subsistence rather than die of starvation b. employers, like all other buyers, prefer to pay less rather than more
c. when (a) and (b) are taken together, it appears that in the absence of government intervention, wage rates would plunge to the minimum-subsistence level before encountering any resistance to their fall
d. all of the above
36. The need of wage earners to work and their willingness to work for minimum subsistence if necessary is irrelevant to the wages they must actually accept because human labor is fundamentally scarce and its price, like that of any scarce good, is determined by the competition of buyers, in this case employers, for the limited supply.
37. The desire of employers, like all other buyers, to pay less rather than more, i.e., lower wages rather than higher wages, is also irrelevant to the wages the workers must actually accept, because the rational self-interest of employers and all other buyers is not to attempt to pay the lowest price or wage they can imagine or would desire, such as minimum subsistence, but merely the lowest price or wage that is simultaneously too high for any other employer or buyer who would otherwise obtain the labor or good in question.
38. As wage rates fall below the free-market equilibrium level, a growing labor shortage develops, which makes it to the self-interest of employers desiring to employ more workers and keep the workers they have, to bid wage rates back up to the free-market equilibrium level.
39. A higher price or wage is never to the self-interest of a buyer/employer, as shown by the fact that it never pays a bidder at an auction to raise his bid.
40. A higher price or wage is to the self-interest of a buyer/employer when it serves to make the item too expensive for some other potential buyer/employer who otherwise would obtain it instead.
41. Money wage rates are determined by the utility and scarcity of labor on the one side and the quantity of money and volume of spending in the economic system on the other.
42. The fall in wage rates required to eliminate unemployment
a. opens up the possibility of wages having to go to subsistence as the condition of achieving full employment
b. is accompanied by more production and supply and also lower unit costs, either or both of which imply lower prices as the accompaniment of the lower wage rates and at the same time eliminates the burden of having to support the unemployed and thus actually tends to raise real take-home wage rates

## The next 15 questions belong together and require the use of the wage and price-level formulas. The first twelve of these questions represent four groups of three questions each.

The following is a three-part question. Assume that the quantity of money and thus the aggregate monetary demands for consumers' goods and labor both double, while the supply of labor, the productivity of labor, and the supply of consumers' goods all remain the same.
43. What is the change in the general consumer price level?
44. What is the change in average money wage rates?
45. What is the change in average real wage rates?

The following is a three-part question. Assume that the quantity of money, the aggregate monetary demands for consumers' goods and labor, and the supply of labor all remain the same, while the productivity of labor and thus the supply of consumers' goods double.
46. What is the change in the general consumer price level?
47. What is the change in average money wage rates?
48. What is the change in average real wage rates?

The following is a three-part question. Assume that the quantity of money, the aggregate monetary demands for consumers goods and labor, and the productivity of labor and supply of consumers' goods all double, while the supply of labor remains the same.
49. What is the change in the general consumer price level?
50. What is the change in average money wage rates?
$\qquad$ 51. What is the change in average real wage rates?
52. What factor in the four preceding threepart problems determines the change, if any, in average real wage rates?
53. What factors in the same problems deter$\overline{\text { mine the change, if any, in average money wage rates? }}$
54. What factors in those sets of problems determine the change, if any, in the general consumer price level?

This is a four-part question. Again using the formulas for the price and wage level, assume a fixed quantity of money and fixed aggregate demands for labor and consumers' goods. Assume also that all wage earners are married and that initially only husbands work. Then assume that all married women also go to work and have the same productivity as their husbands on average.
55. Calculate the effect on average money wage rates.
56. Calculate the effect on the general consumer price level.
57. Calculate the effect on the money income of the average working family.
58. Calculate the effect on the real income of the average working family.

This is a three-part question. Again using the formulas for the price and wage level, assume a fixed quantity of money and fixed aggregate demands for labor and consumers' goods. Assume also that over the course of a generation the size of the working population doubles as the result of immigration and, over the same period, thanks in some significant part to the productive contributions of the immigrants, the productivity of labor also doubles.
59. Calculate the effect on average money wage rates.
60. Calculate the effect on the general consumer price level.
61. Calculate the effect on the average real wage rates.
62. In the light of the formulas for the price and wage level and the critical role of the productivity of labor, it follows that phenomena which begin by reducing money wage rates, such as immigration or a larger labor force due to population growth or the participation of more married women, as well as the elimination of unemployment
a. may well cause prices to fall by more than
wage rates
b. need not reduce real wage rates but can actually raise real wage rates
c. will in fact end by raising real wage rates insofar as they serve to raise the productivity of labor and/or reduce the burden of supporting the unemployed
d. all of the above
63. The cause of a rise in average money wage rates is either an increase in the demand for labor or a decrease in the supply of labor, both of which tend to rase prices as much as wages, which implies that a rise in money wage rates cannot be the cause of a rise in real wage rates.
64. If a rise in money wage rates is to represent a rise in real wage rates, a. it is essential that prices not rise as much as wage rates, since only that makes it possible for wage earners to succeed in actually buying more with their higher monetary earnings
b. what stops prices from rising as much as wage rates when the quantity of money increases and raises the demand for consumers' goods as much as it raises the demand for labor is a rise in the productivity of labor
c. a rise in the productivity of labor increases the supply of consumers' goods relative to the supply of labor and thus makes it possible for the essentially equal-proportional increases in the demand for consumers' goods and labor to be accompanied by an increase in the consumer price level that is less than the increase in the wage level d. all of the above
65. A rise in the productivity of labor is re$\overline{\text { sponsible }}$ for a fall in prices even in cases in which prices stay the same or increase in comparison with what they were in the past. In such cases, it is responsible for prices falling in comparison with what they otherwise would have been, had the increase in the productivity of labor not taken place.
66. Improvements in the productivity of $\overline{\text { labor raise average real wages }}$
a. by raising money wages
b. by reducing prices not by raising money wages
67. As real wages have risen, so too have money wages, because
a. the two phenomena are inseparably connected b. earning more money is the sum and substance of being materially better off
c. the rise in the productivity of labor, which raises real wages, has been accompanied by an increase in the quantity of money, which raises money wages
68. An intrinsic but limited connection between higher average real wages and higher average money wages exists under a system of commodity money, such as a gold standard, insofar as improvements in the average productivity of labor are accompanied by improvements in the productivity of labor specifically in the production of the commodity that serves as money. This is because to this extent, the quantity of money and thus the monetary demand for labor can be expected to increase along with the general rise in the productivity of labor.
69. Any given individual is likely to perceive a close connection between improvements in his own, personal productivity of labor and the money wage rate he earns. This proves that
a. a higher productivity of labor translates into higher monetary earnings rather than lower prices
b. a higher relative productivity of labor on the part of a given individual translates into higher monetary earnings for him and correspondingly lower monetary earnings for those whose relative productivity of labor is reduced at the very same time that his is elevated
70. If everyone in a group of competitors in-
creased the productivity of his labor to the same extent a. the improvement in the productivity of labor of any individual member of the group would not result in a rise in his money wage rate, for he would have no greater means of succeeding in the competition with the other members of the group now than he had before
b. the average money wage rate of the members of this particular group might actually fall as the result of the improvement in their productivity of labor causing a relative oversupply of the product or service that they produced-a situation that often occurred following the adoption of piecework and the incentives it gave to become more productive
c. both (a) and (b)
d. neither (a) nor (b)
71. If all the members of a society improved the productivity of their labor equally and there were no change on the side of money and spending,
a. average money income would stay the same and there would be no improvement in the average standard of living
b. average money income would stay the same, prices would fall, and the average standard of living would improve correspondingly
72. If the adoption of piecework in a given branch of production, and the rise in the productivity of labor it causes in that branch, results in a fall in the average money income of the producers in that branch, this proves that
a. piecework can be inimical to the general standard of living
b. a situation essentially the same as that of the potato growers back in Chapter 13 is present, which means that the average standard of living does rise, because the gains of the rest of the economic system through a combination of lower prices and higher incomes outweigh the loss of the pieceworkers in this branch and, in addition, even the pieceworkers in this branch will ultimately gain, once enough of them have relocated into other lines of work, where their skills are more needed
73. In cases in which a rise in the productiv$\overline{\text { ity of labor in a given branch of the economic system }}$ reduces the average earnings of the members of that branch, it follows that none of the producers in that branch can monetarily gain from the improvement.

This is a four-part question. Assume that in a given case, the adoption of the piecework system results in a doubling of the productivity of labor and is followed by a reduction in the piece rate to one-third of its initial amount.
74. Calculate the change in the money income of the average piece rate worker in this case.
75. Calculate the change in the money income of any piece rate worker who has succeeded in quadrupling his particular productivity of labor
76. Calculate the change in the money income of any worker under the piece-rate system who, following its adoption, has failed to increase his particular productivity
77. The piece rate system, even in cases in which its adoption initially serves to reduce the average level of money income in the branch of production in which it is adopted, can nevertheless be of financial benefit to exceptional individual workers in that branch-i.e., those whose productivity increases more than in proportion to the fall in the piece rate.

This is a seven-part question. Assume that half of the working population succeeds in doubling its productivity of labor, while the productivity of labor of the other half remains the same. Ignore the likely resulting short-run problems of relative, partial overproduction and relative, partial underproduction. As with many previous questions, assume that the quantity of money and thus the aggregate demands for consumers' goods and labor remain the same. Assume further that relative incomes will be in proportion to relative productivity, so that the fifty percent of the population that becomes twice as productive will earn twice the income as the fifty percent of the population whose productivity remains the same.
78. State the now larger aggregate output relative to the initial aggregate output.
79. Calculate the effect of the larger supply on the general consumer price level.
80. Calculate the change in the money income of the members of the group whose productivity of labor doubles and who now earn two-thirds of the total income of the society instead of one-half.
81. Calculate the change in the money income of the members of the group whose productivity of labor remains unchanged and who now earn onethird of the total income of the society instead of onehalf.
82. Calculate the change in the real income of the members of the group whose productivity of labor doubles.
83. Calculate the change in the real income of the members of the group whose productivity of labor remains unchanged.
84. Name the element to which the change in the real income of both groups corresponds.
85. If in the course of economic competition, the success of the members of one group in raising their productivity serves to reduce the money incomes of the members of another group, it follows that the members of the first group have economically harmed the members of the second group. (Answer in the light of your answers to the preceding series of questions.)

This is a 12-part question. Assume that initially an egalitarian society exists in which everyone has the same productivity of labor and earns the same money income. Now, perhaps because of exposure to rays from outer space, five percent of the population becomes energized into becoming the most intelligent, ambitious and hardest-working five percent, whereupon it succeeds in increasing its own productivity of labor a full twelvefold. The process of increasing the productivity of its own labor entails such things as the members of this five percent founding and organizing business firms and introducing new, improved methods of production and new, improved products. As a result, in the course of improving the productivity of its own labor, the activities of the five percent serve to double the productivity of labor of the remaining ninety-five percent of the population, which is induced to work with the newer, better methods of production and to produce the newer, better products. As before, assume that the relative incomes of the two groups will be in proportion to their relative production. As usual, assume that the quantity of money and thus the aggregate demands for consumers' goods and labor remain the same.
86. State the now larger aggregate output relative to the initial aggregate output. (You must add 12x. 05 plus $2 x .95$.)
87. State the resulting general consumer $\overline{\text { price level as a decimal of the original consumer price }}$ level.
88. Calculate the percentage of the total monetary income of the economic system, which now accrues to the 5 percent of the population that has increased its productivity of labor twelvefold. (You need to know the output of this group relative to total output.)
89. Calculate the change in the money income of the 5 percent of the population whose productivity of labor increases twelvefold. (To do this state the new percentage of income going to this group as a
decimal and then divide it by .05 , which was the initial income of this group.)
90. Calculate the percentage of the total monetary income of the economic system, which now accrues to the 95 percent of the population that has increased its productivity of labor twofold. (Again, you need to know the output of this group relative to total output.)
91. Calculate the change in the money income of the 95 percent of the population. (To do this state the new percentage of income going to this group as a decimal and then divide it by .95 , which was the initial income of this group.)
92. Calculate the change in the real income of the 95 percent of the population. (To do this you need to divide the change in the group's money income by the change in the general consumer price level. Your answer should be 2.)
93. Calculate the change in the real income of the 5 percent of the population whose productivity of labor increases twelvefold. (Follow the same procedure as in the preceding question. Your answer should be 12. )
94. How much more does the average member of the 5 percent group earn than the average member of the 95 percent group? (You need to divide each group's percentage of total earnings by its percentage of population and then divide the per capita earnings of the 5 percent group by those of the 95 percent group.)
95. How much more does the average member of the 95 percent group earn in real terms by virtue of the activities of the members of the 5 percent group?
96. How much more will the average member of the 95 percent group earn in real terms if the improvements introduced by members of the 5 percent group serve to double the productivity of labor of the members of the 95 percent group every generation?
97. The preceding all goes to show how in a capitalist society
a. the rich get richer and the poor get poorer
b. the material self-interests of rich and poor are harmonious, with the "poor" becoming progressively richer, thanks precisely to the activities of the rich
c. injustice exists because the rich are always several steps ahead of the poor, no matter how much richer the poor are becoming
98. The productive contribution of businessmen and capitalists is manifested precisely in the determination of the exchange value of products largely by the quantity of labor required to produce them, because the activity of the businessmen and capitalists serves continually to reduce those quantities and thus to make the prices of goods continually to fall relative
to wage rates and thereby continually to raise real wage rates.
99. Show mathematically how, starting with the formulas for the price and wage level, real wage rates are expressible as the product of the productivity of labor times the "distribution factor." Be sure to indicate the mathematical meaning both of the productivity of labor and the "distribution factor."
100. Real wages depend on the productivity of labor; the productivity of labor, in turn, depends on the supply of capital goods per worker.
101. The determinants of the supply of capi-
$\overline{\text { tal goods }}$ are
a. the extent to which the economic system devotes labor and existing capital goods to the production of capital goods relative to the extent to which it devotes labor and existing capital goods to the production of consumers' goods
b. the productivity of labor and existing capital goods
c. the demand for capital goods relative to the demand for consumers' goods
d. all of the above

## The following is a 6-part question.

102. Capital goods are continuously used up and worn out in the course of production and thus must continuously be produced if their supply is to be maintained.
103. The proportion of the economic $\overline{\text { system's existing output that must be devoted to the }}$ production of capital goods if their supply is to be maintained is called the maintenance proportion.
104. In order for capital accumulation to take place, it is necessary for the actual proportion of the economic system's existing output that is devoted to the production of capital goods to exceed the maintenance proportion.
105. The demand for capital goods relative to the demand for consumers' goods determines the production of capital goods relative to the production of consumers' goods and thus whether or not the proportion of the economic system's output that is devoted to the production of capital goods will equal, exceed, or fall short of the maintenance proportion.
106. The demand for capital goods relative to the demand for consumers' goods depends on the extent to which individuals and business firms devote their revenues and incomes to saving and productive expenditure rather than to consumption expenditure.
107. The greater is the degree of saving and productive expenditure relative to consumption expenditure
a. the higher will be the demand for capital goods relative to the demand for consumers goods
b. the greater will be the production of capital goods relative to the production of consumers' goods
c. once beyond the maintenance proportion, the more will the production of new capital goods tend to exceed the productive consumption of existing capital goods and thus the more rapidly will the supply of capital goods tend to increase d. the higher and more rapidly rising will the productivity of labor and thus real wages tend to be e. all of the above
108. The productivity of capital goods is the ratio of output to the supply of capital goods used up in producing the output.
109. The higher is the productivity of capital goods,
a. the lower is the maintenance proportion
b. the easier it is to accumulate capital
c. the more rapidly will capital accumulation take
place for any given relative production of capital goods in excess of the maintenance proportion d. all of the above
110. Technological progress
a. serves to maintain the productivity of capital goods in the face of increasing supplies of capital goods
b. offsets the operation of the law of diminishing returns in the face of increasing supplies of capital goods
c. is an essential requirement of continued capital accumulation
d. all of the above
111. The higher is the productivity of capital goods, the higher is the proportion of output that needs to be devoted to the production of capital goods in order to maintain the supply of capital goods.
112. The economic degree of capitalism is the ratio of productive expenditure for capital goods and labor to business sales revenues.
113. The "distribution factor" is the ratio of the demand for labor by business to the demand for consumers' goods from business.
114. The higher is the distribution factor, the higher tends to be the proportion of national income that is constituted by wages.
115. The higher is the economic degree of capitalism
a. the higher is the demand for capital goods relative to the demand for consumers' goods
b. the higher is the distribution factor
c. the higher and more rapidly rising are real wages
d. all of the above
116. Saving underlies capital accumulation insofar as it determines the demand for and production
of capital goods relative to the demand for and production of consumers' goods.
117. Technological progress
a. is essential for continued substantial capital accumulation
b. depends on an increasing supply of capital goods as the means of implementing more advanced technologies
c. both (a) and (b)
118. Insofar as businessmen and capitalists are motivated to save and productively expend and to improve the methods of production, the effect of their activities is
a. to increase the demand for and production of capital goods relative to the demand for and production of consumers' goods and thus to bring about capital accumulation and a rising productivity of labor
b. to change the distribution factor in favor of wage earners by means of raising the demand for labor by business relative to the demand for consumers' goods
c. to maintain or increase the productivity of capital goods and thereby further contribute to capital accumulation and the rise in the productivity of
labor
d. to raise real wages
e. all of the above
119. Capital accumulation is fostered by
a. saving
b. technological progress
c. international free trade
d. economic freedom in general
e. all of the above
120. The concept that subsumes both technological progress and economic freedom as causes of capital accumulation is
a. saving
b. a rise in the productivity of capital goods
c. both (a) and (b)
121. The ultimate foundations of capital accumulation and a rising productivity of labor and real wages are
a. individual freedom to pursue one's material
self-interest
b. a substantially rational cultural environment
c. both (a) and (b)
122. Saving and productive expenditure and thus the demand for and production of capital goods are reduced by
a. the corporate income tax
b. the progressive personal income tax
c. the inheritance tax
d. the social security system
e. all of the above
123. Government budget deficits reduce or retard
a. the demand for private securities
b. productive expenditure
c. the demand for and production of capital
goods relative to the demand for and production
of consumers' goods
d. capital accumulation
e. the productivity of labor
f. real wages
g. all of the above
124. Government budget deficits financed by inflation of the money supply promote capital accumulation.
125. Capital accumulation under capitalism was inaugurated by a rise in the economic degree of capitalism, combined with a rise in the efficiency with which existing capital goods were employed, both of which operated to raise real wage rates from the very beginning.
126. The effect of the higher economic degree of capitalism was a rise in the demand for labor alongside the rise in the demand for capital goods.
127. The Industrial Revolution
a. represented a great increase in the efficiency of production and in the use of existing capital goods b. brought about a sharp decrease in the maintenance proportion
c. was accompanied by capital accumulation that took place out of an increase in production rather than as the result of any absolute fall in per capita consumption
d. all of the above
128. If and when it occurs, a rise in the demand for capital goods at the expense of the demand for labor is
a. permanently against the interests of the wage earners because it operates to reduce wage rates b. ultimately accompanied by a fall in the prices of consumers' goods that is greater than the fall in wage rates and is so by an ever wider margin
129. It is almost impossible that the inauguration or intensification of capital accumulation and economic progress in a capitalist country could ever result in a reduction in average real wages that would not be made good very quickly. This is because
a. the basic effect of a higher economic degree of capitalism is to raise the demand for labor, as well as the demand for capital goods, relative to consumption and total sales revenues in the economic system
b. at the same time, the higher economic degree of capitalism is itself part of an even wider process which has as another major effect a rise in the productivity of capital goods and corresponding fall in the maintenance proportion
c. any rise in demand for capital goods at the expense of the demand for labor that might take place, despite the fundamental background of a rise in the demand for both, would not take place suddenly and dramatically, all at once, but only gradually, over a period of years, with the result that each succeeding year over which the process occurred would benefit from the operation of forces already in place that were working to bring about a rise in real wages
d. all of the above
130. In the case of the Industrial Revolution in England, the process of capital intensification and the corresponding rise in the ratio of the value of accumulated capital to wage payments, appears to have taken place and been largely completed in the century and a half or more prior to 1775-the year usually taken as marking the beginning of the Industrial Revolution. This was manifested in the fall in the rate of interest on long-term government bonds in England to 3 percent as early as 1757.
131. Capital accumulation under capitalism must initially reduce real wages because getting the process started requires a sudden sharp drop in the demand for labor by business in order to make possible the necessary rise in the relative demand for and production of capital goods.
$\qquad$ 132. The bad economic conditions of the average worker in Great Britain in the early years of the Industrial Revolution were the result of
a. twenty-five years of almost uninterrupted war with France between 1790 and 1815
b. taxes and loans that deprived business firms of the ability both to pay wages and to buy capital goods and thereby worked against real wages via both the "distribution factor" and the productivity of labor
c. both (a) and (b)
132. In a socialist country, such as Soviet Russia, with its gross inefficiencies and impossibly high maintenance proportion, any capital accumulation that may occur based on domestic sources is likely to be at the expense of the extreme deprivation of the citizens.
133. The low real wages, long hours of work, and poor working conditions that characterized much of the nineteenth century were the result of
a. a low productivity of labor
b. the greed of the capitalists and a correspondingly unjust distribution of wealth and income
134. As the productivity of labor rose over the course of the nineteenth century,
a. the supply of goods increased relative to the supply of labor
b. prices fell relative to wage rates
c. wage rates rose relative to prices
d. real wage rates rose
e. all of the above
135. As real hourly wage rates rose in the nineteenth century, the hours of work could fall because
a. more and more workers could afford to accept jobs requiring shorter hours and paying less than jobs requiring longer hours
b. it became competitively advantageous for employers to offer shorter hours, as more and more workers were placed in a position of being able to afford to take jobs with shorter hours at wages lower by enough to make their offer profitable c. in accordance with the growing ability of workers to afford to accept jobs with shorter hours and their growing desire for same, the market started to create a wage premium for jobs with longer hours and a wage discount for jobs with shorter hours
d. all of the above
136. As real hourly wage rates rose in the nineteenth century, child labor could disappear because more and more parents could afford to keep their children home longer and longer and at the same time increasingly desired to do so.
137. As real hourly wage rates rose in the nineteenth century, working conditions improved because
a. the same process of technological progress that was essential to the rise in the productivity of labor made possible improvements in working conditions technologically possible b. to the extent that improvements in working conditions contributed to greater efficiency and could be implemented at a smaller and smaller real cost, it increasingly paid employers to adopt them
c. the rise in real wages enabled workers to afford to accept lesser increases in real wages in cases in which improvements in working conditions did not increase efficiency or did not do so sufficiently to pay for themselves
d. all of the above
138. A rise in the productivity of labor is a. one possible cause of a sustained, significant increase in real wage rates, a redistribution of wealth and income being another b. one possible cause of a sustained, significant increase in real wage rates, an increase in the demand for labor being another
c. the only possible cause of a sustained, significant increase in real wage rates
d. all of the above
139. A rise in money wage rates constitutes a rise in real wage rates when it takes place by means of a. an increase in the quantity of money and volume of spending in the economic system
b. a decrease in the supply of labor available to work
c. an increase in the demand for labor at the expense of the demand for capital goods
d. an increase in the demand for labor by means of taxation the proceeds of which is used to pay wages
e. all of the above
f. none of the above
140. It is possible to raise real wage rates by means of raising the demand for labor and thus money wage rates
a. when the rise in demand for labor is made possible by a fall in the personal consumption of businessmen and capitalists
b. when the rise in demand for labor is made possible by a fall in taxation and government spend-
ing
c. both (a) and (b)
d. neither (a) nor (b)
141. A reduction in government spending
and taxation
a. can make a significant one-time contribution to raising real wage rates by means of raising the demand for labor
b. makes an ultimately much more important, continuing contribution to the rise in real wage rates by means of bringing about an increase in the relative demand for and production of capital goods and by operating to raise the productivity of capital goods via increasing the incentives to introduce improvements
c. both (a) and (b)
142. A policy of redistribution of wealth and
income
a. assumes that the wealth of businessmen and capitalists exists in the form of a vast supply of consumers' goods and can be taken with little or no effect on the amount of wealth produced b. ignores the fact that the great bulk of the wealth of businessmen and capitalists exists in the form of capital goods and underlies the demand for labor, and that it's seizure must cause substantial capital decumulation and a decline in the productivity of labor and real wages
c. both (a) and (b)
143. The general public and the labor unions a. correctly
b. mistakenly
believe that raising money wage rates is the means of raising real wage rates.
144. The efforts of individuals, who must operate under the freedom of competition, to raise their real wages by means of earning more money are perfectly reasonable, fully consistent with the productivity theory of wages, and serve to raise the average level of real wage rates. However, the attempt to raise
the average money wage rate of wage earners as a group, by means of violating the freedom of competition, serves to cause unemployment and lower real wages.
145. Depending on the extent of their influence, the effect of labor unions is
a. to raise the wage rates of some groups of workers artificially while more than equivalently reducing the real wage rates of other groups of workers
b. to cause unemployment
c. both (a) and (b)
146. Labor unions are
a. a genuinely prolabor institution insofar as they achieve increases in money wage rates, because that is the most effective means of raising the general level of real wage rates
b. an antilabor institution insofar as in preventing or delaying the introduction of labor-saving improvements and in other ways holding down the productivity of labor, they actively combat the rise in real wage rates
c. both (a) and (b)
147. When labor unions recognize a connection between the productivity of labor and wages, the connection they seek to establish is between a higher productivity of labor and
a. higher money wage rates
b. lower prices
148. According to the belief that a higher pro$\overline{\text { ductivity }}$ of labor should translate into correspondingly higher money wage rates
a. the wages of workers producing such goods as computer memory and computer hard drives, where there has been an enormous rise in the productivity of labor over the last fifteen or twenty years, should have increased correspondingly b. the wages of workers like waiters or busboys in restaurants, where there has been virtually no rise in the productivity of labor for many generations, should have remained essentially unchanged over this time
c. both (a) and (b)
149. According to the productivity theory of wages, among the consequences of minimum wage legislation are:
a. unemployment, especially among the least educated, least skilled members of society
b. a life-long depressing effect on the earnings of society's most disadvantaged members, who in being prevented from being employed in entry level jobs at sub-minimum wages, are prevented from gaining the experience and developing the skills that might have enabled them to become qualified for better paying jobs later on c. both (a) and (b)
150. According to the productivity theory of wages, maximum- hours legislation
a. forces people to do less work than they are willing and able to do
b. reduces the real wages of people to the extent that it reduces the work they perform
c. both (a) and (b)

The following is a four-part question. Assuming that the monetary demands for consumers' goods and labor are both unchanged,
152. Calculate the effect on average hourly wage rates of a twenty-five percent reduction in the work week from forty hours to thirty hours.
153. Calculate the effect on the production and supply of consumers' goods of the above reduction in the work week on the further assumption that the productivity of labor remains constant per hour worked.
154. Calculate the effect on the prices of consumers' goods of the reduction in the supply of consumers' goods calculated in answer to the previous question.
155. Calculate the effect on average real weekly wage rates on the basis of the change in the relationship between average weekly money wage rates and the general consumer price level.
156. Maximum-hours legislation does not reduce real wages when hourly wage rates are increased to offset the reduction in hours, because in this case weekly wage rates are unchanged.

