Chapter 15
Current Liabilities Management

■ Learning Goals

1. Review the key components of credit terms, accounts payable, and the procedures for analyzing them.
2. Understand the effects of stretching accounts payable on their cost and on the use of accruals.
3. Describe interest rates and the basic types of unsecured bank sources of short-term loans.
4. Discuss the basic features of commercial paper and the key aspects of international short-term loans.
5. Explain the characteristics of secured short-term loans and the use of accounts receivable as short-term-loan collateral.
6. Describe the various ways in which inventory can be used as short-term-loan collateral.

■ True/False

1. Accounts payable are spontaneous secured sources of short-term financing that arise from the normal operations of the firm.

   Answer: FALSE
   Level of Difficulty: 1
   Learning Goal: 1
   Topic: Accounts Payable

2. Notes payable can be either spontaneous secured or spontaneous unsecured financing and result from the normal operations of the firm.

   Answer: FALSE
   Level of Difficulty: 1
   Learning Goal: 1
   Topic: Notes Payable

3. Accounts payable result from transactions in which merchandise is purchased but no formal note is signed to show the purchaser's liability to the seller.

   Answer: TRUE
   Level of Difficulty: 1
   Learning Goal: 1
   Topic: Accounts Payable

4. In credit terms, EOM (End-of-Month) indicates that the accounts payable must be paid by the end of the month in which the merchandise has been purchased.

   Answer: FALSE
   Level of Difficulty: 1
   Learning Goal: 1
   Topic: Analyzing Credit Terms

5. Accruals are liabilities for services received for which payment has yet to be made.

   Answer: TRUE
   Level of Difficulty: 1
   Learning Goal: 2
   Topic: Accrued Liabilities

6. The cost of giving up a cash discount is the implied rate of interest paid in order to delay payment of an account payable for an additional number of days.

   Answer: TRUE
   Level of Difficulty: 2
   Learning Goal: 2
   Topic: Cost of Giving up a Cash Discount

7. In giving up a cash discount, the amount of the discount that is given up is the interest being paid by the firm to keep its money by delaying payment for a number of days.

   Answer: TRUE
   Level of Difficulty: 2
   Learning Goal: 2
   Topic: Cost of Giving up a Cash Discount

8. If a firm anticipates stretching accounts payable, its cost of giving up a cash discount is increased.

   Answer: FALSE
   Level of Difficulty: 2
   Learning Goal: 2
   Topic: Cost of Giving up a Cash Discount

9. A firm should take the cash discount if the firm's cost of borrowing from the bank is greater than the cost of giving up a cash discount.

   Answer: FALSE
   Level of Difficulty: 2
   Learning Goal: 2
   Topic: Cost of Giving up a Cash Discount

10. If a firm anticipates stretching accounts payable, its cost of giving up a cash discount is reduced.

    Answer: TRUE
    Level of Difficulty: 2
    Learning Goal: 2
    Topic: Cost of Giving up a Cash Discount

11. Unlike the spontaneous sources of unsecured short-term financing, bank loans are negotiated and result from deliberate actions taken by the financial manager.

    Answer: TRUE
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Bank Loans

12. Self-liquidating loans are intended merely to carry the firm through seasonal peaks in financing needs, mainly buildups of accounts receivable and inventory.

    Answer: TRUE
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Self-liquidating Loans

13. Self-liquidating loans are mainly invested in productive assets (i.e., fixed assets) which provide the mechanism through which the loan is repaid.

    Answer: FALSE
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Self-liquidating Loans

14. The major attraction of a line of credit from the bank's point of view is that it eliminates the need to examine the credit worthiness of a customer each time it borrows money.

    Answer: TRUE
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Lines of Credit

15. The interest rate on a line of credit is normally stated as a fixed rate—the prime rate plus a percent.

    Answer: FALSE
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Lines of Credit

16. A line of credit is an agreement between a commercial bank and a business specifying the amount of unsecured short-term borrowing the bank will make available to the firm over a given period of time.

    Answer: TRUE
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Lines of Credit

17. A revolving credit agreement is a form of financing consisting of short-term, unsecured promissory notes issued by firms with a high credit standing.

    Answer: FALSE
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Lines of Credit

18. A short-term self-liquidating loan is a secured short-term loan in which the use to which the borrowed money is put provides the mechanism through which the loan is repaid.

