# Test Bank for Investments 10th Edition Bodie Kane Marcus 0077861671 9780077861674 

Full link download:
Test Bank:
https://testbankpack.com/p/solution-manual-for-
investments-10th-edition-bodie-kane-marcus-0077861671-9780077861674/
Solution Manual:
https://testbankpack.com/p/test-bank-for-
investments-10th-edition-bodie-kane-marcus-0077861671-9780077861674/

## Chapter 02: Asset Classes and Financial Instruments Multiple Choice Questions

1. Which of the following is not a characteristic of a money market instrument?
A. Liquidity
B. Marketability
C. Long maturity
D. Liquidity premium
E. Long maturity and liquidity premium
2. The money market is a subsector of the
A. commodity market.
B. capital market.
C. derivatives market.
D. equity market.
E. None of the options
3. Treasury Inflation-Protected Securities (TIPS)
A. pay a fixed interest rate for life.
B. pay a variable interest rate that is indexed to inflation, but maintain a constant principal.
C. provide a constant stream of income in real (inflation-adjusted) dollars.
D. have their principal adjusted in proportion to the Consumer Price Index.
E. provide a constant stream of income in real (inflation-adjusted) dollars and have their principal adjusted in proportion to the Consumer Price Index.
4. Which one of the following is not a money market instrument?
A. Treasury bill
B. Negotiable certificate of deposit
C. Commercial paper
D. Treasury bond
E. Eurodollar account
5. T-bills are financial instruments initially sold by $\qquad$ to raise funds.
A. commercial banks
B. the U.S. government
C. state and local governments
D. agencies of the federal government
E. the U.S. government and agencies of the federal government
6. The bid price of a T -bill in the secondary market is
A. the price at which the dealer in T-bills is willing to sell the bill.
B. the price at which the dealer in T-bills is willing to buy the bill.
C. greater than the asked price of the T-bill.
D. the price at which the investor can buy the T-bill.
E. never quoted in the financial press.
7. The smallest component of the money market is
A. repurchase agreements.
B. small-denomination time deposits.
C. savings deposits.
D. money market mutual funds.
E. commercial paper
8. The smallest component of the bond market is $\qquad$ debt.
A. Treasury
B. other asset-backed
C. corporate
D. tax-exempt
E. mortgage-backed
9. The largest component of the bond market is $\qquad$ debt.
A. Treasury
B. asset-backed
C. corporate
D. tax-exempt
E. mortgage-backed
10. Which of the following is not a component of the money market?
A. Repurchase agreements
B. Eurodollars
C. Real estate investment trusts
D. Money market mutual funds
E. Commercial paper
11. Commercial paper is a short-term security issued by $\qquad$ to raise funds.
A. the Federal Reserve Bank
B. commercial banks
C. large, well-known companies
D. the New York Stock Exchange
E. state and local governments
12. Which one of the following terms best describes Eurodollars?
A. Dollar-denominated deposits only in European banks.
B. Dollar-denominated deposits at branches of foreign banks in the U.S.
C. Dollar-denominated deposits at foreign banks and branches of American banks outside the U.S.
D. Dollar-denominated deposits at American banks in the U.S.
E. Dollars that have been exchanged for European currency.
13. Deposits of commercial banks at the Federal Reserve Bank are called
A. bankers' acceptances.
B. repurchase agreements.
C. time deposits.
D. federal funds.
E. reserve requirements.
14. The interest rate charged by banks with excess reserves at a Federal Reserve Bank to banks needing overnight loans to meet reserve requirements is called the
A. prime rate.
B. discount rate.
C. federal funds rate.
D. call money rate.
E. money market rate.
15. Which of the following statement(s) is(are) true regarding municipal bonds?
I) A municipal bond is a debt obligation issued by state or local governments.
II) A municipal bond is a debt obligation issued by the federal government.
III) The interest income from a municipal bond is exempt from federal income taxation.
IV) The interest income from a municipal bond is exempt from state and local taxation in the issuing state.
A. I and II only
B. I and III only
C. I, II, and III only
D. I, III, and IV only
E. I and IV only
16. Which of the following statements is true regarding a corporate bond?
A. A corporate callable bond gives the holder the right to exchange it for a specified number of the company's common shares.
B. A corporate debenture is a secured bond.
C. A corporate indenture is a secured bond.
D. A corporate convertible bond gives the holder the right to exchange the bond for a specified number of the company's common shares.
E. Holders of corporate bonds have voting rights in the company.
17. In the event of the firm's bankruptcy
A. the most shareholders can lose is their original investment in the firm's stock.
B. common shareholders are the first in line to receive their claims on the firm's assets.
C. bondholders have claim to what is left from the liquidation of the firm's assets after paying the shareholders.
D. the claims of preferred shareholders are honored before those of the common shareholders.
E. the most shareholders can lose is their original investment in the firm's stock and the claims of preferred shareholders are honored before those of the common shareholders.
18. Which of the following is true regarding a firm's securities?
A. Common dividends are paid before preferred dividends.
B. Preferred stockholders have voting rights.
C. Preferred dividends are usually cumulative.
D. Preferred dividends are contractual obligations.
E. Common dividends usually can be paid if preferred dividends have been skipped.
19. Which of the following is true of the Dow Jones Industrial Average?
A. It is a value-weighted average of 30 large industrial stocks.
B. It is a price-weighted average of 30 large industrial stocks.
C. The divisor must be adjusted for stock splits.
D. It is a value-weighted average of 30 large industrial stocks and the divisor must be adjusted for stock splits.
E. It is a price-weighted average of 30 large industrial stocks and the divisor must be adjusted for stock splits.
20. Which of the following indices is(are) market-value weighted?
I) The New York Stock Exchange Composite Index
II) The Standard and Poor's 500 Stock Index
III) The Dow Jones Industrial Average
A. I only
B. I and II only
C. I and III only
D. I, II, and III
E. II and III only
21. The Dow Jones Industrial Average (DJIA) is computed by
A. adding the prices of 30 large "blue-chip" stocks and dividing by 30 .
B. calculating the total market value of the 30 firms in the index and dividing by 30 .
C. adding the prices of the 30 stocks in the index and dividing by a divisor.
D. adding the prices of the 500 stocks in the index and dividing by a divisor.
E. adding the prices of the 30 stocks in the index and dividing by the value of these stocks as of some base date period.
22. Consider the following three stocks:

| Stock | Price |  | Number of shares outstanding |
| :--- | :--- | :--- | :--- |
| Stock A | $\$ 40$ |  | 200 |
| Stock B | $\$ 70$ | 500 |  |
| Stock C | $\$ 10$ | 600 |  |

The price-weighted index constructed with the three stocks is
A. 30 .
B. 40 .
C. 50 .
D. 60 .
E. 70.
23. Consider the following three stocks:

| Stock | Price | Number of shares outstanding |
| :---: | :---: | :---: |
| Stock A | \$40 | 200 |
| Stock B | \$70 | 500 |
| Stock C | \$10 | 600 |

The value-weighted index constructed with the three stocks using a divisor of 100 is
A. 1.2.
B. 1200 .
C. 490 .
D. 4900 .
E. 49.
24. Consider the following three stocks:

| Stock | $\underline{\text { Price }}$ |  | Number of shares outstanding |
| :--- | :--- | :--- | :--- |
| Stock A | $\$ 40$ |  | 200 |
| Stock B | $\$ 70$ | 500 |  |
| Stock C | $\$ 10$ | 600 |  |