The following is a four-part question. Assuming that the monetary demands for consumers' goods and labor are both unchanged, and that in a poor, backward society, the labor of children initially accounts for ten percent of the supply of labor and produces ten percent of the output of consumers' goods, calculate the effect of the abolition of all child labor on
157. The money income of the average working family.

## 158. The supply of consumers' goods produced.

159. The general consumer price level.
$\overline{\text { family. }} 160$. The real wages of the average working
160. According to the productivity theory of wages, the effect of child labor legislation is
a. simply to eliminate child labor
b. in the absence of offsetting increases in the productivity of labor, to reduce the real earnings of poor families at the same time that it eliminates child labor
161. According to the productivity theory of wages, the effect of forced improvements in working conditions is
a. a rise in costs of production and prices
b. unemployment or a fall in take-home money wage rates sufficient to offset the rise in costs caused by the forced improvements
c. a fall in real take home wages
d. all of the above
162. According to the productivity theory of wages, the effect on real wages of freedom of competition in the employment of women and members of minority groups is positive despite a possible reduction in the money wage rates of those already employed
a. to the extent that it succeeds in raising the average productivity of labor and thus reduces prices relative to wage rates
b. to the extent that it enables the average working family to have the benefit of a larger number of hours of labor
c. both (a) and (b)
163. The effect of the competition of women $\overline{\text { and members of minority groups entering the labor }}$ market
a. under economic freedom is not unemployment but a reduction in money wage rates and an increase in the supply of goods produced and a corresponding fall in the prices of goods
b. in the face of prounion and minimum wage legislation and racial and sexual quotas, the creation of unemployment among white male workers c. both (a) and (b)
164. The concept of the aggregate demand for labor employed by the productivity theory of wages is fundamentally different than the classical economists' concept of the wage fund.
165. John Stuart Mill abandoned the idea of $\overline{\text { a fixed wage fund on the grounds that a rise in wage }}$ rates compelled by labor unions could result in a rise in the wage fund at the expense of the personal consumption expenditure of businessmen and capitalists.
166. The productivity theory of wages and the marginal productivity theory of wages differ with respect to
a. the attempt to derive the value of labor services on the basis of the value of product lost by virtue of the withdrawal of a unit of labor b. the significance they accord to changes in prices as a factor determining real wages c. both (a) and (b)
167. Attempting to derive the value of com$\overline{\text { plementary factors of production from the value of }}$ their product, e.g., derive the value of a steering wheel, carburetor, and brake from the value of the automobile in which they are parts, easily results in the attribution of far more value to such factors of production than is possessed by the product.

|  | Correct |  | Correct |  | Correct |  | Correct |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q. \# | Answer | Q. \# | Answer | Q. \# | Answer | Q. \# | Answer |
| 1 | T | 43 | 2 x | 85 | F | 127 | d |
| 2 | T | 44 | 2 x | 86 | 2.5 | 128 | b |
| 3 | T | 45 | none | 87 | 0.4 | 129 | d |
| 4 | e | 46 | halves | 88 | 24\% | 130 | T |
| 5 | f | 47 | none | 89 | 4.8 | 131 | F |
| 6 | T | 48 | 2 x | 90 | 76\% | 132 | C |
| 7 | T | 49 | none | 91 | .76/.95 | 133 | T |
| 8 | T | 50 | 2 x | 92 | 2 | 134 | a |
| 9 | e | 51 | 2 x | 93 | 12 | 135 | e |
| 10 | T | 52 | prod. of labor | 94 | 6 | 136 | d |
| 11 | d | 53 | DL, SL | 95 | 2 x | 137 | T |
| 12 | d | 54 | DC, SC | 96 | 2 x more/gen. | 138 | d |
| 13 | d | 55 | halve | 97 | b | 139 | c |
| 14 | 6 hours | 56 | halve | 98 | T | 140 | F |
| 15 | 100\% | 57 | none | 99 | see text | 141 | c |
| 16 | \$6 | 58 | 2 x | 100 | T | 142 | c |
| 17 | \$60 | 59 | half | 101 | d | 143 | c |
| 18 | \$54 | 60 | one-fourth | 102 | T | 144 | b |
| 19 | \$6 | 61 | 2 x | 103 | T | 145 | T |
| 20 | a | 62 | d | 104 | T | 146 | C |
| 21 | T | 63 | T | 105 | T | 147 | b |
| 22 | d | 64 | d | 106 | T | 148 | a |
| 23 | T | 65 | T | 107 | e | 149 | c |
| 24 | T | 66 | b | 108 | T | 150 | c |
| 25 | T | 67 | c | 109 | d | 151 | c |
| 26 | c | 68 | T | 110 | d | 152 | four thirds |
| 27 | 25\% | 69 | b | 111 | F | 153 | three fourths |
| 28 | 12.50\% | 70 | c | 112 | T | 154 | four thirds |
| 29 | e | 71 | b | 113 | T | 155 | three fourths |
| 30 | e | 72 | b | 114 | T | 156 | F |
| 31 | T | 73 | F | 115 | d | 157 | no change |
| 32 | c | 74 | two thirds | 116 | T | 158 | nine tenths |
| 33 | T | 75 | four thirds | 117 | c | 159 | ten ninths |
| 34 | c | 76 | one third | 118 | e | 160 | nine tenths |
| 35 | d | 77 | T | 119 | e | 161 | b |
| 36 | T | 78 | three halves | 120 | b | 162 | d |
| 37 | T | 79 | two thirds | 121 | c | 163 | c |
| 38 | T | 80 | four thirds | 122 | e | 164 | c |
| 39 | F | 81 | two thirds | 123 | g | 165 | F |
| 40 | T | 82 | 2 | 124 | F | 166 | T |
| 41 | T | 83 | 1 | 125 | T | 167 | c |
| 42 | b | 84 | prod. of labor | 126 | T | 168 | T |

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## Chapter 15 (Includes Review of Chapter 14, Part B, Section 3)

$\qquad$ 1. The volume of spending in the economic system is a measure of the quantity of money that exists, not of the volume of wealth that is produced.
2. The use of price indexes to adjust the volume of spending for changes in the price level makes possible a precise measure of what is produced.
3. The concept of gross product properly includes the production of capital goods such as flour and wheat and steel and iron ore.
4. Productive consumption is consumption for the purpose of production.
5. The net product of the economic system is a. the gain from production
b. equal to the final product
c. the difference between the gross product and productive consumption
d. all of the above
e. none of the above
6. According to most of today's textbooks, what a producer produces is
a. simply his actual product, such as bread in the case of a bakery and steel in the case of a steel mill b. the difference between his actual product and the previously produced means of production he uses up in producing it-for example, the difference between bread and flour or the difference between automobiles and steel sheet
7. According to most of today's textbooks, wheat farmers and flour millers respectively produce only wheat and flour, not bread.
8. What contemporary economics describes as the gross product of the economic system is actually a highly netted product.
9. According to the prevailing concept of gross product, to claim that both bread and flour or both automobiles and steel are produced is to claim that more is produced than is in fact produced and thus to commit the error of double counting.
10. According to contemporary economics, the production of the final products already counts the production of all the products leading up to their production, which is why it represents double counting to count them again, separately.
11. In reporting both so many million automobiles and so many million tons of steel as being produced in the United States in a given year, The Statistical Abstract of the United States must be judged guilty of the alleged error of double counting.
12. The view that one's product is not one's actual physical product but an abstraction, i.e., the conceptual difference between one's product and the previously produced means of production one uses up to
produce it implies that the total product of the economic system
a. is essentially just the production of consumers' goods, i.e., of "final products"
b. that the total production of the economic system is measured by the sum of values added to the previously produced means of production c. that the total production of the economic system is measured by the value of the final product d. all of the above
13. What leads to the conclusion that a final product, such as bread, counts all the intermediate products whose production is necessary to its production is
a. viewing the final product as though it consisted of a bundle of abstractions, i.e., the conceptual product differences that each producer allegedly produces at the various stages leading up to the final product
b. taking apart and putting together this collection of abstractions to represent different entities and in the process often altogether forgetting the existence of one or more of the conceptual product differences
c. adopting a Platonic-Heraclitean view of the nature of entities
d. all of the above
e. none of the above
14. The belief that the value of the final prod$\overline{\text { uct counts the value of the intermediate products in ad- }}$ dition to its own value rests on
a. expressing the value of the final product in various mutually exclusive alternative formulations
b. ignoring one or more terms in all but one of the alternative formulations
c. adding up the remaining elements of the mutually exclusive alternative formulations
d. all of the above
e. none of the above
15. The belief that the value of the final product counts the value of the intermediate products in addition to its own value rests represents a twofold violation of the laws of arithmetic.
16. The belief that the value of the final product counts the value of the intermediate products in addition to its own value entails a double counting of the value of the final product.

## 17. Productive expenditure is

a. expenditure for the purpose of producing goods and services
b. expenditure for the purpose of making subsequent sales
18. Consumption expenditure is expenditure not for the purpose of making subsequent sales.
19. An individual grows richer through pro$\overline{\text { ductive expenditure and poorer through consumption }}$ expenditure.
20. In buying a consumers' good, one buys a. the consumers' good one buys
b. the factors of production that were used up to produce the consumers' good one buys
c. the factors of production that the sellers of the consumers' good will buy with the pieces of money received in exchange for the consumers' good one buys
d. the products into which the good one buys will be made
e. all of the above
f. none of the above
21. In buying a consumers' good, one pays for the seller's research and development outlays and for his political and charitable contributions.
22. It is often believed that in buying a consumers' good one also buys
a. the factors of production that were used up to produce the consumers' good one buys b. the factors of production that the sellers of the consumers' good will buy with the pieces of money received in exchange for the consumers' good one buys
c. the products into which the good one buys will be made
d. all of the above
23. In buying a consumers' good, one buys simply and only the consumers' good.
24. A quantity of wheat is produced that sells $\overline{\text { for } \$ 100}$ and is used to produce a quantity of flour that in turn sells for $\$ 150$. The flour is then used to produce a quantity of bread that sells for $\$ 225$. State the total value of what is produced.
25. A quantity of wheat is produced that sells $\overline{\text { for } \$ 100}$ and is used to produce a quantity of flour that in turn sells for $\$ 150$. The flour is then used to produce a quantity of bread that sells for $\$ 225$.
a. the total value of what is produced is $\$ 475$
b. the total value of what is produced is $\$ 225$
26. The belief that in buying a consumers' $\overline{\text { good one }}$ buys everything necessary to its production supports the belief that saving is hoarding.
27. The proposition that "the demand for A is the demand for A"
a. means, for example, that the purchase of an automobile is the purchase simply and only of that automobile and not the purchase of the automobile and the steel used to make it b. is a restatement of John Stuart Mill's proposition that "demand for commodities is not demand for labor," in a positive and more extended form
c. serves to prevent confusing real entities and real purchases with "shadow entities and shadow purchases"
d. all of the above
e. none of the above
28. The belief that wheat and flour are in bread because the bread was made from flour that was made from wheat implies that ice is in steam if the steam came from water that came from ice.
29. The difference between a real purchase of bread, flour, and wheat and a "shadow-entity" type purchase is that in the first case one leaves the store with three distinct items, while in the second one leaves only with bread.
30. The notion that in buying the final product one buys the labor and capital goods necessary to its production is consistent with the fact that businessmen need capital in order to buy the means of production
31. The notion that in buying the final product one buys the labor and capital goods necessary to its production does not imply that in eating a loaf of bread one eats flour, wheat, and tractor parts.
32. The fact that one buys the output is proof that one has not bought the inputs.
33. If someone in fact bought flour and paid the wages of bakers and then were charged for the resulting bread, he would be in the position of a man forced to buy his own property.
34. "The demand for consumers' goods is $\overline{\text { not only not a demand for factors of production, but is }}$ in competition with the demand for factors of production."
35. If the sellers of consumers' goods used the whole of their sales proceeds to consume, their demand for factors of production would
a. rise to infinity, according to the Keynesian multiplier analysis
b. fall to zero
c. both (a) and (b)
d. neither (a) nor (b)
36. If wealthy businessmen decide to withdraw funds from their firms in order consume in the form of buying yachts, say, the effect will be
a. an increase in the demand for capital goods and labor by the yacht-building industry b. a decrease in the demand for capital goods and labor by the industries producing capital goods c. a decrease in the overall demand for capital goods and labor in the economic system to the extent that the purchase of yachts takes the place of the purchase of capital goods and labor
d. all of the above
e. none of the above
37. A rise in the demand for consumers' $\overline{\text { goods at the expense of the demand for factors of pro- }}$ duction increases the proportion of the demand for factors of production that is made by the consumers' goods industries while reducing the overall size of the demand for factors of production in the economy as a whole.
38. The only income of any significance that could be increased by virtue of the repeated rounds of consumption expenditure depicted in the multiplier process would be profit income, not wage income.

## 39. Saving is

a. the nonspending of funds
b. hoarding
c. the nonconsumption of funds
d. all of the above
e. none of the above
40. People of limited education and with no business experience are especially prone to confuse saving with hoarding because they have no first-hand familiarity with productive expenditure and thus conclude that if funds are not consumed, they are simply not spent.
41. The fallacy that saving is hoarding
a. appears in the financial press when fears are expressed that a rise in saving portends a recession or depression
b. is accompanied by the belief that investment spending comes virtually out of nowhere and is expansionary
c. is present in contemporary economics texts when they describe saving as a "leakage" from the spending stream
d. all of the above
e. none of the above
42. Most present-day economics textbooks describe the macroeconomic effects of taxes and government spending as the same as saving and investment, i.e., the one as representing hoarding and the other as representing new and additional spending, virtually out of nowhere.
43. The belief that saving is hoarding
a. can apply to a given individual in certain circumstances
b. represents the fallacy of composition when it is applied to the economic system as a whole
c. both (a) and (b)
d. neither (a) nor (b)
44. When large-scale hoarding, i.e., an increase in the demand for money for holding, actually occurs it
a. causes a decline in sales revenues, profits, and business net worth
b. causes unemployment and dissaving by the unemployed
c. is the cause of an overall reduction in savings
d. all of the above
e. none of the above
45. When it occurs on a significant scale, "hoarding"
a. has nothing fundamentally to do with any attempt to save or to save more
b. does not originate with consumers
c. represents the attempt of business firms and investors to convert previously accumulated savings from their usual form of investments in physical assets or claims to physical assets, into cash, in an effort to become more liquid
d. all of the above
e. none of the above
46. "Hoarding"
a. comes about after inflation and credit expansion have created the potential for a sudden rise in the demand for money for holding by first causing an undue decline in the demand for money for holding and the consequent creation of a state of illiquidity
b. operates to increase the degree of liquidity in the economic system-i.e., the ratio of the quantity of money to such magnitudes as current liabili-ties-and finally to put an end to the desire further to increase cash holdings
c. can be prevented from having harmful consequences by means of avoiding inflation and credit expansion
d. all of the above
e. none of the above
47. What is saved is not only spent, but is the source of most spending in the economic system inasmuch as saving is the foundation of all of the productive expenditure that is made out of business sales revenues.
48. Saving is the foundation of
a. the demand for goods at wholesale
b. the demand for all capital goods, i.e., the demand for all buildings, machinery, materials, components, and supplies by business firms
c. the demand for labor by business firms
d. the demand for expensive consumers' goods
e. all of the above
f. none of the above
49. The proposition that saving is the source of most spending in the economic system is implied
a. by the fact that profit margins are typically on the order of ten percent or less
b. costs and thus productive expenditure relative to sales are typically on the order of ninety percent or more
c. a substantial portion of costs and the productive expenditure that gives rise to them are for capital goods, behind which there are further substantial costs and productive expenditure d. all of the above
e. none of the above
50. A rise in the rate of saving raises the demand for houses and expensive consumers' goods in general.
51. All the wages of the employees of business firms are paid out of saving and productive expenditure by the business firms; essentially only the wages of domestic servants and government employees are paid out of consumption expenditure.
52. Via the payment of wages and salaries, saving and productive expenditure are the source of almost all consumption expenditure.
53.
a. Financially the individual business firm is vitally dependent on the consumers, because it must compete with other business enterprises for the funds that the consumers can choose to spend on the one or the other business firms
b. From the perspective of the economic system as a whole, however, it is the consumers who are vitally dependent on business, because "money comes to goods"-i.e., all the funds in the consumers' posesssion are sooner or later inevitably drawn from them to business in buying the goods and services necessary to their survival, well-being, and enjoyment, with the result that they must obtain fresh money from business c. both (a) and (b)
d. neither (a) nor (b)
54. Through its productive expenditure and through the consumption expenditure of its owners and creditors, business is the source of its own demand and profitability, with the result that there is no need for government created outside consumption.
55. In making possible capital accumulation and rising production, saving
a. is the source of an increasing aggregate demand in real terms
b. is the source of an increasing aggregate demand in monetary terms
c. in the long run, is the source of rising consumption in both real and monetary terms, as the postWorld War II history of Japan and other Asian economies vividly illustrates
d. all of the above
e. none of the above
56. Given the same quantity of money in the economic system, to the extent that savings are used to pay wages, and the wage earners consume their wages, the effect is to leave aggregate consumption unchanged, with consumption by wage earners taking the place of consumption by the savers.
57. The fact that national income equals con$\overline{\text { sumption }}$ plus net investment and that consumption often exceeds net investment by more than ten to one
implies that most of national income is paid by consumption expenditure.
58. The equality between national income $\overline{\text { (i.e., the sum of profits plus wages), on the one side, }}$ and net national product (i.e., the sum of consumption expenditure plus net investment), on the other, is in fact an identity in which the only difference between the two sides is a change in the order of addition of the exact same revenue-expenditure subcomponents.

## 59. Net investment

a. equals productive expenditure minus business costs-the same costs as are deducted from sales revenues in calculating aggregate profits
b. like the visible portion of an iceberg, is the heading under which most spending in the economic system is concealed
c. equals net investment in plant and equipment plus net investment in inventories
d. equals productive expenditure on account of plant and equipment minus depreciation cost, plus productive expenditure on account of inventory and work in progress minus cost of goods sole, plus productive expenditure not debited to any asset account minus the costs represented by such productive expenditure
e. all of the above
f. none of the above
60. Gross national revenue (GNR)
a. equals total business sales revenues plus wage payments
b. equals the sum of consumption expenditure plus productive expenditure
c. both (a) and (b)
d. neither (a) nor (b)
61. Gross national revenue (GNR) a. reduces to national income if costs are subtracted from sales revenues
b. reduces to net national product if costs are subtracted from productive expenditure
c. both (a) and (b)
d. neither (a) nor (b)
62. Gross national revenue (GNR) reduces to $\overline{\text { GNP if all costs but depreciation are deducted from }}$ productive expenditure, which is equivalent to adding depreciation to net national product.

## The following pertains to the next eleven questions.

Assume that the demand for consumers' goods is 1000 units of money, the demand for capital goods is also 1000 units of money, the demand for labor by business firms is 800 units of money, the demand for labor by consumers is 100 units of money, and total business costs deducted from sales revenues are 1700 .
63. Find aggregate profits.
64. Find aggregate wages.
65. Find national income.
66. Find total consumption.
67. Find net investment.
68. Find net national product.
69. Find total sales revenue and income payments in the economic system.
70. Find the portion of total sales revenue and income payments constituted by consumption expenditure.
71. Find the portion of total sales revenue and income payments constituted by productive expenditure.
72. What portion of wages is paid by consumption expenditure?
73. What portion of wages is paid by productive expenditure?
The following pertains to the next 4 questions. Onehundred of additional net investment takes place, generated by 100 of additional demand for capital goods, and the Keynesian "marginal propensity to consume" is .75 .
74. Find the "investment multiplier."
75. Find the alleged increase in national income.
76. How much of the additional national income is wages?
77. How much of the additional national in$\overline{\text { come is profits? }}$
The following pertains to the next 4 questions. Once again, one-hundred of additional net investment takes place, generated this time by 50 of additional demand for capital goods and 50 of additional demand for labor by business. This time, the Keynesian "marginal propensity to consume" is .90 .
78. Find the "investment multiplier."
79. Find the alleged increase in national income.
80. How much of the additional national income is wages?
81. How much of the additional national income is profits?
82.
a. The only incomes raised by the successive rounds of consumption expenditure envisioned by the multiplier doctrine would be profits, not wages.
b. Any rise in wages, in the demand for goods at wholesale, in the demand for capital goods of any kind depends on saving, which the Keynesians regard as a "leakage" and as allegedly diminishing the amount of subsequent incomes.
c. both (a) and (b)
d. neither (a) nor (b)
83.
a. Real wages depend on the productivity of labor.
b. The productivity of labor depends on the supply of capital goods per worker, increasing as it increases, decreasing as it decreases.
c. both (a) and (b)
d. neither (a) nor (b)
84. The determinants of changes in the supply of capital goods are
a. the production of capital goods relative to the production of consumers' goods
b. the demand for capital goods relative to the demand for consumers' goods
c. the degree of saving in the economic system
d. the productivity of capital goods
e. all of the above
f. none of the above
85. All capital goods are sooner or later used up or worn out in the course of production and must be replaced through the fresh production of capital goods. The proportion of the economic system's output that needs to be in the form of capital goods in order to replace the capital goods used up or worn out is called the $\qquad$ proportion.
86. The higher is the degree of saving,
a. the greater is the demand for capital goods relative to the demand for consumers' goods
b. the greater is the production of capital goods relative to the production of consumers' goods c. the more rapid is capital accumulation, once the relative production of capital goods exceeds the maintenance proportion
d. all of the above
e. none of the above
87. The assumption that the output of the economic system increases in proportion to the increase in the supply of capital goods appears to contradict
a. the law of diminishing marginal utility
b. the law of diminishing returns
c. both (a) and (b)
d. neither (a) nor (b)
88. Technological progress is necessary
a. to keep up the rate of profit by providing additional investment opportunities for the growing supply of capital goods made possible by additional saving
b. to make possible continued capital accumulation in the face of the existence of the law of diminishing returns
c. both (a) and (b)
d. neither (a) nor (b)
89. Technological progress is necessary to keep up the productivity of capital goods as the supply of capital goods increases.
$\qquad$ 90. The relationship between technological progress and capital accumulation is
a. one of cause to effect
b. reciprocal in that the implementation of more advanced technologies typically requires a larger supply of capital goods
c. both (a) and (b)
d. neither (a) nor (b)
91. Capital accumulation is fostered by a. economic freedom, including free international trade and freedom of immigration for self-supporting immigrants
b. anything that contributes to the ability to produce in general
c. a higher degree of saving and provision for the future
d. respect for property rights
e. all of the above
92. Economic freedom promotes capital accu$\overline{\text { mulation }}$ by virtue of
a. promoting saving and thereby the demand for and production of capital goods relative to the demand for and production of consumers' goods
b. raising the productivity of capital goods
c. reducing the maintenance proportion
d. all of the above
e. none of the above
93. Under the conditions of an invariable money, an increase in saving and the relative demand for capital goods is necessary in order to achieve a. capital accumulation
b. an acceleration in the rate of capital accumulation
94. The rapid economic progress of Japan over the last forty years or more is the result of a. high saving rates, which have resulted in the relative production of capital goods far surpassing the maintenance proportion, and of a high productivity of capital goods based on industriousness and innovativeness
b. the application of advances in statistical techniques making possible greatly improved quality control in Japanese manufacturing compared with American manufacturing
c. the Samurai heritage of the Japanese
95. The relative stagnation of the American $\overline{\text { economy }}$ over the last generation is the result of a. a lower demand for capital goods relative to consumers' goods than in the past, caused by government economic policies hostile to saving b. a lower productivity of capital goods than in the past, resulting from government interference that increases cost per unit and equivalently reduces output per unit of cost
c. both (a) and (b)
d. neither (a) nor (b)
96. The stagnation and retrogression of so$\overline{\text { cialist economies, such as that of the former Soviet }}$ Russia, was the result of
a. too low a concentration on the production of capital goods and the building up of heavy industry b. the profound inefficiencies of socialism resulting from its lack of a price system and of profit-and-loss incentives
c. both (a) and (b)
d. neither (a) nor (b)
97. Recognizing the separate existence of the demand for capital goods, and the separate, distinct production of capital goods, is not necessary in order to understand that an additional supply of capital goods serves to increase the supply of capital goods as well as the supply of consumers' goods.
98. The failure to recognize the separate existence of the demand for capital goods and the corresponding separate production of capital goods leads to a. an inadequate appreciation of the role of saving in capital accumulation, which is as force to acceleration
b. a corresponding overemphasis on the role of saving in capital accumulation, which is mistakenly seen as one to one c. an inability to recognize the role of technological progress as a cause of capital accumulation in serving to maintain the productivity of an increasing supply of capital goods
d. an inability to grasp the principle that capital accumulation is fostered by anything that increases the ability to produce in general, such as, above all, economic freedom
e. all of the above
f. none of the above

## The following is a 5 -part question.

99. The demand for consumers' goods is 500 monetary units and the demand for capital goods is 500 monetary units. Taking the demand for capital goods as total costs on account of capital goods, find national income.
100. The demand for consumers' goods now $\overline{\text { falls to } 400 ~ m o n e t a r y ~ u n i t s ~ a n d ~ t h e ~ d e m a n d ~ f o r ~ c a p i t a l ~}$ goods rises to 600 monetary units. Again taking the demand for capital goods as total costs on account of capital goods, find national income.
101. The answers to the preceding two questions imply that in the context of an economic system with an invariable money, the relationship between national income and economic progress and prosperity is inverse, because capital accumulation will be greater when the demand for capital goods rises relative to the demand for consumers' goods, even though as a result national income falls.
102. The answers to those same two questions referred to in the previous question imply that in the context of an economic system with an invariable money, national income is basically the counterpart just of consumption expenditure.
103. In the context of the economic system with a 600 demand for capital goods and a 400 demand for consumers' goods, real incomes would soon far surpass, and further and further surpass, real incomes in the economic system with a 500 demand for capital goods and a 500 demand for consumers' goods. In that former ecoomic system, the mechanism by which economic progress raises real incomes is
a. the average member of the society earns more and more money with every passing year b. prices fall year after year while the money income of the average member of the society remains the same

