Chapter 7
Stock Valuation

■ Learning Goals

1. Differentiate between debt and equity capital.
2. Discuss the rights, characteristics, and features of both common and preferred stock.
3. Describe the process of issuing common stock, including venture capital, going public and the investment banker, and interpreting stock quotations.
4. Understand the concept of market efficiency and basic common stock valuation using zero growth, constant growth, and variable growth models.
5. Discuss the free cash flow valuation model and the book value, liquidation value, and price/earnings (P/E) multiples approaches.
6. Explain the relationships among financial decisions, return, risk, and the firm's value.

■ True/False

1. Holders of equity have claims on both income and assets that are secondary to the claims of creditors.

   Answer: TRUE
   Level of Difficulty: 1
   Learning Goal: 1
   Topic: Contrasting Debt and Equity

2. The tax deductibility of interest lowers the cost of debt financing, thereby causing the cost of debt financing to be lower than the cost of equity financing.

   Answer: TRUE
   Level of Difficulty: 3
   Learning Goal: 1
   Topic: Contrasting Debt and Equity

3. Preferred stock is a special form of stock having a fixed periodic dividend that must be paid prior to payment of any interest to outstanding bonds.

   Answer: FALSE
   Level of Difficulty: 1
   Learning Goal: 2
   Topic: Features of Preferred Stock

4. Cumulative preferred stocks are preferred stocks for which all passed (unpaid) dividends in arrears must be paid in additional shares of preferred stock prior to the payment of dividends to common stockholders.

   Answer: FALSE
   Level of Difficulty: 1
   Learning Goal: 2
   Topic: Features of Preferred Stock

5. Preferred stock is often considered a quasi-debt since it yields a fixed periodic payment.

   Answer: TRUE
   Level of Difficulty: 1
   Learning Goal: 2
   Topic: Features of Preferred Stock

6. The amount of the claim of preferred stockholders in liquidation is normally equal to the market value of the preferred stock.

   Answer: FALSE
   Level of Difficulty: 1
   Learning Goal: 2
   Topic: Features of Preferred Stock

7. Cumulative preferred stocks are preferred stocks for which all passed (unpaid) dividends in arrears must be paid along with the current dividend prior to the payment of dividends to common stockholders.

   Answer: FALSE
   Level of Difficulty: 1
   Learning Goal: 2
   Topic: Features of Preferred Stock

8. Because preferred stock is a form of ownership and has no maturity date, its claims on income and assets are secondary to those of the firm’s creditors.

   Answer: TRUE
   Level of Difficulty: 2
   Learning Goal: 2
   Topic: Features of Preferred Stock

9. One advantage of preferred stock is its ability to increase leverage, which in turn will magnify the effects of increased earnings on common stockholders’ returns.

   Answer: TRUE
   Level of Difficulty: 2
   Learning Goal: 2
   Topic: Features of Preferred Stock

10. A preferred stockholder is sometimes referred to as a residual owner, since in essence he or she receives what is left—the residual—after all other claims on the firm’s income and assets have been satisfied.

    Answer: FALSE
    Level of Difficulty: 2
    Learning Goal: 2
    Topic: Features of Preferred Stock

11. A call feature is a feature that allows preferred stockholders to change each share into a stated number of shares of common stock.

    Answer: FALSE
    Level of Difficulty: 2
    Learning Goal: 2
    Topic: Features of Preferred Stock

12. The cost of preferred stock financing is generally higher than that of debt financing.

    Answer: TRUE
    Level of Difficulty: 3
    Learning Goal: 2
    Topic: Features of Preferred Stock

13. The cost of preferred stock financing is generally higher than that of debt financing because unlike the payment of interest to bondholders, the payment of dividends to preferred stockholders is not guaranteed, and interest on debt is tax-deductible whereas preferred stock dividend is not.

    Answer: TRUE
    Level of Difficulty: 3
    Learning Goal: 2
    Topic: Features of Preferred Stock

14. The claims of equity holders on the firm's income can not be paid until the claims of all creditors have been satisfied. But, the claims of the equity holders on the firm's assets have priority over the claims of creditors because the equity holders are the owners of the firm.

    Answer: FALSE
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Features of Common Stock

15. Preemptive rights allow common stockholders to maintain their proportionate ownership in the corporation when new issues are made.

    Answer: TRUE
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Features of Common Stock

16. Stock rights allow stockholders to purchase additional shares of stock in direct proportion to the number of shares they own.

    Answer: TRUE
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Features of Common Stock

17. The corporate VC funds are subsidiaries of financial institutions, particularly banks, set up to help young firms grow and, it is hoped, become major customers of the institutions.

    Answer: FALSE
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Venture Capital

18. The small business investment companies (SBICs) are corporations chartered by the federal government that can borrow at attractive rates from the U.S. Treasury and use the funds to make venture capital investments in private companies.

    Answer: TRUE
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Venture Capital

19. The angel capitalists are wealthy individual investors who do not operate as a business but invest in early-stage companies in exchange for a portion of equity.

    Answer: TRUE
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Venture Capital

20. The free cash flow valuation model determines the value of an entire company as the present value of its expected free cash flows discounted at the firm's weighted average cost of capital.

    Answer: TRUE
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Free Cash Flow Model

21. A common stockholder has no guarantee of receiving any cash inflows, but receives what is left after all other claims on the firm's income and assets have been satisfied.

    Answer: TRUE
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Features of Common Stock

22. Preferred stock that provides for dividend payments based on certain formulas allowing preferred stockholders to participate with common stockholders in the receipt of dividends beyond a specified amount is cumulative.

    Answer: FALSE
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Features of Preferred Stock

23. Although preferred stock provides added financial leverage in much the same way as bonds, it differs from bonds in that the issuer can pass a dividend payment without suffering the consequences that result when an interest payment is missed on a bond.

    Answer: TRUE
    Level of Difficulty: 2
    Learning Goal: 2
    Topic: Features of Preferred Stock

24. Preemptive rights allow existing shareholders to maintain voting control and protect against the dilution of their ownership.

    Answer: TRUE
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Features of Common Stock

25. American Depositary Receipts are claims issued by U.S. banks representing ownership of shares of a foreign company's stock held on deposit by the U.S. bank in the foreign market and issued in dollars to U.S. investors.

    Answer: TRUE
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: American Depositary Receipts

26. Treasury stock generally does not have voting rights, does not earn dividends, and does not have a claim on assets in liquidation.

    Answer: TRUE
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Treasury Stock

27. Treasury stocks are class B common and have voting rights.

    Answer: FALSE
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Treasury Stock

28. Firms occasionally repurchase stock in order to change their capital structure or to increase the returns to the owners.

    Answer: TRUE
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Treasury Stock

29. Dilution of ownership occurs when a new stock issue results in each present stockholder having a larger number of shares and, thus, a claim to a larger part of the firm's earnings than previously.

    Answer: FALSE
    Level of Difficulty: 4
    Learning Goal: 3
    Topic: Issuing Common Stock

30. Investors purchase a stock when they believe that it is undervalued and sell when they feel that it is overvalued.

    Answer: TRUE
    Level of Difficulty: 1
    Learning Goal: 4
    Topic: Market Efficiency

31. In an efficient market, the expected return and the required return are equal.

    Answer: TRUE
    Level of Difficulty: 2
    Learning Goal: 4
    Topic: Market Efficiency

32. To a buyer, an asset's value represents the minimum price that he or she would pay to acquire it, while a seller views the asset's value as a minimum share price.

Answer: FALSE
Level of Difficulty: 3
Learning Goal: 4
Topic: Market Efficiency

33. If the expected return is less than the required return, investors will sell the asset, because it is not expected to earn a return commensurate with its risk.

Answer: TRUE
Level of Difficulty: 3
Learning Goal: 4
Topic: Market Efficiency

34. If the expected return were above the required return, investors would buy the asset, driving its price up and its expected return down.

Answer: TRUE
Level of Difficulty: 4
Learning Goal: 4
Topic: Market Efficiency

35. Efficient market hypothesis is the theory describing the behavior of an assumed "perfect" market in which securities are typically in equilibrium, security prices fully reflect all public information available and react swiftly to new information, and, because stocks are fairly priced, investors need not waste time looking for mispriced securities.

Answer: TRUE
Level of Difficulty: 4
Learning Goal: 4
Topic: Market Efficiency

36. In valuation of common stock, the price/earnings multiple approach is considered superior to the use of book or liquidation values since it considers expected earnings.

Answer: TRUE
Level of Difficulty: 1
Learning Goal: 5
Topic: P/E Multiple Approach

37. The common stock book value model ignores the firm's expected earnings potential and generally lacks any true relationship to the firm's value in the marketplace.

Answer: TRUE
Level of Difficulty: 2
Learning Goal: 5
Topic: Book Value Approach

38. Any action taken by the financial manager that increases risk will also increase the required return.

Answer: TRUE
Level of Difficulty: 1
Learning Goal: 6
Topic: Risk Return Relationship

39. In common stock valuation, any action taken by the financial manager that increases risk will also increase the required return.