Assume at these prices that the value-weighted index constructed with the three stocks is 490 . What would the index be if stock B is split 2 for 1 and stock C 4 for 1 ?
A. 265
B. 430
C. 355
D. 490
E. 1000
25. The price quotations of Treasury bonds in the Wall Street Journal show an ask price of 104:08 and a bid price of 104:04. As a buyer of the bond, what is the dollar price you expect to pay?
A. $\$ 1,048.00$
B. $\$ 1,042.50$
C. $\$ 1,044.00$
D. $\$ 1,041.25$
E. \$1,040.40
26. The price quotations of Treasury bonds in the Wall Street Journal show an ask price of 104:08 and a bid price of 104:04. As a seller of the bond what is the dollar price you expect to pay?
A. $\$ 1,048.00$
B. $\$ 1,042.50$
C. $\$ 1,041.25$
D. $\$ 1,041.75$
E. \$1,040.40
27. An investor purchases one municipal and one corporate bond that pay rates of return of $8 \%$ and $10 \%$, respectively. If the investor is in the $20 \%$ marginal tax bracket, his or her after-tax rates of return on the municipal and corporate bonds would be $\qquad$ and $\qquad$ , respectively.
A. $8 \%$ and $10 \%$
B. $8 \%$ and $8 \%$
C. $6.4 \%$ and $8 \%$
D. $6.4 \%$ and $10 \%$
E. 10\% and 10\%
28. An investor purchases one municipal and one corporate bond that pay rates of return of $7.5 \%$ and $10.3 \%$, respectively. If the investor is in the $25 \%$ marginal tax bracket, his or her after-tax rates of return on the municipal and corporate bonds would be $\qquad$ and $\qquad$ , respectively.
A. $7.5 \%$ and $10.3 \%$
B. $7.5 \%$ and $7.73 \%$
C. $5.63 \%$ and $7.73 \%$
D. $5.63 \%$ and $10.3 \%$
E. 10\% and 10\%
29. If a Treasury note has a bid price of $\$ 975$, the quoted bid price in the Wall Street Journal would be
A. 97:50.
B. 97:16.
C. 97:80.
D. 94:24.
E. 97:75.
30. If a Treasury note has a bid price of $\$ 995$, the quoted bid price in the Wall Street Journal would be
A. 99:50.
B. 99:16.
C. 99:80.
D. 99:24.
E. 99:32.
31. In calculating the Standard and Poor's stock price indices, the adjustment for stock split occurs
A. by adjusting the divisor.
B. automatically.
C. by adjusting the numerator.
D. quarterly, on the last trading day of each quarter.
32. Which of the following statements regarding the Dow Jones Industrial Average (DJIA) is false?
A. The DJIA is not very representative of the market as a whole.
B. The DJIA consists of 30 blue chip stocks.
C. The DJIA is affected equally by changes in low- and high-priced stocks.
D. The DJIA divisor needs to be adjusted for stock splits.
E. The value of the DJIA is much higher than individual stock prices.
33. The index that includes the largest number of actively traded stocks is
A. the NASDAQ Composite Index.
B. the NYSE Composite Index.
C. the Wilshire 5000 Index.
D. the Value Line Composite Index.
E. the Russell Index.
34. A $5.5 \%$ 20-year municipal bond is currently priced to yield $7.2 \%$. For a taxpayer in the $33 \%$ marginal tax bracket, this bond would offer an equivalent taxable yield of
A. $8.20 \%$.
B. $10.75 \%$.
C. $11.40 \%$.
D. $4.82 \%$.
35. If the market prices of each of the 30 stocks in the Dow Jones Industrial Average (DJIA) all change by the same percentage amount during a given day, which stock will have the greatest impact on the DJIA?
A. The stock trading at the highest dollar price per share
B. The stock having the greatest amount of debt in its capital structure
C. The stock having the greatest amount of equity in its capital structure
D. The stock having the lowest volatility
36. The stocks on the Dow Jones Industrial Average
A. have remained unchanged since the creation of the index.
B. include most of the stocks traded on the NYSE.
C. are changed occasionally as circumstances dictate.
D. consist of stocks on which the investor cannot lose money.
E. include most of the stocks traded on the NYSE and are changed occasionally as circumstances dictate.
37. Federally sponsored agency debt
A. is legally insured by the U.S. Treasury.
B. would probably be backed by the U.S. Treasury in the event of a near-default.
C. has a small positive yield spread relative to U.S. Treasuries.
D. would probably be backed by the U.S. Treasury in the event of a near-default and has a small positive yield spread relative to U.S. Treasuries.
E. is legally insured by the U.S. Treasury and has a small positive yield spread relative to U.S.