    Answer: FALSE
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Short-term Self-liquidating Loans

19. The discount rate is the lowest rate of interest charged by the nation's leading banks on business loans to their most important and reliable business borrowers.

    Answer: FALSE
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Discount Rate

20. Operating change restrictions are contractual restrictions that a bank may impose on a firm as part of a line of credit agreement.

    Answer: TRUE
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Operating Change Restrictions

21. The effective interest rate on a bank loan depends on whether interest is paid when the loan matures or in advance.

    Answer: TRUE
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Effective Interest Rate

22. The prime rate of interest fluctuates with changing supply-and-demand relationships for short-term funds as well as the risk of the bank's business borrowers.

    Answer: FALSE
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Prime Interest Rate

23. A discount loan is a loan on which interest is paid in advance by deducting it from the loan so that the borrower actually receives less money than is requested.

    Answer: TRUE
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Discount Loans

24. A single-payment note is a secured fund which can be obtained from a commercial bank when a borrower needs additional funds for a short period.

    Answer: FALSE
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Single-payment Notes

25. In a line of credit agreement, a bank may retain the right to revoke the line if any major changes occur in the firm's financial condition or operations.

Answer: TRUE
Level of Difficulty: 2
Learning Goal: 3
Topic: Lines of Credit

26. Under a line of credit, a bank may require an annual cleanup, which means that the borrower must pay off all its outstanding debts to all lenders for a certain number of days during the year.

Answer: FALSE
Level of Difficulty: 2
Learning Goal: 3
Topic: Lines of Credit

27. Although more expensive than a line of credit, a revolving credit agreement can be less risky from the borrower's viewpoint.

Answer: TRUE
Level of Difficulty: 2
Learning Goal: 3
Topic: Revolving Credit Agreements versus Lines of Credit

28. Generally the increment above the prime rate on a floating-rate loan will be higher than on a fixed-rate loan of equivalent risk because the lender bears higher risk with a floating-rate loan.

Answer: FALSE
Level of Difficulty: 3
Learning Goal: 3
Topic: Floating Rate versus Fixed-Rate Loans

29. Fixed-rate loan is a loan whose rate of interest is established at a fixed increment above the prime rate and is allowed to vary above prime only when the prime rate varies until maturity.

Answer: FALSE
Level of Difficulty: 3
Learning Goal: 3
Topic: Fixed-Rate Loans

30. The effective interest rate for a discount loan is greater than the loan's stated interest rate.

Answer: TRUE
Level of Difficulty: 3
Learning Goal: 3
Topic: Effective Interest Rate

31. Compensating balance, which is a required checking account balance equal to a certain percentage of the borrower's short-term unsecured loan, may not only forces the borrower to be a good customer of the bank but may also raise the interest cost to the borrower, thereby increasing the bank's earnings.

Answer: TRUE
Level of Difficulty: 3
Learning Goal: 3
Topic: Compensating Balances

32. Commercial paper is a form of financing that consists of short-term, secured promissory notes issued by firms with a high credit standing.

    Answer: FALSE
    Level of Difficulty: 1
    Learning Goal: 4
    Topic: Commercial Paper

33. In doing business in foreign countries, financing operations in the local market not only improves the company's business ties to the host community but also minimizes exchange rate risk.

    Answer: TRUE
    Level of Difficulty: 1
    Learning Goal: 4
    Topic: International Loans

34. The interest paid by the issuer of commercial paper is determined by the size of the discount and the length of time to maturity.

    Answer: TRUE
    Level of Difficulty: 2
    Learning Goal: 4
    Topic: Commercial Paper

35. The risk to a U.S. importer with foreign-currency-denominated accounts payable is that the dollar will depreciate.

    Answer: TRUE
    Level of Difficulty: 2
    Learning Goal: 4
    Topic: International Loans and Exchange Rate Risk

36. Firms are able to raise funds through the sale of commercial paper more cheaply than by borrowing from a commercial bank.

    Answer: TRUE
    Level of Difficulty: 2
    Learning Goal: 4
    Topic: Commercial Paper

37. Secured short-term financing has specific assets pledged as collateral and appears on the balance sheet as current liabilities.