## The following pertains to the next 4 questions. The

 "balanced-budget multiplier" of the Keynesians claims that equal increases in taxes and government spending cause a rise in national income that is equal to the rise in taxes or government spending because the tax multiplier is one less in absolute value than the government spending multiplier while being opposite in sign. Taking the "marginal propensity to consume" as .75,104. Find the government spending multiplier, using the same basic formula as for the investment multiplier.
$\qquad$ 105. Find the tax multiplier.
105. Find the effect on national income of a rise in government spending and taxes of $\$ 100$ billion.
106. The significance of the rise in national income in the preceding question is
a. that higher taxes are actually costless in the aggregate because national income rises by enough
to pay for them
b. that it illustrates the inverse relationship between national income, on the one side, and capital accumulation, economic progress, and prosperity, on the other
c. both (a) and (b)
d. neither (a) nor (b)
107. The doctrine of the "Conservatives' Dilemma"
a. is based on the doctrine of the balanced-budget multiplier
b. claims that fiscal conservatives must choose between their basic values of balanced budgets and small government, because achieving a given rise in national income requires only a relatively modest increase in government spending if the additional government spending is financed by a budget deficit but requires a much greater increase in government spending if the additional government spending is to be financed by equivalent additional taxes. (This is because in the first case the government-spending multiplier allegedly applies, while in the second case only the much smaller balanced-budget multiplier applies.) c. is overthrown by recognition of the inverse relationship between national income and economic progress and prosperity, which recognition rests on the realization that the increase in national income entails reducing the demand for capital goods relative to the demand for consumers' goods d. all of the above
e. none of the above

| Question \# | Correct <br> Answer | Question \# | Correct Answer | Question \# | Correct Answer | Question \# | Correct Answer | Question \# | Correct Answer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | T | 26 | T | 51 | T | 76 | zero | 101 | T |
| 2 | F | 27 | d | 52 | T | 77 | 400 | 102 | T |
| 3 | T | 28 | T | 53 | c | 78 | 10 | 103 | b |
| 4 | T | 29 | T | 54 | T | 79 | 1000 | 104 | 4 |
| 5 | d | 30 | F | 55 | d | 80 | 50 | 105 | -3 |
| 6 | b | 31 | F | 56 | T | 81 | 950 | 106 | \$100 billion |
| 7 | F | 32 | T | 57 | F | 82 | c | 107 | b |
| 8 | T | 33 | T | 58 | T | 83 | c | 108 | d |
| 9 | T | 34 | T | 59 | e | 84 | e |  |  |
| 10 | T | 35 | c | 60 | c | 85 | maintenance |  |  |
| 11 | T | 36 | d | 61 | c | 86 | d |  |  |
| 12 | d | 37 | T | 62 | T | 87 | b |  |  |
| 13 | d | 38 | T | 63 | 300 | 88 | b |  |  |
| 14 | d | 39 | c | 64 | 900 | 89 | T |  |  |
| 15 | T | 40 | T | 65 | 1200 | 90 | c |  |  |
| 16 | T | 41 | d | 66 | 1100 | 91 | e |  |  |
| 17 | b | 42 | T | 67 | 100 | 92 | d |  |  |
| 18 | T | 43 | c | 68 | 1200 | 93 | b |  |  |
| 19 | T | 44 | d | 69 | 2900 | 94 | a |  |  |
| 20 | a | 45 | d | 70 | 1100 | 95 | c |  |  |
| 21 | F | 46 | d | 71 | 1800 | 96 | b |  |  |
| 22 | d | 47 | T | 72 | 100 | 97 | F |  |  |
| 23 | T | 48 | e | 73 | 800 | 98 | e |  |  |
| 24 | \$475 | 49 | d | 74 | 4 | 99 | 500 |  |  |
| 25 | a | 50 | T | 75 | 400 | 100 | 400 |  |  |

## Chapter 16, Part A

1. The treatment of interest in Reisman's $\overline{\text { Chapter } 16}$ is
a. to ignore it as a cost by taking profits as gross of it
b. to include consumption out of it as part of the consumption of businessmen and capitalists
c. both (a) and (b)
d. neither (a) nor (b)
2. The amount of profit in the economic system can be provisionally understood as the difference between the demand for the products of business and the demand for factors of production by business.
3. The determinants of the average rate of profit in the economic system as a whole are no different than the determinants of the rate of profit of an individual company.
4. The significance of an individual company $\overline{\text { earning a given high rate of profit, such as } 50 \text { percent, }}$ and the average rate of profit in the economic system being that high, is essentially the same.
5. The interest rate on government bonds is a good indicator of the average rate of profit in the economic system.
6. According to Capitalism, the interest rate on government bonds is probably
a. substantially less than the average rate of profit in the economic system
b. substantially more than the average rate of profit in the economic system
c. about the same as the average rate of profit in the economic system
7. Net consumption is
a. business sales revenues minus productive expenditure
b. consumption expenditure for the goods and services of business minus the wages paid by business
c. total consumption expenditure counted in net national product minus total wages
d. all of the above
8. Net investment is productive expenditure costs.
9. Given that profits in the economic system equal aggregate sales revenues minus aggregate costs, the algebraic difference between profits and net investment is business sales revenues paid by consumers minus productive expenditure in payment of wages, i.e., net consumption.
10. Productive expenditure is
a. a source of business sales revenues
b. the source of business costs
c. ultimately the source of business costs equal to the productive expenditure
d. all of the above
e. none of the above
11. An invariable money
a. means a fixed quantity of money in the economic system, supporting a fixed aggregate demand for the products of business enterprises, i.e., fixed aggregate business sales revenues
b. implies that increases in aggregate production and supply result in inversely proportionate reductions in the general level of prices
c. both (a) and (b)
12. In an economy with an invariable money, $\overline{\text { if productive expenditure were the only source of busi- }}$ ness sales revenues,
a. the equalization of productive expenditure and costs would imply the absence of profit
b. an aggregate profit could exist only to the extent that net investment existed
c. the average rate of profit would tend steadily to fall unless net investment could go on increasign at a compound rate, which is impossible d. all of the above

## 13.

a. If net consumption is defined in terms of the difference between business sales revenues and productive expenditure, it reduces to the portion of business sales revenues that is paid by consumers minus the portion of productive expenditure that goes for the payment of wages.
b. If net consumption is defined in terms of the difference between the demand for the products of business and the demand for factors of production by business, it reduces to the difference between the demand for consumers' goods from business minus the demand for labor by business.
c. both (a) and (b)
14. The principal source of net consumption is the consumption expenditure of businessmen and capitalists, made possible by dividend, draw, and interest payments.
15.
a. Dividend and draw payments, to the extent that they are consumed, are the source of business sales revenues that have no counterpart whatever in productive expenditure and thus in the generation of business costs. As a result, they are the source of sales revenues exceeding productive expenditure and costs.
b. Interest payments by business, to the extent that they are consumed, are the source of business sales revenues in excess of the productive expenditure and costs that need to be considered in explaining the determination of aggregate profits.
c. both (a) and (b)
d. neither (a) nor (b)
16. In Reisman's Chapter 16,
a. the productive expenditure of any given year is frequently assumed to result in equivalent aggregate costs in the following year.
b. What determines the allocation of any given year's total productive expenditure between the production of the capital goods and the production of the consumers' goods of the following year, and thus the respective aggregate costs of the capital goods and consumers' goods of the following year, is the demand for capital goods relative to the demand for consumers' goods in the following year.
c. both (a) and (b)
d. neither (a) nor (b)
17. The sources the demand for the products of business are
a. the demand for capital goods by business
b. the demand for labor by business, which makes possible the demand for consumers' goods by wage earners
c. the demand for consumers' goods by the owners and creditors of business
d. all of the above
18. The basic sources of the money that consumers spend are
a. wage payments by business, and dividend, draw, and interest payments by business
b. government transfer payments
c. extensions of new credit
19. What allows business to sell each year for more money in toto than it expends in buying the factors of production is the consumption expenditure of the owners and creditors of business, which is a demand for the products of business but not a demand for factors of production by business.
20. The role of net consumption as a determinant of aggregate profit is brought out most clearly when productive expenditure is assumed to generate business costs
a. equal to itself
b. less than itself
c. greater than itself
21. Net consumption is a source of aggregate $\overline{\text { profit by }}$ virtue of making sales revenues greater than productive expenditure and greater than aggregate costs equal to productive expenditure.

## 22. Aggregate profit equals

a. national income minus wages
b. net national product minus wages
c. consumption minus wages, plus net investment
d. net consumption plus net investment
e. all of the above

## The following four questions require a copy of Reisman's Figure 16-2.

23. In every year of Figure 16-2, business both spends all of its cash and yet ends up with exactly the same amount of cash with which to begin operations in the following year.
24. What is the aggregate amount of profit in every year in Figure 16-2?
25. What is the average rate of profit in every year in Figure 16-2?
26. What is the source of the aggregate profit in Figure 16-2?
27. Other possible sources of net consumption besides the consumption expenditure of businessmen and capitalists are
a. corporate stock repurchases
b. extensions of consumer credit by business
c. both (a) and (b)
d. neither (a) nor (b)
28. In addition to its other formulations, net consumption also equals total consumption expenditure that constitutes sales revenue or wages, minus total wages paid in the economic system.
29. It is unreasonable to assume that all the wages paid by business have a counterpart in the demand for consumers' goods from business, if wage earners save.
30. In an economy with an invariable money, a rise in the amount and rate of net consumption raises the amount and rate of profit by virtue of leaving aggregate sales revenues unchanged while reducing aggregate costs.
31. In an economy with an invariable money, if all businessmen were to consume 100 percent of their sales proceeds and thus cease to act as capitalists, the rate of profit would rise to infinity by virtue of money costs and capital expressed in money both falling to zero.
32. The answer to the preceding question refutes Adam Smith's and Karl Marx's contention that in a society without capitalists all income would be wages and no income would be profits. (Note: Credit for this question will be given only if the answer to the preceding question is also correct.)
33. Businessmen and capitalists cannot arbitrarily increase the rate of net consumption and the rate of profit, because greater consumption by any individual businessman or capitalist
a. is incapable of raising the rate of profit
b. reduces his own capital by more than it raises the rate of profit, with the result that his amount of profit falls
34. Insofar as the average rate of profit in the $\overline{\text { economic system is determined by the rate of net con- }}$
sumption, capital tends to gravitate into the hands of those businessmen and capitalists whose rate of consumption relative to their accumulated capitals is below average and out of the hands of those whose rate is above average.
35. The two principles operating to determine the growth and decline of individual fortunes relative to the total wealth of the economic system are relative rates of consumption in relation to capital and relative degrees of efficiency in production.
36. The two principles referred to in the preceding question work by determining both relative rates of profit and the extent to which profits are saved and reinvested.
37. In a free economy, those businessmen and capitalists who are relatively more efficient and who save and invest relatively more heavily continually increase the proportion of the total capital of the economic system that they own at the expense of those businessmen and capitalists who are relatively less efficient and who save and invest relatively less heavily.
38. The possession of accumulated capital is a major factor making possible net consumption and explains why net consumption exists even in the face of general business losses.
39. If aggregate profit were wiped out for any reason, businessmen and capitalists would continue to consume out of their accumulated capitals. Their consumption expenditure would constitute sales revenues in the economic system and would serve to make aggregate sales revenues greater than productive expenditure. An aggregate profit would be restored as soon as costs fell to or below the level of productive expenditure. At that point, profit would exist because if sales revenues exceed productive expenditure, they must equivalently exceed costs equal to productive expenditure (and further exceed costs that are less than productive expenditure).
40. The process described in the preceding question would be hastened by writedowns of business assets.
The following pertains to the next 6 questions. Assume that an individual who possesses a capital of \$10 million consumes at an annual rate of 2 percent of the sum of his capital and annual income together.
41. Calculate this individual's consumption if his income this year is zero.
42. Calculate his consumption if his income this year is $\$ 200,000$.
43. Calculate both the amount of his consumption and the percentage of his income that he saves if his income is $\$ 300,000$.
44. Calculate both the amount of his con$\overline{\text { sumption }}$ and the percentage of his income that he saves if his income is $\$ 400,000$.
45. Calculate both the amount of his con$\overline{\text { sumption }}$ and the percentage of his income that he saves if his income is $\$ 1$ million.
46. Calculate both the amount of his con$\overline{\text { sumption }}$ and the percentage of his income that he saves if his income is $\$ 1$ million and his capital is $\$ 50$ million.
47. Seeing the consumption of businessmen and capitalists as determined mainly by their accumulated capital helps to explain
a. the relationship between relatively high incomes in the economic system and high rates of saving, insofar as such incomes are usually earned as high rates of profit
b. the lack of relationship between rising average real incomes and the rate of saving
c. both (a) and (b)
d. neither (a) nor (b)
48. Time preference means that, other things being equal, people prefer
a. to accomplish given results in less time
b. goods of the same kind and number in the present rather than in the future, or in the nearer future rather than in the more remote future
c. both (a) and (b)
d. neither (a) nor (b)
49. Time preference is implied by
a. the very nature of human valuation
b. the fact that the uninterruptibility of human life makes life in the present necessarily appear more valuable than life in the future, and life in the nearer future more valuable than life in the more remote future
c. both (a) and (b)
d. neither (a) nor (b)
50. A high or low time preference in a society operates to make the rate of profit high or low a. directly
b. indirectly, by making the rate of net consumption high or low
51. The absolute temporal extent of the present and future-i.e., whether the present is taken as the coming year, month, week, or day, and the future as everything beyond it, has an important bearing on the role of the rate of net consumption in determining the annual rate of profit.
52. Other things being equal, because of the effect on time preference, the average rate of profit and interest will be the higher, the freer and more rational is a society.
53. In the light of the influence of economic $\overline{\text { freedom and rationality on time preference and thus on }}$ the rate of net consumption, the effect of the activity of revolutionary bandits and plundering government officials who rail against the existence of profit and in-
terest is actually to raise the average rate of profit and interest.
54. The distinction between productive expenditure and costs is one of timing, in that today's productive expenditures will largely be costs in the future, while today's costs are largely the result of productive expenditures made in the past.
55. Much of productive expenditure is added to asset accounts; much of cost represents subtractions from asset accounts.
56. The asset account which is reduced when cost of goods sold is incurred is:
a. cash
b. inventory and work in progress
c. net plant and equipment
d. none of the above
57. The asset account which is reduced when depreciation cost is incurred is:
a. cash
b. inventory and work in progress
c. net plant and equipment
d. none of the above
58. The asset account which is increased when depreciation cost is incurred is:
a. cash
b. inventory and work in progress
c. net plant and equipment
d. none of the above
59. The asset account which is increased when depreciation cost is incurred is the accumulated depreciation reserve.
60. The accumulated depreciation reserve is a deduction from the gross plant and equipment account, and when deducted yields the net plant and equipment account.
61. The asset account which is increased when productive expenditure for plant and equipment takes place is
a. the gross plant and equipment account
b. the net plant and equipment account
c. both (a) and (b)
62. The asset account which is increased when productive expenditure for inventory or work in progress takes place is
a. cash
b. net plant and equipment
c. gross plant and equipment
d. none of the above
63. Aggregate profit and net investment are closely related on the basis of their mathematical definitions, the one being sales revenues minus costs and the other being productive expenditure minus those same costs, with productive expenditure generating aggregate sales revenues equal to itself.
64. Aggregate profit and net investment differ from one another on the basis of their mathematical definitions only by the amount of
a. s-B
b. $\mathrm{sc}_{\mathrm{c}}-\mathrm{wb}$
c. net consumption
d. all of the above
e. none of the above
65. Starting with the fact that aggregate profit equals aggregate sales revenues minus aggregate costs, it follows that it also equals the sum of net consumption plus net investment. This can be shown
a. by inserting $B$ both as a positive and a negative term between s and d
b. on the basis of the fact that $B-d$ equals I
c. on the basis of the fact that s-B equals NC
d. all of the above taken together
66. Where K stands for total invested capital,
a. the net consumption rate equals $\mathrm{NC} / \mathrm{K}$
b. the net investment rate equals $\mathrm{I} / \mathrm{K}$
c. the average rate of profit in the economic system equals the sum of the net consumption and net investment rates
d. all of the above
e. none of the above
67. "Secondary productive expenditure" a. is productive expenditure made out of the wages paid by business
b. enlarges total productive expenditure while leaving aggregate sales revenues unchanged c. reduces the amount of net consumption, which could, conceivably, be made negative if the amount of secondary productive expenditure were great enough
d. comes to an end once the accumulated savings of the wage earners become great enough
e. all of the above
68. The existence of negative net consumption is unlikely, given the fact that much or all of the savings of wage earners normally has a counterpart in the granting of loans to consumers, such as home mortgages and automobile loans.
69. Productive expenditure equal to or even greater than aggregate sales revenues is compatible with the existence of an aggregate profit in the economic system provided
a. aggregate costs are less than sales revenues
b. positive net investment exists in excess of the amount of any negative net consumption
c. both (a) and (b)
d. neither (a) nor (b)
70. The same amount of productive expenditure for plant and equipment can be accompanied by new and additional net investment
a. if the average life of plant and equipment increases, because this will decrease annual depreci-
ation charges until as many batches of the longerlived plant and equipment are in existence as corresponds to their longer life
b. to the extent that the average period of time required for the construction and or installation of the new plant and equipment increases, because this will postpone the date when the productive expenditure begins to show up as depreciation cost c. both (a) and (b)

The following pertains to the next 8 questions. Productive expenditure for new plant and equipment in a hypothetical economic system is 100 units of money every year, year in and year out. The average life of plant and equipment in that economic system is initially ten years. However, starting in Year X, which is sometime long after Year 10, the average life of new plant and equipment rises to twenty years.
71. Find the amount of annual depreciation cost on the plant and equipment purchased in any one year prior to Year X.
72. Find the total amount of annual depreciation cost in the economic system after Year 10 and prior to Year X.
73. Find the amount of annual net investment $\overline{\text { after Year } 10 \text { and prior to Year X. }}$
74. Find the amount of annual depreciation $\overline{\text { cost on the plant and equipment purchased in any one }}$ year starting in Year X.
75. Find the amount of net investment in

Year X.
76. Find the amount of net investment in $\overline{\text { Year } X+1 .}$
77. Find the amount of net investment in $\overline{\text { Year } X+9}$ (i.e., the tenth year).
78. Find the total amount of annual depreciation cost in the economic system in every year starting with Year X +19 (i.e., the twentieth year).
79. Net investment results from a change in the disposition of a given amount of aggregate productive expenditure in the following ways:
a. a shift of productive expenditure for inventory and work in progress from inventory and work in progress requiring a shorter period of time between outlays for factors of production and receipts from the sale of the product to inventory and work in progress requiring a longer period of time between outlays for factors of production and receipts from the sale of the product-for example, a shift from the production of eight-yearold scotch to the production of twelve-year-old scotch
b. a shift of productive expenditure from expensed expenditures to expenditure for inventory and work in progress
c. as a rule, a shift of productive expenditure for inventory and work in progress to productive expenditure for plant and equipment
d. a shift of productive expenditure for plant and equipment of a shorter average life or shorter period of construction time to plant and equipment of a longer average life or longer period of construction time
e. all of the above
80. By means of the various changes in the disposition of productive expenditure described in the previous question, the existence of net investment can be indefinitely prolonged under the existence of an invariable money.
81. The shifting of productive expenditures from points less remote from the making of sales to points more remote from the making of sales
a. operates to reduce aggregate costs in the economic system and thereby create net investment b. operates to increase the amount and rate of profit in the economic system
c. both (a) and (b)
82. The expression the marginal productivity of capital, as used in Capitalism,
a. denotes a net physical product attributable to the employment of additional capital goods b. means the savings of cost or additions to sales revenue that additional capital would achieve for individual business firms, relative to the additional capital in question
c. both (a) and (b)
d. neither (a) nor (b)
83. If the marginal productivity of capital, in the sense in which the expression is used in Capitalism, exceeds the rate of profit, incentives are created that serve to increase the amount of net investment and the amount and rate of profit in the economic system by virtue of causing productive expenditure to shift to points more remote from the making of sales.
84. In an economic system with an invariable money, and in the absence of continuing technological progress, the marginal productivity of capital, in the sense in which the expression is used in Capitalism, and the rate of profit tend to
a. equalize
b. permanently differ
85. Under the conditions of an invariable money, the ability of net investment to add to the rate of profit is an inherently self-limiting phenomenon.
86. Under the conditions of an invariable money, the ability of net investment to add to the rate of profit is an inherently self-limiting phenomenon. This is because the higher is the rate of net investment and consequently the economy-wide average rate of profit, the more difficult it is for still more net investment to be perceived as worthwhile, in view of the fact
that a condition of investing is that the marginal productivity of capital must now surpass a higher rate of profit for the investment to take place.
87. Under the conditions of an invariable money, it becomes progressively more difficult to keep net investment in being in the face of any given rate of profit.
88. Under the conditions of an invariable money, it becomes progressively more difficult to keep net investment in being in the face of any given rate of profit. This is because all additional net investment implies an increase in the degree of remoteness of portions of productive expenditure from the sales revenues they serve to bring in, with these more remote portions having to pass the hurdle of the prevailing rate of profit being compounded for the additional periods of time involved.
89. Under the conditions of an invariable money, the rate of profit comes to equal the rate of net consumption alone.
90. Under the conditions of an invariable money, the effect of net investment is to bring about a subsequent rise in net consumption and reduction of productive expenditure.
91. Under the conditions of an invariable $\overline{\text { money, the rate of profit comes to equal the rate of net }}$ consumption alone
a. because the growing accumulation of capital that net investment results in serves to increase the amount (though not the rate) of net consumption and thus to reduce the amount of productive expenditure
b. costs tend to rise toward productive expenditure
c. both (a) and (b)
d. neither (a) nor (b)
92. Under an invariable money, savings and capital would be accumulated up to a certain ratio to income, and then, in the absence of a fall in time preference, further accumulation would cease.
93. The increase in the quantity of money and volume of spending operates to perpetuate the existence of net investment.
94. The increase in the quantity of money and volume of spending operates to perpetuate the existence of net investment
a. because it brings about a systematic rise in productive expenditure while costs do not rise b. because it brings about a systematic rise in productive expenditure while the resulting rise in aggregate costs lags behind the rise in productive expenditure
95. The rate of increase in the quantity of money and volume of spending tends to add an approximately equivalent percentage to the nominal rate of profit.
96. The rate of increase in the quantity of money and volume of spending tends to add an approximately equivalent percentage to the nominal rate of profit
a. because costs are the reflection of productive expenditures made largely in the past, which productive expenditures and costs are not retroactively increased by any increase in the quantity of money and volume of spending made subsequent to those productive expenditures
b. the increase in the quantity of money and volume of spending systematically enlarges sales revenues relative to the productive expenditures made in the past to bring in those sales revenues with the degree of enlargement corresponding to the rate of increase in the quantity of money and volume of spending
c. both (a) and (b)

The following pertains to the next 9 questions. Assume initially the existence of an invariable money and a 5 percent annual rate of profit, which will be earned in all of the following cases. Additionally, assume that in all of the following cases the outlay of money by a businessman, i.e., his productive expenditure, is $\$ 100$, and that it is all expended at the same time.
97. Calculate the businessman's sales pro$\overline{\text { ceeds in the case of a product that requires exactly one }}$ year between the making of his productive expenditure and the sale of his product.
98. Calculate the businessman's sales proceeds in the case of a product that requires exactly one month between the making of his productive expenditure and the sale of his product.
99. Calculate the businessman's sales pro$\overline{\text { ceeds in the case of a product that requires two years }}$ between the making of his productive expenditure and the sale of his product.

The following pertains both to the preceding three questions and to the next 6 questions. Now, while continuing to assume the undiminished existence of the forces that bring about the five percent annual rate of profit under an invariable money (i.e., a five percent annual rate of net consumption), drop the assumption of an invariable money and assume that starting in the instant of the businessman's outlay, the quantity of money and volume of spending in the economic system increase at an annual rate of two percent.
100. Recalculate the businessman's sales rev$\overline{\text { enues in the first of the three preceding questions. }}$
101. Recalculate the businessman's rate of profit in the first of the three preceding questions.
102. Recalculate the businessman's sales revenues in the second of the three preceding questions.
103. Recalculate the businessman's annualized rate of profit in the second of the three preceding questions.
104. Recalculate the businessman's sales rev$\overline{\text { enues in the third of the three preceding questions. }}$
105. Recalculate the businessman's annualized rate of profit in the third of the three preceding questions.

The following pertains to the next 9 questions. Assume initially the existence of an invariable money and a 4 percent annual rate of profit, which will be earned in all of the following cases. Additionally, assume that in all of the following cases the outlay of money by a businessman, i.e., his productive expenditure, is $\$ 100$, and that it is all expended at the same time.
106. Calculate the businessman's sales proceeds in the case of a product that requires exactly one year between the making of his productive expenditure and the sale of his product.
107. Calculate the businessman's sales pro$\overline{\text { ceeds in the case of a product that requires exactly one }}$ month between the making of his productive expenditure and the sale of his product.
108. Calculate the businessman's sales pro$\overline{\text { ceeds in the case of a product that requires two years }}$ between the making of his productive expenditure and the sale of his product.

The following pertains both to the preceding three questions and to the next 6 questions. Now, while continuing to assume the undiminished existence of the forces that bring about the four percent annual rate of profit under an invariable money (i.e., a four percent annual rate of net consumption), drop the assumption of an invariable money and assume that starting in the instant of the businessman's outlay, the quantity of money and volume of spending in the economic system increase at an annual rate of three percent.
109. Recalculate the businessman's sales revenues in the first of the three preceding questions.
110. Recalculate the businessman's rate of $\overline{\text { profit in the first of the three preceding questions. }}$
111. Recalculate the businessman's sales rev$\overline{\text { enues in the second of the three preceding questions. }}$
112. Recalculate the businessman's annualized rate of profit in the second of the three preceding questions.
113. Recalculate the businessman's sales revenues in the third of the three preceding questions.
114. Recalculate the businessman's annualized rate of profit in the third of the three preceding questions.
115. The net investment rate, i.e., the rate which net investment bears to the total of invested capital, tends to equal the rate of increase in the quantity of money and volume of spending.
116. The net investment rate, i.e., the rate which net investment bears to the total of invested capital, tends to equal the rate of increase in the quantity of money and volume of spending. This is because the increase in the quantity of money and volume of spending systematically enlarges the productive expenditure of the present relative to the productive expenditures made in the past which now constitute costs, and does so to an extent corresponding to the rate of increase in the quantity of money and volume of spending.
117. The rate of increase in production and supply adds an approximately equal percentage to the real rate of profit.