Treasuries.
38. Brokers' calls
A. are funds used by individuals who wish to buy stocks on margin.
B. are funds borrowed by the broker from the bank, with the agreement to repay the bank immediately if requested to do so.
C. carry a rate that is usually about one percentage point lower than the rate on U.S. T-bills.
D. are funds used by individuals who wish to buy stocks on margin and are funds borrowed by the broker from the bank, with the agreement to repay the bank immediately if requested to do so.
E. are funds used by individuals who wish to buy stocks on margin and carry a rate that is usually about one percentage point lower than the rate on U.S. T-bills.
39. A form of short-term borrowing by dealers in government securities is
A. reserve requirements.
B. repurchase agreements.
C. bankers' acceptances.
D. commercial paper.
E. brokers' calls.
40. Which of the following securities is a money market instrument?
A. Treasury note
B. Treasury bond
C. Municipal bond
D. Commercial paper
E. Mortgage security
41. The yield to maturity reported in the financial pages for Treasury securities
A. is calculated by compounding the semiannual yield.
B. is calculated by doubling the semiannual yield.
C. is also called the bond equivalent yield.
D. is calculated as the yield-to-call for premium bonds.
E. is calculated by doubling the semiannual yield and is also called the bond equivalent yield.
42. Which of the following is not a mortgage-related government or government-sponsored agency?
A. The Federal Home Loan Bank
B. The Federal National Mortgage Association
C. The U.S. Treasury
D. Freddie Mac
E. Ginnie Mae
43. In order for you to be indifferent between the after-tax returns on a corporate bond paying 8.5\% and a tax-exempt municipal bond paying $6.12 \%$, what would your tax bracket need to be?
A. $33 \%$
B. $72 \%$
C. $15 \%$
D. $28 \%$
E. Cannot tell from the information given
44. What does the term negotiable mean with regard to negotiable certificates of deposit?
A. The CD can be sold to another investor if the owner needs to cash it in before its maturity date.
B. The rate of interest on the $C D$ is subject to negotiation.
C. The CD is automatically reinvested at its maturity date.
D. The $C D$ has staggered maturity dates built in.
E. The interest rate paid on the CD will vary with a designated market rate.
45. Freddie Mac and Ginnie Mae were organized to provide
A. a primary market for mortgage transactions.
B. liquidity for the mortgage market.
C. a primary market for farm loan transactions.
D. liquidity for the farm loan market.
E. a source of funds for government agencies.
46. The type of municipal bond that is used to finance commercial enterprises such as the construction of a new building for a corporation is called
A. a corporate courtesy bond.
B. a revenue bond.
C. a general obligation bond.
D. a tax anticipation note.
E. an industrial development bond.
47. Suppose an investor is considering a corporate bond with a $7.17 \%$ before-tax yield and a municipal bond with a $5.93 \%$ before-tax yield. At what marginal tax rate would the investor be indifferent between investing in the corporate and investing in the muni?
A. $15.4 \%$
B. $23.7 \%$
C. $39.5 \%$
D. $17.3 \%$
E. $12.4 \%$
48. Which of the following are characteristics of preferred stock?
I) It pays its holder a fixed amount of income each year at the discretion of its managers.
II) It gives its holder voting power in the firm.
III) Its dividends are usually cumulative.
IV) Failure to pay dividends may result in bankruptcy proceedings.
A. I, III, and IV
B. I, II, and III
C. I and III
D. I, II, and IV
E. I, II, III, and IV
49. Bond market indexes can be difficult to construct because
A. they cannot be based on firms' market values.
B. bonds tend to trade infrequently, making price information difficult to obtain.
C. there are so many different kinds of bonds.
D. prices cannot be obtained for companies that operate in emerging markets.
E. corporations are not required to disclose the details of their bond issues.
50. With regard to a futures contract, the long position is held by
A. the trader who bought the contract at the largest discount.
B. the trader who has to travel the farthest distance to deliver the commodity.
C. the trader who plans to hold the contract open for the lengthiest time period.
D. the trader who commits to purchasing the commodity on the delivery date.
E. the trader who commits to delivering the commodity on the delivery date.
51. In order for you to be indifferent between the after-tax returns on a corporate bond paying 9\% and a tax-exempt municipal bond paying $7 \%$, what would your tax bracket need to be?
A. $17.6 \%$
B. $27 \%$
C. $22.2 \%$
D. $19.8 \%$
E. Cannot tell from the information given
52. In order for you to be indifferent between the after-tax returns on a corporate bond paying $7 \%$ and a tax-exempt municipal bond paying $5.5 \%$, what would your tax bracket need to be?
A. $22.6 \%$
B. $21.4 \%$
C. $26.2 \%$
D. $19.8 \%$
E. Cannot tell from the information given
53. An investor purchases one municipal and one corporate bond that pay rates of return of $6 \%$ and $8 \%$, respectively. If the investor is in the $25 \%$ marginal tax bracket, his or her after-tax rates of return on the municipal and corporate bonds would be $\qquad$ and $\qquad$ , respectively.
A. $6 \%$ and $8 \%$
B. $4.5 \%$ and $6 \%$
C. $4.5 \%$ and $8 \%$
D. $6 \%$ and $6 \%$
54. An investor purchases one municipal and one corporate bond that pay rates of return of $7.2 \%$ and $9.1 \%$, respectively. If the investor is in the $15 \%$ marginal tax bracket, his or her after-tax rates of return on the municipal and corporate bonds would be $\qquad$ and $\qquad$ , respectively.
A. $7.2 \%$ and $9.1 \%$
B. $7.2 \%$ and $7.735 \%$
C. $6.12 \%$ and $7.735 \%$
D. $8.471 \%$ and $9.1 \%$
55. For a taxpayer in the $25 \%$ marginal tax bracket, a 20-year municipal bond currently yielding 5.5\% would offer an equivalent taxable yield of
A. $7.33 \%$.
B. $10.75 \%$.
C. $5.5 \%$.
D. $4.125 \%$.
56. For a taxpayer in the $15 \%$ marginal tax bracket, a 15-year municipal bond currently yielding 6.2\% would offer an equivalent taxable yield of
A. $6.2 \%$.
B. $5.27 \%$.
C. $8.32 \%$.
D. $7.29 \%$.
57. With regard to a futures contract, the short position is held by
A. the trader who bought the contract at the largest discount.
B. the trader who has to travel the farthest distance to deliver the commodity.
C. the trader who plans to hold the contract open for the lengthiest time period.
D. the trader who commits to purchasing the commodity on the delivery date.
E. the trader who commits to delivering the commodity on the delivery date.
58. A call option allows the buyer to
A. sell the underlying asset at the exercise price on or before the expiration date.
B. buy the underlying asset at the exercise price on or before the expiration date.
C. sell the option in the open market prior to expiration.
D. sell the underlying asset at the exercise price on or before the expiration date and sell the option in the open market prior to expiration.
E. buy the underlying asset at the exercise price on or before the expiration date and sell the option in the open market prior to expiration.
59. A put option allows the holder to
A. buy the underlying asset at the strike price on or before the expiration date.
B. sell the underlying asset at the strike price on or before the expiration date.
C. sell the option in the open market prior to expiration.
D. sell the underlying asset at the strike price on or before the expiration date and sell the option in the open market prior to expiration.
E. buy the underlying asset at the strike price on or before the expiration date and sell the option in the open market prior to expiration.
60. The $\qquad$ index represents the performance of the German stock market.
A. DAX
B. FTSE
C. Nikkei
D. Hang Seng
61. The $\qquad$ index represents the performance of the Japanese stock market.
A. DAX
B. FTSE
C. Nikkei
D. Hang Seng
62. The $\qquad$ index represents the performance of the U.K. stock market.
A. DAX
B. FTSE
C. Nikkei
D. Hang Seng
63. The $\qquad$ index represents the performance of the Hong Kong stock market.
A. DAX
B. FTSE
C. Nikkei
D. Hang Seng
64. The $\qquad$ index represents the performance of the Canadian stock market.
A. DAX
B. FTSE
C. TSX
D. Hang Seng
65. The ultimate stock index in the U.S. is the
A. Wilshire 5000.
B. DJIA.
C. S\&P 500.
D. Russell 2000 .
66. The $\qquad$ is an example of a U.S. index of large firms.
A. Wilshire 5000
B. DJIA
C. DAX
D. Russell 2000
E. All of the options
67. The $\qquad$ is an example of a U.S. index of small firms.
A. S\&P 500
B. DJIA
C. DAX
D. Russell 2000
E. All of the options
68. The largest component of the money market is
A. repurchase agreements.
B. money market mutual funds.
C. T-bills.
D. Eurodollars.
E. savings deposits.
69. Certificates of deposit are insured by the
A. SPIC.
B. CFTC.
C. Lloyds of London.
D. FDIC.
E. All of the options
70. Certificates of deposit are insured for up to $\qquad$ in the event of bank insolvency.
A. $\$ 10,000$
B. $\$ 100,000$
C. $\$ 250,000$
D. $\$ 500,000$
71. The maximum maturity of commercial paper that can be issued without SEC registration is
A. 270 days.
B. 180 days.
C. 90 days.
D. 30 days.
72. Which of the following is used extensively in foreign trade when the creditworthiness of one trader is unknown to the trading partner?
A. Repos
B. Bankers' acceptances
C. Eurodollars
D. Federal funds
73. A U.S. dollar-denominated bond that is sold in Singapore is a
A. Eurobond.
B. Yankee bond.
C. Samurai bond.
D. Bulldog bond.
74. A municipal bond issued to finance an airport, hospital, turnpike, or port authority is typically a
A. revenue bond.
B. general obligation bond.
C. industrial development bond.
D. revenue bond or general obligation bond.
75. Unsecured bonds are called
A. junk bonds.
B. debentures.
C. indentures.
D. subordinated debentures.
E. either debentures or subordinated debentures.
76. A bond that can be retired prior to maturity by the issuer is a(an) $\qquad$ bond.
A. convertible
B. secured
C. unsecured
D. callable
E. Yankee
77. Corporations can exclude $\qquad$ \% of the dividends received from preferred stock from taxes.
A. 50
B. 70
C. 20
D. 15
E. 62
78. You purchased a futures contract on corn at a futures price of 350 , and at the time of expiration the price was 352 . What was your profit or loss?
A. $\$ 2.00$
B. - $\$ 2.00$
C. $\$ 100$
D. $-\$ 100$
79. You purchased a futures contract on corn at a futures price of 331 , and at the time of expiration the price was 343 . What was your profit or loss?
A. $-\$ 12.00$
B. $\$ 12.00$
C. $-\$ 600$
D. $\$ 600$
80. You sold a futures contract on corn at a futures price of 350 and at the time of expiration the price was 352 . What was your profit or loss?
A. $\$ 2.00$
B. $-\$ 2.00$
C. $\$ 100$
D. $-\$ 100$
81. You sold a futures contract on corn at a futures price of 331 and at the time of expiration the price was 343 . What was your profit or loss?
A. $-\$ 12.00$
B. $\$ 12.00$
C. $-\$ 600$
D. $\$ 600$
82. You purchased a futures contract on oats at a futures price of 233.75 and at the time of expiration the price was 261.25 . What was your profit or loss?
A. $\$ 1375.00$
B. $-\$ 1375.00$
C. $-\$ 27.50$
D. $\$ 27.50$
83. You sold a futures contract on oats at a futures price of 233.75 and at the time of expiration the price was 261.25 . What was your profit or loss?
A. $\$ 1375.00$
B. $-\$ 1375.00$
C. $-\$ 27.50$
D. $\$ 27.50$

## Short Answer Questions

84. 

|  | $\mathrm{P}_{0}$ | $\mathrm{Q}_{0}$ | $\mathrm{P}_{1}$ | $\mathrm{Q}_{1}$ | $\mathrm{P}_{2}$ | $\mathrm{Q}_{2}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Stock A | $\$ 70$ | 200 | $\$ 72$ | 200 | $\$ 36$ | 400 |
| Stock B | $\$ 85$ | 500 | $\$ 81$ | 500 | $\$ 81$ | 500 |
| Stock C | $\$ 105$ | 300 | $\$ 98$ | 300 | $\$ 98$ | 300 |

Based on the information given, for a price-weighted index of the three stocks calculate
A. the rate of return for the first period ( $t=0$ to $t=1$ ).
B. the value of the divisor in the second period $(t=2)$. Assume that Stock A had a $2-1$ split during this period.
C. the rate of return for the second period ( $t=1$ to $t=2$ ).
85.

|  | $\mathrm{P}_{0}$ | $\mathrm{Q}_{0}$ | $\mathrm{P}_{1}$ | $\mathrm{Q}_{1}$ | $\mathrm{P}_{2}$ | $\mathrm{Q}_{2}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Stock A | $\$ 70$ | 200 | $\$ 72$ | 200 | $\$ 36$ | 400 |
| Stock B | $\$ 85$ | 500 | $\$ 81$ | 500 | $\$ 81$ | 500 |
| Stock C | $\$ 105$ | 300 | $\$ 98$ | 300 | $\$ 98$ | 300 |

Based on the information given for the three stocks, calculate the first-period rates of return (from
$t=0$ to $t=1$ ) on
A. a market-value-weighted index.
B. an equally weighted index.
86. Distinguish between U. S. Treasury debt and U.S agency debt.
87. Discuss the advantages and disadvantages of common stock ownership relative to other investment alternatives.
88. The Dow Jones Industrial Average and the New York Stock Exchange Index have unique characteristics. Discuss how these indices are calculated and any problems/advantages associated with the specific indices.