    Answer: TRUE
    Level of Difficulty: 1
    Learning Goal: 5
    Topic: Secured Short-term Financing

38. The outright sale of accounts receivable at a discount in order to obtain funds is called pledging accounts receivable.

    Answer: FALSE
    Level of Difficulty: 1
    Learning Goal: 5
    Topic: Factoring Accounts Receivable

39. One advantage of factoring accounts receivable is the ability it gives the firm to turn accounts receivable immediately into cash without having to worry about repayment.

Answer: TRUE
Level of Difficulty: 1
Learning Goal: 5
Topic: Factoring Accounts Receivable

40. Fixed assets are the most desirable short-term loan collateral since they normally have a longer life, or duration, than the term of the loan.

Answer: FALSE
Level of Difficulty: 1
Learning Goal: 5
Topic: The Use of Collateral

41. Generally, lenders recognize that holding collateral can reduce losses if the borrower defaults, but the presence of collateral has no impact on the risk of default.

Answer: TRUE
Level of Difficulty: 2
Learning Goal: 5
Topic: The Use of Collateral

42. The interest rate charged on secured short-term loans is typically higher than the rate on unsecured short-term loans.

Answer: TRUE
Level of Difficulty: 2
Learning Goal: 5
Topic: Secured versus Unsecured Short-term Loans

43. The higher cost of unsecured as opposed to secured borrowing is due to the greater risk of default.

Answer: FALSE
Level of Difficulty: 2
Learning Goal: 5
Topic: Secured versus Unsecured Short-term Loans

44. Commercial finance companies are lending institutions that make only unsecured loans—both short-term and long-term—to businesses.

Answer: FALSE
Level of Difficulty: 2
Learning Goal: 5
Topic: Commercial Finance Companies

45. The commercial finance companies usually charge a higher interest on secured short-term loans than commercial banks because the finance companies generally end up with higher-risk borrowers.

Answer: TRUE
Level of Difficulty: 2
Learning Goal: 5
Topic: Commercial Finance Companies

46. Factoring accounts receivable is not a form of secured short-term borrowing. It entails the sale of accounts receivable at a discount to obtain needed short-term funds.

    Answer: TRUE
    Level of Difficulty: 2
    Learning Goal: 5
    Topic: Factoring Accounts Receivable

47. Pledges of accounts receivable are normally made on a notification basis because the lender does not trust the borrower to collect the pledged account receivable and remit these payments as they are received.

    Answer: FALSE
    Level of Difficulty: 2
    Learning Goal: 5
    Topic: Pledging Accounts Receivable

48. Nonrecourse basis is the basis on which accounts receivable are sold to a factor with the understanding that the factor accepts all credit risks on the purchased accounts.

    Answer: TRUE
    Level of Difficulty: 2
    Learning Goal: 5
    Topic: Factoring Accounts Receivable

49. The percentage advance constitutes the principal of the secured loan and varies not only according to the type and liquidity of collateral but also according to the type of security interest being taken.

    Answer: TRUE
    Level of Difficulty: 3
    Learning Goal: 5
    Topic: Secured Short-term Financing

50. Commercial banks and other institutions do not normally consider secured loans less risky than unsecured loans, and therefore require higher interest rates on them.

    Answer: TRUE
    Level of Difficulty: 3
    Learning Goal: 5
    Topic: Secured versus Unsecured Short-term Loans

51. In pledging accounts receivable, the percentage advanced against the adjusted collateral is determined by the borrower based on its overall evaluation of the quality of the acceptable receivables and the expected cost of their liquidation.

    Answer: FALSE
    Level of Difficulty: 3
    Learning Goal: 5
    Topic: Pledging Accounts Receivable

52. Floating inventory lien is a lender's claim on the borrower's general inventory as collateral for a secured loan.

    Answer: TRUE
    Level of Difficulty: 1
    Learning Goal: 6
    Topic: Floating Inventory Liens

53. Trust receipt inventory loan is an arrangement in which the lender receives control of the pledged inventory collateral, which is warehoused by a designated agent.

Answer: FALSE
Level of Difficulty: 1
Learning Goal: 6
Topic: Trust Receipt Inventory Loans

54. The security agreement is the security offered the lender by the borrower, usually in the form of an asset such as accounts receivable or inventory.