    Answer: TRUE
    Level of Difficulty: 2
    Learning Goal: 6
    Topic: Risk Return Relationship

40. In common stock valuation, any action taken by the financial manager that increases risk contributes toward an increase in value.

    Answer: FALSE
    Level of Difficulty: 2
    Learning Goal: 6
    Topic: Risk Return Relationship

41. In a stable economy, an action of the financial manager that increases the level of expected return without changing risk should reduce share value, and an action that reduces the level of expected return without changing risk should increase share value.

    Answer: FALSE
    Level of Difficulty: 3
    Learning Goal: 6
    Topic: Risk Return Relationship

42. Assuming that economic conditions remain stable, any management action that would cause current and prospective stockholders to raise their dividend expectations should decrease the firm's value.

    Answer: FALSE
    Level of Difficulty: 3
    Learning Goal: 6
    Topic: Risk Return Relationship

43. Unlike creditors (lenders), equity holders (both preferred and common stockholders) are owners of the firm.

    Answer: TRUE
    Level of Difficulty: 1
    Learning Goal: 1
    Topic: Contrasting Debt and Equity

44. Unlike equity holders, creditors are owners of the firm.

    Answer: FALSE
    Level of Difficulty: 1
    Learning Goal: 1
    Topic: Contrasting Debt and Equity

45. Interest paid to bondholders is tax deductible but interest paid to stockholders is not.

    Answer: FALSE
    Level of Difficulty: 1
    Learning Goal: 1
    Topic: Contrasting Debt and Equity

46. Interest paid to bondholders is tax deductible but dividends paid to stockholders are not.

Answer: TRUE
Level of Difficulty: 1
Learning Goal: 1
Topic: Contrasting Debt and Equity

47. In the case of liquidation, common stockholders are paid first, followed by preferred stockholders, followed by bondholders.

Answer: FALSE
Level of Difficulty: 1
Learning Goal: 1
Topic: Contrasting Debt and Equity

48. In the case of liquidation, bondholders are paid first, followed by preferred stockholders, followed by common stockholders.

Answer: TRUE
Level of Difficulty: 1
Learning Goal: 1
Topic: Contrasting Debt and Equity

49. Preferred stockholders are often referred to as residual claimants.

Answer: FALSE
Level of Difficulty: 1
Learning Goal: 2
Topic: Contrasting Debt and Equity

50. Common stockholders are often referred to as residual claimants.

Answer: TRUE
Level of Difficulty: 1
Learning Goal: 2
Topic: Contrasting Debt and Equity

51. Common stock can be either privately or publicly owned.

Answer: TRUE
Level of Difficulty: 1
Learning Goal: 2
Topic: Features of Common Stock

52. Like bonds, common stock is usually sold with a par value.

Answer: TRUE
Level of Difficulty: 1
Learning Goal: 2
Topic: Features of Common Stock

53. Like bonds, the par value on a common stock is used as a basis for determining its fixed dividend.

Answer: FALSE
Level of Difficulty: 1
Learning Goal: 2
Topic: Features of Common Stock

54. The number of authorized shares of common stock is always greater than or equal to the number of outstanding shares of common stock.

    Answer: TRUE
    Level of Difficulty: 1
    Learning Goal: 2
    Topic: Features of Common Stock

55. The number of outstanding shares of common stock is always greater than or equal to the number of authorized shares of common stock.

    Answer: FALSE
    Level of Difficulty: 1
    Learning Goal: 2
    Topic: Features of Common Stock

56. Supervoting shares of common stock provide shareholders with ten times the voting power of ordinary shares of common stock.

    Answer: FALSE
    Level of Difficulty: 1
    Learning Goal: 2
    Topic: Common Stock Voting

57. Under the Jobs and Growth Tax Relief Reconciliation Act of 2003, dividends are subject to a maximum tax rate of 20 percent.

    Answer: FALSE
    Level of Difficulty: 1
    Learning Goal: 2
    Topic: Features of Common Stock

58. Under the Jobs and Growth Tax Relief Reconciliation Act of 2003, dividends are subject to a maximum tax rate of 15 percent.

    Answer: TRUE
    Level of Difficulty: 1
    Learning Goal: 2
    Topic: Features of Common Stock

59. A prospectus is another term for a firm's annual report showing the firm's prospects for the coming year.

    Answer: FALSE
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Issuing Common Stock

60. A prospectus is a portion of the security registration statement that describes the key aspects of the issue, the issuer, and its management and financial position.

    Answer: TRUE
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Issuing Common Stock

61. An underwritten issue of common stock is one in which the firm purchases insurance to cover unexpected losses suffered by shareholders.

Answer: TRUE
Level of Difficulty: 2
Learning Goal: 3
Topic: Issuing Common Stock

62. In a common stock quotation, the term "YLD percent" stands for dividend yield and can be found by dividing the stock's annual dividend by its PE ratio.

Answer: FALSE
Level of Difficulty: 2
Learning Goal: 3
Topic: Common Stock Quotations

63. In a common stock quotation, the term "YLD percent" stands for dividend yield and can be found by dividing the stock's annual dividend by most recent closing price.

Answer: TRUE
Level of Difficulty: 2
Learning Goal: 3
Topic: Common Stock Quotations

64. In an efficient market, stock prices adjust quickly to new public information.

Answer: TRUE
Level of Difficulty: 2
Learning Goal: 4
Topic: Efficient Market Theory

65. In an inefficient market, stock prices adjust quickly to new public information.

Answer: FALSE
Level of Difficulty: 2
Learning Goal: 4
Topic: Efficient Market Theory

66. In an inefficient market, securities are typically in equilibrium, which means that they are fairly priced and that their expected returns equal their required returns.

Answer: FALSE
Level of Difficulty: 2
Learning Goal: 4
Topic: Efficient Market Theory

67. In an efficient market, securities are typically in equilibrium, which means that they are fairly priced and that their expected returns equal their required returns.

Answer: TRUE
Level of Difficulty: 2
Learning Goal: 4
Topic: Efficient Market Theory

68. If a market is truly efficient, investors should not waste their time trying to find and capitalize on mispriced securities.

Answer: TRUE
Level of Difficulty: 2
Learning Goal: 4
Topic: Efficient Market Theory

69. Behavioral finance is a growing body of research that focuses on investor behavior and its impact on investment decisions and stock prices.

Answer: TRUE
Level of Difficulty: 2
Learning Goal: 4
Topic: Efficient Market Theory

70. The constant growth model is an approach to dividend valuation that assumes a constant future dividend.

Answer: FALSE
Level of Difficulty: 2
Learning Goal: 4
Topic: Constant Growth Valuation Model

71. The constant growth model is an approach to dividend valuation that assumes that dividends grow at a constant rate indefinitely.

Answer: TRUE
Level of Difficulty: 2
Learning Goal: 4
Topic: Constant Growth Valuation Model

72. The free cash flow valuation model is based on the same principle as the P/E valuation approach; that is, the value of a share of stock is the present value of future cash flows.

Answer: FALSE
Level of Difficulty: 2
Learning Goal: 5
Topic: Free Cash Flow Model

73. The free cash flow valuation model is based on the same principle as dividend valuation models; that is, the value of a share of stock is the present value of future cash flows.

Answer: TRUE
Level of Difficulty: 2
Learning Goal: 5
Topic: Free Cash Flow Model

74. The liquidation value per share of common stock is the amount per share of common stock that would be received if all of the firm's assets were sold for their accounting value and the proceeds remaining were divided among common stockholders.

Answer: FALSE
Level of Difficulty: 2
Learning Goal: 5
Topic: Liquidation Value

75. The book value per share of common stock is the amount per share of common stock that would be received if all of the firm's assets were sold for their accounting value and the proceeds remaining were divided among common stockholders.

Answer: TRUE
Level of Difficulty: 2
Learning Goal: 5
Topic: Book Value

■ Multiple Choice Questions

1. Equity capital can be raised through
(a) the money market.
(b) the NYSE bond market.
(c) retained earnings and the stock market.
(d) a private placement with an insurance company as the creditor.

Answer: C
Level of Difficulty: 1
Learning Goal: 1
Topic: Issuing Common Stock

2. Holders of equity capital
(a) own the firm.
(b) receive interest payments.
(c) receive guaranteed income.
(d) have loaned money to the firm.

Answer: A
Level of Difficulty: 1
Learning Goal: 1
Topic: Features of Common Stock

3. As a form of financing, equity capital
(a) has a maturity date.
(b) is only liquidated in bankruptcy.
(c) is temporary.
(d) has priority over bonds.

Answer: B
Level of Difficulty: 2
Learning Goal: 1
Topic: Features of Common Stock

4. The claims of the equity holders on income have priority over
   (a) the claims of the preferred stockholders.
   (b) the claims of the creditors.
   (c) the claims of the unsecured creditors.
   (d) no one.