# Chapter 02 Asset Classes and Financial Instruments Answer Key 

## Multiple Choice Questions

1. Which of the following is not a characteristic of a money market instrument?
A. Liquidity
B. Marketability
C. Long maturity
D. Liquidity premium
E. Long maturity and liquidity premium

Money market instruments are short-term instruments with high liquidity and marketability; they do not have long maturities nor pay liquidity premiums.
2. The money market is a subsector of the
A. commodity market.
B. capital market.
C. derivatives market.
D. equity market.
E. None of the options

Money market instruments are short-term instruments with high liquidity and marketability; they do not have long maturities nor pay liquidity premiums.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Money Market
3. Treasury Inflation-Protected Securities (TIPS)
A. pay a fixed interest rate for life.
B. pay a variable interest rate that is indexed to inflation, but maintain a constant principal.
C. provide a constant stream of income in real (inflation-adjusted) dollars.
D. have their principal adjusted in proportion to the Consumer Price Index.
E. provide a constant stream of income in real (inflation-adjusted) dollars and have their principal adjusted in proportion to the Consumer Price Index.

TIPS provide a constant stream of income in real (inflation-adjusted) dollars because their principal is adjusted in proportion to the Consumer Price Index.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
4. Which one of the following is not a money market instrument?
A. Treasury bill
B. Negotiable certificate of deposit
C. Commercial paper
D. Treasury bond
E. Eurodollar account

Money market instruments are instruments with maturities of one year or less, which applies to all of the options except Treasury bonds.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Money Market Instruments
5. T-bills are financial instruments initially sold by $\qquad$ to raise funds.
A. commercial banks
B. the U.S. government
C. state and local governments
D. agencies of the federal government
E. the U.S. government and agencies of the federal government

Only the U.S. government sells T-bills in the primary market.
6. The bid price of a T-bill in the secondary market is
A. the price at which the dealer in T -bills is willing to sell the bill.
B. the price at which the dealer in T-bills is willing to buy the bill.
C. greater than the asked price of the T-bill.
D. the price at which the investor can buy the T-bill.
E. never quoted in the financial press.

T-bills are sold in the secondary market via dealers; the bid price quoted in the financial press is the price at which the dealer is willing to buy the bill.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Money Market Instruments
7. The smallest component of the money market is
A. repurchase agreements.
B. small-denomination time deposits.
C. savings deposits.
D. money market mutual funds.
E. commercial paper

According to Table 2.1, small-denomination time deposits are the smallest component of the money market.

AACSB: Analytic
Blooms: Remember
8. The smallest component of the bond market is $\qquad$ debt.
A. Treasury
B. other asset-backed
C. corporate
D. tax-exempt
E. mortgage-backed

According to Table 2.7, other asset-backed debt is the smallest component of the bond market.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Capital Market Instruments
9. The largest component of the bond market is $\qquad$ debt.
A. Treasury
B. asset-backed
C. corporate
D. tax-exempt
E. mortgage-backed

According to Table 2.7, Treasury debt is the largest component of the bond market.
10. Which of the following is not a component of the money market?
A. Repurchase agreements
B. Eurodollars
C. Real estate investment trusts
D. Money market mutual funds
E. Commercial paper

Real estate investment trusts are not short-term investments.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Money Market Instruments
11. Commercial paper is a short-term security issued by $\qquad$ to raise funds.
A. the Federal Reserve Bank
B. commercial banks
C. large, well-known companies
D. the New York Stock Exchange
E. state and local governments

Commercial paper is short-term unsecured financing issued directly by large, presumably safe corporations.
12. Which one of the following terms best describes Eurodollars?
A. Dollar-denominated deposits only in European banks.
B. Dollar-denominated deposits at branches of foreign banks in the U.S.
C. Dollar-denominated deposits at foreign banks and branches of American banks outside the U.S.
D. Dollar-denominated deposits at American banks in the U.S.
E. Dollars that have been exchanged for European currency.

Although originally Eurodollars were used to describe dollar-denominated deposits in European banks, today the term has been extended to apply to any dollar-denominated deposit outside the U.S.

AACSB: Analytic
Blooms: Understand
Difficulty: Intermediate
13. Deposits of commercial banks at the Federal Reserve Bank are called
A. bankers' acceptances.
B. repurchase agreements.
C. time deposits.
D. federal funds.
E. reserve requirements.

The federal funds are required for the bank to meet reserve requirements, which is a way of influencing the money supply. No substitutes for fed funds are permitted.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Money Market Instruments
14. The interest rate charged by banks with excess reserves at a Federal Reserve Bank to banks needing overnight loans to meet reserve requirements is called the
A. prime rate.
B. discount rate.
C. federal funds rate.
D. call money rate.
E. money market rate.

The federal funds are required for the bank to meet reserve requirements, which is a way of influencing the money supply.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
15. Which of the following statement(s) is(are) true regarding municipal bonds?
I) A municipal bond is a debt obligation issued by state or local governments.
II) A municipal bond is a debt obligation issued by the federal government.
III) The interest income from a municipal bond is exempt from federal income taxation.
IV) The interest income from a municipal bond is exempt from state and local taxation in the issuing state.
A. I and II only
B. I and III only
C. I, II, and III only
D. I, III, and IV only
E. I and IV only

State and local governments and agencies thereof issue municipal bonds on which the interest income is free from all federal taxes and is exempt from state and local taxation in the issuing state.

AACSB: Analytic
Blooms: Understand
Difficulty: Intermediate
Topic: Capital Market Instruments
16. Which of the following statements is true regarding a corporate bond?
A. A corporate callable bond gives the holder the right to exchange it for a specified number of the company's common shares.
B. A corporate debenture is a secured bond.
C. A corporate indenture is a secured bond.
D. A corporate convertible bond gives the holder the right to exchange the bond for a specified number of the company's common shares.
E. Holders of corporate bonds have voting rights in the company.
"A corporate convertible bond gives the holder the right to exchange the bond for a specified number of the company's common shares" is the only true statement; all other statements describe something other than the term specified.

AACSB: Analytic
Blooms: Understand
Difficulty: Basic
Topic: Capital Market Instruments
17. In the event of the firm's bankruptcy
A. the most shareholders can lose is their original investment in the firm's stock.
B. common shareholders are the first in line to receive their claims on the firm's assets.
C. bondholders have claim to what is left from the liquidation of the firm's assets after paying the shareholders.
D. the claims of preferred shareholders are honored before those of the common shareholders.
E. the most shareholders can lose is their original investment in the firm's stock and the claims of preferred shareholders are honored before those of the common shareholders.

Shareholders have limited liability and have residual claims on assets. Bondholders have a priority claim on assets, and preferred shareholders have priority over common shareholders.

AACSB: Analytic
Blooms: Understand
Difficulty: Intermediate
Topic: Equity Securities
18. Which of the following is true regarding a firm's securities?
A. Common dividends are paid before preferred dividends.
B. Preferred stockholders have voting rights.
C. Preferred dividends are usually cumulative.
D. Preferred dividends are contractual obligations.
E. Common dividends usually can be paid if preferred dividends have been skipped.

Preferred dividends must be paid first and any skipped preferred dividends must be paid before common dividends may be paid.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Equity Securities
19. Which of the following is true of the Dow Jones Industrial Average?
A. It is a value-weighted average of 30 large industrial stocks.
B. It is a price-weighted average of 30 large industrial stocks.
C. The divisor must be adjusted for stock splits.
D. It is a value-weighted average of 30 large industrial stocks and the divisor must be adjusted for stock splits.
E. It is a price-weighted average of 30 large industrial stocks and the divisor must be adjusted for stock splits.

The Dow Jones Industrial Average is a price-weighted index of 30 large industrial firms, and the divisor must be adjusted when any of the stocks on the index split.
20. Which of the following indices is(are) market-value weighted?
I) The New York Stock Exchange Composite Index
II) The Standard and Poor's 500 Stock Index
III) The Dow Jones Industrial Average
A. I only
B. I and II only
C. I and III only
D. I, II, and III
E. II and III only

The Dow Jones Industrial Average is a price-weighted index.
21. The Dow Jones Industrial Average (DJIA) is computed by
A. adding the prices of 30 large "blue-chip" stocks and dividing by 30 .
B. calculating the total market value of the 30 firms in the index and dividing by 30 .
C. adding the prices of the 30 stocks in the index and dividing by a divisor.
D. adding the prices of the 500 stocks in the index and dividing by a divisor.
E. adding the prices of the 30 stocks in the index and dividing by the value of these stocks as of some base date period.