The following pertains to the next 5 questions. Assume the existence of an invariable money and that the annual rate of profit generated by the rate of net consumption is 5 percent. Now assume that production and supply begin to increase at a two percent annual rate.
118. Calculate the real rate of profit before production and supply begin to increase. (You should assume that the price level is stable in these conditions.)
119. Calculate the annual rate of fall in prices, once production and supply begin to increase.
120. Taking into account the fall in prices, $\overline{\text { calculate the year-end buying power of any given sum }}$ of money on which the five percent rate of profit is earned.
121. State the real rate of profit implied by the difference between the year-end buying power of any sum on which the 5 percent rate of profit is earned and the buying power of the initial sum invested at the start of the year.
122. Calculate the difference in the annual real rate of profit that results from the two percent annual rate of increase in production and supply.
123. The fact that the rate of increase in production and supply adds an approximately equal percentage to the real rate of profit can be inferred from a. the fact that the rate of increase in the quantity of money and volume of spending adds an approximately equal number of percentage points to the nominal rate of profit, but if the rate of increase in production and supply equals the rate of increase in money and spending, prices will be unchanged and thus the addition to the nominal rate of profit will turn out to be an equivalent addition to the real rate of profit as well
b. the fact that if there is no increase in the quantity of money and volume of spending, the increase in production and supply reduces prices in inverse proportion and thus correspondingly increases the buying power of the capital invested, along with that of the profit earned on the capital
invested, thereby adding an approximately equivalent percentage to the real rate of profit c. both (a) and (b)
124. The degree of capital intensiveness of an economic system is expressed by the ratio of the nominal value of its capital invested to
a. total sales revenues in the economic system
b. total consumption in the economic system
c. total wages paid in the economic system
d. all of the above
e. none of the above
125. The higher the degree of capital intensiveness in an economic system, the greater is the likelihood of its being able to implement technological advances.
126. In which context does net investment represent the achievement of a higher degree of capital intensiveness in the economic system
a. that of an economic system with an invariable money
b. that of an economic system with an increasing quantity of money and volume of spending
127. In an economic system with a modestly increasing quantity of money and volume of spending, accumulated capital relative to other macroeconomic aggregates
a. increases
b. decreases
c. remains about the same
128. Which of the following represent "springs to profitability" (i.e., factors which operate to bring profit back into existence in the economic system if it should be temporarily wiped out)?
a. net consumption
b. net investment as the cause of growing capital intensiveness and thus of more rapid economic progress, which implies a greater ability to produce or import precious metals, with a resulting positive effect on the rate of profit
c. net investment and an equivalent rise in the amount of profit, coming about precisely in response to a prevailing very low or negative rate of profit
d. all of the above
129. In the case of any individual industry, a lower rate of profit acts as an incentive to the withdrawal of capital. This must also be true of the economic system as a whole.
130. In the economic system as a whole, a lower rate of profit actually encourages greater capital intensiveness
a. by reducing the extent of the cost savings or revenue increases that the investment of additional sums of capital need to achieve in order to be considered worthwhile
b. by favoring the adoption of lower-cost, more-capital-intensive methods of production
c. by favoring the production of more-capital-intensive products
d. by favoring the expansion of more-capital-intensive industries.
e. all of the above
f. none of the above
131. Whatever else their undesirable effects may be, wage-rate rigidities do not operate to block the spring to greater general profitability through the movement toward greater capital intensiveness.
132. The increase in the quantity of money that is the by-product of economic progress operates to reduce the degree of capital intensiveness of the economic system, according to Capitalism.
133. The productivity theory [of profit and interest] holds that profit and interest are
a. determined by the marginal net productivity of capital
b. that additional saving operates to reduce the marginal net productivity of capital and thus the rate of profit and interest
c. that technological progress operates to raise the marginal net productivity of capital and thus the rate of profit and interest
d. all of the above

The following pertains to the next 8 questions. You are given the following information: The average member of a very primitive tribe of fishermen gathers 3 fish per day that are washed up in tide pools. Now one of the tribesmen, who is prepared to get by on eating only 2 fish per day, devotes $1 / 3$ of his daily labor for each of 150 days to working on a crude boat and net. At the end of that time, he has the boat and net, and for each of the next 100 days (the useful life of the boat and net), this tribesman is able to catch an average of 30 fish per day.
134. Calculate, in terms of fish, the "marginal gross product" of the boat and net.
135. Calculate, in terms of fish, the "marginal net product" of the boat and net.
136. Calculate, in terms of fish, the average capital outstanding in the boat and net from the time it is brand new to the end of its useful life.
137. Basing your calculation on just one turn of the capital, calculate the rate of profit on the boat and net according to the productivity theory.
138. How many times in the course of a year could the capital invested in the boat and net be turned over on the assumption that the boat and net last for just 100 days?
139. Based on your answer to the two previous questions, calculate the annualized rate of profit on the capital invested in the boat and net.
140. According to the productivity theory, the very high rate of profit present in this series of questions would be reduced by
a. further saving
b. the accumulation of additional capital
c. the operation of the law of diminishing returns
d. all of the above
141. According to the productivity theory, the very high rate of profit present in this series of questions would be reduced by technological progress.
142. According to the instructor, diminishing returns and technological progress determine
a. the rate of profit/interest
b. the rate of capital accumulation in real terms
c. both (a) and (b)
d. neither (a) nor (b)
143. Among the difficulties encountered by the productivity theory of profit/interest are
a. a reliance on the doctrine of opportunity cost
b. the problem of having to subtract mathematically incommensurate quantities, such as loaves of bread forgone versus extra fish produced c. a confusion of more physical output with more money revenue
d. the fact that the rate of profit is highest before there is any capital or productivity of capital
e. all of the above
f. none of the above

## The following pertains to the next 24 questions.

Building on the assumptions underlying questions 134141, assume a nation of one million primitive fishermen, each of whom initially produces three fish per day which sell at a price of $\$ 1$ per fish. Assume that the million fishermen are organized into one million fishing enterprises, each of which pays wages to its one fisherman employee of $\$ 2$ per day. The enterprises make no productive expenditures other than the payment of wages.
144. Calculate total sales revenues in this economic system.
$\qquad$ 145. Calculate total costs in this economic system.
146. Calculate total profits in this economic system.

Now assume that one fishing enterprise alone begins using a boat and net which raise its daily output from 3 fish per day to 30 fish per day.
147. Based on this additional assumption, state the total daily production and supply of fish in the economic system.
148. On the further assumption that the economic system of this nation of fishermen operates under an invariable money, calculate the average price of fish corresponding to the total daily production and supply of fish expressed in answer to the previous question.
149. Calculate the sales revenues of the fishing enterprise that raises its daily fish catch to 30 fish.
150. Calculate the profits of the fishing enterprise that raises its daily fish catch to 30 fish.
151. Calculate the total profit of the 999,999 fishing enterprises that continue to catch only 3 fish per day.
152. Calculate the change, if any, in the profits of the 999,999 fishing enterprises whose production remains at 3 fish per day following the success of the one fishing enterprise that increases its catch to 30 fish per day.

Now, continuing with the assumption of an invariable money, assume that all one million fishing enterprises succeed in increasing their fish catch to 30 fish per day.
153. State the total daily production and sup$\overline{\text { ply of fish in the economic system under this new as- }}$ sumption.
154. Calculate the average price of fish corre$\overline{\text { sponding }}$ to the total daily production and supply of fish expressed in answer to the last question.
155. Calculate the sales revenues of the average fishing enterprise under this new assumption.
156. Calculate profit of the average fishing $\overline{\text { enterprise }}$ under this new assumption.
157. Calculate total sales revenues in the economic system under this new assumption.
158. Calculate total profit in the economic system under this new assumption.
159. A proper conclusion to be drawn from the preceding questions is that the productivity theory of profit/interest is correct in holding that the net productivity of capital goods explains the rate of profit and interest in the economic system.
160. A proper conclusion to be drawn from the preceding questions is that the adoption of more productive methods of production serves to raise the average rate of profit and interest in the economic system.

## Now assume that during the time that the one million fishing enterprises are in process of constructing their boats and nets ( 150 days in all), they each devote one-third of the daily labor of their workers to that purpose.

161. Calculate the daily output of fish for each of these enterprises.
162. Calculate the aggregate, economy-wide daily output of fish.
163. Calculate the average price at which the fish are sold under the continuing assumption of an invariable money.
164. State the sales revenues of the economic system during this period.
165. Calculate the aggregate cost of goods sold during this period.
166. Calculate the aggregate profit of the economic system during this period.
167. It is a mistake to conclude from the answers to these questions that the effect of diverting labor and the corresponding payment of wages to the construction of a fixed asset is to correspondingly reduce cost of goods sold and thus to equivalently raise profits in the economic system.
168. The productivity of capital goods, such as a boat and net, can explain
a. a virtually corresponding addition to the profits of an individual enterprise if it is alone in adopting the more productive method represented by the use of a boat and net
b. the existence of an addition to the aggregate profits of the economic system, because the adoption of more productive methods of production by any one enterprise has no implications for the profitability of other enterprises
c. both (a) and (b)
d. neither (a) nor (b)
169. If, in an economic system with an invari$\overline{\text { able money, all firms employ more productive meth- }}$ ods of production based on the use of more capital,
a. prices fall in inverse proportion to the increase in production and supply
b. aggregate sales revenues remain unchanged c. no addition to aggregate profits or the average rate of profit in the economic system is implied so long as aggregate productive expenditure remains the same and aggregate cost remains equal to aggregate productive expenditure
d. all of the above
170. An indirect connection can exist between the adoption of more productive methods of production and a positive contribution to the rate of profit/interest via
a. the effect of the adoption of more productive methods of production on the rate of increase in
the quantity of commodity money in an economic system that uses commodity money b. the effect of the adoption of more productive methods of production on net investment in the period in which additional capital required for the adoption of the more productive methods is being accumulated
c. both (a) and (b)
d. neither (a) nor (b)
171. The general marginal net productivity
of physical capital goods, conceived of in terms of abstract units of wealth, such as the productive consumption of each unit $K$ of capital goods resulting in an output equivalent to 2 K or, alternatively, 4 K , of capital goods, is far higher than the average rate of profit/interest because
a. wage cost as well as the cost of the capital goods must be subtracted from sales revenues, but this is not allowed for in calculations of physical productivity
b. increases in the production of commodities (other than the commodities that themselves serve as money) do not increase aggregate sales revenues but reduce prices in the face of the same aggregate sales revenues
c. both (a) and (b)
d. neither (a) nor (b)
172. Select the best choice.
a. According to the time preference theory in its traditional form, the totality of the means of producing a future good, such as ten apples to be ready in one year, are purchased at a discount, for example, for nine present apples-i.e., for nine apples available right now. In one year, when the product ten apples appears, those apples will be ten present apples, and thus a profit of one apple will have been earned.
b. According to the time preference theory in its traditional form, profit/interest exists because factors of production represent future goods (i.e., the products into which they will be transformed), and are thus purchased at a discounted value in comparison to the present goods they will later become. When they finally are transformed into their products and have thus become present goods, the products represent a larger quantity of present goods than did the discounted value of the means of producing them. The difference is profit or interest.
c. both (a) and (b)
d. neither (a) nor (b)

The following applies to the next 3 questions. According to the time preference theory in its traditional form, calculate the various rates of profit/interest that result if one begins with 9 present apples and succeeds in ending up with a product that then represents
$\qquad$ 173. 10 present apples.
174. 20 present apples.
175. 5 present apples.

## The following 13 questions require a copy of Reisman's Figure 16-2.

In each year of Reisman's Figure 16-2, a product of $1 C$ of consumers' goods is produced, which sells for 500 units of money and has a cost of production of 400 units of money. The amount of profit earned on those consumers' goods is 100 units of money and the rate of profit/interest expressed as a percentage of the cost value of the consumers' goods is 25 percent. From the perspective of the production box of each year of Figure 16-2, the consumers' goods to be available at the beginning of the following year are future goods.
176. Express the cost of producing the $1 C$ of consumers' goods to be available at the start of the following year in terms of the quantity of present consumers' goods that is of equivalent monetary value, i.e., state what portion of the consumers' goods available in Year 1 is equivalent in monetary value to the means of producing the consumers' goods to be available at the start of Year 2.
177. Express the rate of profit in terms of the difference between the present goods value of the means of producing $l C$ of consumers' goods and the resulting actual $1 C$ of consumers' goods.

Now assume that the economic system suddenly becomes more productive. Thus, imagine that in Year 2, say, the same means of production that were previously able to produce just $1 C$ of consumers' goods now become able to produce $2 C$ of consumers' goods, which will become available at the start of Year 3.
178. State the quantity of present goods that $\overline{\text { represents }}$ the cost value of the means of producing the consumers' goods that will become available at the start of Year 3.
179. Calculate the difference between the present consumers' goods one ends up with at the start of Year 3 and the present goods value, back in Year 2, of the means of producing them.
180. Calculate, in terms of a percentage of cost, the rate of profit/interest implied by your answer to the previous question.
181. Using Figure 16-2's framework of an invariable money, compare the monetary receipts from the sale of consumers' goods in Year 3 with the money cost of producing those consumers' goods and state the difference.
182. The monetary differnce arrived at in answer to the preceding question continues to prevail even though the physical product that is produced and sold rises from 1C to 2C.

Now assume that the economic system had suddenly become less productive instead of more productive. Thus, imagine that in Year 2, the same means of production that were previously able to produce 1C of consumers' goods now become able to produce only .5C of consumers' goods, which will become available at the start of Year 3.
$\qquad$ 183. Calculate for this case the difference between the present consumers' goods one ends up with at the start of Year 3 and the present goods value, back in Year 2, of the means of producing them.
184. Also calculate for this case, in terms of a percentage of cost, the rate of profit/interest implied by your answer to the previous question.
185. Using Figure 16-2's framework of an invariable money, compare the monetary receipts from the sale of consumers' goods in Year 3 with the money cost of producing those consumers' goods and state the difference.
186. The monetary differnce arrived at in answer to the preceding question continues to prevail even though the physical product that is produced and sold falls from 1 C to .5 C .
187. On the basis of the preceding examples, it is clear that the basic formula of the time-preference theory demonstrates exactly what it is supposed to demonstrate. Starting with 9 present apples and ending with 10,20 , or 5 present apples a year later tells us the rate of return that is actually earned in production.
188. The time-preference theory assumes that the prices of present goods
a. fall when production increases
b. rise when production decreases
c. remain the same, irrespective of changes in production
d. none of the above

The following applies to the next 3 questions. The rate of profit/interest calculated as a percentage of cost is initially twenty-five percent. Now production in the economic system doubles while the expenditure of money to produce the product remains the same.
189. State the rate of profit/interest implied by the time-preference theory.
190. State the rate of profit/interest implied by the doctrine of purchasing-power price premiums if the increase in production takes place under an invariable money and thus causes a halving of prices.
191. The supporters of the time-preference theory and of the doctrine of purchasing-power price premiums in the rate of profit/interest hold the contradiction of regarding increases in production as the cause both of an increase and a decrease in the rate of profit.
192. The time-preference theory shares with the productivity theory the error of assuming that a greater or smaller physical product implies correspondingly greater or smaller money sales revenues.
193. According to the doctrine of purchasingpower price premiums a fall in prices reduces the rate of profit/interest by an equivalent percentage.
194. Böhm-Bawerk's exposition of the timepreference theory in its traditional form shares with his critique of the exploitation theory the error of regarding the wage earners as the real producers of the products, rather than, as is in fact the case, the businessmen and capitalists.
195. Like Böhm-Bawerk's exposition, $\overline{\text { Rothbard's exposition of the time-preference theory }}$ also regards the wage earners as the real producers of the products.
196. According to the time-preference theory in its traditional form, the value of consumers' goods represents a fixed starting point from which the value of the factors of production is derived by the application of a rate of discount to the value of the consumers' goods.

The following pertains to the next 8 questions. The rate of profit/interest is 10 percent. Two consumers' goods, one a quantity of wheat which takes 6 months to grow and the other a quantity of scotch which takes eight years to produce, are each worth $\$ 100$. Both products can be produced with the same kind of labor, with the result that labor can be transferred from the production of the one to the production of the other. We assume that labor is the only factor of production that needs to be purchased in the two cases.
197. Find the value of the labor required to grow the wheat according to the time preference theory in its traditional form.
198. Find the value of the labor required to $\overline{\text { produce the scotch according to the time preference }}$ theory in its traditional form.

## Now assume that the rate of profit/interest falls to 5 percent.

199. Find the new value of the labor required to grow the wheat according to the time preference theory in its traditional form.
200. Find the new value of the labor required to produce the scotch according to the time preference theory in its traditional form.
201. This example shows that in order for the value of consumers' goods to be a fixed starting point from which the value of the factors of production is derived, wage rates of the same kind of labor would have to become permanently unequal in the production of products requiring different periods of time in their production.
202. In reality, when the rate of profit/interest fell from 10 percent to five percent,
a. wage rates in the production both of the wheat and the scotch would rise, but the wage rates in the production of the scotch would tend to rise by more
b. labor would be attracted to the production of the scotch from the production of wheat, tending to equalize wage rates in the production of the two goods
c. the price of scotch would fall, because of the increase in its production and supply, while the price of wheat would rise, because of the decrease in its production and supply
d. all of the above
e. none of the above
203. The correct answer to the preceding question shows the market value of consumers' goods can properly be taken as a fixed starting point for the determination of the value of the factors of production by the application of a rate of discount to the value of consumers' goods.
204. It is an error to take the value of consumers' goods as a fixed starting point and to assume that changes in the rate of profit/interest affect only the value of the factors of production used to produce them.
205. Select the best choice.
a. the prices of factors of production are fundamentally determined by supply and demand no less than the prices of consumers' goods b. the rate of discount (viz., profit/interest) emerges as the result of differences between the demand/supply situation in the market for products and the demand/supply situation in the market for factors of production
c. the demand for products tends regularly and permanently to exceed the demand for factors of production by the amount of net consumption d. the supply of products can be less or more than corresponds to the supply of factors of production
to the extent that there is positive or negative net investment
e. all of the above
206. Böhm-Bawerk's recognition that whoever has savings of any kind thereby demonstrates that he values the last unit of wealth that he devotes to the future above an additional unit of wealth that he might devote to enjoyment in the present
a. implies that to this extent an individual has a preference for future goods over present goods b. undermines the time preference theory in its traditional form, which holds that profits/interest derive from the higher valuation of present goods over future goods
c. does not eliminate the role of time preference in determining the rate of profit/interest if the role of time preference is perceived as determining the extent to which individuals divide their wealth and income between consumption and provision for the future, and thus as the major determinant of the rate of net consumption
d. all of the above
207. Ricardo's proposition that "profits rise as wages fall and fall as wages rise"
a. was advanced in the context of an invarible money
b. can be understood as representing profits rising as productive expenditure and costs fall, if
wages are regarded as representing all of productive expenditure
c. implicitly presupposes the existence of net consumption as the basis of sales revenues being greater than "wages" or productive expenditure d. is consistent with real wages and real profits both rising together and with real wages rising even when "profits rise and wages fall" e. all of the above
208. John Stuart Mill's proposition that "demand for commodities is not demand for labor" a. must be accepted, at least implicitly, in order to see that the demand for consumers' goods regularly and consistently exceeds the demand for labor and thus to recognize net consumption as a source of aggregate profit/interest
b. was accepted by Ricardo and thus helps to make his doctrine that "profits rise as wages fall and fall as wages rise" compatible with the net consumption theory
c. both (a) and (b)
d. neither (a) nor (b)
209. If John Stuart Mill's proposition that $\overline{\text { "demand }}$ for commodities is not demand for labor" were not true, and the demand for commodities were a demand for labor, the demand for consumers' goods could not exceed the demand for labor and thus net consumption could not exist.

| Question \# | Correct Answer | Question \# | Correct Answer | Question \# | Correct Answer | Question \# | Correct Answer | Question \# | Correct Answer | Question \# | Correct Answer | Question \# | Correct Answer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | c | 31 | T | 61 | C | 91 | C | 121 | 7.10\% | 151 | \$999,970 | 181 | 100 |
| 2 | T | 32 | T | 62 | d | 92 | T | 122 | 2.10\% | 152 | -\$27 | 182 | T |
| 3 | F | 33 | b | 63 | T | 93 | T | 123 | c | 153 | 30000000 | 183 | -. 3 C |
| 4 | F | 34 | T | 64 | d | 94 | b | 124 | d | 154 | \$0.10 | 184 | -37.5\% |
| 5 | F | 35 | T | 65 | d | 95 | T | 125 | T | 155 | \$3 | 185 | 100 |
| 6 | a | 36 | T | 66 | d | 96 | C | 126 | a | 156 | \$1 | 186 | T |
| 7 | d | 37 | T | 67 | e | 97* | \$105.00 | 127 | c | 157 | \$3,000,000 | 187 | F |
| 8 | T | 38 | T | 68 | T | 98 | \$100.4074 | 128 | d | 158 | \$1,000,000 | 188 | c |
| 9 | T | 39 | T | 69 | c | 99 | \$110.25 | 129 | F | 159 | F | 189 | 150\% |
| 10 | d | 40 | T | 70 | C | 100 | \$107.10 | 130 | e | 160 | F | 190 | -25\% |
| 11 | c | 41 | \$200,000 | 71 | 10 | 101 | 7.10\% | 131 | F | 161 | 2 | 191 | T |
| 12 | d | 42 | \$204,000 | 72 | 100 | 102 | \$100.5732 | 132 | F | 162 | 2,000,000 | 192 | T |
| 13 | c | 43 | \$206000 also \$94000/\$300000 $=31.33 \%$ | 73 | 0 | 103 | 7.10\% | 133 | d | 163 | \$1.50 | 193 | T |
| 14 | T | 44 | \$208000 also \$192000/\$400000 $=48 \%$ | 74 | 5 | 104 | \$114.70 | 134 | 2700 | 164 | \$3,000,000 | 194 | T |
| 15 | c | 45 | \$220000 also \$780000/\$1000000 = 78\% | 75 | 5 | 105 | 7.10\% | 135 | 2550 | 165 | \$1,333,333 | 195 | T |
| 16 | c | 46 | \$1020000 also -\$20000/\$1000000 $=-2 \%$ | 76 | 10 | 106 | \$104.00 | 136 | 75 | 166 | \$666,667 | 196 | T |
| 17 | d | 47 | c | 77 | 50 | 107 | \$100.33 | 137 | 3400\% | 167 | F | 197 | \$95 |
| 18 | a | 48 | b | 78 | 100 | 108 | \$108.16 | 138 | 3.65 | 168 | a | 198 | \$47 |
| 19 | T | 49 | c | 79 | e | 109 | \$107.12 | 139 | 12410\% | 169 | d | 199 | \$97.50 |
| 20 | a | 50 | b | 80 | T | 110 | 7.12\% | 140 | d | 170 | c | 200 | \$68 |
| 21 | T | 51 | F | 81 | c | 111 | \$100.5732 | 141 | F | 171 | C | 201 | T |
| 22 | e | 52 | F | 82 | b | 112 | 7.12\% | 142 | b | 172 | C | 202 | d |
| 23 | T | 53 | T | 83 | T | 113 | \$114.75 | 143 | e | 173 | 11.11\% | 203 | F |
| 24 | 200 | 54 | T | 84 | a | 114 | 7.12\% | 144 | \$3,000,000 | 174 | 122.22\% | 204 | T |
| 25 | 11.11\% | 55 | T | 85 | T | 115 | T | 145 | \$2,000,000 | 175 | -44.44\% | 205 | e |
| 26 | NC of 200 | 56 | b | 86 | T | 116 | T | 146 | \$1,000,000 | 176 | .8C | 206 | d |
| 27 | c | 57 | C | 87 | T | 117 | T | 147 | 3,000,027 | 177 | 0.25 | 207 | e |
| 28 | T | 58 | d | 88 | T | 118 | 5.00\% | 148 | \$0.999991 | 178 | .8C | 208 | C |
| 29 | F | 59 | T | 89 | T | 119 | 1.96\% | 149 | \$30 | 179 | 1.2C | 209 | T |
| 30 | T | 60 | T | 90 | T | 120 | 1.0710 | 150 | \$28 | 180 | 150\% |  |  |


| Rate of Net | Sales | Rate of Increase | Sales |  | Rate of | Annualized |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Consumption/ | Revenues | in Money and | Revenues | Profit | Profit | Rate of Profit |
| Rate of Profit | $\$ 100^{*}(1+B)$ | Spending | C*(1+D) | E $-\$ 100$ | F/100 |  |


| Annual | $5.00 \%$ | $\$ 105.00$ | $2.00 \%$ | $\$ 107.10$ | $\$ 7.10$ | $7.10 \%$ | $7.10 \%$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Monthly | $0.4074 \%$ | $\$ 100.4074$ | $0.1652 \%$ | $\$ 100.5732$ | $\$ 0.57$ | $0.5732 \%$ | $7.10 \%$ |
| Biannual | $10.25 \%$ | $\$ 110.25$ | $4.04 \%$ | $\$ 114.70$ | $\$ 14.70$ | $14.70 \%$ | $7.10 \%$ |
|  |  |  |  |  |  |  |  |
| Annual | $4.00 \%$ | $\$ 104.00$ | $3.00 \%$ | $\$ 107.12$ | $\$ 7.12$ | $7.12 \%$ | $7.12 \%$ |
| Monthly | $0.33 \%$ | $\$ 100.33$ | $0.25 \%$ | $\$ 100.57$ | $\$ 0.57$ | $0.57 \%$ | $7.12 \%$ |
| Biannual | $8.16 \%$ | $\$ 108.16$ | $6.09 \%$ | $\$ 114.75$ | $\$ 14.75$ | $14.75 \%$ | $7.12 \%$ |

Question Answer

| 1 | C |
| :--- | :--- |
| 2 | T |
| 3 | F |
| 4 | F |
| 5 | F |
| 6 | a |
| 7 | d |
| 8 | T |

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## Chapter 17

1. Capital accumulation can take place only with an accompanying fall in the rate of profit.
2. When production increases and prices fall, the result is
a. a fall in profit margins and the rate of profit
b. an increase in the difficulty of repaying debts
c. deflation
d. all of the above
e. none of the above
3. Capital accumulation can take place with both no accompanying fall in the rate of profit and no greater difficulty of repaying debts.
4. In the conditions of an invariable money, a fall in the rate of profit is associated with an acceleration of the rate of capital accumulation and fall in prices, rather than with capital accumulation and falling prices per se.
5. In the conditions of an invariable money, $\overline{\text { capital accumulation can take place }}$
a. on the basis of a sufficiently high but stable volume of demand for capital goods and of productive expenditure overall
b. only on the basis of a rising demand for capital goods and of productive expenditure overall
6. The habit of focusing almost exclusively on the production of consumers' goods, as though all that were produced were consumers' goods,
a. prevents one from recognizing that once a
larger supply of capital goods comes into exis-
tence and increases the ability to produce, that circumstance causes an increase in the production and supply of capital goods as well as an increase in the production and supply of consumers' goods b. leads to the belief that the only source of capital accumulation is more saving
c. both (a) and (b)
d. neither (a) nor (b)
7. The conclusion that the effect of capital accumulation is a lower rate of profit
a. is a valid generalization from the effects of greater investment in an individual industry
b. rests on the fallacy of composition
c. both (a) and (b)
8. Falling prices caused by increased production and supply are not preceded or accompanied by falling unit costs.
9. Given the monetary demands for the products of business and for factors of production by business, falling prices caused by increased production and supply are preceded by falling unit costs to the same extent.
10. Given the monetary demands for the $\overline{\text { products }}$ of business and for factors of production by
business, falling prices caused by increased production and supply are preceded by falling unit costs to the same extent, because the increase in the supply of products is preceded by a corresponding increase in the supply and/or productivity of the factors of production.
11. A fall in the rate of profit that results from a fall in the rate of net consumption differs from a fall in the rate of profit that results from a financial contraction and deflation because
a. a fall in the rate of net consumption entails a rise in saving and productive expenditure, net investment, and the formation of new capital giving rise to a higher degree of capital intensiveness, and makes possible a correspondingly greater availability of credit, which characterizes it as the very opposite of a period of deflation or financial contraction
b. in a deflation or financial contraction, productive expenditure falls, net investment becomes negative, capital values decline, and credit becomes largely unobtainable
c. both (a) and (b)
12. The process of falling prices resulting from increased production and supply is likely to be accompanied by an increased difficulty of repaying debt.
13. Under a gold standard, the process of falling prices resulting from increased production and supply is actually almost certain to be accompanied by a growing ability to repay debt rather than by an increased difficulty of repaying debt.
14. Under a gold standard, the process of falling prices resulting from increased production and supply is actually almost certain to be accompanied by a growing ability to repay debt rather than by an increased difficulty of repaying debt because the increase in production and supply will almost certainly be accompanied by an increase in the production and supply of gold and thus correspondingly rising spending and sales revenues in terms of gold.
15. Under a system of commodity money, the fall in the rate of profit that is the accompaniment of launching or accelerating the process of capital accumulation by means of a fall in the rate of net consumption, is in part reversed by the consequences of that capital accumulation, which include an increase in the production and supply of the commodity serving as money, along with an increase in the production and supply of commodities in general.
16. Just as technological progress is not required as an "outlet" for capital goods accumulated merely by means of saving, but is itself a source of capital goods, so in its relation to the increase in the supply of commodity money it is not an outlet for net investment, but is itself a source of net investment.
$\qquad$ 17. Technological progress
a. provides new and additional uses for an expanding supply of capital goods resulting from saving
b. is a major source of new and additional capital goods
17. Ricardo's essential insight concerning the nature of capital accumulation was that it is the result of anything that increases production in general.
18. A fall in the rate of profit caused by a fall in the rate of net consumption is unlikely to be accompanied by a rise in the demand for money for holding, as is the case when the rate of profit falls because of a financial contraction/deflation, because
a. it does not render the rate of profit negative
b. it results in additional saving and capital accumulation and thus in the availability of additional credit, which last operates to reduce the demand for money for holding

