

Chapter 16, Part A

_____ 1. The treatment of interest in Reisman's 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 earning a given high rate of profit, such as 50 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 minus 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, if productive expenditure were the only source of business 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 increase 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,
- the productive expenditure of any given year is frequently assumed to result in equivalent aggregate costs in the following year.
 - 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.
 - both (a) and (b)
 - neither (a) nor (b)
- _____ 17. The sources the demand for the products of business are
- the demand for capital goods by business
 - the demand for labor by business, which makes possible the demand for consumers' goods by wage earners
 - the demand for consumers' goods by the owners and creditors of business
 - all of the above
- _____ 18. The basic sources of the money that consumers spend are
- wage payments by business, and dividend, draw, and interest payments by business
 - government transfer payments
 - 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
- equal to itself
 - less than itself
 - greater than itself
- _____ 21. Net consumption is a source of aggregate profit by virtue of making sales revenues greater than productive expenditure and greater than aggregate costs equal to productive expenditure.
- _____ 22. Aggregate profit equals
- national income minus wages
 - net national product minus wages
 - consumption minus wages, plus net investment
 - net consumption plus net investment
 - 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
- corporate stock repurchases
 - extensions of consumer credit by business
 - both (a) and (b)
 - 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
- is incapable of raising the rate of profit
 - 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 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 consumption and the percentage of his income that he saves if his income is \$400,000.

_____ 45. Calculate both the amount of his consumption and the percentage of his income that he saves if his income is \$1 million.

_____ 46. Calculate both the amount of his consumption 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

- 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
- the lack of relationship between rising *average* real incomes and the rate of saving
- both (a) and (b)
- neither (a) nor (b)

_____ 48. Time preference means that, other things being equal, people prefer

- to accomplish given results in less time
- 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
- both (a) and (b)
- neither (a) nor (b)

_____ 49. Time preference is implied by

- the very nature of human valuation
- the fact that the unintermittibility 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
- both (a) and (b)
- neither (a) nor (b)

_____ 50. A high or low time preference in a society operates to make the rate of profit high or low

- directly
- 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 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:

- cash
- inventory and work in progress
- net plant and equipment
- none of the above

_____ 57. The asset account which is reduced when depreciation cost is incurred is:

- cash
- inventory and work in progress
- net plant and equipment
- none of the above

_____ 58. The asset account which is increased when depreciation cost is incurred is:

- cash
- inventory and work in progress
- net plant and equipment
- 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

- the gross plant and equipment account
- the net plant and equipment account
- both (a) and (b)

_____ 62. The asset account which is increased when productive expenditure for inventory or work in progress takes place is

- cash
- net plant and equipment
- gross plant and equipment
- 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

- $s - B$
- $s_c - w_b$
- net consumption
- all of the above
- 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

- by inserting B both as a positive and a negative term between s and d
- on the basis of the fact that $B - d$ equals I
- on the basis of the fact that $s - B$ equals NC
- all of the above taken together

_____ 66. Where K stands for total invested capital,

- the net consumption rate equals NC/K
- the net investment rate equals I/K
- the average rate of profit in the economic system equals the sum of the net consumption and net investment rates
- all of the above
- none of the above

_____ 67. "Secondary productive expenditure"

- is productive expenditure made out of the wages paid by business
- enlarges total productive expenditure while leaving aggregate sales revenues unchanged
- reduces the amount of net consumption, which could, conceivably, be made negative if the amount of secondary productive expenditure were great enough
- comes to an end once the accumulated savings of the wage earners become great enough
- 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

- aggregate costs are less than sales revenues
- positive net investment exists in excess of the amount of any negative net consumption
- both (a) and (b)
- neither (a) nor (b)

_____ 70. The same amount of productive expenditure for plant and equipment can be accompanied by new and additional net investment

- if the average life of plant and equipment increases, because this will decrease annual depreci-

ation charges until as many batches of the longer-lived 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 after Year 10 and prior to Year X.