When the DJIA became a 30 -stock index, it was computed by adding the prices of 30 large "blue-chip" stocks and dividing by 30 ; however, as stocks on the index have split and been replaced, the divisor has been adjusted.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Market Indexes
22. Consider the following three stocks:

| Stock | $\underline{\text { Price }}$ |  | Number of shares outstanding |
| :--- | :--- | :--- | :--- |
| Stock A | $\$ 40$ |  | 200 |
| Stock B | $\$ 70$ | 500 |  |
| Stock C | $\$ 10$ | 600 |  |

The price-weighted index constructed with the three stocks is
A. 30 .
B. 40 .
C. 50 .
D. 60 .
E. 70.
$(\$ 40+\$ 70+\$ 10) / 3=\$ 40$.

AACSB: Analytic
Blooms: Apply
Difficulty: Basic
Topic: Market Indexes
23. Consider the following three stocks:

| Stock | $\underline{\text { Price }}$ |  | Number of shares outstanding |
| :--- | :--- | :--- | :--- |
| Stock A | $\$ 40$ |  | 200 |
| Stock B | $\$ 70$ | 500 |  |
| Stock C | $\$ 10$ | 600 |  |

The value-weighted index constructed with the three stocks using a divisor of 100 is
A. 1.2.
B. 1200 .
C. 490 .
D. 4900 .
E. 49 .

The sum of the value of the three stocks divided by 100 is 490 : $[(\$ 40 \times 200)+(\$ 70 \times 500)+$ $(\$ 10 \times 600)] / 100=490$.
24. Consider the following three stocks:

| Stock | $\underline{\text { Price }}$ |  | Number of shares outstanding |
| :--- | :--- | :--- | :--- |
| Stock A | $\$ 40$ |  | 200 |
| Stock B | $\$ 70$ | 500 |  |
| Stock C | $\$ 10$ | 600 |  |

Assume at these prices that the value-weighted index constructed with the three stocks is 490 .
What would the index be if stock B is split 2 for 1 and stock C 4 for 1 ?
A. 265
B. 430
C. 355
D. 490
E. 1000

Value-weighted indexes are not affected by stock splits.
25. The price quotations of Treasury bonds in the Wall Street Journal show an ask price of 104:08 and a bid price of 104:04. As a buyer of the bond, what is the dollar price you expect to pay?
A. $\$ 1,048.00$
B. $\$ 1,042.50$
C. $\$ 1,044.00$
D. $\$ 1,041.25$
E. $\$ 1,040.40$

You pay the asking price of the dealer, $1048 / 32$, or $104.25 \%$ of $\$ 1,000$, or $\$ 1,042.50$.

AACSB: Analytic
Blooms: Apply
Difficulty: Intermediate
Topic: Market Indexes
26. The price quotations of Treasury bonds in the Wall Street Journal show an ask price of 104:08 and a bid price of 104:04. As a seller of the bond what is the dollar price you expect to pay?
A. $\$ 1,048.00$
B. $\$ 1,042.50$
C. $\$ 1,041.25$
D. $\$ 1,041.75$
E. $\$ 1,040.40$

You receive the bid price of the dealer, $1044 / 32$, or $104.125 \%$ of $\$ 1,000$, or $\$ 1,041.25$.
27. An investor purchases one municipal and one corporate bond that pay rates of return of $8 \%$ and $10 \%$, respectively. If the investor is in the $20 \%$ marginal tax bracket, his or her after-tax rates of return on the municipal and corporate bonds would be $\qquad$ and $\qquad$ _, respectively.
A. $8 \%$ and $10 \%$
B. 8\% and $8 \%$
C. $6.4 \%$ and $8 \%$
D. $6.4 \%$ and $10 \%$
E. 10\% and 10\%
$r_{c}=0.10(1-0.20)=0.08$, or $8 \% ; r_{m}=0.08(1-0)=8 \%$.

AACSB: Analytic
Blooms: Apply
Difficulty: Intermediate
Topic: Capital Market Instruments
28. An investor purchases one municipal and one corporate bond that pay rates of return of $7.5 \%$ and $10.3 \%$, respectively. If the investor is in the $25 \%$ marginal tax bracket, his or her after-tax rates of return on the municipal and corporate bonds would be $\qquad$ and $\qquad$ , respectively.
A. $7.5 \%$ and $10.3 \%$
B. $7.5 \%$ and $7.73 \%$
C. $5.63 \%$ and $7.73 \%$
D. $5.63 \%$ and $10.3 \%$
E. $10 \%$ and $10 \%$
$r_{c}=0.103(1-0.25)=0.07725$, or $7.73 \% ; r_{m}=0.075(1-0)=7.5 \%$.

AACSB: Analytic
Blooms: Apply
Difficulty: Intermediate
Topic: Capital Market Instruments
29. If a Treasury note has a bid price of $\$ 975$, the quoted bid price in the Wall Street Journal would be
A. $97: 50$.
B. 97:16.
C. $97: 80$.
D. 94:24.
E. 97:75.

Treasuries are quoted as a percent of $\$ 1,000$ and in $1 / 32$ s.

AACSB: Analytic
Blooms: Apply
30. If a Treasury note has a bid price of $\$ 995$, the quoted bid price in the Wall Street Journal would be
A. 99:50.
B. 99:16.
C. 99:80.
D. 99:24.
E. 99:32.

Treasuries are quoted as a percent of $\$ 1,000$ and in $1 / 32$ s.

AACSB: Analytic
Blooms: Apply
Difficulty: Basic
Topic: Market Indexes
31. In calculating the Standard and Poor's stock price indices, the adjustment for stock split occurs
A. by adjusting the divisor.
B. automatically.
C. by adjusting the numerator.
D. quarterly, on the last trading day of each quarter.

The calculation of the value-weighted S\&P indices includes both price and number of shares of each of the stocks in the index. Thus, the effects of stock splits are automatically incorporated into the calculation.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Market Indexes
32. Which of the following statements regarding the Dow Jones Industrial Average (DJIA) is false?
A. The DJIA is not very representative of the market as a whole.
B. The DJIA consists of 30 blue chip stocks.
C. The DJIA is affected equally by changes in low- and high-priced stocks.
D. The DJIA divisor needs to be adjusted for stock splits.
E. The value of the DJIA is much higher than individual stock prices.

The high-priced stocks have much more impact on the DJIA than do the lower-priced stocks.

AACSB: Analytic
Blooms: Understand
Difficulty: Basic
33. The index that includes the largest number of actively traded stocks is
A. the NASDAQ Composite Index.
B. the NYSE Composite Index.
C. the Wilshire 5000 Index.
D. the Value Line Composite Index.
E. the Russell Index.

The Wilshire 5000 is the largest readily available stock index, consisting of the stocks traded on the organized exchanges and the OTC stocks.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Market Indexes
34. A $5.5 \%$ 20-year municipal bond is currently priced to yield $7.2 \%$. For a taxpayer in the $33 \%$ marginal tax bracket, this bond would offer an equivalent taxable yield of
A. $8.20 \%$.
B. $10.75 \%$.
C. $11.40 \%$.
D. $4.82 \%$.
$0.072=r(1-t) ; 0.072=r(0.67) ; r=0.072 / 0.67 ; r=0.1075=10.75 \%$.

AACSB: Analytic
Blooms: Apply
Difficulty: Intermediate
35. If the market prices of each of the 30 stocks in the Dow Jones Industrial Average (DJIA) all change by the same percentage amount during a given day, which stock will have the greatest impact on the DJIA?
A. The stock trading at the highest dollar price per share
B. The stock having the greatest amount of debt in its capital structure
C. The stock having the greatest amount of equity in its capital structure
D. The stock having the lowest volatility

Higher-priced stocks affect the DJIA more than lower-priced stocks; other choices are not relevant.

AACSB: Analytic
Blooms: Understand
Difficulty: Intermediate
Topic: Market Indexes
36. The stocks on the Dow Jones Industrial Average
A. have remained unchanged since the creation of the index.
B. include most of the stocks traded on the NYSE.
C. are changed occasionally as circumstances dictate.
D. consist of stocks on which the investor cannot lose money.
E. include most of the stocks traded on the NYSE and are changed occasionally as circumstances dictate.

The stocks on the DJIA are only a small sample of the entire market and have been changed occasionally since the creation of the index; one can lose money on any stock.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Market Indexes
37. Federally sponsored agency debt
A. is legally insured by the U.S. Treasury.
B. would probably be backed by the U.S. Treasury in the event of a near-default.
C. has a small positive yield spread relative to U.S. Treasuries.
D. would probably be backed by the U.S. Treasury in the event of a near-default and has a small positive yield spread relative to U.S. Treasuries.
E. is legally insured by the U.S. Treasury and has a small positive yield spread relative to U.S. Treasuries.