> c. both (a) and (b)
20. With the passage of time, the cumulative proportion of the capital goods and labor in existence in any given base year that directly or indirectly serves in the production of consumers' goods continually grows, while the proportion continuing to serve indirectly in the production of capital goods and thus of consumers' goods in the still further future continually declines.
21. Irrespective of how high is the relative production of capital goods and how low is the relative production of consumers's goods, virtually the total supply of the means of production existing in any given year are ultimately devoted to the production of consumers' goods.
22. The average period of production or length of the structure of production can be expressed in terms of how many years must elapse before some given percentage of the capital goods and labor in existence in a base year will have ended up directly or indirectly serving in the production of consumers' goods.
23. A continuous lengthening of the period of production is necessary for the existence of capital accumulation.
24. The role played in capital accumulation by the average period of production explains why technological progress by itself is limited in its ability to bring about capital accumulation.
25. An economic system with a longer aver$\overline{\text { age period of production is in no better position to im- }}$ plement technological advances than an economic system with a shorter average period of production.
26. In an economic system with either an invariable money or a quantity of money and volume of spending that increases at any given rate, the taxation of profits
a. raises
b. lowers
c. leaves unchanged
the pretax rate of profit.
27. Under a system of commodity money, the taxation of profits
a. raises
b. lowers
c. leaves unchanged
the rate of net investment and the rate of profit insofar as it depends on the rate of net investment.
28. In an economic system with either an invariable money or a quantity of money and volume of spending that increases at any given rate, budget deficits financed by borrowing from the public operate to
a. raise
b. lower
c. leave unchanged
the rate of profit.
29. Under a system of commodity money, budget deficits financed by borrowing from the public operate to
a. raise
b. lower
c. leave unchanged
the rate of net investment and the rate of profit insofar as it depends on the rate of net investment.
30. The goal of increasing saving and capital $\overline{\text { formation through balancing the government's budget }}$ is facilitated more by cutting government spending than by increasing taxes, insofar as the additional taxes would come at the expense of saving.
31. When the rate of profit is $5 \%$, it pays an investor to wait an additional year for payback if the later payback will be more than $5 \%$ greater than the earlier payback, and to wait an additional two years for payback if the later payback will be more than $10.25 \%$ greater than the earlier payback, and so on. How much greater must the paybacks be if the rate of profit is $10 \%$ ?
32. To the extent that government intervention has served to raise the rate of profit in the economic system, it has contributed to an emphasis on short-term results.
33. To the extent that chronic budget deficits in the United States have made the rate of profit higher in the United States than in Japan, they have
a. encouraged Japanese investment in the United States
b. contributed to the negative US balance of trade with Japan
c. mitigated the reduction in capital available and rise in the rate of profit that would otherwise have taken place in the US as the result of its budget deficits
d. all of the above
e. none of the above

## $10 \mathrm{PT}=$ The following is four-part question:

34. Economic freedom and respect for property rights promote capital accumulation and economic progress by
a. increasing the productivity of capital goods and thus reducing the maintenance proportion b. increasing the relative production of capital goods
c. both (a) and (b)
35. The relative size of a country's economy in the world as a whole depends in the long run on its rate of capital accumulation and economic progress.
36. The relative size of a country's economy in the world as a whole depends in the long run on the extent of its economic freedom and respect for property rights.
37. In the face of more rapid increases in production in the rest of the world than in the United States, greater economic freedom and respect for property rights in the United States is necessary in order to stem the decline in the relative size of the American economy.
38. In the absence of increases in the quantity of money, net saving in terms of money would show a tendency to disappear.
39. In the absence of increases in the quantity of money, net saving in terms of money would tend to disappear because
a. costs tend to rise toward any given level of productive expenditure
b. to the extent that net saving continued and increased the total of accumulated savings and capital, the amount of net consumption would tend to rise and thus cause productive expenditure to fall c. both (a) and (b)
40. The actual economic significance of sav$\overline{\text { ing lies at the gross level, rather than at the net level, }}$ because this is the level at which the respective demands for capital goods and labor relative to the demand for consumers' goods are present and play their vital role even though net saving in terms of money may be zero.
41. Continued net saving in terms of money a. reduces the rate of profit
b. is the product of forces that add to the rate of profit, viz., the increase in the quantity of money and volume of spending
42. In the long run, hoarding is the cause of a higher rate of profit rather than a lower rate of profit because the funds hoarded are as much a foundation of net consumption as the funds invested; at the same time, the ratio of net consumption to funds invested is
increased, to the extent that people hold their savings in the form of cash hoards rather than investments.
43. The scarcity of capital in its vertical dimension refers to
a. the extent to which capital is available for employment at stages of production more remote from the production of consumers' goods, e.g., in the production of the steel that is used to produce automobiles, in the construction of the steel mills that are used to produce that steel, and so on b. the relation between the supply of capital and the need for more overall capital directly or indirectly employed per unit of consumers' goods produced
c. the need for a higher degree of capital intensiveness
d. all of the above
44. In its horizontal dimension, the scarcity of capital is as great as is the scarcity of consumers' goods.
45. Outlets for additional investment of capi$\overline{\text { tal in its vertical dimension exist in accumulating capi- }}$ tal sufficient
a. to enable the vast majority of the world that is presently not industrialized to come up to the degree of capital intensiveness of the portion of the world that is industrialized
b. within the industrialized countries to enable every factory, farm, mine, and store to increase its degree of capital intensiveness to the point presently enjoyed only by the most capital-intensive establishments
c. to enable all productive establishments to raise the standard of capital intensiveness to the point where no further reduction in costs of production or improvement in the quality of products could be achieved by any greater availability of capital in its vertical dimension
d. all of the above
46. The potential for a rise in the value of land constitutes an outlet for virtually unlimited savings and capital accumulation in its vertical dimension at a positive rate of return on capital.
47. The doctrine of underconsumptionism a. holds that an increase in saving and decrease in consumption requires that in order for the additional savings to be invested, business must buy for more at the very time that it sells for less b. omits the demand for capital goods when it concludes that an increase in saving and decrease in consumption means a reduction in business sales revenues
c. both (a) and (b)
48. The demand for capital goods and labor can
a. not lastingly
b. radically and permanently
exceed the demand for consumers' goods.
49. The demand for capital goods and labor can radically and permanently exceed the demand for consumers' goods because under such conditions
a. most of the demand for capital goods and labor comes to be made in the production of capital goods, not consumers' goods
b. the demand for consumers' goods needs to exceed only the limited part of the demand for capital goods and labor made directly in the production of consumers goods, while the demand
for capital goods in the production of consumers' goods constitutes a further demand for goods, behind which stands a further demand for capital goods and labor, and so on, indefinitely c. matters are described by an infinite series the further terms of which are larger the smaller is the initial term and the larger is the proportion in which later terms stand to earlier terms d. all of the above

Chapter 17, Questions 1-48.

| Ques- <br> tion \# | Correct <br> Answer | Ques- <br> tion \# <br> 1 | Correct <br> Answer |
| :---: | :---: | :---: | :---: |
| 2 | e | 26 | a |
| 3 | T | 27 | b |
| 4 | T | 29 | a |
| 5 | a | 30 | b |
| 6 | C | 31 | $>10 \%$ T $>21 \%$ |
| 7 | b | 32 | T |
| 8 | F | 33 | d |
| 9 | T | 34 | c |
| 10 | T | 35 | T |
| 11 | C | 36 | T |
| 12 | F | 37 | T |
| 13 | T | 38 | T |
| 14 | T | 39 | c |
| 15 | T | 40 | T |
| 16 | T | 41 | b |
| 17 | b | 42 | T |
| 18 | T | 43 | d |
| 19 | C | 44 | T |
| 20 | T | 45 | d |
| 21 | T | 46 | T |
| 22 | T | 47 | c |
| 23 | F | 48 | b |
| 24 | T | 49 | d |
| 25 | F |  |  |

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## Chapter 18

1. An economist's acceptance of the proposition that unemployment can be eliminated by a fall in wage rages and prices implies opposition on his part to labor legislation and all other government intervention that stands in the way of wage rates falling in the face of unemployment.
2. In view of the influence of the Marxian ex$\overline{\text { ploitation theory, opposition to government interven- }}$ tion on the side of raising and maintaining wage rates a. opened an economist up to the condemnation of being ready to leave wage earners defenseless against exploitation by businessmen and capitalists b. required that an economist be able to refute the Marxian exploitation theory if he wished to overcome such condemnation, which was a task beyond the ability of most economists
c. required that an economist who was capable of refuting the Marxian exploitation theory take a stand in opposition to the overwhelming intellectual current of the time
d. all of the above
3. The essential claim of Keynesianism is that a free market in labor and fall in wage rates is incapable of eliminating unemployment and that mass unemployment is an inescapable feature of a capitalist economic system in modern conditions.
4. A leading implication of Keynesianism is that there is no need for economists to oppose government interference raising or maintaining wage rates, since the abolition of such interference would not serve to eliminate unemployment in any case, and thus that there is no reason for economists to have to be in a state of conflict with the prevailing opinion of virtually all other intellectuals.
5. According to Keynesianism, the solution for mass unemployment is "fiscal policy," by which, in essence, is meant that the government must adopt a policy of budget deficits.
6. According to Keynesianism, the more the government spends for any purpose-even for the least valuable programs imaginable, such as pyramid building-the more prosperous must the economic system become.
7. Keynesianism was a source of intellectual relief for many economists, because his ideas filled what perhaps the majority of economists experienced as a vital need-it gave them a way out of conflict with the rest of the intellectual world and with a good portion of their own convictions. For if Keynes were right, economists need not oppose labor legislation. Indeed, they could join in the calls for expanded government intervention.
8. Such ideas as that pyramid building and budget deficits are economically beneficial marks Key-
nesianism as an enemy both of common sense and the love of liberty (viz., the freedom from excessive government, which excess is fostered by the policy of budget deficits).
9. Keynesianism
a. holds that even though the quantity of money in the economic system remains the same, a fall in wage rates and prices is accompanied by proportionately less spending, since it alleges that there is no increase in the quantity of goods and labor demanded at the lower prices and wages
b. is incompatible with the quantity theory of money
c. is a species of consumptionism
d. all of the above
10. The success of Keynesianism in overcoming opposition was the result in large part of the unnecessary abandonment two generations earlier of the main body of classical economic thought in the mistaken belief that it supported Marxism, in particular the abandonment of classical economics' views on the wages fund doctrine and the role of saving in spending.
11. Neo-Keynesianism
a. arose in response to some relatively mild criticism of Keynes levied by A. C. Pigou, a colleague at Cambridge University
b. admits that a fall in wage rates would be capable of eliminating unemployment, but claims that the fall would have to be enormously out of proportion to any additional employment achieved, with the implication that in the process of achieving full employment virtually every debtor would be bankrupted, because the grossly disproportionate drop in wage rates and prices implies correspondingly large reductions in aggregate spending and revenues and thus in the ability to repay debts.
c. claims that a necessary condition of prices being able to fall would be the adoption of a radical antitrust policy, or a program of widespread nationalization of industry, as the means of establishing "price competition," because big business, left to its own devices, is "oligopolistic" and practices "administered pricing"-i.e., won't reduce prices
d. fully agrees with Keynesianism with respect to the conclusion that a free economy cannot have full employment
e. all of the above
12. The neo-Keynesians are led to conclude that reductions in wage rates and prices can have only a relatively modest impact on the increase in employment and output because the only mechanism they can imagine by which a fall in wage rates and prices can
increase the quantity of goods and labor demanded is by virtue of its effect in increasing the buying power of the stock of money and on that basis increasing the demand for consumers' goods and thereby creating additional employment.
13. Pigou's doctrine is even weaker than the $\overline{\text { Keynesians themselves recognize, because if the }}$ money supply of the economic system rests on a fractional reserve, and if it were the case that there must be some significant drop in total spending accompanying the fall in wage rates and prices, then there would be substantial business failures, which would result in substantial bank failures and in a reduction in the quantity of money. In such a case, the "Pigou effect" would be reduced to depending on the ability of a fall in wage rates and prices to raise the purchasing power not of a fixed stock of money (which would not be fixed, but falling) but of a much more limited fixed monetary base.
14. Samuelson and Nordhaus depart both from Keynesianism and traditional neo-Keynesianism in their explanation of unemployment as being caused by wage-rate rigidities rather than by the alleged perfect inelasticity or at least extremely high inelasticity of the aggregate demand curve.
15. When they say, "The classical approach holds that prices and wages are flexible, so the economy moves to its long-run equilibrium very quickly," Samuelson and Nordhaus
a. misrepresent the views of the classical economists, who never maintained that wages and prices are flexible in the face of minimum-wage and prounion legislation and similar government interference
b. ignore the existence of such government interference
c. both (a) and (b)
16. When they say that the classical economists preached "that persistent unemployment was impossible," Samuelson and Nordhaus ignore the fact that the classical economists' proposition was intended to apply only to a labor market free of government interference, not to one in which such interference prevents a fall in wage rates.
17. Choose the answer which is most completely true.
a. According to Samuelson and Nordhaus,

Keynes emphasized that because wages and prices are inflexible, there is no economic mechanism to restore full employment and ensure that the economy produces its potential.
b. Keynes's actual position was that there is no way for a free economy, which has flexible wages and prices, to achieve full employment.
c. Samuelson and Nordhaus's claim represents an unadmitted capitulation to the claims of classical economists, in that it concedes that what stands in the way of full employment is a failure of wage
rates to fall and thereby increase the quantity of labor demanded.
d. all of the above
18. As presented by Samuelson and Nordhaus, what remains of the Keynesian position is merely an obstinate refusal to challenge the government intervention that is responsible for mass unemployment, and an insistence that the problem of unemployment be dealt with by means of still more government intervention.
19. The Keynesian doctrine of the unemployment equilibrium is the claim that
a. a fall in wage rates and prices is incapable of increasing the quantity of labor demanded, because it is accompanied by a corresponding fall in the aggregate monetary demands for consumers' goods and labor
b. a free economy cannot escape from mass unemployment
c. both (a) and (b)
20. The Keynesian aggregate demand curve is identical to the consumptionist aggregate curve presented in Chapter 13 except for the horizontal axis representing employment as well as output, and the use of the letter $Y$ to denote output.
21. The claim of many union leaders that wage rate reductions result in proportionate reductions in consumer spending
a. is often thought to be the basis of the Keynesian aggregate demand curve
b. is fallacious because while the wage-rate reductions reduce the spending of the individual wage earner, they increase the number of workers employed and thereby enable the same overall level of spending to be maintained by the individually smaller spending of a larger number of workers, which unchanged level of overall spending is sufficient to buy the output of the larger number of workers by virtue of lower prices
c. both (a) and (b)
22. The fall in wage rates to their equilibrium, i.e., full-employment, level is in fact almost certain to be accompanied by a rise in total payroll spending and in productive expenditure as a whole, because it brings out the investment expenditures which had been postponed, awaiting the fall in wage rates. Thus, in actuality, it is accompanied by a rise in the aggregate monetary demands for labor and for goods, both consumers' goods and capital goods.
23. The actual basis of the vertical Keynesian aggregate demand curve is
a. the claim of many union leaders that wage rate reductions result in proportionate reductions in consumer spending
b. the $I S$ curve
24. The $I S$ curve
a. is the relationship alleged by the Keynesians between the "marginal efficiency of capital" (viz., the rate of profit and interest), on the one side, and the volume of output and employment, on the other, for equilibria of investment and saving b. purports to show that as output and employment expand, as measured along the horizontal axis, the rate of return on capital falls, as measured along the vertical axis
c. both (a) and (b)
25. The $I S$ curve underlies the Keynesian aggregate demand curve in that the Keynesians claim that at the point of full employment on the $I S$ curve, namely $Y_{f}$ and its corresponding output, the rate of return would either be negative or, if not negative, at least unacceptably low (below 2 percent is the usual estimate of what is unacceptably low). This alleged insufficiency of the rate of return that would exist if full employment were achieved is supposed to be the reason that full employment cannot exist, or if it did exist, could not be maintained.
26. The Keynesian argument for an unemployment equilibrium is based on the claim that the achievement of full employment would entail a rate of profit and interest too low for investment to be worthwhile. And thus, if somehow full employment were achieved, say the Keynesians, savings would be hoarded rather than invested, with the effect being a drop in spending for output and labor and a reduction in output and employment below the full-employment level, which would go on until sufficient movement had taken place up and to the left along the $I S$ curve to raise the rate of return on capital back up to the alleged minimum acceptable rate of return.
27. While 2 percent is the figure most often cited as the minimum acceptable rate of return, nothing depends on that specific assumpiton. If the minimum acceptable rate of return were instead assumed to be zero, the Keynesian argument could simply be recast as claiming that full employment required a rate of return below zero.
28. The $I S$ curve is derived from
a. the production function
b. the saving function
c. the equality of investment with saving
d. the marginal efficiency of capital schedule
e. all of the above
29. The production function describes the relationship between the quantity of labor employed, on the vertical axis, and the quantity of output (real national income) produced, on the horizontal axis.
30. The "saving function" a. is the Keynesian doctrine that a definite, determinate mathematical relationship exists between the level of income, on the one side, and the volume of saving out of income, on the other
b. when diagrammed shows saving on the vertical axis and national income on the horizontal axis c. is the corollary of the more widely known Keynesian doctrine of the "consumption function," according to which consumption spending is mathematically determined by the level of income d. is derived by subtracting the consumption function from national income
e. is presented as the algebraic formula
$S=-a+(1-c) Y$,
f. all of the above
31. The equilibria of investment and saving is diagrammitically depicted by a 45 degree line that shows investment equal to saving at every point, with the vertical axis representing saving and identical to the vertical axis of the saving-function diagram, and the horizontal axis representing net investment.
32. The reason for showing the equality of saving and investment is to
a. ask what would happen if all that were saved at every level of real income were actually invested
b. set the stage for showing why investment cannot in fact be equal to saving when saving is substantial
c. both (a) and (b)
33. The marginal efficiency of capital schedule
a. is drawn showing the rate of return on capital on the vertical axis and the volume of net investment on the horizontal axis
b. claims that as the volume of net investment increases, the rate of return on capital decreases
c. both (a) and (b)
34. The IS curve is derived on the basis of the proposition that
a. a given volume of employment results in a corresponding volume of output (real national income) on the production function
b. that volume of output (real national income) implies a definite amount of saving, based on the saving function
c. that volume of saving requires an equivalent volume of net investment if hoarding is not to result
d. that volume of net investment implies a definite rate of return on capital according to the marginal efficiency of capital schedule
e. the pairing of the rate of return on capital implied by the marginal efficiency of capital schedule with the volume of output (real national income) that gave rise to it represents a point on the $I S$ curve
f. all of the above
35. Keynesianism alleges that
a. the "marginal efficiency of capital" is determined by the volume of investment in physical
terms, and thus that as wage rates and prices fall, the effect is to reduce the monetary value of the maximum physical amount of investment that is consistent with the minimum acceptable rate of return
b. since total spending is essentially just a multiple of investment spending, the effect of a reduction in wage rates and prices and a proportional reduction in investment spending is a proportional reduction in total spending
c. both (a) and (b)
36. According to Keynesianism, there cannot $\overline{\text { lastingly }}$ be a level of employment, output, and real income greater than what produces the limited volume of saving that can be accommodated by the limited volume of profitable investment opportunities.
37. According to Keynesianism, full employment is not possible because if it existed, people would attempt to save more than can profitably be invested (i.e., invested at the minimum acceptable rate of return or better).
38. According to Keynesianism, the achievement of a rate of return on capital high enough to be minimally acceptable requires the existence of unemployment in order to reduce
a. the level of output/real income
b. the volume of saving, which is allegedly determined by the size of output/real income
c. the need for investment to offset the saving
d. the downward pressure on the rate of return allegedly caused by more investment
e. all of the above
39. According to Keynesianism, if there were no additional savings requiring offsetting investment as employment increased, full employment could actually be achieved, because in that case the rate of return on capital would not have to fall as employment increased. Thus, if only people were sufficiently profligate, they could be prosperous, according to Keynesianism.
40. The grounds for the MEC doctrine are a. an alleged rise in the purchase price of capital assets as net investment increases b. a fall in the selling prices of products as the result of increasing net investment and the additional productive capacity that it brings about, which fall in prices allegedly causes a fall in profit margins and the rate of profit
c. the operation of the law of diminishing returns as net investment increases, accompanied by a further fall in the prospective yields to capital assets d. all of the above
41. "Fiscal policy" is essentially a policy of government budget deficits designed to deal with the alleged excess of saving over profitable investment outlets at the point of full employment.
42. Fiscal policy, in the form of chronic government budget deficits, is supposed to be the solution for the unemployment equilibrium, according to Keynesianism, by virtue of providing an additional outlet for saving, alongside the allegedly insufficient outlet provided by profitable investment. With a deficit, employment, output/real income, and saving can allegedly be greater with no additional downward pressure on the marginal efficiency of capital, because the excess saving is siphoned off into financing the deficit.
43. An analogy to the Keynesian doctrine of the unemployment equilibrium would be the assumption of an environmental pollution function in place of the saving function and the further assumption of a maximum tolerable amount of pollution. In that case, as employment and output/real income increased, so too would the magnitude of pollution. If full employment generated more pollution than the alleged maximum tolerable amount, then a basis would exist for the allegation of an unemployment equilibrium on environmental grounds.
44. An analogy to the Keynesian doctrine of the unemployment equilibrium would be the assumption of an alcholic beverage/narcotic function in place of the saving function and the further assumption of a maximum tolerable limit to the consumption of alchohol/narcotics consistent with people being able to work effectively. In that case, as employment and output/real income increased, so too would the consumption of alchohol/narcotics. If at the point of full employment and its corresponding level of output/real income, the consumption of alchohol/narcotics was so great that people could not work, an unemployment equilibrium could be held to exist for that reason.
45. The Keynesian claim that as net invest$\overline{m e n t ~ i n c r e a s e s, ~ t h e ~ p u r c h a s e ~ p r i c e ~ o f ~ c a p i t a l ~ a s s e t s ~}$ rises, thereby reducing the rate of return on capital, drops the context that the question at issue is the effect of a fall in wage rates and prices. When wage rates and price fall, the purchase price of capital assets will fall, not rise. The additional net investment is analogous to an additional quantity demanded at lower prices. Just as the additional quantity demanded at lower prices is not a rise in demand and does not raise prices, so too the additional net investment that occurs in response to lower wage rates and prices does not raise the purchase price of capital assets, but is in response to the fall in their prices.
46. The Keynesian claim that as net investment increases and thus causes an increase in productive capacity, which in turn leads to a fall in selling prices, drops the context that what initiates the process is a fall in wage rates, which means a fall in costs of production preceding the fall in selling prices. The effect of the fall in costs is to prevent the fall in selling prices from reducing profit margins and the rate of profit.
47. The Keynesian claim that as net investment increases, the operation of the law of diminishing returns serves to reduce the yield to successive increments of net investment, drops the context of the increase in employment. When wage rates fall and employment increases, the effect is to increase labor more than capital and thus, if anything, to increase marginal physical returns to capital, not decrease them. If ever capital were too abundant, the employment of more labor would be the cure.
48. The Keynesian claim that a fall in wage $\overline{\text { rates and }}$ prices cannot lift the economic system out of a depression and achieve full employment because at full employment the rate of return on capital would be too low, is a claim that the rate of return in the recovery from a depression would be lower than it is in the depression.
49. A major reversal of economic reality on the part of the Keynesian analysis is its belief that in a depression saving and net investment are at their maximum possible limits, and the problem is that full employment requires that they be carried still further. The actual fact is, however, that far from being at their maximum limits, saving and net investment are extremely low or even negative in a depression.
50. In a depression, net investment is sharply reduced and even becomes negative as the result of the plunge in productive expenditure, including plant and equipment spending and spending on account of inventory, while depreciation and cost of goods sold continue to reflect earlier, higher levels of productive expenditure.
51. In a depression, saving is sharply reduced $\overline{\text { and even }}$ becomes negative as the result of
a. the plunge in business profits and the payment of dividends out of earned surplus, which serves to reduce accumulated business savings
b. the existence of mass unemployment and unemployed workers having to consume their savings
c. both (a) and (b)
52. Profit is sales receipts minus costs. Net investment is productive expenditure, which is the source of the overwhelming bulk of business's sales receipts, minus those same costs. It follows that in the context of a business cycle, in which productive expenditure and sales reveunes move together virtually dollar for dollar, net investment and profits move together virtually dollar for dollar.
53. The marginal-efficiency-of-capital doc$\overline{\text { trine constitutes a reversal of the actual relationship be- }}$ tween net investment and the rate of profit in the context of a business cycle, because more net investment accomanying the return to full employment would result in a virtual dollar-for-dollar increase in the amount of profit in the economic system and thus in a rise in the rate of profit, not a fall.

The following is a four-part question.
Assume that the Keynesian investment multiplier is 4 and that profits are a constant 10 percent of sales revenues (actually they are usually a rising percentage of rising sales revenues).
54. Calculate the increase in national income

55. Calculate the increase in profit income.
56. Calculate the ratio of the additional profit income to the additional net investment.
57. Calculate what the rate of profit would have to have been before the increase in net investment in order for it not to be higher now.
58. The marginal-efficiency-of-capital doc$\overline{\text { trine and }}$ the multiplier doctrine are mutually contradictory in that the former claims that as net investment increases the rate of return on capital falls, while the latter claims that as net investment increases, national income increases by a multiplied amount, which implies that profits increase at a substantial rate relative to the additional net investment and thus that the rate of profit rises.
59. In bringing about a restoration of productive expenditure, particularly for plant and equipment, which had been postponed, awaiting their fall, a fall in wage rates brings about the restoration of net investment and profitability along with full employment.
60. If wage rate reductions were accompanied by reduced total wage payments, and the saving of funds were used to buy plant and equipment, aggregate business profits would increase, because while aggregate sales revenues in the economic system remained the same, aggregate business costs would fall because expenditures for plant and equipment typically show up as costs more slowly than do wage payments.
61. The paradox-of-thrift doctrine is the claim that the attempt to save a larger proportion of national income results in a smaller amount of national income.