   Answer: D
   Level of Difficulty: 2
   Learning Goal: 1
   Topic: Features of Common Stock

5. _________ are promised a fixed periodic dividend that must be paid prior to paying any common stock dividends.
   (a) Preferred stockholders
   (b) Common stockholders
   (c) Bondholders
   (d) Creditors

   Answer: A
   Level of Difficulty: 1
   Learning Goal: 2
   Topic: Features of Preferred Stock

6. Dividends in arrears that must be paid to the preferred stockholders before payment of dividends to common stockholders are
   (a) cumulative.
   (b) noncumulative.
   (c) participating.
   (d) convertible.

   Answer: A
   Level of Difficulty: 1
   Learning Goal: 2
   Topic: Features of Preferred Stock

7. An 8 percent preferred stock with a market price of $110 per share and a $100 par value pays a cash dividend of _________.
   (a) $4.00
   (b) $8.00
   (c) $8.80
   (d) $80.00

   Answer: B
   Level of Difficulty: 1
   Learning Goal: 2
   Topic: Features of Preferred Stock

8. From the corporation's point of view, the advantages of issuing preferred stock include all of the following EXCEPT
   (a) its increased financial leverage.
   (b) its flexible dividend policy.
   (c) its excellent merger security.
   (d) its difficulty to retire.

   Answer: D
   Level of Difficulty: 1
   Learning Goal: 2
   Topic: Features of Preferred Stock

9. The advantages of issuing preferred stock from the common stockholder's perspective include all of the following EXCEPT
   (a) seniority of the preferred stockholder's claim.
   (b) flexibility.
   (c) use in mergers.
   (d) increased leverage.

   Answer: A
   Level of Difficulty: 2
   Learning Goal: 2
   Topic: Features of Preferred Stock

10. The cost of preferred stock is
   (a) lower than the cost of long-term debt.
   (b) higher than the cost of common stock.
   (c) higher than the cost of long-term debt and lower than the cost of common stock.
   (d) lower than the cost of convertible long-term debt and higher than the cost of common stock.

   Answer: C
   Level of Difficulty: 2
   Learning Goal: 2
   Topic: Features of Preferred Stock

11. All of the following features may be characteristic of preferred stock EXCEPT
   (a) callable.
   (b) no maturity date.
   (c) tax-deductible dividends.
   (d) convertible.

   Answer: C
   Level of Difficulty: 2
   Learning Goal: 2
   Topic: Features of Preferred Stock

12. All of the following are characteristics of preferred stock EXCEPT
    (a) it is often considered quasi-debt due to fixed payment obligation.
    (b) it has less restrictive covenants than debt.
    (c) it gives the holder voting rights which permit selection of the firm's directors.
    (d) its holders have priority over common stockholders in the liquidation of assets.

    Answer: C
    Level of Difficulty: 3
    Learning Goal: 2
    Topic: Features of Preferred Stock

13. The following are all disadvantages of preferred stock EXCEPT
    (a) seniority of the preferred stockholder's claim.
    (b) the cost of preferred stock financing is generally higher than that of debt financing.
    (c) most preferred stock sold must be fixed rate to compete with bonds.
    (d) preferred stock is generally difficult to sell.

    Answer: C
    Level of Difficulty: 3
    Learning Goal: 2
    Topic: Features of Preferred Stock

14. A firm has issued cumulative preferred stock with a $100 par value and a 12 percent annual dividend. For the past two years, the board of directors has decided not to pay a dividend. The preferred stockholders must be paid _________ prior to paying the common stockholders.
    (a) $ 0/share
    (b) $12/share
    (c) $24/share
    (d) $36/share

    Answer: D
    Level of Difficulty: 3
    Learning Goal: 2
    Topic: Cumulative Preferred Stock

15. A firm has an outstanding issue of 1,000 shares of preferred stock with a $100 par value and an 8 percent annual dividend. The firm also has 5,000 shares of common stock outstanding. If the stock is cumulative and the board of directors has passed the preferred dividend for the prior two years, how much must the preferred stockholders be paid prior to paying dividends to common stockholders?
    (a) $ 8,000
    (b) $16,000
    (c) $24,000
    (d) $25,000

    Answer: C
    Level of Difficulty: 3
    Learning Goal: 2
    Topic: Cumulative Preferred Stock

16. A violation of preferred stock restrictive covenants usually permits preferred shareholders to
    (a) force the company into bankruptcy.
    (b) sell their shares.
    (c) force the retirement of the preferred stock at or above its par value.
    (d) force the company to repurchase the shares at a stated amount below par.

    Answer: C
    Level of Difficulty: 3
    Learning Goal: 2
    Topic: Features of Preferred Stock

17. The opportunity for management to purchase a certain number of shares of their firm's common stock at a specified price over a certain period of time is a
    (a) stock option.
    (b) warrant.
    (c) pre-emptive right.
    (d) stock right.

    Answer: A
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Features of Common Stock

18. Another term sometimes applied to a common shareholder is a
    (a) fundamental or basic owner of the firm.
    (b) residual owner of the firm.
    (c) net owner of the firm.
    (d) reciprocal owner of the firm.

    Answer: B
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Features of Common Stock

19. Regarding the tax treatment of payments to securities holders, it is true that _________, while _________.
    (a) interest and preferred stock dividends are not tax-deductible; common stock dividends are tax deductible
    (b) interest and preferred stock dividends are tax-deductible; common stock dividends are not tax-deductible
    (c) common stock dividends and preferred stock dividends are tax-deductible; interest is not tax-deductible
    (d) common stock dividends and preferred stock dividends are not tax-deductible; interest is tax-deductible

    Answer: D
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Contrasting Debt and Equity

20. Shares of stock currently owned by the firm's shareholders are called
    (a) authorized.
    (b) issued.
    (c) outstanding.
    (d) treasury shares.

    Answer: C
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Treasury Stock

21. If a firm has class A and class B common stock outstanding, it means that
    (a) each class receives a different dividend.
    (b) the par value of each class is different.
    (c) the dividend paid to one of the classes is tax deductible by the corporation.
    (d) one of the classes is non-voting stock.

    Answer: D
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Features of Common Stock

22. Common stockholders expect to earn a return by receiving
    (a) semiannual interest.
    (b) fixed periodic dividends.
    (c) dividends.
    (d) annual interest.

    Answer: C
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Features of Common Stock

23. All of the following are examples of marketable securities EXCEPT
    (a) common stock.
    (b) a Treasury bill.
    (c) commercial paper.
    (d) a negotiable certificate of deposit.

    Answer: A
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Marketable Securities

24. _________ is hired by a firm to find prospective buyers for its new stock or bond issue.
   (a) A securities analyst
   (b) A trust officer
   (c) A commercial loan officer
   (d) An investment banker

   Answer: D
   Level of Difficulty: 1
   Learning Goal: 3
   Topic: Investment Banking

25. A specialist involved in analyzing securities and constructing investment portfolios is called
   (a) an investment banker.
   (b) a controller.
   (c) an installment loan officer.
   (d) a securities analyst or securities broker.

   Answer: D
   Level of Difficulty: 1
   Learning Goal: 3
   Topic: Investment Banking

26. The _________ are sometimes referred to as the residual owners of the corporation.
   (a) preferred stockholders
   (b) unsecured creditors
   (c) common stockholders
   (d) secured creditors

   Answer: C
   Level of Difficulty: 2
   Learning Goal: 3
   Topic: Features of Common Stock

27. Treasury stock results from the
   (a) firm selling stock for greater than its par value.
   (b) cumulative feature on preferred stock.
   (c) repurchase of outstanding stock.
   (d) authorization of additional shares of stock by the board of directors.

   Answer: C
   Level of Difficulty: 2
   Learning Goal: 3
   Topic: Treasury Stock

28. The purpose of nonvoting common stock is to
    (a) limit the voting power of the management.
    (b) allow the minority interest to elect one director.
    (c) raise capital without giving up any voting rights.
    (d) give preference on distribution of earnings to those shareholders who own the stock.

    Answer: C
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Common Stock Voting

29. A proxy statement gives the shareholder the right
    (a) of one vote for each share owned.
    (b) to give up their vote to another party.
    (c) to maintain their proportionate ownership in the corporation when new common stock is issued.
    (d) to sell their share of stock at a premium.

    Answer: B
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Common Stock Voting

30. A proxy battle is the attempt by
    (a) the creditors of a bankrupt firm to seize assets.
    (b) the management to dismiss the board of directors.
    (c) a nonmanagement group to gain control of the management of a firm through the solicitation of a sufficient number of corporate votes.
    (d) the employees to unionize.

    Answer: C
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Common Stock Voting

31. Because equity holders are the last to receive any distribution of assets as a result of bankruptcy proceedings, common stockholders expect
    (a) fixed dividend payments.
    (b) greater compensation in the form of dividends and rising stock prices.
    (c) all profits to be paid out in dividends.
    (d) warrants to be attached to the stock issue as a sweetener.

    Answer: B
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Features of Common Stock

32. The attempt by a non-management group to gain control of the management of a firm by soliciting a sufficient number of proxy votes is called
    (a) hostile takeover.
    (b) supervoting shares.
    (c) proxy battle.
    (d) None of the above.