Federally sponsored agencies are not government owned. These agencies' debt is not insured by the U.S. Treasury, but probably would be backed by the Treasury in the event of an agency near-default. As a result, the issues are very safe and carry a yield only slightly higher than that of U.S. Treasuries.

AACSB: Analytic
38. Brokers' calls
A. are funds used by individuals who wish to buy stocks on margin.
B. are funds borrowed by the broker from the bank, with the agreement to repay the bank immediately if requested to do so.
C. carry a rate that is usually about one percentage point lower than the rate on U.S. T-bills.
D. are funds used by individuals who wish to buy stocks on margin and are funds borrowed by the broker from the bank, with the agreement to repay the bank immediately if requested to do so.
E. are funds used by individuals who wish to buy stocks on margin and carry a rate that is usually about one percentage point lower than the rate on U.S. T-bills.

Brokers' calls are funds borrowed from banks by brokers and loaned to investors in margin accounts.

AACSB: Analytic
Blooms: Understand
Difficulty: Basic
Topic: Money Market Instruments
39. A form of short-term borrowing by dealers in government securities is
A. reserve requirements.
B. repurchase agreements.
C. bankers' acceptances.
D. commercial paper.
E. brokers' calls.

Repurchase agreements are a form of short-term borrowing, where a dealer sells government securities to an investor with an agreement to buy back those same securities at a slightly higher price.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Money Market Instruments
40. Which of the following securities is a money market instrument?
A. Treasury note
B. Treasury bond
C. Municipal bond
D. Commercial paper
E. Mortgage security

Only commercial paper is a money market security. The others are capital market instruments.

AACSB: Analytic
41. The yield to maturity reported in the financial pages for Treasury securities
A. is calculated by compounding the semiannual yield.
B. is calculated by doubling the semiannual yield.
C. is also called the bond equivalent yield.
D. is calculated as the yield-to-call for premium bonds.
E. is calculated by doubling the semiannual yield and is also called the bond equivalent yield.

The yield to maturity shown in the financial pages is an APR calculated by doubling the semiannual yield.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Capital Market Instruments
42. Which of the following is not a mortgage-related government or government-sponsored agency?
A. The Federal Home Loan Bank
B. The Federal National Mortgage Association
C. The U.S. Treasury
D. Freddie Mac
E. Ginnie Mae

Only the U.S. Treasury issues securities that are not mortgage-backed.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
43. In order for you to be indifferent between the after-tax returns on a corporate bond paying $8.5 \%$ and a tax-exempt municipal bond paying $6.12 \%$, what would your tax bracket need to be?
A. $33 \%$
B. $72 \%$
C. $15 \%$
D. $28 \%$
E. Cannot tell from the information given
$.0612=.085(1-t) ;(1-t)=0.72 ; t=.28$.

AACSB: Analytic
Blooms: Analyze
Difficulty: Intermediate
Topic: Capital Market Instruments
44. What does the term negotiable mean with regard to negotiable certificates of deposit?
A. The CD can be sold to another investor if the owner needs to cash it in before its maturity date.
B. The rate of interest on the CD is subject to negotiation.
C. The CD is automatically reinvested at its maturity date.
D. The CD has staggered maturity dates built in.
E. The interest rate paid on the CD will vary with a designated market rate.

Negotiable means that it can be sold or traded to another investor.
45. Freddie Mac and Ginnie Mae were organized to provide
A. a primary market for mortgage transactions.
B. liquidity for the mortgage market.
C. a primary market for farm loan transactions.
D. liquidity for the farm loan market.
E. a source of funds for government agencies.

Liquidity for the mortgage market.

AACSB: Analytic
Blooms: Understand
Difficulty: Basic
Topic: Capital Market Instruments
46. The type of municipal bond that is used to finance commercial enterprises such as the construction of a new building for a corporation is called
A. a corporate courtesy bond.
B. a revenue bond.
C. a general obligation bond.
D. a tax anticipation note.
E. an industrial development bond.

Industrial development bonds allow private enterprises to raise capital at lower rates.
47. Suppose an investor is considering a corporate bond with a $7.17 \%$ before-tax yield and a municipal bond with a $5.93 \%$ before-tax yield. At what marginal tax rate would the investor be indifferent between investing in the corporate and investing in the muni?
A. $15.4 \%$
B. $23.7 \%$
C. $39.5 \%$
D. $17.3 \%$
E. $12.4 \%$
$t_{m}=1-(5.93 \% / 7.17 \%)=17.29 \%$.

AACSB: Analytic
Blooms: Apply
Difficulty: Intermediate
Topic: Capital Market Instruments
48. Which of the following are characteristics of preferred stock?
I) It pays its holder a fixed amount of income each year at the discretion of its managers.
II) It gives its holder voting power in the firm.
III) Its dividends are usually cumulative.
IV) Failure to pay dividends may result in bankruptcy proceedings.
A. I, III, and IV
B. I, II, and III
C. I and III
D. I, II, and IV
E. I, II, III, and IV

Only I and III are true.

AACSB: Analytic
Blooms: Remember
Difficulty: Intermediate
Topic: Equity Securities
49. Bond market indexes can be difficult to construct because
A. they cannot be based on firms' market values.
B. bonds tend to trade infrequently, making price information difficult to obtain.
C. there are so many different kinds of bonds.
D. prices cannot be obtained for companies that operate in emerging markets.
E. corporations are not required to disclose the details of their bond issues.

Bond trading is often "thin," making prices stale (or not current).
50. With regard to a futures contract, the long position is held by
A. the trader who bought the contract at the largest discount.
B. the trader who has to travel the farthest distance to deliver the commodity.
C. the trader who plans to hold the contract open for the lengthiest time period.
D. the trader who commits to purchasing the commodity on the delivery date.
$E$. the trader who commits to delivering the commodity on the delivery date.

The trader agreeing to buy the underlying asset is said to be long the contract, whereas the trader agreeing to deliver the underlying asset is said to be short the contract.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
51. In order for you to be indifferent between the after-tax returns on a corporate bond paying 9\% and a tax-exempt municipal bond paying $7 \%$, what would your tax bracket need to be?
A. $17.6 \%$
B. $27 \%$
C. $22.2 \%$
D. $19.8 \%$
E. Cannot tell from the information given
$.07=.09(1-t) ;(1-t)=0.777 ; t=.222$.

AACSB: Analytic
Blooms: Apply
Difficulty: Intermediate
Topic: Capital Market Instruments
52. In order for you to be indifferent between the after-tax returns on a corporate bond paying 7\% and a tax-exempt municipal bond paying $5.5 \%$, what would your tax bracket need to be?
A. $22.6 \%$
B. $21.4 \%$
C. $26.2 \%$
D. $19.8 \%$
E. Cannot tell from the information given
$.055=.07(1-t) ;(1-t)=0.786 ; t=.214$.
53. An investor purchases one municipal and one corporate bond that pay rates of return of $6 \%$ and $8 \%$, respectively. If the investor is in the $25 \%$ marginal tax bracket, his or her after-tax rates of return on the municipal and corporate bonds would be $\qquad$ and $\qquad$ , respectively.
A. $6 \%$ and $8 \%$
B. $4.5 \%$ and $6 \%$
C. $4.5 \%$ and $8 \%$
D. $6 \%$ and $6 \%$
$r_{c}=0.08(1-0.25)=0.06$, or $6 \% ; r_{m}=0.06(1-0)=6 \%$.

AACSB: Analytic
Blooms: Apply
Difficulty: Intermediate
Topic: Capital Market Instruments
54. An investor purchases one municipal and one corporate bond that pay rates of return of $7.2 \%$ and $9.1 \%$, respectively. If the investor is in the $15 \%$ marginal tax bracket, his or her after-tax rates of return on the municipal and corporate bonds would be $\qquad$ and $\qquad$ _, respectively.
A. 7.2\% and 9.1\%
B. $7.2 \%$ and $7.735 \%$
C. $6.12 \%$ and $7.735 \%$
D. $8.471 \%$ and $9.1 \%$
$r_{C}=0.091(1-0.15)=0.07735$, or $7.735 \% ; r_{m}=0.072(1-0)=7.2 \%$
55. For a taxpayer in the $25 \%$ marginal tax bracket, a 20 -year municipal bond currently yielding $5.5 \%$ would offer an equivalent taxable yield of
A. $7.33 \%$.
B. $10.75 \%$.
C. $5.5 \%$.
D. $4.125 \%$.
$0.055=r(1-t) ; r=0.055 / 0.75 ; r=0.0733$.