The following is a four-part question.
Assume that 10 is the maximum amount of net investment that can occur at the minimum acceptable rate of return or better.
62. If saving is equal to 25 percent of national income, calculate the maximum amount of national income that is consistent with saving not exceeding the allegedly limited profitable investment opportunites.
63. If saving is equal to 10 percent of national income, calculate the maximum amount of national income that is consistent with saving not
exceeding the allegedly limited profitable investment opportunites.
64. If saving is equal to 1 percent of national income, calculate the maximum amount of national income that is consistent with saving not exceeding the allegedly limited profitable investment opportunites.
65. The paradox-of-thrift doctrine rests entirely on the central notion of the Keynesian analysis that there is room in the economic system for only a strictly limited amount of profitable investment. If that were so, then the higher the percentage of income saved, the smaller must be the income that results in the maximum amount of saving that the economic system can allegedly tolerate by offsetting it with profitable net investment.
66. Saving out of money income continues as a permanent phenomenon only because of the continuing increase in the quantity of money and thus the continuing increase in the level of money incomes. In such conditions more saving is necessary to maintain any given desired ratio of accumulated savings to current income. If the increase in the quantity of money and the consequent rise in money incomes came to an end, it would no longer be necessary to go on saving out of income once accumulated savings reached the desired ratio to current income. Thus there is no such thing as saving being a mathematical function of income.
67. The continuing saving and net investment that goes on in the world as the result of an increasing quantity of money, so far from reducing the rate of return on capital, takes place largely out of a rate of return that is elevated by that same increase in the quantity of money and volume of spending.
68. "Liquidity preference," or cash preference, as Hazlitt calls it, is
a. people's preference for holding money
b. is the basis, according to the Keynesians, for the minimum acceptable rate of return on capital being 2 percent; 2 percent is the alleged minimum rate of return required to overcome liquidity preference
c. allegedly has no limit when the rate of return falls to its minimum acceptable level
d. all of the above
69. The arguments the Keynesians advance $\overline{\text { for expecting } 2 \text { percent to be the minimum rate of re- }}$ turn at which people are willing to lend or invest are
a. the costs of bringing borrowers and lenders together
b. the potential for capital losses if interest rates should rise from a level at or below 2 percent c. both (a) and (b)
70. In a free economy, without inflation and credit expansion, the rate of profit and interest would almost certainly be above 2 percent as the result of the
combined operation of net consumption and the increase in the quantity of gold.
71. If the rate of return on capital somehow did get so low that people attemted to hoard, that very fact would operate to raise the rate of return, because the rate of net consumption applies to cash holdings as well as to investments in capital assets other than cash, with the result that the larger are cash holdings relative to capital assets other than cash, the higher is the amount of net consumption and thus the amount of profit in the economic system relative to the value of capital assets other than cash.

The following is a four-part question, in which the rate of net consumption is assumed to be constant at 2 percent.
72. Assume that initially there is 100 of cash in the economic system and 900 of assets other than cash in the form of capital. Calculate the rate of profit on the capital assets other than cash.
73. Now assume that there is major increase in cash preference, such that while the quantity of cash remains 100, the monetary value of capital assets other than cash is cut from 900 to 400 .
74. Assume that there is another, even $\overline{\text { greater increase in cash preference, such that while the }}$ quantity of cash continues to be 100 , the monetary value of capital assets other than cash is cut from 400 to 100 . Calculate the rate of profit on the capital assets other than cash.
75. Calculate the rate of return on capital as$\overline{\text { sets other than cash if cash preference were so powerul }}$ that while there continued to be 100 of cash, the monetary value of capital assets other than cash fell to 10 .
76. If cash preference were so great that people did not productively expend and invest at all, whatever consumption that took place would be profit and the average rate of profit would be that amount of profit divided by zero of invested capital, with the result that the rate of return on capital would be infinite.
77. The fact that there are costs of bringing lenders and borrowers together, and of otherwise investing, and that the absolute amount of return must exeed these costs in order for lending and investing to be worthwhile, merely implies that the size of the loan or investment, and the period of time for which it is made, must be of some minimum, not that all lending and borrowing cease to be worthwhile as the rate of return falls below some arbitrary level such as two percent.
78. When the pooling of small sums is allowed for, as is accomplished every day by such institutions as savings banks, the sums which it pays to lend and invest even at a rates of return below 2 percent, can be quite small and need be available only for very short periods of time.
79. If the rate of return on capital is extremely low and people hesitate to lend or invest for fear that it will rise, then either they are right in expecting the rate of return to rise, or they are wrong. If they are right, then the rate of return rises, and the alleged problem of too low a rate of return simply disappears. If they are wrong, and the rate of return does not rise, then there is no actual reason to fear the rise and they can lend and invest at the low rate of return. Either way, the argument about uncertainty concerning the future of the rate of interest as a permanent basis of largescale hoarding does not hold up.
80. If we consider the phenomenon of a rise in the rate of return on capital as such, rather than merely a rise in the rate of interest on loans, and keep in mind that what brings it about in the circumstances of recovery from a depression-namely, a recovery of productive expenditure and sales revenues-then it becomes clear that people have good reason to go ahead and invest immediately if they expect the rate of return to rise. This is because if they invest as stockholders or other categories of equity owners, they will actually gain from the rise in the rate of return. And if they do not expect the rate of return to rise, then they have no good reason to abstain from investing out of any fear of securities prices falling.
81. If the rate of return on capital did fall to an extremely low level, the effect would be
a. a reduction in the volume of lending and borrowing of relatively small sums for relatively short periods of time
b. a reduction in the velocity of circulation of money
c. a counteracting tendency toward a rise in the average rate of return because of the application of net consumption to cash holdings that were now larger relative to capital assets in forms other than cash
d. all of the above
82. According to Keynes, the problem of unemployment, rests on the fact that people insist on saving. If they did not save, if they only consumed, the "multiplier" would allegedly be infinite, and full employment would exist.
83. In conditions in which there would be no $\overline{\text { saving whatever, no net saving out of income and no }}$ gross saving out of sales revenues, no saving even in the form of cash holdings, because everyone would race to consume immediately,
a. liquidity preference would be zero
b. productive expenditure, costs, and capital would be zero
c. profits would equal sales revenues
d. the rate of profit and interest would be infinite
e. the employment of wage earners in the production of products for sale would be zero
f. all of the above
84. In Keynes's view, in the conditions described in the preceding question,
a. the rate of interest, as the price paid for parting with liquidity preference, would be zero
b. employment would be full
c. both (a) and (b)
85. The economic consequences of Keynesianism, manifested in the adoption of the implied economic policies have been
a. chronic federal government budget deficits
b. the abandonment of the gold standard and continuous inflation of the supply of paper money c. growth in the size of government, in the belief that increases in government spending do not require additional taxes and are a source of prosperity
d. the large-scale undermining of saving and capital accumulation as the result of deficits, inflation, and the confiscatory taxation of high incomes
e. the "rust belt"
f. all of the above
86. Although Keynesianism is, and must be, $\overline{\text { radically }}$ opposed to the quantity theory of money, for the reasons explained at the beginning of Chapter 18, it nevertheless recognizes the need to couple its policy of budget deficits with an expansion in the quantity of money. This is because even though Keynesianism avows that what increases spending is the mere existence of budget deficits, the fact is that in the absence of substantial increases in the quantity of money, a policy of sustained large-scale budget deficits would inevitably result in the government's bankruptcy.

| Chapter 18, Questions 1-86 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Question \# | Correct Answer | Question \# | Correct Answer | Question \# | Correct Answer | Question \# | Correct Answer |
| 1 | T | 26 | T | 51 | c | 76 | T |
| 2 | d | 27 | T | 52 | T | 77 | T |
| 3 | T | 28 | e | 53 | T | 78 | T |
| 4 | T | 29 | T | 54 | 40 | 79 | T |
| 5 | T | 30 | f | 55 | 4 | 80 | T |
| 6 | T | 31 | T | 56 | 0.40 | 81 | d |
| 7 | T | 32 | c | 57 | > or $=40 \%$ | 82 | T |
| 8 | T | 33 | c | 58 | T | 83 | f |
| 9 | d | 34 | f | 59 | T | 84 | c |
| 10 | T | 35 | c | 60 | T | 85 | f |
| 11 | e | 36 | T | 61 | T | 86 | T |
| 12 | T | 37 | T | 62 | 40 |  |  |
| 13 | T | 38 | e | 63 | 100 |  |  |
| 14 | T | 39 | T | 64 | 1000 |  |  |
| 15 | c | 40 | d | 65 | T |  |  |
| 16 | T | 41 | T | 66 | T |  |  |
| 17 | d | 42 | T | 67 | T |  |  |
| 18 | T | 43 | T | 68 | d |  |  |
| 19 | c | 44 | T | 69 | c |  |  |
| 20 | T | 45 | T | 70 | T |  |  |
| 21 | c | 46 | T | 71 | T |  |  |
| 22 | T | 47 | T | 72 | 2.22\% |  |  |
| 23 | b | 48 | T | 73 | 2.50\% |  |  |
| 24 | c | 49 | T | 74 | 4.00\% |  |  |
| 25 | T | 50 | T | 75 | 20.20\% |  |  |

## Chapter 19, Part A

1. Inflation is
a. rising prices
b. an undue increase in the quantity of money
c. an increase in the quantity of money more rapid than the increase in the supply of gold
d. all of the above
e. (b) and (c) but not (a)
2. "Demand-pull inflation"
a. refers to an increase in the quantity of money and volume of spending as pulling prices up in the face of limited supplies of goods or services b. is alleged to be the only way in which increases in the quantity of money and volume of spending can succeed in raising prices c. both (a) and (b)

## 3. "Cost-push inflation"

a. alleges that prices rise from the side of supply rather than from the side of demand
b. is presented as a mutually exclusive alternative to the quantity theory of money, whose operation is allegedly confined to "demand-pull inflation" c. both (a) and (b)
4. The doctrine of "cost-push inflation" embraces rising prices allegedly caused by
a. rising wage rates, in which case it is known as "wage-push inflation"
b. the greed of businessmen for higher profits, which is described as "profit-push" or "sellers' inflation"
c. sudden substantial reductions in the supply of critical materials, such as oil, in which case it is described as "crisis-push inflation"
d. all of the above
5. The doctrine of the "wage-price spiral" rests on the doctrine of cost-push inflation.
6. Like "cost-push inflation," so-called de-mand-pull inflation is also supposed to take a variety of forms. In addition to being caused by an increase in the quantity of money, it is supposed to be capable of being caused by
a. inexplicable increases in the velocity of circulation of money
b. the unexplained existence of "inflation psychology"
c. the growing use of credit cards, installment credit, or other forms of credit
d. the increasing greed of consumers for more goods
e. all of the above
7. Since numerous possibile causes can be adduced to explain rising prices in this or that case, the definition of inflation as rising prices results in people having no ready idea of what causes inflation at any given time.
8. The definition of inflation as rising prices implies that
a. if businessmen did not raise their prices, inflation would not exist
b. the greed of businessmen is responsible for inflation
c. the imposition of price controls would stop inflation by prohibiting the rise in prices
d. all of the above
9. The definition of inflation as rising prices distinguishes between prices rising from the side of demand (i.e., from the side of money and spending) and prices rising from the side of production and supply.
10. The definition of inflation as rising prices $\overline{\text { can lead to the government's inflation of the money }}$ supply in misguided efforts to hold interest rates down or to pay subsidies to producers in order to enable them to sell at below-market prices.
11. The formula for the general consumer price level is $P=\frac{D_{C}}{S_{C}}$.
12. The formula for the general consumer $\overline{\text { price level limits the direct, immediate explanation of }}$ rising prices to either a rise in aggregate demand or fall in aggregate supply and implies that if an alleged cause of rising prices cannot be shown to cause one or the other of these two direct causes, then it is simply not a cause of rising prices.
13. As far as it goes, the effect of supply on prices in the United States and practically all other countries over the last seventy years has been
a. a continuing rise brought about by a progressive fall in supply
b. a continuing fall brought about by a progressive rise in supply
14. Where falling supply has contributed to rising prices, its role has been relatively minor, in the most extreme cases accounting for perhaps as much as a doubling of prices over a period years over which prices rose many times more altogether.
15. In order for falling supply to account for a sustained 2 percent compound annual rise in prices, a. supply would have to halve approximately every 35 years
b. supply would have to fall to approximately one-eighth of its initial level in little more than a century
c. the rapid disappearance of material civilization would be implied
d. all of the above
16. Falling supply is itself often the by-product of rapid increases in the quantity of money and aggregate demand.
17. An inflationary rise in prices includes not $\overline{\text { only a rise in the strict weighted average of all prices }}$ but also the fact that all prices, or at least the far greater part of them, are able to rise at the same time.
18. In cases in which a fall in supply takes place in the production of a necessity or a vital material, i.e., in any case in which the demand for a product is inelastic, the outcome will be
a. a rise in the price of the item more than proportionate to the reduction in its supply
b. a rise in the amount of money spent to buy that item and a corresponding fall in the amount of money spent to buy other items
c. a tendency toward a fall in prices wherever spending has had to decline in order to make possible the concentration of funds on the purchase of the good in reduced supply.
d. all of the above
19. Because it would be accompanied by a fall in many prices, falling supply cannot explain the range of price increases that exists under inflation, which extends to all goods and services, or at least to the far greater part of them, at the same time.
20. In contrast to falling supply, the combination of an increase in the quantity of money and rising aggregate demand is capable of raising all prices at the same time and so satisfies the requirement of explaining the necessary range of price increases that exists under inflation.
21. An inflationary rise in prices includes not only a rise in the strict weighted average of all prices, and in at least the broad range of prices, but also a systematic tendency for stockholders to gain at the expense of bondholders and for debtors in general to gain at the expense of creditors.
22. Rising prices caused by falling supply do not enable stockholders and other debtors to gain at the expense of bondholders and other creditors, because falling supply does nothing to increase the monetary income or wealth of the average stockholder or creditor, who is in the position of having as many fewer physical units of goods and wealth as the price per unit of goods and wealth has risen.
23. Rising prices caused by falling supply are incompatible with the debtor/creditor effects associated with inflation.
24. Rising prices caused by falling supply, such as would result from massive enemy bombing of factories in a war, would result in stockholders actually being worse off than bondholders as the result of rising prices, because they would lose their capitals to a greater extent than the bondholders, as well as having to pay the same higher prices as the bondholders.
25. Unlike rising prices caused by falling sup$\overline{\text { ply, rising prices caused by rising aggregate demand }}$
a. are accompanied by rising monetary incomes and wealth on the part of stockholders and debtors, which enables these groups to gain as prices rise, to the extent that their monetary incomes and wealth rise more rapidly than prices
b. are fully compatible with the debtor/creditor effects associated with inflation
c. both (a) and (b)
26. The belief that falling supply is a cause of inflation implies
a. the belief that rising supply is a cause of defla-
tion and thus of depression
b. the overproduction doctrine
c. both (a) and (b)
27. Falling aggregate supply must be elimi$\overline{\text { nated as the cause of an inflationary rise in prices, leav- }}$ ing only rising aggregate demand because
a. with few exceptions supply has increased over
the period in which prices have been rising, mak-
ing its actual contribution a reduction in prices compared with what they otherwise would have been
b. where supply did fall, its fall could not begin to explain the extent of the rise in prices c. reductions in supply are frequently the result of rapid increases in aggregate demand d. reductions in supply as a sustained cause even of moderately rising prices would imply the disappearance of material civilization at a rate rivaling or surpassing that of the collapse of the Roman Empire
e. all of the above
28. Falling aggregate supply must be eliminated as the cause of an inflationary rise in prices, leaving only rising aggregate demand because it
a. cannot explain the range of price increases associated with inflation
b. cannot explain the effects on the relations between stockholders and bondholders, and debtors and creditors in general, associated with inflation c. implies the overproduction doctrine
d. all of the above
29. People are led to believe that the rising prices of the last two generations could not have been caused by rising aggregate demand, but only by rising costs of production or the greed for higher profits, because they mistakenly believe that more demand raises prices only at the point of full employment, which we have not had during this time, and short of that point serves merely to increase employment.
30. The cost-push doctrine is mathematically equivalent to blaming rising prices on falling supply, since it claims that no increase in demand is necessary, which leaves only falling supply as the explanation of rising prices.

## The following is a four-part question.

Starting from a position of full employment and given unchanged aggregate demands for consumers' goods and labor, an unchanged productivity of labor, and an unchanged size of the labor force, calculate the unemployment rate that would result from
$\qquad$ 31. A cumulative rise in wage rates of 10 percent.
32. A cumulative rise in wage rates of 25 percent.
33. A cumulative rise in wage rates of $331 / 3$ percent.
34. The effect of wage increases imposed by labor unions is to create mounting unemployment if there is no increase in the quantity of money and thus in aggregate demand.
35. Starting from a position of full employment, and recalling that in the depths of the Great Depression the unemployment rate did not exceed 25 percent, calculate to what extent labor unions could succeed in raising wage rates before bringing about an unemployment rate comparable to that of the great depression, if there were no increase in the quantity of money and thus in aggregate demand.
36. Given the fact that a mounting unemployment rate would finally lead to an end to further union wage demands as more and more of the unions' membership came to be added to the unemployment roles, and even assuming that the unemployment rate that would be necessary for this would be as high as that of the Great Depression, the maximum, cumulative effect of labor unions driving up wage rates would be an increase in priceson the order of one-third.
37. In the early 1980s, an unemployment rate briefly in excess of 11 percent was sufficient to eliminate most of "wage push."
38. Starting from a position of full employ$\overline{m e n t}$ and given unchanged aggregate demands for consumers' goods and labor and an unchanged size of the labor force, but now assuming a doubling of the productivity of labor over the same period of time that the labor unions succeed in driving up wage rates sufficiently to cause a Great-Depression level of unemployment, calculate the change in the general consumer price level.
39. If, over the same period of time that the unions were driving up wage rates, the productivity of labor were to rise, prices could actually fall substantially, despite the rise in wage rates.
40. Over time, labor unions are not a significant cause of rising prices, but of unemployment.
41. "In order for "wage-push" to have a sustained significant effect on the general consumer price level, and avoid burning out in mounting unemploy-
ment, it must be sustained by an increasing quantity of money and rising aggregate demand."
_42. The increase in the quantity of money and rising aggregate demand
a. allows "wage push" to continue because it removes the brake of mounting unemployment b. calls wage push into being when it otherwise would not exist, by virtue of reducing or removing the threat of its causing additional unemployment c. positively encourages wage push by virtue of raising nominal profits, which constitutes a veritable red flag to the unions and their demands for wage increases
d. causes prices of goods available only in limited quantity to rise, which, together with rising prices caused by the unions' previous wage demands, leads the unions to demand wage increases to keep pace with price increases
e. all of the above
43. Given that wage push could not be very significant in the absence of increases in the quantity of money and volume of spending, it follows that the intellectual zone of explanation of rising prices previously regarded as belonging to the wage-push doctrine should henceforth be regarded as having been annexed by the quantity theory of money.
44. The "profit-push" doctrine claims that the greed of businessmen for profits is what drives up prices.
45. In the absence of increases in demand even a protected legal monopolist, while almost certainly charging high prices, would not charge continually rising prices.
46. Even if a protected legal monopolist were faced with a rising demand for his particular product, no rise in the general consumer price level would be present in the absence of a rise in aggregate demand, because in that case the rise in demand for the monopolist's product would presuppose or cause an equivalent fall in the demand for other products and thus operate to reduce the prices of other products.
47. Apart from the case of protected legal monopolists, the normal operation of the profit motive is steadily to reduce prices, not increase them, because a major way to earn premium profits is to reduce the costs of production, which cost reductions competition passes on to consumers.
48. What explains the association between rising prices and higher nominal profits is an increasing quantity of money and rising aggregate demand, which raises both prices and sales revenues, which latter serves to increase profit margins and thus the rate of profit.
49. The "crisis-push" doctrine refers to the price-raising effects of sudden substantial reductions in the supply of critical materials, such as oil.
50. In the absence of increases in the quantity of money and aggregate demand, supply crises while causing dramatic increases in the prices of some goods, would result in numerous price reductions, including reductions in prices that constitute costs of production, because the concentration of spending on the goods whose supply had been reduced would come from spending on numerous other goods, whose prices would thus be driven down.
51. The effect of a decrease in the supply of oil is to
a. increase
b. decrease
the demand for automobiles, iron and steel, and the services of auto workers and steel workers
52. A decrease in the supply of oil is what explains the rising prices of all other materials and in the prices based on the prices of those other materials.
$\qquad$ 53. Any given supply crisis is unable to explain more than a one-time delimited rise in the general consumer price level corresponding to the extent to which it serves to reduce aggregate supply.
54. In the absence of increases in the quantity of money and aggregate demand, the resolution of any given supply crisis should usually be expected to be followed by a reduction in the general consumer price level, probably all the way to the point of where the price level was before the crisis.
55. In judging the effects of supply crises, the public and the media confuse
a. the dramatic rise in the price of the good whose supply is in crisis and in the prices of its products, with a general rise in prices, failing to realize that the steep rise in the price of the good whose supply is in crisis implies a reduction in many other prices
b. an essentially one-time, delimited rise in prices with a continuing rise in prices
c. both (a) and (b)
56. The public's views about the effects of supply crises on prices are misled by the fact that news of the crisis appears on page one of the newspapers, while news of its resolution is more likely to appear on page fifty-one.
57. In order to explain a rising price level on the basis of supply crises, one would have to find not only replacement crises for the ones that have been solved, but additional crises as well. And in the next year, one would have to find replacements for this larger number of crises, along with still more additional crises; and this would have to go on from year to year at a compound rate.
58. According to the wage-price spiral doc$\overline{\text { trine, prices rise because wages rise, and wages rise be- }}$ cause prices rise. Wages and prices, it is believed,
simply chase each other upward in a spiral, and that is why prices go on rising.
59. In the absence of increases in the quantity of money and aggregate demand, any wage-price spiral would quickly burn itself out in mounting unemployment. This proposition is illustrated by the phenomenon of "givebacks" in the early 1980s, when it was common for labor unions to give up their contractual right to such things as cost of living increases.
60. The "velocity" doctrine
a. admits the essential role of rising aggregate demand in raising prices
b. denies the essential role of increases in the quantity of money in raising aggregate demand c. implies that spending rises because of decreases, often unexplained, in the demand for money for holding
d. all of the above
61. Increases in velocity caused by factors such as growing security of property and the development of financial markets and financial institutions are accompanied by an increase in the number of stages in production and a corresponding need for more stages of spending in the ultimate production of consumers' goods, and also by increases in the production and supply of consumers' goods. Therefore, it is unlikely that they would be a cause of rising prices of consumers' goods.
62. Increases in the quantity of money operate to raise velocity by means of reducing the demand for money for holding.
63. Increases in the quantity of money reduce the demand for money for holding by means of a. causing rising prices, which can lead to people prefering to buy sooner rather than hold cash to buy later
b. creating the belief that cash can readily be obtained by borrowing it, thus reducing the need to hold it, which belief is the result of inflation in the form of credit expansion
c. causing rising demand for products and thus a greater ability to liquidate inventories easily and profitably, thereby encouraging the holding of more inventory and less cash d. raising short-term interest rates and making it worthwhile to lend out sums that otherwise would have been held in cash
e. all of the above
64. All that is required to reduce velocity is to cut back on the rate of increase in the quantity of money, the effect of which will be to raise the demand for money for holding by going in reverse along the lines indicated in the choices in the previous question.
65. Velocity is lower in countries with less rapidly increasing quantities of money and higher in countries with more rapidly increasing quantities of
money-for example, it is much higher in Brazil than in the United States.
66. Velocity is higher in the United States today than it was when the country was on the gold standard and its money supply increased less rapidly.
67. Since the early ' 80 s, velocity has declined, along with slowing of the increase in the quantity of money.
68. The intellectual zone of explanation previously claimed by the velocity doctrine should henceforth be regarded as annexed by the quantity theory of money. For it is the growth in the quantity of money that explains the inflationary rise in the velocity of circulation of money.
69. Properly understood, the term "inflation $\overline{\text { psychology" refers to the various ways in which a rap- }}$ idly expanding quantity of money reduces the desire of people to hold money.
70. Inflation psychology is
a. caused by prolonged experience of the fact of inflation
b. an uncaused primary that explains inflation
71. Inflation psychology operates from the side of supply as well as from the side of demand. It does so by influencing the expectations of sellers.
72. Inflation psychology operates from the side of supply when
a. businessmen come to anticipate that in the years ahead inflation will raise the replacement costs of their plant and equipment, and that they must begin to raise prices today, in order to be in a position to accumulate sufficient replacement funds
b. workers demand wage increases in order to cover the rise in prices they expect to occur over the life of their employment contracts
c. landlords demand rent increases to cover the rise in prices and costs they expect to occur over the life of their rental contracts
d. lenders demand interest rates high enough to cover the increase in prices they expect to occur over the life of their loan contracts
e. all of the above
73. In operating in the ways described in the $\overline{\text { previous }}$ question and thus leading to a rise in prices in advance of the actual increase in spending, inflation psychology makes inflation into a cause of unemployment.
74. What is required to eliminate inflation psychology is
a. speeches by public officials ridiculing it and urging people to abandon it
b. the government's stopping its policy of inflation
75. Once its policy of inflation has created in$\overline{\text { flation psychology, stopping inflation may not im- }}$
mediately appear to work, because, in the belief that the government will soon resume its policy of inflation, people may have placed themselves in even more overextended positions, in which they are operating with even lower money balances, have further increased their borrowings, and are asking still higher wages and prices. In such conditions, the elimination of inflation psychology is likely to be accompanied by a major recession.
76. Inflation psychology would not be a prob$\overline{\text { lem under a gold standard because it would have little }}$ or no factual basis. To the extent such a psychology began to develop, it would quickly run up against the fact that the money supply did not keep up with it, because it simply could not. At that point, the consequence would be that inflation psychology would disappear.
77. The "credit-card doctrine" holds that $\overline{\text { credit cards make possible a rise in spending without }}$ any expansion in the quantity of money and thus serve to raise prices.
78. The use of credit cards, such as the American Express card, in which the whole balance due is payable at once, requires the existence of two cash balances instead of one to finance the same purchase: the checking-account balance of the credit-card customer to pay his credit-card bill, and a cash balance by the credit-card company to pay the merchant. Thus, it is arguable that the use of this credit card serves actually to reduce the velocity of money rather than increase it, despite the fact that people no longer need to hold as much currency as they otherwise would.
79. Insofar as the possession of credit cards may actually contribute to a rise in velocity, by representing guaranteed lines of credit and thereby sparing people the need to hold cash balances as large as before, the rise in velocity is to be attributed to the ability of the banking system to increase the quantity of money, because this is what makes possible the granting of lines of credit not based on savings. Where savings are the foundation of the lines of credit, the process originates in a decline in spending elsewhere in the economic system and thus will not serve to increase overall spending in the economic system.
80. According to the consumer-installmentcredit doctrine, prices rise because the granting of con-sumer-installment credit enables consumers to make an additional demand for goods.
81. To the extent that consumer-installment $\overline{\text { credit or any other form of credit is granted out of sav- }}$ ings, it does not serve to increase aggregate demand, but merely to divert the ability to spend from the saver ot the borrower.
82. The granting of credit is inflationary
$\overline{\text { when the }}$ funds lent are newly created, not when they are the result of saving.
83. Debts incurred through the borrowing
of savings are not inflationary, while debts incurred through the borrowing of newly created money are inflationary.
84. The "consumer-greed" doctrine is the claim that inflation is the result of the consumers' "greed," including their desire for a higher standard of living.
85. The consumer-greed doctrine mistakenly assumes that
a. "greed" implies a reduction in the demand for money for holding
b. the effect "greed"-i.e., of the desire for a higher standard of living-is to raise prices rather than lower them by virtue of people's efforts to produce more, as the means of earning higher incomes
c. both (a) and (b)
86. What is required to make "consumer greed" translate into a lower demand for money for holding rather than a higher demand for money for holding is the government's policy of inflation, which penalizes the ownership of cash holdings through rising prices.
87. As far as the explanations of rising prices other than the quantity theory of money contain any kernel of validity at all, it is only as an extension of the quantity theory of money.
88. The undue increase in the quantity of money that underlies the rise in prices must be laid at the door of the government, because
a. the moneys chosen by the market were, and would be again, in the absence of government intervention, gold and silver, which are moneys that do not increase at a rate sufficient to cause a sustained, significant rise in prices
b. in the last seventy years, the government of the United States, like that of virtually every other country, has had unlimited power to expand the quantity of fiat paper money and has made ample use of that power
c. both (a) and (b)
89. All of the knowledge concerning the cause of rising prices can be summarized in a definition of inflation as an increase in the quantity of money more rapid than the increase in the supply of gold and silver, which is to say, an increase in the quantity of money caused by the government.
90. In contrast to the definition of inflation as rising prices, the definition of inflation in the preceding question provides
a. essential comprehensive knowledge concern-
ing the cause of rising prices
b. the ability to understand the causation of the
full range of symptoms associated with inflation
c. the ability to distinguish between rising prices
caused by more demand and rising prices caused by less supply
d. knowledge concerning how to stop inflation
e. the ability to raise further questions about the causes and effects of inflation properly understood
f. all of the above