    Answer: C
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Common Stock Voting

33. The disadvantages of issuing common stock versus long-term debt include all of the following EXCEPT
    (a) the potential dilution of earnings.
    (b) high cost.
    (c) no maturity date.
    (d) the market perception that management thinks the firm is over-valued, causing a decline in stock price.

    Answer: C
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Contrasting Debt and Equity

34. The par value on common stock has all of the following characteristics EXCEPT
    (a) a generally low value.
    (b) some states tax according to the par value.
    (c) indicates the market value at which the stock was originally sold.
    (d) stated in the corporate charter.

    Answer: C
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Features of Common Stock

35. A firm issued 5,000 shares of $1 par-value common stock, receiving proceeds of $20 per share. The accounting entry for the paid-in capital in excess of par account is
    (a) $5,000.
    (b) $ 95,000.
    (c) $100,000.
    (d) $0.

    Answer: B
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Accounting for Common Stock

36. A firm issued 10,000 shares of $2 par-value common stock, receiving proceeds of $40 per share. The accounting entry for the paid-in capital in excess of par account is
    (a) $200,000.
    (b) $380,000.
    (c) $400,000.
    (d) $800,000.

    Answer: B
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Accounting for Common Stock

37. A firm issued 10,000 shares of no par value common stock, receiving proceeds of $40 per share. The accounting entry is
    (a) $0 in the common stock account.
    (b) $0 in the paid-in capital in excess of par account.
    (c) $400,000 in the common stock account.
    (d) $400,000 in the paid-in capital in excess of par account.

    Answer: C
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Accounting for Common Stock

38. Advantages of issuing common stock versus long-term debt include all of the following EXCEPT
    (a) the effects of dilution on earnings and voting power.
    (b) no maturity.
    (c) increases firm's borrowing power.
    (d) no fixed payment obligation.

    Answer: A
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Contrasting Debt and Equity

39. All of the following are characteristics of common stock EXCEPT
    (a) voting rights which permit selection of the firm's directors.
    (b) claims on income and assets which are subordinate to the creditors of the firm.
    (c) fully tax-deductible dividends.
    (d) no fixed payment obligation.

    Answer: C
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Features of Common Stock

40. Stock rights provide the stockholder with
    (a) certain purchase privileges of additional stock shares in direct proportion based on their number of owned shares.
    (b) the right to elect the board of directors.
    (c) cumulative voting privileges.
    (d) the opportunity to receive extraordinary earnings.

    Answer: A
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Features of Common Stock

41. The preemptive right gives the shareholder the right
    (a) of one vote for each share owned.
    (b) to give up their vote to another party.
    (c) to maintain their proportionate ownership in the corporation when new common stock is issued.
    (d) to sell their share of stock at a premium.

    Answer: C
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Features of Common Stock

42. The investment banker does all of the following EXCEPT
    (a) make long-term investments for banking institutions.
    (b) bear the risk of selling a security issue.
    (c) act as a middleman between the issuer and buyer of a new security.
    (d) advise clients.

    Answer: A
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Investment Banking

43. A firm has the balance sheet accounts, common stock, and paid-in capital in excess of par, with values of $10,000 and $250,000, respectively. The firm has 10,000 common shares outstanding. If the firm had a par value of $1, the stock originally sold for
    (a) $24/share.
    (b) $25/share.
    (c) $26/share.
    (d) $30/share.

    Answer: C
    Level of Difficulty: 4
    Learning Goal: 3
    Topic: Accounting for Common Stock

44. A firm has the balance sheet accounts, common stock, and paid-in capital in excess of par, with values of $40,000 and $500,000, respectively. The firm has 40,000 common shares outstanding. If the firm had a par value of $1, the stock originally sold for
    (a) $11.50/share.
    (b) $12.50/share.
    (c) $13.50/share.
    (d) $15.50/share.

    Answer: C
    Level of Difficulty: 4
    Learning Goal: 3
    Topic: Accounting for Common Stock

45. All of the following are true about the issuance of non-voting common stock EXCEPT
    (a) it has been issued as a defense against an unfriendly takeover.
    (b) it has been issued when the corporation wishes to raise capital through the sale of common stock, but does not want to relinquish its voting control.
    (c) it tends to result in unequal voting rights among the shareholders.
    (d) it tends to result in the dilution of voting rights of current stockholders.

    Answer: D
    Level of Difficulty: 4
    Learning Goal: 3
    Topic: Common Stock Voting

46. Preferred stock is valued as if it were a
    (a) fixed-income obligation.
    (b) bond.
    (c) perpetuity.
    (d) common stock.

    Answer: C
    Level of Difficulty: 1
    Learning Goal: 4
    Topic: Preferred Stock Valuation

47. A firm has an issue of preferred stock outstanding that has a stated annual dividend of $4. The required return on the preferred stock has been estimated to be 16 percent. The value of the preferred stock is _________.
    (a) $64
    (b) $16
    (c) $25
    (d) $50

    Answer: C
    Level of Difficulty: 2
    Learning Goal: 4
    Topic: Preferred Stock Valuation (Equation 7.3)

48. A firm has an expected dividend next year of $1.20 per share, a zero growth rate of dividends, and a required return of 10 percent. The value of a share of the firm's common stock is _________.
   (a) $120
   (b) $10
   (c) $12
   (d) $100

   Answer: C
   Level of Difficulty: 2
   Learning Goal: 4
   Topic: Zero Growth Valuation Model (Equation 7.3)

49. A firm has an issue of preferred stock outstanding that has a stated annual dividend of $4. The required return on the preferred stock has been estimated to be 16 percent. The value of the preferred stock is _________.
   (a) $64
   (b) $16
   (c) $25
   (d) $50

   Answer: C
   Level of Difficulty: 2
   Learning Goal: 4
   Topic: Preferred Stock Valuation (Equation 7.3)

50. The _________ is utilized to value preferred stock.
   (a) constant growth model
   (b) variable growth model
   (c) zero-growth model
   (d) Gordon model

   Answer: C
   Level of Difficulty: 2
   Learning Goal: 4
   Topic: Preferred Stock Valuation

51. In the Gordon model, the value of the common stock is the
   (a) net value of all assets which are liquidated for their exact accounting value.
   (b) actual amount each common stockholder would expect to receive if the firm's assets are sold, creditors and preferred stockholders are repaid, and any remaining money is divided among the common stockholders.
   (c) present value of a non-growing dividend stream.
   (d) present value of a constant, growing dividend stream.

   Answer: D
   Level of Difficulty: 3
   Learning Goal: 4
   Topic: Constant Growth Valuation Model

52. Emmy Lou, Inc. has an expected dividend next year of $5.60 per share, a growth rate of dividends of 10 percent, and a required return of 20 percent. The value of a share of Emmy Lou, Inc.'s common stock is _________.
    (a) $28.00
    (b) $56.00
    (c) $22.40
    (d) $18.67

    Answer: B
    Level of Difficulty: 3
    Learning Goal: 4
    Topic: Constant Growth Valuation Model (Equation 7.4 and Equation 7.5)

53. A firm has experienced a constant annual rate of dividend growth of 9 percent on its common stock and expects the dividend per share in the coming year to be $2.70. The firm can earn 12 percent on similar risk involvements. The value of the firm's common stock is _________.
    (a) $22.50/share
    (b) $9/share
    (c) $90/share
    (d) $30/share

    Answer: C
    Level of Difficulty: 3
    Learning Goal: 4
    Topic: Constant Growth Valuation Model (Equation 7.4 and Equation 7.5)

54. A common stock currently has a beta of 1.3, the risk-free rate is an annual rate of 6 percent, and the market return is an annual rate of 12 percent. The stock is expected to generate a constant dividend of $5.20 per share. A toxic spill results in a lawsuit and potential fines, and the beta of the stock jumps to 1.6. The new equilibrium price of the stock
    (a) will be $37.68.
    (b) will be $43.33.
    (c) cannot be determined from the information given.
    (d) will be $33.33.

    Answer: D
    Level of Difficulty: 3
    Learning Goal: 4
    Topic: Constant Growth Valuation Model and CAPM (Equation 7.4, Equation 7.5, and Equation 7.9)

55. A common stock currently has a beta of 1.7, the risk-free rate is 7 percent annually, and the market return is 12 percent annually. The stock is expected to generate a constant dividend of $6.70 per share. A pending lawsuit has just been dismissed and the beta of the stock drops to 1.4. The new equilibrium price of the stock
    (a) will be $55.83.
    (b) will be $43.23.
    (c) will be $47.86.
    (d) cannot be determined from the information given.

    Answer: C
    Level of Difficulty: 3
    Learning Goal: 4
    Topic: Constant Growth Valuation Model and CAPM (Equation 7.4, Equation 7.5, and Equation 7.9)

56. According to the efficient market theory,
   (a) prices of actively traded stocks can be under- or over-valued in an efficient market, and bear searching out.
   (b) prices of actively traded stocks can only be under-valued in an efficient market.
   (c) prices of actively traded stocks do not differ from their true values in an efficient market.
   (d) prices of actively traded stocks can only be over-valued in an efficient market.