AACSB: Analytic
Blooms: Apply
Difficulty: Intermediate
Topic: Capital Market Instruments
56. For a taxpayer in the $15 \%$ marginal tax bracket, a 15 -year municipal bond currently yielding $6.2 \%$ would offer an equivalent taxable yield of
A. $6.2 \%$.
B. $5.27 \%$.
C. $8.32 \%$.
D. $7.29 \%$.
$0.062=r(1-t) ; r=0.062 /(0.85) ; r=0.0729=7.29 \%$.
57. With regard to a futures contract, the short position is held by
A. the trader who bought the contract at the largest discount.
B. the trader who has to travel the farthest distance to deliver the commodity.
C. the trader who plans to hold the contract open for the lengthiest time period.
D. the trader who commits to purchasing the commodity on the delivery date.
E. the trader who commits to delivering the commodity on the delivery date.

The trader agreeing to buy the underlying asset is said to be long the contract, whereas the trader agreeing to deliver the underlying asset is said to be short the contract.

AACSB: Analytic
Blooms: Understand
Difficulty: Basic
Topic: Derivatives Markets
58. A call option allows the buyer to
A. sell the underlying asset at the exercise price on or before the expiration date.
B. buy the underlying asset at the exercise price on or before the expiration date.
C. sell the option in the open market prior to expiration.
D. sell the underlying asset at the exercise price on or before the expiration date and sell the option in the open market prior to expiration.
E. buy the underlying asset at the exercise price on or before the expiration date and sell the option in the open market prior to expiration.

A call option may be exercised (allowing the holder to buy the underlying asset) on or before expiration; the option contract also may be sold prior to expiration.
59. A put option allows the holder to
A. buy the underlying asset at the strike price on or before the expiration date.
B. sell the underlying asset at the strike price on or before the expiration date.
C. sell the option in the open market prior to expiration.
D. sell the underlying asset at the strike price on or before the expiration date and sell the option in the open market prior to expiration.
E. buy the underlying asset at the strike price on or before the expiration date and sell the option in the open market prior to expiration.

A put option allows the buyer to sell the underlying asset at the strike price on or before the expiration date; the option contract also may be sold prior to expiration.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Derivatives Markets
60. The $\qquad$ index represents the performance of the German stock market.
A. DAX
B. FTSE
C. Nikkei
D. Hang Seng

Many major foreign stock markets exist, including the DAX (Germany), FTSE (UK), Nikkei (Japan), Hang Seng (Hong Kong), and TSX (Canada).
61. The $\qquad$ index represents the performance of the Japanese stock market.
A. DAX
B. FTSE
C. Nikkei
D. Hang Seng

Many major foreign stock markets exist, including the DAX (Germany), FTSE (UK), Nikkei (Japan), Hang Seng (Hong Kong), and TSX (Canada).

AACSB: Analytic
Blooms: Remember
62. The____index represents the performance of the U.K. stock market.
A. DAX
B. FTSE
C. Nikkei
D. Hang Seng

Many major foreign stock markets exist, including the DAX (Germany), FTSE (UK), Nikkei (Japan), Hang Seng (Hong Kong), and TSX (Canada).

AACSB: Analytic
Blooms: Remember
63. The $\qquad$ index represents the performance of the Hong Kong stock market.
A. DAX
B. FTSE
C. Nikkei
D. Hang Seng

Many major foreign stock markets exist, including the DAX (Germany), FTSE (UK), Nikkei (Japan), Hang Seng (Hong Kong), and TSX (Canada).

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Market Indexes
64. The $\qquad$ index represents the performance of the Canadian stock market.
A. DAX
B. FTSE
C. TSX
D. Hang Seng

Many major foreign stock markets exist, including the DAX (Germany), FTSE (UK), Nikkei (Japan), Hang Seng (Hong Kong), and TSX (Canada).

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Market Indexes
65. The ultimate stock index in the U.S. is the
A. Wilshire 5000 .
B. DJIA.
C. S\&P 500.
D. Russell 2000.

The Wilshire 5000 is the broadest U.S. index and contains more than 7000 stocks.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Market Indexes
66. The $\qquad$ is an example of a U.S. index of large firms.
A. Wilshire 5000
B. DJIA
C. DAX
D. Russell 2000
E. All of the options

The DJIA contains 30 of some of the largest firms in the U.S.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Market Indexes
67. The $\qquad$ is an example of a U.S. index of small firms.
A. $\mathrm{S} \& \mathrm{P} 500$
B. DJIA
C. DAX
D. Russell 2000
E. All of the options

The Russell 2000 is a small firm index. The DJIA and S\&P 500 are large firm U.S. indexes and the DAX is a large German firm index.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Market Indexes
68. The largest component of the money market is
A. repurchase agreements.
B. money market mutual funds.
C. T-bills.
D. Eurodollars.
E. savings deposits.

Savings deposits are the largest component according to Table 2.1.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Money Market Instruments
69. Certificates of deposit are insured by the
A. SPIC.
B. CFTC.
C. Lloyds of London.
D. FDIC.
E. All of the options

The Federal Deposit Insurance Corporation (FDIC) insures saving deposits for up to \$100,000.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Money Market Instruments
70. Certificates of deposit are insured for up to $\qquad$ in the event of bank insolvency.
A. $\$ 10,000$
B. $\$ 100,000$
C. $\$ 250,000$
D. $\$ 500,000$

The Federal Deposit Insurance Corporation (FDIC) insures saving deposits for up to $\$ 100,000$.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Money Market Instruments
71. The maximum maturity of commercial paper that can be issued without SEC registration is
A. 270 days.
B. 180 days.
C. 90 days.
D. 30 days.

The SEC permits issuing commercial paper for a maximum of 270 days without registration.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Money Market Instruments
72. Which of the following is used extensively in foreign trade when the creditworthiness of one trader is unknown to the trading partner?
A. Repos
B. Bankers' acceptances
C. Eurodollars
D. Federal funds

A bankers' acceptance facilitates foreign trade by substituting a bank's credit for that of the trading partner.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Money Market Instruments
73. A U.S. dollar-denominated bond that is sold in Singapore is a
A. Eurobond.
B. Yankee bond.
C. Samurai bond.
D. Bulldog bond.

Eurobonds are bonds denominated in a currency other than the currency of the country in which they are issued.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Money Market Instruments
74. A municipal bond issued to finance an airport, hospital, turnpike, or port authority is typically a
A. revenue bond.
B. general obligation bond.
C. industrial development bond.
D. revenue bond or general obligation bond.

Revenue bonds depend on revenues from the project to pay the coupon payment and are normally issued for airports, hospitals, turnpikes, or port authorities. General obligation bonds are backed by the taxing power of the municipality. Industrial development bonds are used to support private enterprises.

AACSB: Analytic
Blooms: Understand
Difficulty: Basic
Topic: Capital Market Instruments
75. Unsecured bonds are called
A. junk bonds.
B. debentures.
C. indentures.
D. subordinated debentures.
E. either debentures or subordinated debentures.

Debentures are unsecured bonds.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Capital Market Instruments
76. A bond that can be retired prior to maturity by the issuer is a(an) $\qquad$ bond.
A. convertible
B. secured
C. unsecured
D. callable
E. Yankee

Only callable bonds can be retired prior to maturity.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Capital Market Instruments
77. Corporations can exclude $\qquad$ \% of the dividends received from preferred stock from taxes.
A. 50
B. 70
C. 20
D. 15
E. 62

Corporations can exclude $70 \%$ of dividends received from preferred stock from taxes.

AACSB: Analytic
Blooms: Remember
Difficulty: Basic
Topic: Equity Securities
78. You purchased a futures contract on corn at a futures price of 350 , and at the time of expiration the price was 352 . What was your profit or loss?
A. $\$ 2.00$
B. $-\$ 2.00$
C. $\$ 100$
D. $-\$ 100$

There are 5,000 bushels per contract and prices are quoted in cents per bushel. Thus, your profit was (3.52-3.50) $=\$ 0.02$ per bushel, or $\$ 0.02 \times 5,000=\$ 100$.

Difficulty: Basic
79. You purchased a futures contract on corn at a futures price of 331 , and at the time of expiration the price was 343 . What was your profit or loss?
A. $-\$ 12.00$
B. $\$ 12.00$
C. $-\$ 600$
D. $\$ 600$

There are 5,000 bushels per contract and prices are quoted in cents per bushel. Thus, your profit was (3.43-3.31) $=\$ 0.12$ per bushel, or $\$ 0.12 \times 5,000=\$ 600$.