## Chapter 19, Part B

91. A government budget deficit
a. means an excess of government spending over its tax revenues
b. requires that the government borrow equivalent funds
c. both (a) and (b)
92. Government borrowing can be from a. the citizens (other than the fractional-reserve banking system)
b. the central bank (in the US, the Federal Reserve System)
c. from the private, fractional-reserve banking system
d. all of the above
93. Government borrowing from the central bank entails the creation of new and additional standard money, which the central bank creates and then lends to the government.
94. Government borrowing from the private, $\overline{\text { fractional-reserve banking system typically entails the }}$ creation of new and additional checking deposits, which is what the banks lend.
95. Government borrowing from the central $\overline{\text { bank or from the fractional-reserve banking system en- }}$ tails the creation of new and additional money, while government borrowing from the citizens does not.
96. Government budget deficits financed by the creation of new and additional money
a. enable the government to increase its spending without the citizens having to decrease their spending
b. result in an elevation of the level of total spending as the new and additional money passes from hand to hand
c. is inflationary
d. all of the above
97. Government budget deficits
a. when financed by the savings of the citizens, are accompanied by a reduction in spending on the part of the citizens or on the part of those to whom the citizens would otherwise have lent the money
b. in and of themselves are not inflationary
c. both (a) and (b)
98. Government budget deficits are
a. inflationary insofar as they are financed by the creation of new and additional money
b. not inflationary insofar as they are financed by the lending of previously accumulated savings c. both (a) and (b)
99. If the monetary unit were gold, whose supply the government and the banking system cannot increase, budget deficits could not be financed by the creation of new and additional money.
100. Inflation can take place while the gov$\overline{\text { ernment }}$ operates with a budget surplus, if the central bank or the fractional-reserve banking system buys up previously issued government securities and thereby creates new and additional money.
$\qquad$ 101. Only the budget deficit of the federal government can be inflationary, not those of state or local governments, because only the federal government has the power to create new and additional money and to place the fractional-reserve banking system in a position to create such money. Lacking that power, the states and localities are essentially forced to borrow only from the citizens.
101. No matter how large its debt becomes, the ability of the federal government to create new and additional money prevents it from going bankrupt in the technical sense of not having the money available to meet its debt, so long as its debt is payable in the kind of money that it can create.
102. Because creating money to pay its debt reduces the purchasing power of money and thus cannot serve to repay debt defined in terms of a given purchasing power, the federal government has probably long been bankrupt in the sense of an inability to repay its debt in terms of the same purchasing power in which the debt was contracted.
103. So long as the federal government has the power to create money, no lack of money compels it to reduce its spending or its indebtedness.
104. Compelling the government to limit its $\overline{\text { spending }}$ and indebtedness requires depriving it of the ability to create new and additional money.
105. If the monetary unit were defined as a fixed weight of gold, of a definite finess, as it was in the United States from 1788 to 1933, the government, not being able to create gold, could not enlarge the basic money supply and thus could not finance its deficits by means of inflation.
106. In the absence of the ability to inflate the money supply, government budget deficits
a. would not be inflationary
b. would ultimately lead to government bankruptcy if pursued as a policy
c. both (a) and (b)
107. The specter of government bankruptcy under a gold standard, and the accompanying uncertain political and economic climate, would lead to
a. an increased demand for gold for holding
b. an increased demand for gold for export
c. a threat to the solvency of the banking system, insofar as its assets included government securities d. a threat to the quantity of money, insofar as gold was exported and insofar as government securities provided backing for fractional-reserve checking deposits or bank notes
e. all of the above
108. Answers to the previous question imply $\overline{\text { that under a gold standard, government budget deficits }}$ would ultimately be deflationary rather than inflationary.
109. Government budget deficits have the potential to be deflationary even in the short-run, to the extent that their financing deprived business firms of working capital—a highly unlikely result in today's conditions, but very possible under a gold standard.
110. The motives and rationale for budget deficits and inflation can be described under the following headings:
a. the welfare state
b. inflation and war finance
c. inflation and the "easy money" doctrine
d. inflation as the alleged cure for unemployment
e. all of the above
111. Deficits, and the inflation to finance $\overline{\text { them, are the cornerstone of the welfare state. They are }}$ indispensable in order to lend the appearance of reality to the belief that the government is the source of free benefits, which belief is the fundamental delusion underlying the welfare state.
$\qquad$ 113. The ability to inflate is valued in part because it makes it possible for the government to finance wars which it would not be politically possible to finance through taxation.
112. Inflation in the form of a policy of "easy money" is supported by the belief that credit expansion is a means of creating capital and lowering interest rates.
113. Probably the most important single root of the policy of inflation in the present day is the belief that inflation is necessary in order to prevent or combat mass unemployment.
114. An underlying influence of the socialist $\overline{\text { ideology }}$ is present in the use of inflation to finance the welfare state, in that
a. the expansion in government functions and powers entailed in the growth of the welfare state is a major step toward the establishment of socialism
b. both the welfare state and socialism itself are advocated in the name of the alleged helplessness
of the average individual and the alleged omniscience and omnipotence of the State c. inflation creates the appearance of the kind of relationship between the individual and the State described in (b): on the one side stands the individual with his unmet needs, and on the other side, the State, ready to help with funds not derived from individuals, but miraculously created outside the economic system, out of thin air d. all of the above
115. The socialist ideology and support for the "easy money" doctrine overlap insofar as a. both share a belief in the existence of free benefits, in this case the alleged benefit of capital costlessly created out of thin air by the manufacture of new and additional money
b. credit expansion and its accompanying reduction in the rate of interest is perceived to be the means of achieving the "euthenasia of the ren-tier"-Keynes's effort to achieve the goals of Marxism without the necessity of a revolution c. both (a) and (b)
116. The belief that inflation is necessary to $\overline{\text { prevent or combat unemployment is largely an indirect }}$ result of the influence of the socialist ideology. This is because the labor legislation and other government interference that creates the problem of mass unemployment in the first place is the result of the influence of the Marxian exploitation theory, which holds that in the absence of government interference on behalf of higher wages, wage rates will go to the level of minimum subsistence.
117. A policy of government budget deficits is incompatible with the principle of representative government, since it obligates future generations to pay taxes for the payment of principal and interest on a debt neither they nor their representatives have any role in incurring and which their representatives cannot be present to oppose.
118. The government's ability to inflate the money supply has contributed to the growth in the size of the government relative to the economic system by making new and additional government programs appear costless, because the government is no longer under the compulsion of financing them by raising taxes. This enables supporters of the programs merely to describe their prospective benefits, while opponents are depicted as maliciously opposing the benefits.
119. The government's ability to inflate the money supply destroys peoples' understanding of the fact that the government is supported by them and leads them to believe instead that they are supported by the government.
120. The government's ability to inflate the money supply underlies the belief that Washington, D. C., a city that is economically insignificant in terms of what it produces or contributes to production, is nev-
ertheless capable of bailing out the economies of such major cities as Detroit, Newark, and New York, indeed, the economies of entire states and multistate regions.
121. When the gold standard is overthrown and the government gains the power to spend funds it does not have to obtain from the people,
a. the government can no longer easily be viewed as deriving its powers and rights from the people b. the government is enabled to throw off its status as the servant of the people, deriving its just powers from the consent of the governed, and to appear instead in the guise of the Provider and Father of the people, with the people deriving their existence, powers, and rights from the government c. a veritable revolution occurs in the relationship between the government and the people
d. all of the above
122. Inflation operates to redistribute wealth and income from creditors to debtors, as the result of a. the rising prices it causes
b. its increasing the incomes and monetary wealth of the debtors, while the incomes and monetary wealth of the creditors are contractually fixed c. (a) and (b) in combination
123. To the extent that their corporations are $\overline{\text { debtors, stockholders receive the benefits of debtors }}$ during inflation.
124. A government's power to inflate is po$\overline{\text { tentially }}$ capable of achieving a redistribution of wealth and income among its citizens on a scale rivaling that of the French and Russian revolutions.
125. Inflation does not raise all prices at the same time and to the same extent, but rather raises some prices sooner than other prices.
126. In addition to its effects on the redistribution of wealth and income between debtors and creditors, inflation also redistributes real income in favor of those who receive the new and additional money relatively early, and who are thus in a position to buy at prices that have not yet rise for the most part, and those who receive it only later on and who have had to buy at rising prices before their selling prices and incomes rose.
127. Those who introduce the new and additional money gain at the expense of others, inasmuch as they are enabled to consume without having had to produce, and thereby drain away part of the production of others without providing goods and services in exchange.
128. The poor and the elderly have traditionally been among the worst victims of inflation, because they frequently must live on fixed incomes while inflation proceeds to drive up the prices of practically everything they must buy.

## The following is a three-part question.

131. Inflation makes the traditionally safest types of investments, such as high grade bonds, life insurance policies, and savings accounts, the least safe in terms of its potential damage to the purchasing power of such investments.
132. Under a fiat, paper money system, the safety of all such contractually fixed investments comes to depend on
a. the rate at which prices rise
b. the rate at which the quantity of money and volume of spending increases
c. knowledge of the quantity theory of money on the part of the government officials in charge of the increase in the money supply
d. the courage and integrity of government officials who may know and understand the quantity theory of money, to be quided by their knowledge in the face of political pressures urging more rapid increases in the quantity of money
e. all of the above
133. In making the traditionally safest types of investments the least safe, inflation undermines capital formation by placing the large number of people who require such investments, in the position either of having to turn to alternative vehicles, such as gold hoarding, which do not provide funds for business investment, or ceasing to save altogether, or doing so only on a smaller scale.

## The following is an eleven-part question.

An imaginary tiny business firm buys a supply of merchandise for $\$ 100$ and exactly one year later sells its merchandise for $\$ 110$. The tax rate on profits is 50 percent and does not change. After some years the quantity of money and volume of spending in the economic system come to increase at a 10 percent compound annual rate, as do both the selling price and the replacement cost of the firm's merchandise.
134. State the firm's profit before the onset of inflation.
135. State the amount of tax the firm must pay before the onset of inflation.
136. State the amount of the firm's profit that it needs to use for the replacement of its merchandise, before the onset of inflation.
137. State the amount of after-tax profit remaining to the firm, before the onset of inflation, after it has made full allowance for replacement.
138. State the firm's sales revenues in the first year in which the inflation begins.
139. State the firm's profit in the first year of the inflation.
140. State the amount of tax the firm must pay in the first year of the inflation.
141. State the amount of the firm's profit that it needs to use for the replacement of its merchandise, in the first year of the inflation.
142. State the amount of after-tax profit re$\overline{\text { maining to the firm, in the first year of the inflation, }}$ after it has made full allowance for replacement.
143. Recalculate the firm's pretax profit to serve as a measure of its gain from operations only after full allowance for replacement of its merchandise has been made.
144. Calculate the percentage of the firm's restated profit in your answer to the preceding question that is constituted by the amount of taxes you previously calculated that the firm owed in the first year of the inflation.

## The following is a fifteen-part question.

An imaginary business firm buys a machine that will last for 10 years for $\$ 1$ million. It depreciates the machine on a straight-line basis over 10 years. In a period in which there is no inflation, the firm's annual sales revenues in connection with this machine are also \$1 million, while its annual operating costs in connection with the machine are $\$ 850,000$. Sometime during the course of the machine's depreciable life, inflation succeeds in doubling the quantity of money and volume of spending in the economic system and also in doubling the annual sales revenues and operating costs of this firm in connection with the use of this machine. It also succeeds in doubling the replacement price of the firm's machine to $\$ 2$ million. Throughout, the rate of tax on profits remains unchanged at 50 percent.
145. Calculate the firm's annual gross profit $\overline{\text { (i.e., its profit pre-deduction of depreciation cost) in }}$ the year(s) before the start of the inflation.
146. Calculate the firm's annual depreciation $\overline{\text { charge in }}$ the year(s) before the start of the inflation.
147. Calculate the firm's annual net profit before tax in the year(s) before the start of the inflation.
148. Calculate the amount of tax the firm must pay on its profit in the year(s) before the start of the inflation.
149. Calculate the amount of the firm's profit that it needs to set aside for the replacement of its machine, in the year(s) before the start of the inflation.
150. Calculate the amount of after-tax profit remaining to the firm, in the year(s) before the start of the inflation, after it has made full allowance for replacement.
151. Calculate the firm's annual gross profit $\overline{\text { (i.e., its profit pre-deduction of depreciation cost) }}$ when sales revenues and operating costs have doubled.
152. Calculate the firm's annual depreciation $\overline{\text { charge when sales revenues and operating costs have }}$ doubled.
153. Calculate the firm's annual net profit be$\overline{\text { fore tax when sales revenues and operating costs have }}$ doubled.
154. Calculate the amount of tax the firm $\overline{\text { must pay on its profit when sales revenues and operat- }}$ ing costs have doubled.
155. Calculate the amount of the firm's annual profit that it would need to set aside for the replacement of its machine at a price of $\$ 2$ million, if somehow it had a full 10 years over which to accumulate an additional million dollars in repalcement funds.
156. Calculate the amount of after-tax profit remaining to the firm after making such additional allowance for replacement.
157. Recalculate the firm's pretax profit to serve as a measure of its gain from operations only after this necessary additional allowance for replacement of its machine has been made.
158. Calculate the percentage of the firm's restated profit in your answer to the preceding question that is constituted by the amount of taxes you previously calculated that the firm owed when its sales revenues and operating costs had doubled.
159. Inflation operates to increase the effective rate of taxation on business profits with unchanged rates of taxation. It does so by increasing the amount of profit that is subject to the unchanged tax rate at the same time that most of that additional profit is required for the repacement of assets whose prices inflation raises, and which thus does not represent any sort of genuine economic gain. The rise in the effective rate of tax is seen when recalculates pre-tax profit to allow for the additional funds required for replacement at higher prices and takes the tax the firm is required to pay as a percentage of that much smaller recalculated profit.
160. The preceding sets of questions show that the high nominal profits that accompany inflation are also accompanied by sharply reduced after-tax real profits.
161. The preceding sets of questions show that the public and the media know very well what they are talking about when they complain of high profits as the cause of inflation or as a source of benefit from inflation.
162. To offset the effects of inflation on profits, tax rates on profits need to be
a. raised to capture the unconscionable gains being reaped by large corporations
b. reduced in order to prevent the rise in the effective rate of taxation of real profits resulting from the enlargement of nominal profits and rise in replacement prices
163. In impoverishing people through rising prices and at the same time bloating nominal profits while reducing real profits, inflation both foments anticapitalistic hostility and undermines economic activity.

## The following is a thirteen-part question.

In a period of no inflation and no annual rise in prices, an individual has a capital of $\$ 1$ million, which he lends out at a 4 percent annual interest rate. At the same time, there is a flat-rate proportional income tax of 25 percent, which remains unchanged all throughout. Subsequently, inflation ensues and succeeds in raising prices at an annual rate of 6 percent and in raising interest rates to 10 percent.
164. Calculate this individual's annual income from this $\$ 1$ million of capital when there is no inflation.
165. Calculate the amount of this individual's income tax on the interest income from this $\$ 1$ million of capital.
166. Calculate this individual's after-tax income derived from his ownership of this $\$ 1$ million of capital.
167. State the amount of this individual's $\overline{\text { after-tax }}$ income derived from his ownership of this \$1 million of capital that needs to be set aside and added to his capital in order to maintain the buying power of his capital at an unchanged amount, i.e., equal to that of $\$ 1$ million the year before.
168. Calculate the rate of interest this individ$\overline{\text { ual earns }}$ on his million dollars of capital after deducting his payment of taxes on the interest income.
169. Calculate the rate of interest this individ$\overline{\text { ual earns }}$ on his million dollars of capital after deducting both his payment of taxes on the interest income and any necessary set aside of income to maintain the buying power of his capital.
170. Calculate an individual's annual income derived from $\$ 1$ million of capital when inflation has raised interest rates to 10 percent.
171. Calculate his income tax on the income $\overline{\text { you stated in your answer to the preceding question. }}$
172. Calculate his after-tax income.
173. Calculate the amount of this individual's after-tax income derived from his ownership of this $\$ 1$ million of capital that now needs to be set aside and added to his capital in order to maintain the buying power of his capital at an unchanged amount, i.e., equal to that of $\$ 1$ million the year before.
174. Calculate the amount of this individual's after-tax income derived from his ownership of this $\$ 1$ million of capital that remains after setting aside the sum shown in answer to the previous question as necessary to maintain the buying power of his capital, i.e., his "real" income or gain on his capital.
175. Calculate the rate of interest this individ$\overline{\text { ual earns }}$ on his million dollars of capital after deducting both his payment of taxes on the interest income and any necessary set aside of income to maintain the buying power of his capital.
176. The preceding questions show that while sharply increasing nominal rates of interest and nominal interest incomes, inflation serves to sharply reduce real rates of interest and real interest incomes.
177. In the absence of inflation, assets such $\overline{\text { as houses, land, and buildings would not show any gen- }}$ eral or systematic tendency to rise. As a result, anyone selling existing such assets would generally not be subject to the payment of a capital gains tax. In this environment, we can imagine a vast collection of assets all of which have a given price, that we will call 100 . Anyone selling an asset at the price of 100 can buy other such assets also at a price of 100 . Now we imagine inflation to ensue, with the result that over a period of years, assets that were previously 100 now sell for 200. If the capital gains tax is 25 percent, calculate the quantity of other assets that a seller of a given asset for 200 will be able to buy after paying the capital gains tax.
178. Inflation operates to raise the effective rate of taxation on capital gains by virtue of systematically raising the prices of previously purchased assets, thereby creating taxable capital gains on those assets as and when they are sold, with the taxes being the greater, the greater is the inflation and the consequent rise in the prices. At the same time, after having paid the capital gains tax, the funds remaining to the sellers are the less adequate to buy comparable assets the more that prices have risen and the capital gains tax has deprived them of the funds needed to keep up.
179. Inflation can play a major role in the decay of the highways and other so-called infrastructure of a country. This is because as it pours new and additional revenues into their hands, governments frequently proceed as though the revenues were available for the expansion of government activities, and neglect the need to devote an adequate portion of them to replacement and maintenance at progressively rising prices. The result is decaying water and sewage systems, subway and rail lines, and bridges and tunnels, as well as decaying roads and highways.
180. The prosperity delusion of inflation a. refers to the rise in nominal incomes and asset values that it creates and which leads people to believe that they are more prosperous and can thus afford to consume more, when in fact, after allow-
ing for higher replacement prices and the higher prices that must be paid to acquire other assets, they are not more prosperous and cannot afford to consume more
b. serves to undermine saving and capital accumulation
c. both (a) and (b)
181. Even after people stop regarding them$\overline{\text { selves as }}$ enriched by inflation, inflation continues to promote overconsumption insofar as it leads people to believe that they still have positive investment income when in reality their position is one of losses.
182. In a period of inflation, with prices $\overline{\text { steadily rising, everyone has an exaggerated idea of }}$ the purchasing power of money, based on his past experience of prices, which, necessarily, is now outmoded. For example, his notion of the purchasing power of money rests in part on his estimate of the price of a new car or washing machine. But that estimate is based on his last experience of the prices of such goods, which may have occurred several months or even several years in the past, at which time the prices were undoubtedly lower than they are today. Thus, people consume in the mistaken belief that their incomes will enable them to afford to buy more than is actually possible at the now higher level of prices.
183. Inflation in the form of credit expansion operates
a. to reduce the rate of interest relative to the rate of profit
b. to raise both the rate of profit and the rate of interest absolutely
c. to encourage the incurrence of debt
d. all of the above
184. Von Mises has shown that credit expan$\overline{\text { sion, and }}$ the artificial reduction in the rate of interest that it causes, creates the appearance of a more abundant supply of capital than in fact exists. On the basis of this appearance, businessmen are led to undertake projects for whose execution the actual supply of capital is inadequate. Such use of capital, for purposes inappropriate to the actual supply of capital, constitutes malinvestment.
185. Malinvestment is
a. the wasteful investment of capital
b. brought about by credit expansion and the low rate of interest it causes relatively to the rate of profit and to the rise in prices
c. exists in cases in which the profitability of an investment rests on no other foundation than credit expansion itself
d. exemplified by cases of wasteful inventory accumulation and wasteful investment in owner occupied housing
e. all of the above
186. Inflation in the form of credit expansion makes investments that actually lose in real terms ap-
pear to be profitable nonetheless, and to be profitable in fact to some investors.

## The following is a five-part question.

In normal conditions, it does not pay to hold inventories for the sake of holding inventories. In fact, storage costs would make such behavior downright loss making. But now assume the existence of inflation strong enough to raise prices in general 15 percent per year, and the price of a specific commodity, say, copper, also 15 percent per year. Assume annual storage costs equal to 3 percent of the initial value of the copper. Assume also that credit expansion serves to keep the rate of interest at 10 percent.
187. Calculate the real rate of return on investing in an inventory of copper, holding it for a year, and selling it at a 15 percent higher price.
188. Calculate the percentage of the value of copper next year, after allowing for storage costs, that would nevertheless constitute the profit of a borrower if he can finance his investment in copper entirely with borrowed money.
189. Calculate the loss in real terms suffered by the lender.
190. The lender's loss finances the gain of the borrower and the loss on the investment as a whole.
191. The borrower's profit is made possible by the combination of the rise in prices and the relative lowness of the rate of interest, both of which are caused by inflation in the form of credit expansion.

## The following is an eight-part question.

In the absence of inflation, with no secular trend of rising new-home prices, the prices of houses would tend to gradually decline as they got older. In such circumstances, buying a home would not often be thought of as an investment. Nevertheless to the extent that inflation proceeds more rapidly than houses depreciate, it makes the price of houses increase as they grow older. In this context imagine that the price of a home that is now 25 years old is twice as high as it was when the home was brand new. Over the same interval of time, however, the general consumer price level, including the price of new homes, has tripled. Assume that the home was originally purchased for $\$ 100,000$, of which $\$ 80,000$ was borrowed, and that through various refinancings, $\$ 80,000$ continues to be owed on the house.
192. Calculate the real rate of return (taken as a total, not annualized) on the $\$ 100,000$ investment made to purchase the new home, which is sold 25 years later at twice the price, when prices have tripled.
193. Calculate the homeowner's equity in the house at the time of its sale.
194. Calculate the homeowner's monetary $\overline{\text { profit on his investment. }}$
195. Calculate the homeowner's real profit in terms of the prices prevailing in the year in which he purchased his home.
196. Calculate the mortgage lenders' loss in terms of the buying power of $\$ 80,000$ at the time of sale when prices are 3 times higher than they were when the $\$ 80,000$ was originally lent.
197. State the amount of loss in buying power on the overall original $\$ 100,000$ investment in the house in terms of the prices that prevailed in the year in which the house was originally purchased.
198. Calculate the difference in real terms between the mortgage lenders' loss and the sum of the homeowner's gain plus the overall loss on the investment.
199. The mortgage lenders' loss finances the loss on the investment as a whole plus the gain of the homeowner.
200. In making home ownership a profitable investment for homeowners, inflation in the form of credit expansion encourages the diversion of savings and capital into home ownership at the expense of other investments.
201. Malinvestment impairs capital formation in reducing the efficiency with which existing capital is used, in that this holds down the production of new capital goods as well as new consumers' goods.
202. The existence of malinvestment confirms the proposition that inflation does not raise all prices at the same time and to the same extent, in that the credit expansion that causes it tends to raise the prices of such things as storable commodities and houses relative to most other prices, by virtue of creating an artificial additional demand for them based on the desire to take advantage of the special profit that such inflation creates in those lines.
203. When credit expansion and the malin$\overline{\text { vestment that it fosters come to an end, the prices of }}$ the goods and services artifially elevated relative to other prices then fall disproportionately relative to other prices.
204. The withdrawal-of-wealth effect is the uncompensated withdrawal of wealth from producers by the spenders of newly created money. It is essentially similar to the gains of counterfeiters, who take wealth out of the economic system while putting none in, and the corresponding loss of others.
205. The withdrawal-of-wealth effect
a. represents a diversion of capital to consumption insofar as the spenders of the new and additional money are consumers
b. represents probable malinvestment insofar as the spenders of the new and additional money are business firms, inasmuch as the firms which depend on the creation of new and additional money have proved unable to compete for capital on the regular loan market and require the subsidy that credit expansion represents
c. contributes to the undermining of capital formation
d. all of the above
206. Inflation operates to reduce the real rate of return on capital at the same time that it impairs capital formation via
a. the reversal-of-safety effect, which threatens savers with losses in terms of buying power
b. the tax effect, which diminishes the real aftertax rate of return through the rise in effective tax rates on profit and interest
c. the malinvestment effect, which represents the investment of capital in ways that are less efficient and actually loss-making in real terms d. the withdrawal-of-wealth effect, which represents the withdrawal of wealth that constitutes part or all of firms' real rate of return on capital e. all of the above
207. The fact that inflation reduces the real $\overline{\text { rate of return on capital as such implies that the gains }}$ of debtors resulting from inflation are less than the losses of creditors, a proposition which is explicitly demonstrated in the examples drawn from malinvestment in inventories and housing.
208. In its undermining of capital accumulation, inflation operates to
a. reduce the demand for capital goods relative to the demand for consumers' goods and the degree of capital intensiveness in the economic system b. reduce the efficiency with which existing capital goods are employed
c. reduce the demand for labor relative to the demand for consumers' goods
d. reduce the productivity of labor
e. all of the above
209. As a result of its undermining of capital accumulation and thus both the productivity of labor and the so-called distribution factor, inflation serves to reduce real wages.