   Answer: C
   Level of Difficulty: 4
   Learning Goal: 4
   Topic: Efficient Markets

57. Economically rational buyers and sellers use their assessment of an asset's risk and return to determine its value. Relative to this concept, which of the following is true?
   (a) To a buyer the asset's value represents the minimum price that he or she would pay to acquire it.
   (b) To a seller the asset's value represents the maximum sale price.
   (c) To a buyer the asset's value represents the maximum price that he or she would pay to acquire it.
   (d) The interaction of buyers and sellers can result in a value that differs from the stock's true value.

   Answer: C
   Level of Difficulty: 4
   Learning Goal: 4
   Topic: Risk, Return and Market Efficiency

58. If expected return is less than required return on an asset, rational investors will
   (a) buy the asset, which will drive the price up and cause expected return to reach the level of the required return.
   (b) sell the asset, which will drive the price down and cause the expected return to reach the level of the required return.
   (c) sell the asset, which will drive the price up and cause the expected return to reach the level of the required return.
   (d) buy the asset, since price is expected to increase.

   Answer: B
   Level of Difficulty: 4
   Learning Goal: 4
   Topic: Risk, Return and Market Efficiency

59. If the expected return is above the required return on an asset, rational investors will
   (a) buy the asset, which will drive the price up and cause expected return to reach the level of the required return.
   (b) sell the asset, which will drive the price down and cause the expected return to reach the level of the required return.
   (c) sell the asset, which will drive the price up and cause the expected return to reach the level of the required return.
   (d) sell the asset, since price is expected to decrease.

   Answer: A
   Level of Difficulty: 4
   Learning Goal: 4
   Topic: Risk, Return and Market Efficiency

60. Following the theory of the "efficient market hypothesis" all of the following are true EXCEPT
   (a) securities are typically in equilibrium, meaning they are fairly priced and their expected returns equal their required returns.
   (b) the Ivan Boesky's of the market have proven that stocks are not fully and fairly priced, so investors should spend time searching for mispriced (over- or under-valued) stocks.
   (c) at any point in time, security prices fully reflect all public information available about the firm and its securities, and these prices react swiftly to new information.
   (d) since stocks are fully and fairly price, it follows that investors should not waste their time trying to find and capitalize on miss-priced (under- or over-valued) securities.

   Answer: B
   Level of Difficulty: 4
   Learning Goal: 4
   Topic: Efficient Markets

61. _________ in the beta coefficient normally causes _________ in the required return and therefore _________ in the price of the stock, all else remaining the same.
   (a) An increase; an increase; an increase
   (b) An increase; a decrease; an increase
   (c) An increase; an increase; a decrease
   (d) A decrease; a decrease; a decrease

   Answer: C
   Level of Difficulty: 4
   Learning Goal: 4
   Topic: Risk Return Relationship

62. _________ is the value of the firm's ownership in the event that all assets are sold for their exact accounting value and the proceeds remaining after paying all liabilities (including preferred stock) are divided among common stockholders.
   (a) Liquidation value
   (b) Book value
   (c) The P/E multiple
   (d) The present value of the common stock

   Answer: B
   Level of Difficulty: 1
   Learning Goal: 5
   Topic: Book Value of Stock

63. _________ is the actual amount each common stockholder would expect to receive if the firm's assets are sold, creditors and preferred stockholders are repaid, and any remaining money is divided among the common stockholders.
   (a) Liquidation value
   (b) Book value
   (c) The P/E multiple
   (d) The present value of the dividends

   Answer: A
   Level of Difficulty: 1
   Learning Goal: 5
   Topic: Liquidation Value of Stock

64. _________ is a guide to the firm's value if it is assumed that investors value the earnings of a given firm in the same way they do the average firm in the industry.
(a) Liquidation value
(b) Book value
(c) The P/E multiple
(d) The present value of the dividends

Answer: C
Level of Difficulty: 1
Learning Goal: 5
Topic: P/E Multiple Valuation Approach

65. The use of which of the following valuation methods, utilized in valuing common stock, is superior since it considers expected earnings.
(a) liquidation value
(b) book value
(c) P/E multiple
(d) present value of the interest

Answer: C
Level of Difficulty: 2
Learning Goal: 5
Topic: P/E Multiple Valuation Approach

66. The use of the _________ is especially helpful in valuing firms that are not publicly traded.
(a) liquidation value
(b) book value
(c) P/E multiple
(d) present value of the dividends

Answer: C
Level of Difficulty: 2
Learning Goal: 5
Topic: P/E Multiple Valuation Approach

67. The current price of DEF Corporation stock is $26.50 per share. Earnings next year should be $2 per share and it should pay a $1 dividend. The P/E multiple is 15 times on average. What price would you expect for DEF's stock in the future?
(a) $13.50
(b) $15.00
(c) $26.50
(d) $30.00

Answer: D
Level of Difficulty: 3
Learning Goal: 5
Topic: P/E Multiple Valuation Approach

68. Which of the following terms typically applies to common stock but not to preferred stock?
    (a) Par value.
    (b) Dividend yield.
    (c) Legally considered as equity in the firm.
    (d) Voting rights.

    Answer: D
    Level of Difficulty: 2
    Learning Goal: 1
    Topic: Contrasting Common and Preferred Stock

69. Key differences between common stock and bonds include all of the following except.
    (a) Common stockholders have a voice in management; bondholders do not.
    (b) Common stockholders have a senior claim on assets and income relative to bondholders.
    (c) Bonds have a stated maturity but stock does not.
    (d) Interest paid to bondholders is tax-deductible but dividends paid to stockholders are not.

    Answer: B
    Level of Difficulty: 3
    Learning Goal: 1
    Topic: Contrasting Common Stock and Bonds

70. Key differences between common stock and bonds include all of the following except.
    (a) Common stockholders have a voice in management; bondholders do not.
    (b) Common stockholders have a junior claim on assets and income relative to bondholders.
    (c) Bonds have a stated maturity but stock does not.
    (d) Dividends paid to bondholders are tax-deductible but interest paid to stockholders is not.

    Answer: D
    Level of Difficulty: 3
    Learning Goal: 1
    Topic: Contrasting Common Stock and Bonds

71. Which of the following is false?
    (a) The common stock of a corporation can be either privately or publicly owned.
    (b) Firms often issue common stock with no par value.
    (c) Preemptive rights often result in a dilution of ownership.
    (d) A firm's corporate charter indicates how many authorized shares it can issue.

    Answer: C
    Level of Difficulty: 3
    Learning Goal: 2
    Topic: Features of Common Stock

72. Which of the following is false?
   (a) The common stock of a corporation can only be publicly owned.
   (b) Firms often issue common stock with no par value.
   (c) Preemptive rights help to prevent a dilution of ownership on the part of existing shareholders.
   (d) A firm's corporate charter indicates how many authorized shares it can issue.

   Answer: A
   Level of Difficulty: 2
   Learning Goal: 2
   Topic: Features of Common Stock

73. A proxy statement is
   (a) a statement giving the votes of a stockholder to the CEO.
   (b) a statement giving the votes of a stockholder to the board of directors.
   (c) a statement giving the votes of a stockholder to another party.
   (d) none of the above.

   Answer: C
   Level of Difficulty: 2
   Learning Goal: 2
   Topic: Common Stock Voting

74. An ADR is
   (a) a claim issued by a U.S. bank representing ownership of shares of a foreign company's stock held on deposit by the U.S. bank and is issued in dollars to U.S. investors.
   (b) a claim issued by a foreign bank representing ownership of shares of a foreign company's stock held on deposit by the foreign bank and is issued in dollars to U.S. investors.
   (c) a claim issued by a U.S. bank representing ownership of shares of a U.S. company's stock held on deposit by the U.S. bank and is issued in dollars to U.S. investors.
   (d) none of the above.

   Answer: A
   Level of Difficulty: 4
   Learning Goal: 2
   Topic: American Depositary Receipt

75. Preferred stockholders
   (a) do not have preference over common stockholders in the case of liquidation.
   (b) do have preference over bondholders in the case of liquidation.
   (c) do not have preference over bondholders in the case of liquidation.
   (d) Two of the above are true statements.

   Answer: C
   Level of Difficulty: 3
   Learning Goal: 2
   Topic: Preferred Stockholder Rights

76. Which of the following is usually a right of a preferred stockholder?
    (a) Right to convert shares to common stock on demand.
    (b) Preemptive right to participate in the issuance of new common shares.
    (c) Right to receive dividend payments before any dividends are paid to common stockholders.
    (d) Right to sue company in bankruptcy proceedings if promised preferred dividends are not paid.

    Answer: C
    Level of Difficulty: 3
    Learning Goal: 2
    Topic: Preferred Stockholder Rights

77. Which of the following is not typically a feature of preferred stock?
    (a) Most preferred stock is noncumulative.
    (b) Most preferred stock is cumulative.
    (c) Preferred stock is generally callable.
    (d) Preferred stock is typically convertible.

    Answer: A
    Level of Difficulty: 3
    Learning Goal: 2
    Topic: Features of Preferred Stock

78. Which of the following is not typically a feature of common stock?
    (a) Most common stock is callable.
    (b) Most common stock is cumulative.
    (c) Common stock may or may not pay dividends.
    (d) More than one of the above statements is not true of common stock.