Answer: FALSE
Level of Difficulty: 1
Learning Goal: 6
Topic: Security Agreements

55. Inventory is attractive as collateral since it normally has a market value greater than its book value, which is used to establish its value as collateral.

Answer: FALSE
Level of Difficulty: 1
Learning Goal: 6
Topic: Inventory as Collateral

56. Floating inventory lien is most attractive when the firm has a stable level of inventory that consists of a diversified group of relatively inexpensive merchandise.

Answer: TRUE
Level of Difficulty: 3
Learning Goal: 6
Topic: Floating Inventory Liens

57. Under the floating inventory lien, the borrower is free to sell the merchandise and is expected to remit the amount lent against each item, along with accrued interest, to the lender immediately after the sale. The lender then releases the lien on the appropriate item.

Answer: FALSE
Level of Difficulty: 3
Learning Goal: 6
Topic: Floating Inventory Liens

58. Spontaneous liabilities such as accounts payable and accruals represent a source of financing that arise from the normal course of business.

Answer: TRUE
Level of Difficulty: 2
Learning Goal: 1
Topic: Spontaneous Liabilities

59. Spontaneous liabilities such as accounts payable and notes payable represent a source of financing that arise from the normal course of business.

Answer: FALSE
Level of Difficulty: 2
Learning Goal: 1
Topic: Spontaneous Liabilities

60. Spontaneous liabilities such as accounts payable and accruals represent a use of financing that arise from the normal course of business.

    Answer: FALSE
    Level of Difficulty: 2
    Learning Goal: 1
    Topic: Spontaneous Liabilities

61. For firms that are in a financial position to take a cash discount, it is generally a more financially sound decision not to take the discount if the terms offered are 2/10 net 30.

    Answer: FALSE
    Level of Difficulty: 3
    Learning Goal: 1
    Topic: Cost of Giving Up a Cash Discount (Equation 15.1)

62. For firms that are in a financial position to take a cash discount, it is generally a more financially sound decision to take the discount if the terms offered are 2/10 net 30.

    Answer: TRUE
    Level of Difficulty: 3
    Learning Goal: 2
    Topic: Cost of Giving Up a Cash Discount (Equation 15.1)

63. If possible, it would be a more financially sound decision to pay employees once every two weeks rather than once a month.

    Answer: FALSE
    Level of Difficulty: 2
    Learning Goal: 2
    Topic: Accrued Liabilities Management

64. If possible, it would be a more financially sound decision to pay employees once a month rather than once every two weeks.

    Answer: TRUE
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Accrued Liabilities Management

65. If one borrows $1,000 at 8 percent interest on a discount basis, the effective rate of interest is about 8.7 percent.

    Answer: TRUE
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Discount Loans (Equation 15.4)

66. If one borrows $1,000 at 8 percent interest on a discount basis, the effective rate of interest is about 9.7 percent.

    Answer: FALSE
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Discount Loans (Equation 15.4)

67. Lines of credit are non-guaranteed loans that specify the maximum amount that a firm can owe the bank at any point in time.

    Answer: TRUE
    Level of Difficulty: 2
    Learning Goal:
    Topic: Lines of Credit

68. Lines of credit are guaranteed loans that specify the maximum amount that a firm can owe the bank at any point in time.

    Answer: FALSE
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Lines of Credit

69. Tangshan Mining borrowed $10,000 for one year under a line of credit with a stated interest rate of 8 percent and a 10 percent compensating balance. Normally, the firm keeps almost no money in its checking account. Based on this information, the effective annual interest rate on the loan was 8.89 percent.

    Answer: TRUE
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Lines of Credit with Compensating Balances (Equation 15.3)

70. Tangshan Mining borrowed $10,000 for one year under a line of credit with a stated interest rate of 8 percent and a 10 percent compensating balance. Normally, the firm keeps a balance of about $800 in its checking account. Based on this information, the effective annual interest rate on the loan was 8.89 percent.

    Answer: FALSE
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Lines of Credit with Compensating Balances (Equation 15.3)

71. Revolving credit agreements are guaranteed loans that specify the maximum amount that a firm can owe the bank at any point in time.

    Answer: TRUE
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Revolving Credit Agreements

72. Revolving credit agreements are non-guaranteed loans that specify the maximum amount that a firm can owe the bank at any point in time.