AACSB: Analytic
Blooms: Apply
Difficulty: Basic
Topic: Derivatives Markets
80. You sold a futures contract on corn at a futures price of 350 and at the time of expiration the price was 352 . What was your profit or loss?
A. $\$ 2.00$
B. $-\$ 2.00$
C. $\$ 100$
D. $-\$ 100$

There are 5,000 bushels per contract and prices are quoted in cents per bushel. Thus, your loss was (\$3.50-3.52) = \$0.02 per bushel, or $-\$ 0.02 \times 5,000=-\$ 100$.

AACSB: Analytic
Blooms: Apply
Difficulty: Basic
81. You sold a futures contract on corn at a futures price of 331 and at the time of expiration the price was 343 . What was your profit or loss?
A. $-\$ 12.00$
B. $\$ 12.00$
C. $-\$ 600$
D. $\$ 600$

There are 5,000 bushels per contract and prices are quoted in cents per bushel. Thus, your profit was $(3.31-3.43)=-\$ 0.12$ per bushel, or $-\$ 0.12 \times 5,000=-\$ 600$.

AACSB: Analytic
Blooms: Apply
Difficulty: Basic
Topic: Derivatives Markets
82. You purchased a futures contract on oats at a futures price of 233.75 and at the time of expiration the price was 261.25 . What was your profit or loss?
A. $\$ 1375.00$
B. $-\$ 1375.00$
C. $-\$ 27.50$
D. $\$ 27.50$

There are 5,000 bushels per contract and prices are quoted in cents per bushel. Thus, your profit was (2.6125-2.3375) $=\$ 0.275$ per bushel, or $\$ 0.275 \times 5,000=\$ 1,375$.

AACSB: Analytic
Blooms: Apply
83. You sold a futures contract on oats at a futures price of 233.75 and at the time of expiration the price was 261.25. What was your profit or loss?
A. $\$ 1375.00$
B. $-\$ 1375.00$
C. $-\$ 27.50$
D. $\$ 27.50$

There are 5,000 bushels per contract and prices are quoted in cents per bushel. Thus, your loss was $(\$ 2.3375-\$ 2.6125)=-\$ 0.275$ per bushel, or $-\$ 0.275 \times 5,000=-\$ 1,375$.

## Short Answer Questions

84. 

|  | $\mathrm{P}_{0}$ | $\mathrm{Q}_{0}$ | $\mathrm{P}_{1}$ | $\mathrm{Q}_{1}$ | $\mathrm{P}_{2}$ | $\mathrm{Q}_{2}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Stock A | $\$ 70$ | 200 | $\$ 72$ | 200 | $\$ 36$ | 400 |
| Stock B | $\$ 85$ | 500 | $\$ 81$ | 500 | $\$ 81$ | 500 |
| Stock C | $\$ 105$ | 300 | $\$ 98$ | 300 | $\$ 98$ | 300 |

Based on the information given, for a price-weighted index of the three stocks calculate
A. the rate of return for the first period ( $t=0$ to $t=1$ ).
B. the value of the divisor in the second period ( $t=2$ ). Assume that Stock A had a $2-1$ split during this period.
C. the rate of return for the second period ( $t=1$ to $t=2$ ).
A. The price-weighted index at time 0 is $(70+85+105) / 3=86.67$. The price-weighted index at time 1 is $(72+81+98) / 3=83.67$. The return on the index is $83.67 / 86.67-1=-3.46 \%$. B. The divisor must change to reflect the stock split. Because nothing else fundamentally changed, the value of the index should remain 83.67. So the new divisor is $(36+81+$ $98) / 83.67=2.57$. The index value is $(36+81+98) / 2.57=83.67$.
C. The rate of return for the second period is $83.67 / 83.67-1=0.00 \%$.
85.

|  | $\mathrm{P}_{0}$ | $\mathrm{Q}_{0}$ | $\mathrm{P}_{1}$ | $\mathrm{Q}_{1}$ | $\mathrm{P}_{2}$ | $\mathrm{Q}_{2}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Stock A | $\$ 70$ | 200 | $\$ 72$ | 200 | $\$ 36$ | 400 |
| Stock B | $\$ 85$ | 500 | $\$ 81$ | 500 | $\$ 81$ | 500 |
| Stock C | $\$ 105$ | 300 | $\$ 98$ | 300 | $\$ 98$ | 300 |

Based on the information given for the three stocks, calculate the first-period rates of return (from $t=0$ to $t=1$ ) on
A. a market-value-weighted index.
B. an equally weighted index.
A. The total market value at time 0 is $\$ 70 \times 200+\$ 85 \times 500+\$ 105 \times 300=\$ 88,000$. The total market value at time 1 is $\$ 72 \times 200+\$ 81 \times 500+\$ 98 \times 300=\$ 84,300$. The return is $\$ 84,300 / \$ 88,000-1=-4.20 \%$.
B. The return on Stock A for the first period is $\$ 72 / \$ 70-1=2.86 \%$. The return on Stock B for the first period is $\$ 81 / \$ 85-1=-4.71 \%$. The return on Stock C for the first period is $\$ 98 / \$ 105$ -$1=-6.67 \%$. The return on an equally weighted index of the three stocks is $(2.86 \%-4.71 \%$ $6.67 \%) / 3=-2.84 \%$.

AACSB: Analytic
Blooms: Evaluate
Difficulty: Challenge
Topic: Market Indexes
86. Distinguish between U. S. Treasury debt and U.S agency debt.

Debt issued by the U.S. Treasury is backed by the full taxing power of the U.S. Treasury. Such instruments are considered to be free of default risk. Some agencies of the U.S. government issue debt also. Technically, this debt is not backed by the U.S. Treasury. However, most investors think that if any U.S. agency were having trouble meeting a debt commitment, the U.S. Treasury would come to the rescue of the agency. Thus, as a result, U.S. agency issues are considered almost as safe as U.S. Treasury issues and earn a yield only slightly higher than that of U.S. Treasury issues.

Feedback: The purpose of this question is to ascertain whether or not the student understands the subtle differences between Treasury and agency issues.
87. Discuss the advantages and disadvantages of common stock ownership relative to other investment alternatives.

The advantages of common stock ownership are: The stockholder is allowed to participate in earnings. If the firm is doing well, these benefits are passed on to the shareholder in the form of dividends and/or increased market price of the stock (with fixed income investments, such as bonds and preferred stock, the investor receives a fixed payment, regardless of the earnings of the firm). In addition, common stock investment represents ownership in the firm, giving the shareholder voting rights. Finally, the shareholder is liable only for the amount of the shareholder's investment in the stock. That is, unlike a sole proprietorship or partnership, the common stockholder has limited liability.

The disadvantages of common stock ownership are: The cash flow from dividends (if any) and the appreciation of the stock are uncertain, and the firm makes no commitment to the common shareholder regarding future income resulting from common stock ownership. In addition, the claims of the bondholders and other creditors come before the benefits of the common shareholders. The preferred shareholders must receive dividends prior to common shareholders, and if preferred dividends are skipped, these dividends are cumulative and skipped preferred dividends must be paid before common dividends are paid. Thus, the claims of the common shareholder are residual; that is, only after all other creditors' and investors' claims have been met will the claims of the common shareholder be honored.

Feedback: This question was designed to determine whether the student understands the priorities of claims upon a firm, and the benefits and risks associated with common stock ownership.
88. The Dow Jones Industrial Average and the New York Stock Exchange Index have unique characteristics. Discuss how these indices are calculated and any problems/advantages associated with the specific indices.

The Dow Jones Industrial Average (DJIA) is the oldest index. The index consists of 30 "blue chip" firms. The index is "price-weighted"; that is, the only market variables in the calculation of the index are the prices of the stocks on the index. As the stocks on the index split, the divisor must be adjusted downward. The result of the small divisor is the very large value of the average, which is not representative of the average price of stock in anyone's portfolio! Thus, the movements in the average, when quoted in absolute numbers are quite large, which cause many people to think that the market is very volatile. A more realistic way to assess the market's movement is to look at the percent change in the value of the index from one day to the next. Finally, the movements of the index are influenced much more by price changes in the higher-priced stocks in the index than by changes in the lower-priced stocks. The New York Stock Exchange Index is a value-weighted index comprised of every stock listed on the NYSE. "Value-weighted" means that each stock is represented by price per share times number of shares, as a percent of the entire value of the NYSE. As a result of this calculation, no divisor manipulation is necessary.

Feedback: This question is designed to determine whether the student understands the various types of calculations involved in the representative indexes and the advantages and disadvantages of these indexes.