    Answer: D
    Level of Difficulty: 3
    Learning Goal: 2
    Topic: Features of Preferred Stock

79. A group formed by an investment banker to share the financial risk associated with underwriting new securities is a(n)
    (a) underwriting syndicate.
    (b) selling group.
    (c) investment banking consortium.
    (d) broker pool.

    Answer: A
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Issuing Securities

80. You are planning to purchase the stock of Ted's Sheds Inc. and you expect it to pay a dividend of $3 in 1 year, $4.25 in 2 years, and $6.00 in 3 years. You expect to sell the stock for $100 in 3 years. If your required return for purchasing the stock is 12 percent, how much would you pay for the stock today?
(a) $75.45
(b) $77.24
(c) $81.52
(d) $85.66

Answer: C
Level of Difficulty: 3
Learning Goal: 4
Topic: Basic Valuation Model (Equation 7.2)

81. Nico Corporation's common stock is expected to pay a dividend of $3.00 forever and currently sells for $21.42. What is the required rate of return?
(a) 10%
(b) 12%
(c) 13%
(d) 14%

Answer: D
Level of Difficulty: 2
Learning Goal: 4
Topic: Zero Growth Valuation Model (Equation 7.3)

82. Zack is considering purchasing the stock of Pepsi Cola because he really loves the taste of Pepsi. What should Zack be willing to pay for Pepsi today if it is expected to pay a $2 dividend in one year and he expects dividends to growth at 5 percent indefinitely? Zack requires a 12 percent return to make this investment.
(a) $28.57
(b) $29.33
(c) $31.43
(d) $43.14

Answer: A
Level of Difficulty: 2
Learning Goal: 4
Topic: Constant Growth Valuation Model (Equation 7.4 and Equation 7.5)

83. Nico Corporation's common stock currently sells for $180 per share. Nico just paid a dividend of $10.18 and dividends are expected to grow at a constant rate of 6 percent forever. If the required rate of return is 12 percent, what will Nico Corporation's stock sell for one year from now?
(a) $180.00
(b) $187.04
(c) $195.40
(d) $190.80

Answer: C
Level of Difficulty: 4
Learning Goal: 4
Topic: Constant Growth Valuation Model (Equation 7.4 and Equation 7.5)

84. Tangshan China Company's stock is currently selling for $80.00 per share. The expected dividend one year from now is $4.00 and the required return is 13 percent. What is Tangshan's dividend growth rate assuming that dividends are expected to grow at a constant rate forever?
(a) 8%
(b) 9%
(c) 10%
(d) 11%

Answer: A
Level of Difficulty: 3
Learning Goal: 4
Topic: Constant Growth Valuation Model (Equation 7.4 and Equation 7.5)

85. Tangshan China's stock is currently selling for $160.00 per share and the firm's dividends are expected to grow at 5 percent indefinitely. Assuming Tangshan China's most recent dividend was $5.50, what is the required rate of return on Tangshan's stock?
(a) 7.3%
(b) 8.6%
(c) 9.5%
(d) 10.6%

Answer: B
Level of Difficulty: 3
Learning Goal: 4
Topic: Constant Growth Valuation Model (Equation 7.4 and Equation 7.5)

86. Nico Custom Cycles' common stock currently pays no dividends. The company plans to begin paying dividends beginning 3 years from today. The first dividend will be $3.00 and dividends will grow at 5 percent per year thereafter. Given a required return of 15 percent, what would you pay for the stock today?
(a) $26.00
(b) $19.73
(c) $30.00
(d) $22.68

Answer: D
Level of Difficulty: 4
Learning Goal: 4
Topic: Variable Growth Valuation Model (Equation 7.6)

87. Jia's Fashions recently paid a $2 annual dividend. The company is projecting that its dividends will grow by 20 percent next year, 12 percent annually for the two years after that, and then at 6 percent annually thereafter. Based on this information, how much should Jia's Fashions common stock sell for today?
(a) $54.90
(b) $60.80
(c) $66.60
(d) $69.30

Answer: C
Level of Difficulty: 4
Learning Goal: 4
Topic: Variable Growth Valuation Model (Equation 7.6)

Table 7.1

	52-WEEK			YLD		VOL			NET
YTD %CHG	**HI**	**LO**	**STOCK (SYM)**	**Div**	**%**	**PE**	**100s**	**CLOSE**	**CHG**
–5.1	48.72	20.10	FORD (F)	1.00	3.3	18	20,925	30.20	–0.56

88. According to Table 7.1, Ford's common stock must have closed at _________ per share on the previous trading day.
(a) $29.64
(b) $30.76
(c) $30.99
(d) $31.55

Answer: B
Level of Difficulty: 2
Learning Goal: 3
Topic: Common Stock Quotation

89. According to Table 7.1, the expected dividend per share for Ford is
(a) $0.25.
(b) $1.00.
(c) $2.00.
(d) $3.30.

Answer: B
Level of Difficulty: 2
Learning Goal: 3
Topic: Common Stock Quotation

90. Referring to Table 7.1, if we assume that Ford's dividends will grow at a rate of 10 percent forever, the required return on Ford's stock would be
(a) 7.4%.
(b) 8.9%.
(c) 11.0%.
(d) 13.6%.

Answer: D
Level of Difficulty: 3
Learning Goal: 3
Topic: Common Stock Quotation

91. Based on Table 7.1, Ford's earnings per share are
(a) $0.80.
(b) $1.21.
(c) $1.68.
(d) $1.91.

Answer: C
Level of Difficulty: 3
Learning Goal: 3
Topic: Common Stock Quotation

92. Based on the information given in Table 7.1, the number of shares of Ford that were traded on the previous day was
    (a) 2,092.
    (b) 20,925.
    (c) 209,250.
    (d) 2,092,500.

    Answer: D
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Common Stock Quotation

93. Nico Corporation expects to generate free-cash flows of $200,000 per year for the next five years. Beyond that time, free cash flows are expected to grow at a constant rate of 5 percent per year forever. If the firm's average cost of capital is 15 percent, the market value of the firm's stock is $500,000, and Nico has a half million shares of stock outstanding, what is the value of Nico's stock?
    (a) $12.15
    (b) $121.50
    (c) $11.64
    (d) $116.40

    Answer: A
    Level of Difficulty: 4
    Learning Goal: 5
    Topic: Free Cash Flow Valuation Model (Equation 7.7 and Equation 7.8)

94. At year end, Tangshan China Company balance sheet showed total assets of $60 million, total liabilities (including preferred stock) of $45 million, and 1,000,000 shares of common stock outstanding. Based on this information, Tangshan's book value per share of common stock is _________.
    (a) $105.00
    (b) $10.50
    (c) $15.00
    (d) $150.00

    Answer: C
    Level of Difficulty: 2
    Learning Goal: 5
    Topic: Book Value of Common Stock

95. At year end, Tangshan China Company balance sheet showed total assets of $60 million, total liabilities (including preferred stock) of $45 million, and 1,000,000 shares of common stock outstanding. If Tangshan could sell its assets for $52.5 million, Tangshan's liquidation value per share of common stock is _________.
    (a) $15.00
    (b) $7.50
    (c) $52.50
    (d) $75.00

    Answer: B
    Level of Difficulty: 3
    Learning Goal: 5
    Topic: Liquidation Value of Common Stock

96. At year end, Tangshan China Company balance sheet showed total assets of $60 million, total liabilities (including preferred stock) of $45 million, and 1,000,000 shares of common stock outstanding. Next year, Tangshan is projecting that it will have net income of $1.5 million. If the average PE multiple in Tangshan's industry is 15, what should be the price of Tangshan's stock?

(a) $15.00
(b) $22.50
(c) $52.50
(d) $75.00

Answer: B
Level of Difficulty: 3
Learning Goal: 5
Topic: PE Multiple Valuation Approach

97. Tangshan China's stock is currently selling for $160.00 per share and the firm's dividends are expected to grow at 5 percent indefinitely. In addition, Tangshan China's most recent dividend was $5.50. If the expected risk free rate of return is 3 percent, the expected market return is 8 percent, and Tangshan has a beta of 1.2, Tangshan's stock would be _________.

(a) overvalued
(b) undervalued
(c) properly valued
(d) not enough information to tell

Answer: A
Level of Difficulty: 4
Learning Goal: 6
Topic: Constant Growth Valuation Model (Equation 7.4 and Equation 7.5)

98. Tangshan China's stock is currently selling for $160.00 per share and the firm's dividends are expected to grow at 5 percent indefinitely. In addition, Tangshan China's most recent dividend was $5.50. If the expected risk free rate of return is 3 percent, the expected market premium is 5 percent, and Tangshan has a beta of 1.2, Tangshan's stock would be _________.