## The following is a five-part question.

Assume that as a result of inflation's undermining of the foundations of real wages, the point has been reached where the prices of consumers' goods are rising more rapidly than wage rates, and the labor unions
are imposing wage increases equal to the rate of price increases.
210. More specifically, assume that while the demand for consumers' goods is rising at a rate of 10 percent per year, the demand for labor is rising at a rate of only 8 percent per year and that if nothing else were present, this would cause prices to rise by 10 percent while wage rates rose by only 8 percent. Assume that to prevent this outcome, the unions demand wage increases of 10 percent, to keep pace with the price increases. Calculate the proportion of the presently employed wage earners who must become unemployed each year as the result of the continuation of such union demands.

Now assume in addition that while the supply of labor is unchanged, the supply of consumers goods is falling at a rate of 2 percent per year.
211. Calculate the annual rise in prices when the 2 percent annual fall in the supply of consumers' goods is combined with a 10 percent annual increase in the demand for consumers' goods.
212. State the rise in wage rates now needed to keep pace with the rise in prices.
213. Recalculate the proportion of the presently employed wage earners who must become unemployed each year as the result of union demands for wage increases on a par with price increases. The efforts of labor unions to resist the fall in real wages caused by
214. The efforts of labor unions to resist the fall in real wages entails an attempt to raise wage rates relative to the demand for labor and thus results in unemployment.
215. Since common stock prices depend on the degree of saving, which inflation undermines, in the long-run inflation prevents stock prices from keeping pace with the prices of consumers' goods.
216. The negative effects of inflation on saving and the availability of real capital gives rise to the phenomenon of an inflationary depression-i.e., a rapidly increasing quantity of money and rapidly rising prices accompanied by widespread insolvencies and bankruptcies, as the money available for the purchase of capital goods and labor becomes inadequate by becoming unable to grow rapidly enough relative to the rise in the demand for consumers' goods and in prices.

## The following is a five-part question.

217. On the basis of the various ways in which it reduces the demand for money for holding, inflation, expecially in the form of credit expansion,
brings about an increase in the volume of spending and in sales revenues and incomes in the economic system that is more than proportional to the increase in the quantity of money and thereby reduces the degree of liquidity in the economic system, i.e., the ratio of cash holdings to current liabilities.
218. In reducing interest rates relative to the rate of profit, inflation in the form of credit expansion encourages the incurrence of debt.
219. Inflation in the form of credit expansion causes malinvestments, i.e., investments whose profitability is based on the existence of credit expansion.
220. When inflation in the form of credit expansion stops or significantly slows,
a. the demand for money for holding rises
b. the growth in sales revenues in the economic
system slows, stops, or is reversed
c. profit margins and the general rate of profit in the economic system are reduced, as is cash flow d. the unprofitability of malinvestments is revealed
e. many debts become unpayable because of the combination of now inadequate sales reveunues and cash flow and the unduly large debts incurred in the process of credit expansion
f. some substantial business firms suddenly fail g. banks that have made substantial loans to business firms that have failed also fail h. the failure of banks and their inability to redeem their checking deposts (and or bank notes) on demand reduces the quantity of money and further reduces the volume of spending in the economic system with the potential result of further business failures and then further bank failures, in successive waves, until the quantity of fiduciary media in the economic system is greatly reduced or even completely wiped out
i. all of the above
221. Inflation, especially in the form of credit expansion, sets the stage for a financial contraction and deflation.
222. To the extent that credit expansion serves to raise wage rates and/or materials prices, it a. reduces the adequacy of existing capital funds, with the result that firms requiring credit turn out to need more credit than they had planned on, while those firms normally supplying credit turn out to be able to supply less than had been counted on, and may even need credit themselves in order to meet the requirements of their own internal operations at these higher wage rates and prices
b. can result in a "credit crunch" and the precipitation of business failures and then bank failures c. both (a) and (b)
223. The failure of inflation to accelerate sufficiently can also cause the demand for money for
holding to increase, and thus velocity to decrease, insofar as the demand for money for holding has become unduly low based on the expectation of a more rapid acceleration of inflation than turns out to be the case.

## The following is a three-part question.

224. A gold clause is a feature of contracts that calls for payment either in physical gold of a definite weight and fineness or in whatever amount of paper money may be required to purchase such quantity of gold at the prevailing market price of gold.
225. If a bond is payable in the amount of \$1,000 gold dollars, in which a gold dollar is defined as one-twentieth of an ounce of gold of a definite fineness, calculate the amount of paper dollars required to redeem that bond if the price of gold rises to $\$ 35$.
226. If a bond is payable in the amount of \$1,000 gold dollars, in which a gold dollar is defined as one-twentieth of an ounce of gold of a definite fineness, calculate the amount of paper dollars required to redeem that bond if the price of gold rises to $\$ 350$.

## The following is a nine-part question.

Assume the existence of a money supply that contains 250 million physical ounces of gold, with each ounce of gold defined as $\$ 20$. Assume also that along with the gold, the money supply consists of a further \$20 billion of paper money, payable in gold on demand, and up to now treated as the equivalent of $\$ 20$ billion gold dollars.
227. Calculate the number of dollars represented by the gold component of the money supply.
228. Calculate the total money supply, consisting of the sum of the gold dollars represented by gold and the equivalent of gold dollars represented by the paper money.

Now assume that the supply of paper money is expanded from $\$ 20$ billion to $\$ 22$ billion and that, as result, the market price of gold rises from $\$ 20$ per ounce to $\$ 25$ per ounce.
229. Calculate the total money supply in terms of paper dollars, using $\$ 25$ per ounce to determine the number of paper dollars represented by the gold supply.
230. While the price of an ounce of gold is now $\$ 25$, calculate the price of a paper dollar in terms of a gold dollar still defined as one-twentieth of an ounce of gold.
231. Calculate the size of the total money supply expressed as gold dollars defined as one-twentieth of an ounce of gold.
232. Under a fractional-reserve gold standard, such as described above, inflation of the supply of paper money that is redeemable on demand in gold can lead to
a. a reduction in the quantity of money insofar as
it is considered as the equivalent of gold
b. a reduction in the ability to repay debts containing gold clauses
c. both (a) and (b)
233. In the context of a fractional-reserve gold standard with numerous gold-clause contracts in existence, inflation of the paper money can constitute deflation from the perspective of gold money.
234. At the time of the Great Depression in 1929, most long-term debt in the United States, both government and private, contained gold clauses. Based on this fact and on your answers to the preceding questions, it follows that the policy of the Hoover Administration of running what for the time were major budget deficits, and the policy of the Federal Reserve of attempting to increase the supply of dollars in order to reduce interest rates and to finance the deficits, may have served to intensify the deflation and depression of the early 1930s by threatening the future convertibility of the dollar at $\$ 20$ to the ounce of gold.
235. With international trade carried on on a gold basis, the policy of inflation and consequent devaluation against gold may have served to reduce the world supply of money calculated in gold and thus have been responsible for much of the decline in the volume of international trade in the early 1930s.
236. In recent years, the effect of an increase in the supply of Mexican pesos that caused a more-than-proportionate devaluation of the peso against the dollar
a. reduced the ability of Mexican firms to pay their dollar debts
b. represented a deflationary inflation
c. both (a) and (b)
237. In setting the stage for it to happen, inflation and credit expansion must be blamed for the mass unemployment that results from financial contraction, deflation, and depression.
238. In the face of the existence of strong monopoly labor unions, inflation is ineffectual as a remedy for existing unemployment because the unions will take advantage of the inflation to drive up wage rates, with the result that the larger volume of spending is likely to result in little or no increase in the quantity of labor demanded and thus little or no reduction in unemployment.
239. Those who are reemployed on the various make-work projects that almost always accompany any attempt to eliminate unemployment by means of inflation, are employed at a loss to the rest of the population, in that additional goods must be provided for them, including the means of production that
they use, and while goods go to them from the rest of society, they do not produce any comparable output that can make compensation possible.

## The following is a four-part question.

240. Inflation, having caused mass unemployment by creating all the necessary conditions for a financial contraction, can
a. never bring about a restoration of employment
b. bring about a restoration of employment provided either that there are no substantial monopoly labor unions present or, if there are, they are weakened to the point that they will not use the occasion of a rising aggregate demand to force up wage rates significantly
241. In the case in which inflation can bring about a restoration of employment, the essential problem remains that the policy of inflation continues, and with it, all of its destructive consequences.
242. If inflation is ever to be eliminated, the government must lose the power to inflate even in conditions in which doing so can reduce unemployment. Unemployment must be eliminated through a fall in wage rates and prices.

## The following is a four-part question.

243. The resumption and continuation of inflation is bound to be accompanied by substantial unemployment sooner or later, by virtue of
a. the tendency of real wage rates to fall as the result of inflation and because of efforts to prevent this fall by forcing wage rates to rise fully as rapidly as prices, without benefit of the necessary increase in the demand for labor b. the fact that as inflation becomes more extreme, the potential for sudden mass unemployment is created by efforts merely to moderate the inflation, and even by the failure sufficiently to accelerate it
c. both (a) and (b)
244. Assume the existence of a country in which the quantity of money and volume of spending are increasing at a rate of 50 percent per year and are accompanied by comparable increases in wage rates and prices. (Many Latin American countries have provided real world examples of such conditions.) Now assume that the country's government, having become alarmed at the pace of the inflation, decides to cut the rate of increase in the quantity of money to 25 percent, and the volume of spending follows suit. Calculate the proportion of the labor force that is presently employed that will suddenly become unemployed if, while the aggregate demand for labor now increases by only 25 percent, wage rates continue, simply by a process of inertia as it were, to rise by 50 percent.
245. If aggregate demand has been growing at a 50 percent annual rate and wages and prices begin to rise at a 75 percent annual rate, in anticipation of aggregate demand growing at 75 percent, and then aggregate demand fails to grow more than 50 percent, calculate the proportion of the labor force that is presently employed that will suddenly become unemployed.
246. A similar outcome to that described in the previous two questions results in conditions in which the demand for money for holding has fallen in anticipation of a degree of inflation that does not materialize, which then leads to a rise in the demand for money for holding.
247. The potentially most devastating consequence of inflation is that, once begun, the process tends to accelerate, with no necessary stopping point short of the destruction of the monetary unit by virtue of its losing its acceptability.
248. The loss of acceptability of the monetary unit occurs when people realize that between the time they accept it and even the earliest possible time they can spend it and thus pass it on to someone else, they will have suffered a substantial loss in buying power, at which point they refuse any longer to accept it and revert to barter if necessary.
249. According to von Mises, the three stages that inflation goes through before reaching its ultimate limit are
a. the belief that although prices are rising, they will come down, and so it is better to postpone purchases
b. the belief that prices will never come down but only go on rising, and so it is better to buy now instead of waiting
c. the belief that the loss in the buying power of money will be so rapid that it is better to buy anything than to continue to hold the money
d. all of the above
250. Inflation has a tendency to accelerate because
a. a major underlying premise which leads to the policy of inflation in the first place-namely, the premise of the welfare state that the government has the power to provide free benefits for people who need them, a premise given the appearance of reality when the benefits are financed by means of inflation, logically calls for more and more such free benefits, financed by more and more inflation
b. the stimulative effects of any given rate of inflation tend to wear off and to require a more rapid rate of inflation to maintain them c. inflation itself creates problems whose solution is perceived as requiring still more inflation
d. all of the above
251. On the basis of the fact that a more rapid rate of increase in the quantity of money leads to a fall in the demand for money for holding and thus to a rise in the velocity of circulation of money, it follows that
a. any one-time rise in the rate of increase in the quantity of money will be followed by a more rapid rate of increase in spending and thus in business sales revenues so long as velocity as well as the money supply is rising
b. any one-time rise in the rate of increase in the quantity of money will later on be followed by a no more rapid rate of increase in spending and in sales revenues once the demand for money for holding and consequent rise in velocity stabilize at their respective lower and higher levels c. the rate of increase in spending and in sales revenues corresponding to any given rate of increase in the quantity of money must fall at some point
d. to maintain the rate of increase in spending and in sales revenues corresponding to any given rate of increase in the money supply in the period when it is joined by the effects of a rising velocity of circulation, a more rapid rate of increase in the money supply becomes necessary
e. all of the above
252. Because the rate of increase in spending and in sales revenues adds a corresponding component to the average rate of profit in the economic system, it follows that
a. the fall in the rate of increase in spending and sales revenues resulting from velocity stabilizing, operates to reduce the average rate of profit in the economic system
b. the maintenance of the average rate of profit at the level achieved by the combination of any given rate of increase in the money supply coupled with a rising velocity of circulation requires an acceleration in the rate of increase in the money supply
c. both (a) and (b)
253. In raising sales revenues and profits, inflation operates to benefit stockholders at the expense of bondholders, whose interest returns are contractually fixed. Yet in the face of continuing inflation, interest rates tend to rise, to offset this imbalance. In order for the stockholders to continue to gain at the expense of bondholders, an acceleration of inflation is required.
254. In the absence of an acceleration of inflation, the gains experienced by debtors at the expense of creditors as the result of inflation wear off.
255. The factors making for an acceleration
of inflation in connection with profits are
a. the acceleration needed to maintain the oveall rate of profit on capital
b. the acceleration needed to enable stockholders to go on benefitting at the expense of bondholders
c. both (a) and (b)
256. Examples of inflation coming to be demanded as the means of solving problems largely created by inflation are
a. inflation-financed government rescues and bailouts of businesses, which have been driven to failure by the effects of credit expansion or the taxation of replacment funds resulting from the overstatement of profits brought about by inflation
b. inflation-financed government aid to the elderly, who have been impoverished by the decline in the buying power of their incomes and assets caused by the government's previous inflation c. inflation-financed government aid to the mortgage market brought to near extinction by the threat posed by inflation to all long-term contracts d. inflation to offset the reduction in the buying power of the government's own revenues
e. inflation to paper over credit crunches and profit squeezes brought on by inflation
f. all of the above
257. The use of inflation to solve problems created by prior inflation turns recessions into inflationary fueling periods.

## 258. Price indexing

a. addresses the problem of lags between the rise in the prices one must pay and the prices or income that one receives
b. at most enables an individual to catch up with the rise in prices, but does not compensate him for the loss of purchasing power in the interval before catching up, nor compensate him for the effects of again falling behind, as the prices he must pay rise before the prices he receives
259. In response to inflation and the threat of inflation, price indexes have come into use in the United States in
a. employment contracts
b. social security payments
c. the determination of the boundaries of income tax brackets
d. the payment of interest on a small amount of government bonds
e. all of the above
260. Additional areas that are likely candi$\overline{\text { dates for }}$ the use of price indexes in the future are
a. the calculation of depreciation allowances for income-tax purposes
b. the calculation of interest income for incometax purposes
c. a larger proportion of government-bond interest payments
d. all of the above
261. The use of price indexes operates to make inflation accelerate insofar as it serves to make prices rise still higher, as in price increases causing
wage increases which then cause further price increases.
262. The use of price indexes operates to make inflation accelerate insofar as
a. it brings about a more rapid increase in the quantity of money and volume of spending in government efforts to overcome or forestall the reduced quantities of goods and labor otherwise demanded at the higher prices, and the unemployment this would cause.
b. the reductions in government revenue and increases in government expenditures that it causes lead the government to rely more heavily on the creation of new and additional money as a source of funds.
c. both (a) and (b)
263. Apart from wage indexing, there is no tendency for inflation to accelerate in the government's efforts to avoid unemployment.

## The following is a four-part question.

264. Assume that labor unions demand an in$\overline{\text { crease in }}$ wage rates 2 percent above the prevailing increase, if any, in the general consumer price level, but that there is no rise in the productivity of labor or in the distribution factor. The outcome will be a. the unemployment of about 2 percent of the workers presently employed plus a further rise in prices of 2 percent
b. a further rise in prices of 2 percent but possibly no additional unemployment, if at the same time the government increases the quantity of money and thus the volume of spending by a further 2 percent
c. both (a) and (b), considered as alternatives
265. Calculate the rise in prices in a future year when the unions not only continue to demand an increase in wages of 2 percent above the expected rise in prices but the expected rise in prices now also comes to incorporate the additional 2 percent annual rise brought about by the unions' policy itself, supported by the government's policy of accomodating it through increases in the money supply.
266. Calculate the rise in prices in a further future year when the unions not only continue to demand an increase in wages of 2 percent above the expected rise in prices but the expected rise in prices is now still further elevated by a second 2 percent.
267. Witnessing the repeated failure of wage $\overline{\text { demands }} 2$ percent above the expected rise in prices to achieve any actual benefit, because prices turn out to rise 2 percent faster, a likely effect is an acceleration of union demands, perhaps to 4 percent above the now prevailing rise in the consumer price level, as a means of offsetting the effect of the recurring extra 2 percent rise in prices.
268. Union wage demands in combination with a government policy of accommodating them through increases in the quantity of money and volume of spending
a. operate as a kind of upward "ratcheting" in connection with the acceleration of inflation b. have the potential to reach double and triple digit levels
c. both (a) and (b)
269. The losses that inflation inflicts on bondholders and other creditors
a. result in increases in the rate of interest, as a means of preventing such losses
b. the establishment of a rate of interest high enough both to offset the rise in prices and to yield a positive real rate of return, would not only eliminate the gains of stockholders and other debtors, but impose losses on them equal to the losses on investments as a whole that are caused by inflation
c. to avoid or eliminate losses and regain the advantage of inflation, stockholders and other creditors must demand more rapid inflation
d. all of the above taken together
270. After repeated rounds of interest rates rising to levels sufficient to protect creditors from prevailing levels of rising prices, only soon to be followed by prices that rise still more rapidly so that once again creditors suffer losses, creditors will ultimately conclude that no rate of interest is high enough to protect them from inflation. At that point the loan market ei-
ther withers and dies or must be maintained by infusions of new and additional money on a scale sufficient to meet whatever credit needs will be met.
271. The United States began to approach the kind of conditions described in the preceding question in the late 1970s, when the long-term fixed rate mortgage market virtually disappeared.
272. When the limits of the upward ratcheting of interest rates is reached, the potential is created for a quantum leap in the rate of inflation in an effort to supply vast needs for credit by means of the creation of new and additional money.
273. The potential of inflation to destroy the existing monetary unit, by accelerating to the point of people refusing to accept it,
a. would be accelerated by the availability of an alternative monetary unit that retained its purchasing power better and whose competition would rapidly undermine the demand for the inflating monetary unit
b. can result in the destruction of the division of labor and the material civilization that depends on the division of labor, if the destruction of the existing monetary unit is turned into the destruction of money as such by a combination of the continued acceleration of inflation and the prohibition of the development of an alternative monetary unit c. both (a) and (b)
274. The leading historical example of the destruction of money is the late Roman Empire, whose civilization and culture could not survive without it.

## Chapter 19, Part C

275. The widespread ownership of gold and silver coins coupled with the freedom to use them as media of exchange at their bullion value and to write enforceable contracts payable in them
a. would provide powerful competition for a rapidly inflating paper money and result either in the public spontaneously abandoning the paper money or in the government halting its inflation and making the paper money once again redeemable in gold on demand
b. would serve as a guarantee against the destruction of money as the result of hyperinflation c. both (a) and (b)
276. Assuming that its rapid or at least substantial inflation is virtually inevitable, fiat money can be maintained in existence only by the forcible suppression of the competition of gold.
277. Inflation at the rate experienced in the United States in the 1970s turns the real rate of return on capital negative, for the reasons explained in connection with its undermining of capital accumulation. In such conditions, ownership of gold becomes a better alternative than normal investments, by virtue of
the fact that the rise in its price along with prices in general maintains its purchasing power, while its minimal cost of storage is less than the losses in buying power experienced on normal investments. In such conditions, the rising demand for gold makes its price rise faster than the general rise in prices.
278. If not prevented by government interference, growing ownership of gold as an inflation hedge would lay the foundation for its spontaneous reemergences as money
a. inasmuch as the sizable number of people seeking to add to their ownership of gold would be willing takers of gold in exchange for goods and services
b. the existence of the people described in (a) would further increase the number of people willing to take gold in exchange, because even people not seeking to hold gold as an inflation hedge would know that they could reexchange it with the extensive group of those who were seeking to do so
c. the addition of the further group described in
(b) to the number of people willing to take gold in
exchanges would lead to still more people becoming willing to take it on the basis of the now still greater ability to rexechange it
d. the culmination of a self-reenforcing process of growing numbers of people willing to take gold, would be its universal acceptability, i.e., its reestablishment as money
e. all of the above
279. The spontaneous remonetization of the precious metals would be greatly fostered if
a. it were not illegal for merchants to practice discrimination between paper money and precious metal coins of the same face value. (The constant, day-to-day experience of people being able to use a twenty-dollar gold piece as the equivalent of 320 or more paper dollars-its recent bullion value-and four silver quarters or ten silver dimes as the equivalent of more than $\$ 3$, reflecting the recent bullion value of silver, would teach people that the problem of inflation resided in the paper money and make them want their pensions and contracts payable in gold or silver.)
b. if contracts payable in precious metal were legally enforcable and not treated as usurious merely because the depreciation of paper money might entail the repayment of vastly more paper dollars than were equivalent to the gold when the contract was made
c. if the increase in the paper dollar value of gold contracts, resulting from nothing other than the depreciation of the paper, were not subject to taxation
d. all of the above
280. Among the positive measures the government might take that would foster the remonetization of the precious metals are
a. the phasing in, over a period of a few years perhaps, of the collection of certain taxes, such as the proceeds of the tariff and perhaps certain excise taxes, in gold or in transferable claims to gold payable on demand and 100 percent backed by gold b. the sale of government assets, such as the land it owns in the Western states and in Alaska, for gold or transferable claims to gold payable on demand and 100 percent backed by gold
c. enactment of a creditors' protection bill requiring that some modest portion of existing contracts, such as 5 or 10 percent of the sums involved, be payable in gold, at the option of the creditor, at the price of gold prevailing at the time of the bill's enactment (in the case of new contracts, the price of gold could be that prevailing when the contracts are made)
d. all of the above
281. The government's establishing a gold revenue for itself would
a. immediately sharply increase the demand for gold and its value
b. immediately make payment in gold acceptable to whoever had to pay such taxes
c. be a clear indication to everyone of the course of things to come
d. provide the government with a secure source of revenue that would be sufficient to maintain its essential, non-welfare-state, peacetime functions on the scale on which they existed earlier in American history
e. promote the highly desirable objective of the monetary demand for gold increasing as far as possible in advance of major financial obligations coming to be expressed in gold, which would be necessary in order for borrowers of gold not to find that it is vastly more difficult to acquire it at the time of repayment than at the time they borrowed it
f. all of the above
282. The kind of creditors' protection legislation described above would serve to provide a significant measure of protection for creditors against the possibility of being wiped out by the depreciation of paper money, because the almost certain rise in the price of gold far in excess of the rise in the general run of prices in such circumstances would make the amount of gold that was originally equal to just 5 percent of the value of a contract equal to a substantially higher percentage in terms of buying power.

## The following is a two-part question.

Assume that a contract is made calling for the payment of $\$ 1$ million in 20 years. Assume that the price of gold at the time of the making of the contract is $\$ 500$ per ounce.
283. Calculate the quantity of gold in which the contract would be payable if the contract guarantees the option of the creditor to collect 5 percent of the face value of the contract in gold at the present, $\$ 500$ price of gold.
284. Assume that by the time the $\$ 1$ million $\overline{\text { becomes }}$ payable, prices in general have increased by a factor of 10 and that the price of gold has increased by a factor of 50 . Calculate the percentage of the buying power of $\$ 1$ million at the time the contract was made, that the payee would be able to collect at the time of the contract's fulfillment.

## The following is a four-part question.

285. Almost any gold standard that was adhered to would eliminate the problem of inflation.
286. A 100-percent-reserve gold standard would make both inflation and deflation/depression impossible.
287. The falling prices that would exist under the gold standard, as the result of the increase in the
production and supply of goods surpassing the increase in the supply of gold and consequently the volume of spending in terms of gold,
a. would not be deflationary with respect to the rate of profit, which not only would not fall as the result of the falling prices, but would be positively increased to the extent that the increase in the supply of gold was the source of a continuing rise in productive expenditure and sales revenues and thus of a corresponding addition to the average rate of profit in the economic system
b. would not be deflationary with respect to the ability of business firms to repay their debts, because the average business would be in the position of having a larger supply of goods to sell at prices that fell less than in proportion to the increase in its supply, because of the increase in the quantity of money and volume of spending that takes place
c. would not be deflationary with respect to the ability of wage earners to repay their debts because the increase in the quantity of money and volume of spending that takes place would almost certainly surpass the increase in the supply of labor, with the result that money wage rates would not tend to fall but to modestly rise (real wages would rise both to this extent and to whatever extent prices fell)
d. all of the above
288. The 100-percent-reserve gold standard, so far from being deflationary would actually serve as the strongest possible guarantee against deflation because
a. the slow rate of increase in the quantity of money that it made possible would not give rise to temporary, unsustainable decreases in the demand for money for holding that in turn would serve to
temporarily raise the velocity of money, only to be followed by a rise in the demand for money for holding and accompanying fall in the velocity of money
b. it would make impossible any significant decline in the quantity of money and volume of spending, irrespective of the failure of any debtors c. both (a) and (b)
289. A 100-percent-reserve gold standard, in-
$\overline{\text { deed, any real gold standard that was adhered to, would }}$ a. eliminate the possibility of peacetime government budget deficits on the part of any even semiresponsible government, by making bankruptcy the price of such a policy
b. sharply limit growth in the size of government, since all new spending would have to be financed by tax increases in the very same year c. reduce the frequency and duration of wars, which would be an occasion for major tax increases
d. eliminate the risk of arbitrary redistribution of wealth and income through inflation
e. reduce the taxation of profit and interest income by not artifically creating such income, which is then subjected to taxation, but instead making it possible for a significant portion of profit and interest income in real terms to take the form of falling prices and thereby escape taxation f. greatly encourage saving and capital accumulation
g. eliminate the risk of currency depreciation on the part of countries that had it
h. create the potential for a single currency across the whole world, with enormous benefit to international trade and investment
i. all of the above


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[^0]:    113. Cases of close substitutes and luxury goods represent examples of demands that are likely to be elastic.