_____ 74. Find the amount of annual depreciation 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 Year $X + 1$.

_____ 77. Find the amount of net investment in 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-year-old 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 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 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.

_____ 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 proceeds 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 revenues 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 revenues 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 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.

_____ 108. Calculate the businessman's sales proceeds 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 profit in the first of the three preceding questions.

_____ 111. Recalculate the businessman's sales revenues 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, 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

- 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
- 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

- total sales revenues in the economic system
- total consumption in the economic system
- total wages paid in the economic system
- all of the above
- 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

- that of an economic system with an invariable money
- 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

- increases
- decreases
- 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)?

- net consumption
- 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
- 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
- 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

- 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

- by favoring the adoption of lower-cost, more-capital-intensive methods of production
- by favoring the production of more-capital-intensive products
- by favoring the expansion of more-capital-intensive industries.
- all of the above
- 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

- determined by the marginal net productivity of capital
- that additional saving operates to reduce the marginal net productivity of capital and thus the rate of profit and interest
- that technological progress operates to raise the marginal net productivity of capital and thus the rate of profit and interest
- 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

- further saving
- the accumulation of additional capital
- the operation of the law of diminishing returns
- 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

- the rate of profit/interest
- the rate of capital accumulation in real terms
- both (a) and (b)
- neither (a) nor (b)

_____ 143. Among the difficulties encountered by the productivity theory of profit/interest are

- a reliance on the doctrine of opportunity cost
- the problem of having to subtract mathematically incommensurate quantities, such as loaves of bread forgone versus extra fish produced
- a confusion of more physical output with more money revenue
- the fact that the rate of profit is highest before there is any capital or productivity of capital
- all of the above
- none of the above

The following pertains to the next 24 questions.

Building on the assumptions underlying questions 134–141, 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.

_____ 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 supply of fish in the economic system under this new assumption.

_____ 154. Calculate the average price of fish corresponding 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 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 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
 - 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
 - both (a) and (b)
 - neither (a) nor (b)
- _____ 169. If, in an economic system with an invariable money, all firms employ more productive methods of production based on the use of more capital,
- prices fall in inverse proportion to the increase in production and supply
 - aggregate sales revenues remain unchanged
 - 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
 - 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
- 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

- 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
- both (a) and (b)
- 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 $2K$ or, alternatively, $4K$, of capital goods, is far higher than the average rate of profit/interest because

- 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
- 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
- both (a) and (b)
- neither (a) nor (b)

_____ 172. Select the best choice.

- 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.
- 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.
- both (a) and (b)
- 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

- _____ 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 1C 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 1C 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 1C of consumers' goods and the resulting actual 1C 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 1C of consumers' goods now become able to produce 2C of consumers' goods, which will become available at the start of *Year 3*.

- _____ 178. State the quantity of present goods that 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 difference 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*.

_____ 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 difference arrived at in answer to the preceding question continues to prevail even though the physical product that is produced and sold falls from 1C to .5C.

_____ 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
- fall when production increases
 - rise when production decreases
 - remain the same, irrespective of changes in production
 - 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 purchasing-power price premiums a fall in prices reduces the rate of profit/interest by an equivalent percentage.

_____ 194. Böhm-Bawerk's exposition of the time-preference 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, 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 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,

- 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
- 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
- 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
- all of the above
- 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.

- the prices of factors of production are fundamentally determined by supply and demand no less than the prices of consumers' goods
- 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
- the demand for products tends regularly and permanently to exceed the demand for factors of production by the amount of net consumption
- 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 invariable 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 "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.

Answers to Questions 1-209 on Chapter 16 *See next page concerning 97-114.

Ques- tion #	Correct Answer	Ques- tion #	Correct Answer	Ques- tion #	Correct Answer	Ques- tion #	Correct Answer	Ques- tion #	Correct Answer	Ques- tion #	Correct Answer	Ques- tion #	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	3000000	183	-.3C
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	\$100.5748	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%		

The following relates to questions 97-114.

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