(a) overvalued
(b) undervalued
(c) properly valued
(d) Not enough information to tell

Answer: A
Level of Difficulty: 4
Learning Goal: 6
Topic: Constant Growth Valuation Model (Equation 7.4 and Equation 7.5)

Essay Questions

1. Sopp Accounting Services has an outstanding issue of 1,000 shares preferred stock with a $100 par value, an 8 percent annual dividend, and 5,000 shares of common stock outstanding. If the stock is cumulative and the board of directors has passed the preferred dividend for the last two years, how much must preferred stockholders be paid prior to paying dividends to common stockholders?

   Answer: $8,000 × 2 = $16,000 for the two prior years plus $8,000 for the current year.

   Level of Difficulty: 3
   Learning Goal: 2
   Topic: Features of Preferred Stock

2. Identify whether the key characteristic describes common stock (CS) or preferred stock (PS).

   _____ 1. Source of financing which places minimum constraints on the firm.
   _____ 2. Used often in mergers.
   _____ 3. Potential dilution of earnings and voting power.
   _____ 4. Fixed financial obligation.
   _____ 5. Increases the firm's borrowing power.
   _____ 6. May have cumulative and participating features.
   _____ 7. May be convertible into another type of security.
   _____ 8. Last to receive earnings or distribution of assets in the event of bankruptcy.
   _____ 9. Frequently includes a call feature.

   Answers:

   1. CS
   2. PS
   3. CS
   4. PS
   5. CS
   6. PS
   7. PS
   8. CS
   9. PS

   Level of Difficulty: 3
   Learning Goal: 3
   Topic: Features of Preferred and Common Stock

3. Fish'n Chips Restaurants, Inc. had earnings before interest and taxes of $4,000,000 last year. The firm has a marginal tax rate of 40 percent and currently has the following capital structure:

Source of Capital	Amount	Percentage of Total Capital
Long-term Debt at 12%	$8,000,000	25%
Preferred Stock at 14%	8,000,000	25
Common Stock Equity		
(2,000,000 shares outstanding)	16,000,000	50
	$32,000,000	100%

(a) Calculate the firm's after-tax return on equity (ROE) and earnings per share (EPS).
(b) If the firm retires $4,000,000 of preferred stock using the proceeds from an equal increase in long-term debt, what would have been the after-tax return on equity (ROE) and earnings per share (EPS)?
(c) If the firm retires $4,000,000 of preferred stock using the proceeds from the sale of 500,000 shares of common stock, what would have been the after-tax return on equity (ROE) and earnings per share (EPS)?

Answers:
(a)

EBIT	$4,000,000	ROE**	= 1,824,000/24,000,000
Interest*	960,000		= 7.6%
EBT	$3,040,000	EPS***	= 704,000/2,000,000
Taxes (40%)	1,216,000		= $0.3520
EAT	$1,824,000		
Preferred Div	1,120,000		
EAC	$ 704,000		

* $8,000,000 × 0.12 = $960,000
** ROE = Net Profits after Taxes/Stockholders' Equity
(where stockholders' equity includes preferred stock).
*** EPS = EAC/Common share outstanding

(b)

EBIT	$4,000,000	ROE	= 1,536,000/20,000,000
Interest	1,440,000		= 7.7%
EBT	$2,560,000	EPS	= 976,000/2,000,000
Taxes (40%)	1,024,000		= $0.49
EAT	$1,536,000		
Preferred Div	560,000		
EAC	$ 976,000		

(c)

EBIT	$4,000,000	ROE	= 1,824,000/24,000,000
Interest	960,000		= 7.6%
EBT	$3,040,000	EPS	= 1,264,000/2,500,000
Taxes (40%)	1,216,000		= $0.51
EAT	$1,824,000		
Preferred Div	560,000		
EAC	$1,264,000		

Level of Difficulty: 4
Learning Goal: 3
Topic: ROE and EPS

4. The board of directors of the National Computer Company has declared \$5.00 common stock dividend and accepted a plan to freeze the dividend at \$5 per year indefinitely. What is the value of the National Computer Company's common stock if the required rate of interest is 15 percent?

   Answer: P = D/k = 5/0.15 = \$33.33

   Level of Difficulty: 1
   Learning Goal: 4
   Topic: Zero Growth Valuation Model (Equation 7.3)

5. Kingston Kitchen Stuff has recently sold 1,000 shares of \$6.75 preferred stock. What is the value of the stock assuming 10 percent required rate of return?

   Answer: P = D/k = 6.75/0.10 = \$67.50

   Level of Difficulty: 1
   Learning Goal: 4
   Topic: Preferred Stock Valuation (Equation 7.3)

6. The Fur Company has been experiencing several years of financial difficulty and, thus, has considered maintaining its dividend payment at \$2.50 indefinitely. What is the value of its common stock if the required rate of return is 8.5 percent?

   Answer: P = D/k = 2.50/0.085 = \$29.41

   Level of Difficulty: 1
   Learning Goal: 4
   Topic: Zero Growth Valuation Model (Equation 7.3)

7. In response to the stock market's reaction to its dividend policy, the Paper Company has decided to increase its dividend payment at a rate of 4 percent per year. The firm's most recent dividend is \$3.25 and the required rate of interest is 9 percent. What is the maximum you would be willing to pay for a share of the stock?

   Answer: P = D1/(k – g) = 3.25(1 + 0.04)/(0.09 – 0.04) = \$67.60

   Level of Difficulty: 2
   Learning Goal: 4
   Topic: Constant Growth Valuation Model (Equation 7.4 and Equation 7.5)

8. A firm has an expected dividend next year of \$3.60 and a required return of 12 percent. Calculate the value of a share of common stock assuming a zero growth rate of dividends.

   Answer: $\frac{\$3.60}{0.12} = \$30$

   Level of Difficulty: 2
   Learning Goal: 4
   Topic: Zero Growth Valuation Model (Equation 7.3)

9. Smith Juggling Equipment has an outstanding preferred issue of stock with a par value of \$100 and an annual dividend of 10 percent (of par). Similar risk preferred stocks are yielding an 11.5 percent annual rate of return.
   (a) What is the current value of the outstanding preferred stock?
   (b) What will happen to price as the risk-free rate increases? Explain.

Answers:

(a) $\$10/0.115 = \$86.96$

(b) As the risk-free rate increases, the required rate of return will increase and the price will drop.

Level of Difficulty: 2
Learning Goal: 4
Topic: Preferred Stock Valuation (Equation 7.3)

10. Ted has 10 shares of the Men's Underwear Company. Based on the company's dividend policy, Ted will receive a total of \$450 a year in perpetuity. What is the value of each share if the rate of interest is 8 percent?

Answer:

Dividend per share = 450/10 = \$45
P = D/k = 45/0.08 = \$562.50

Level of Difficulty: 2
Learning Goal: 4
Topic: Zero Growth Valuation Model (Equation 7.3)

11. The Bradshaw Company's most recent dividend was \$6.75. The historical dividend payment by the company shows a constant growth rate of 5 percent per year. What is the maximum you would be willing to pay for a share of its common stock if your required rate of return is 8 percent?

Answer:

$D1 = 6.75\ (1 + 0.05) = \$7.09$

$P = D1/(k - g) = 7.09/(0.08 - 0.05) = \$236.33$

Level of Difficulty: 2
Learning Goal: 4
Topic: Constant Growth Valuation Model (Equation 7.4 and Equation 7.5)

12. The Medical Equipment Company paid \$2.25 common stock dividend last year. The company's policy is to allow its dividend to grow at 5 percent per year indefinitely. What is the value of the stock if the required rate of return is 8 percent?

Answer: $P = D1/(k - g) = 2.25\ (1 + 0.05)/(0.08 - 0.05) = \$78.67$

Level of Difficulty: 2
Learning Goal: 4
Topic: Constant Growth Valuation Model (Equation 7.4 and Equation 7.5)

13. Mr. Arthur recently purchased a block of 100 shares of Bingham Corporation common stock for \$6,000. The stock is expected to provide an annual cash flow of dividends of \$400 indefinitely. Assuming a discount rate of 8 percent, how does the price Mr. Arthur paid compare to the value of the stock?

Answer: The value of the stock is $= \dfrac{\$400}{0.08} = \$5,000$

Mr. Arthur paid \$1,000 more than the value of the stock.

Level of Difficulty: 3
Learning Goal: 4
Topic: Zero Growth Valuation Model (Equation 7.3)

14. The Central Heating Company has been very successful in the past four years. Over these years, it paid common stock dividend of \$4 in the first year, \$4.20 in the second year, \$4.41 in the third year, and its most recent dividend was \$4.63. The company wishes to continue this dividend growth indefinitely. What is the value of the company's stock if the required rate of return is 12 percent?

    Answer: FVIFg, 3 = 4.63/4.00 = 1.158 g = 5%
    P = D5/(k – g) = 4.63 (1 + 0.05)/(0.12 – 0.05) = \$69.46

    Level of Difficulty: 3
    Learning Goal: 4
    Topic: Constant Growth Valuation Model (Equation 7.4 and Equation 7.5)

Table 7.2

Year	Dividends($)
2003	2.89
2002	2.53
2001	2.22
2000	1.95
1999	1.71
1998	1.50

15. Charlene owns stock in a company which has paid the annual dividends shown in Table 7.2. Calculate the growth rate of these dividends.

    Answer: $\frac{1.50}{2.89} = 0.519$
    0.519 = PVIF
    growth rate = 14%

    Level of Difficulty: 3
    Learning Goal: 4
    Topic: Constant Growth Valuation Model (Equation 7.4 and Equation 7.5)

16. Calculate the estimated dividend for 2004. (See Table 7.2.)

    Answer: (\$2.89)(1.14) = \$3.29

    Level of Difficulty: 3
    Learning Goal: 4
    Topic: Constant Growth Valuation Model (Equation 7.4 and Equation 7.5)

17. The required return is assumed to be 17 percent. Using the Gordon model, calculate the per share value of the stock. (See Table 7.2.)

    Answer: $\frac{\$3.29}{0.17 - 0.14} = \$109.67$

    Level of Difficulty: 3
    Learning Goal: 4
    Topic: Constant Growth Valuation Model (Equation 7.4 and Equation 7.5)

18. Diamond House Exporting has a beta of 1.50, the risk-free rate of interest is currently 12 percent, and the required return on the market portfolio is 18 percent. The company plans to pay a dividend of $2.45 per share in the coming year and anticipates that its future dividends will increase at an annual rate consistent with that experienced over the 2001–2003 period

Year	Dividend
2003	2.32
2002	2.21
2001	2.10

Estimate the value of Diamond House Exporting stock.

Answer:

$$ks = 0.12 + 1.50(0.18 - 0.12)$$
$$= 0.21$$

growth rate of dividends:

2.23/2.10 = FVIF

1.105 5%

$$Po = \frac{\$2.45}{0.21 - 0.05} = \$15.31$$

Level of Difficulty: 4
Learning Goal: 4
Topic: CAPM and Constant Growth Valuation Model (Equation 7.4, Equation 7.5 and Equation 7.9)

19. The National X-Ray Company paid $2.00 per share in common stock dividends last year. The company's policy is to allow its dividend to grow at 5 percent for 4 years and then the rate of growth changes to 3 percent per year from year five and on. What is the value of the stock if the required rate of return is 8 percent?

Answer:

t	Do	FVIF5%,t	Dt	PVIF8%,t	PV
1	$2.00	1.050	$2.10	0.926	$1.94
2	2.00	1.102	2.20	0.857	1.89
3	2.00	1.158	2.32	0.794	1.84
4	2.00	1.216	2.43	0.735	1.79
					P1 = $7.46

D5 = 2.43 (1 + 0.03) = $2.50

$$P2 = \frac{2.50}{0.08 - 0.03} \times \frac{1}{(1 + 0.08)^{\wedge}4} = \$36.75$$

Value of stock = $36.75 + $7.46 = $44.21

Level of Difficulty: 4
Learning Goal: 4
Topic: Variable Growth Valuation Model (Equation 7.6)

20. Compute the value of a share of common stock of a company whose most recent dividend was $2.50 and is expected to grow at 3 percent per year for the next 5 years, after which the dividend growth rate will increase to 6 percent per year indefinitely. Assume 10 percent required rate of return.

Answer:

t	Do	FVIF5%,t	Dt	PVIF8%,t	PV
1	$2.50	1.030	$2.58	0.909	$2.35
2	2.50	1.061	2.65	0.826	2.19
3	2.50	1.093	2.73	0.751	2.05
4	2.50	1.126	2.82	0.683	1.93
5	2.50	1.159	2.90	0.621	1.80
					P1 = $10.32

D6 = 2.90 (1 + 0.06) = $3.07

$$P2 = \frac{3.07}{0.10 - 0.06} \times \frac{1}{(1+0.10)\,\hat{}\,5} = \$47.66$$

Value of stock = $47.66 + $10.32 = $57.98

Level of Difficulty: 4
Learning Goal: 4
Topic: Variable Growth Valuation Model (Equation 7.6)

21. Newmarket Industries currently has 2,000 shares of common stock outstanding. The firm has assets of $200,000 and total liabilities including preferred stock of $75,000. Calculate the book value per share of Newmarket common stock.

Answer: $\frac{\$200,000 - \$75,000}{2,000} = \$62.50\text{/share}$

Level of Difficulty: 1
Learning Goal: 5
Topic: Book Value of Common Stock

22. Based on analysis of the company and expected industry and economic conditions, Newmarket Industries is expected to earn $4.60 per share of common stock next year. The average price/earnings ratio for firms in the same industry is 8. Calculate the estimated value of a share of Newmarket common stock.

Answer: $4.60(8) = $36.80/share

Level of Difficulty: 1
Learning Goal: 5
Topic: P/E Multiple Valuation Model

23. Due to growing demand for computer software, the LetterPerfect Company has had a very successful year and expects its earnings per share to grow by 25 percent to reach $5.50 for this year. Estimate the price of the company's common stock assuming the industry's price/earning ratio is 12.

Answer: P = (P/E)(E) = 12 × 5.50 = $66

Level of Difficulty: 1
Learning Goal: 5
Topic: P/E Multiple Valuation Model

24. International Tools Inc. (ITI)'s total assets as recorded on its balance sheet are $1,500,000. What is the value of the ITI's common stock if it has $950,000 in liabilities, and 7,500 shares of common stock outstanding?

Answer: P = (1,500,000 – 950,000)/7,500 = $73.33

Level of Difficulty: 1
Learning Goal: 5
Topic: Book Value of Common Stock

25. International Tools Inc. (ITI) has estimated the market value of its assets to be $1,250,000. What is the value of ITI's common stock if it has $900,000 in liabilities, $50,000 in preferred stock, and 7,500 shares of common stock outstanding?

Answer: P = (1,250,000 – 900,000 – 50,000)/7,500 = $40

Level of Difficulty: 1
Learning Goal: 5
Topic: Book Value of Common Stock

26. A firm's common stock currently sells for $75 per share. The firm has total assets of $1,000,000 and total liabilities, including preferred stock, of $350,000. If the firm has 10,000 shares of common stock outstanding,

(a) what is the book value of each share of common stock?
(b) is the stock overvalued or undervalued in the marketplace?
(c) what might be the reason(s) for your answer in (b).

Answers:

(a) $\dfrac{\$1{,}000{,}000 - \$350{,}000}{10{,}000} = \$65\text{/share}$

(b) overvalued

(c) market value of the assets is greater than the book value.

Level of Difficulty: 2
Learning Goal: 5
Topic: Book Value of Common Stock

27. A firm has current assets of $800,000, which can be liquidated at 90 percent of book value. Total liabilities, including preferred stock, equal $270,000. The firm has 15,000 shares of common stock outstanding. What is the liquidation value per share of common stock?

Answer: $\dfrac{\$800{,}000(0.90) - \$270{,}000}{15{,}000} = \$30\text{/share}$

Level of Difficulty: 2
Learning Goal: 5
Topic: Liquidation Value of Common Stock

28. Antique Replicas, Inc., has a beta of 1.40, the annual risk-free rate of interest is currently 10 percent, and the required return on the market portfolio is 16 percent. The firm estimates that its future dividends will continue to increase at an annual compound rate consistent with that experienced over the 2000–2003 period.

Year	**Dividend**
2000	\$2.70
2001	2.95
2002	3.25
2003	3.40

(a) Estimate the value of Antique Replicas, Inc., stock.
(b) A lawsuit has been filed against the company by a competitor, and the potential loss has increased risk, which is reflected in the company's beta, increasing it to 1.6. What is the estimated price of the stock following the filing of the lawsuit.

Answers:

(a) ks = 0.10 + 1.4(0.16 – 0.10) = 0.184
growth rate of dividends = \$3.40/\$2.70 = 1.259 FVIF3, k = 8%
Po = \$3.40(1.08)/(0.184 – 0.08) = \$35.31
(b) ks = 0.10 + 1.6(0.16 – 0.10) = 0.196
Po = \$3.40(1.08)/(0.196 – 0.08) = \$31.66

Level of Difficulty: 4
Learning Goal: 6
Topic: CAPM and Constant Growth Valuation Model (Equation 7.4, Equation 7.5 and Equation 7.9)

29. Tangshan China's stock is currently selling for \$160.00 per share and the firm's dividends are expected to grow at 5 percent indefinitely. In addition, Tangshan China's most recent dividend was \$5.50. The expected risk free rate of return is 3 percent, the expected market return is 8 percent, and Tangshan has a beta of 1.20.
(a) What is the expected return based on the dividend valuation model?
(b) What is the required return based on the CAPM?
(c) Would Tangshan China be a good investment at this time? Explain

Answers:

(a) ks = [\$5.50(1.05)]/\$160.00 + 0.05 = 8.6%
(b) ks = 0.03 + 1.2(0.08 – 0.03) = 9%
(c) The expected return is 8.6 percent but the required return is 9 percent. Based on this information, Tangshan is overvalued and would not be a good investment at this time.

Level of Difficulty: 4
Learning Goal: 6
Topic: CAPM and Constant Growth Valuation Model (Equation 7.4, Equation 7.5 and Equation 7.9)