    Answer: FALSE
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Revolving Credit Agreements

73. Tangshan Mining borrowed $10,000 for one year under a revolving credit agreement that authorized and guaranteed the firm access to $20,000. The revolving credit agreement had a stated interest rate of 8 percent and charged the firm a half percent commitment fee on the unused portion of the agreement. Based on this information, the effective annual interest rate on the loan was 8.50 percent.

    Answer: TRUE
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Revolving Credit Agreements (Equation 15.3)

74. Tangshan Mining borrowed $10,000 for one year under a revolving credit agreement that authorized and guaranteed the firm access to $20,000. The revolving credit agreement had a stated interest rate of 8 percent and charged the firm a half percent commitment fee on the unused portion of the agreement. Based on this information, the effective annual interest rate on the loan was 9.50 percent.

    Answer: FALSE
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Revolving Credit Agreements (Equation 15.3)

75. Tangshan Mining issued $10,000 of commercial paper for $9,925 for 60 days. Based on this information, the effective annual rate of interest on the commercial paper would be about 4.69 percent.

    Answer: TRUE
    Level of Difficulty: 3
    Learning Goal: 4
    Topic: Commercial Paper (Equation 15.3)

76. Tangshan Mining issued $10,000 of commercial paper for $9,925 for 60 days. Based on this information, the effective annual rate of interest on the commercial paper would be about 4.19 percent.

    Answer: FALSE
    Level of Difficulty: 3
    Learning Goal: 4
    Topic: Commercial Paper (Equation 15.3)

77. Factoring accounts receivable is a relatively inexpensive source of unsecured short-term funds.

    Answer: FALSE
    Level of Difficulty: 3
    Learning Goal: 5
    Topic: Factoring Accounts Receivable

78. Factoring accounts receivable is a relatively expensive source of unsecured short-term funds.

    Answer: FALSE
    Level of Difficulty: 3
    Learning Goal: 5
    Topic: Factoring Accounts Receivable

79. Factoring accounts receivable is a relatively inexpensive source of unsecured short-term funds that allows firms to turn accounts receivable immediately into cash.

    Answer: FALSE
    Level of Difficulty: 3
    Learning Goal: 5
    Topic: Factoring Accounts Receivable

80. Factoring accounts receivable is a relatively expensive source of secured short-term funds that allows firms to turn accounts receivable immediately into cash.

Answer: TRUE
Level of Difficulty: 3
Learning Goal: 5
Topic: Factoring Accounts Receivable

■ Multiple Choice Questions

1. The two major sources of short-term financing are
   (a) a line of credit and accounts payable.
   (b) accounts payable and accruals.
   (c) a line of credit and accruals.
   (d) accounts receivable and notes payable.

   Answer: B
   Level of Difficulty: 1
   Learning Goal: 1
   Topic: Accounts Payable and Accrued Liabilities

2. _________ are the major source of unsecured short-term financing for business firms.
   (a) Accounts receivable
   (b) Accruals
   (c) Notes payable
   (d) Accounts payable

   Answer: D
   Level of Difficulty: 1
   Learning Goal: 1
   Topic: Accounts Payable

3. Accruals and accounts payable are _________ sources of short-term financing.
   (a) negotiated, secured
   (b) negotiated, unsecured
   (c) spontaneous, secured
   (d) spontaneous, unsecured

   Answer: D
   Level of Difficulty: 1
   Learning Goal: 1
   Topic: Accounts Payable and Accrued Liabilities

4. Financing that arises from the normal operations of the firm is said to be
   (a) expected.
   (b) accrued.
   (c) spontaneous.
   (d) payable.

   Answer: C
   Level of Difficulty: 1
   Learning Goal: 1
   Topic: Spontaneous Liabilities

5. _________ are liabilities for services received for which payment has yet to be made. The most common accounts are taxes and wages.
   (a) Notes payable
   (b) Accruals
   (c) Accounts payable
   (d) Accounts receivable

   Answer: B
   Level of Difficulty: 1
   Learning Goal: 2
   Topic: Accrued Liabilities

6. 1/15 net 30 date of invoice translates as
   (a) a 1 percent cash discount may be taken if paid in 15 days; if no cash discount is taken, the balance is due in 30 days after the middle of the month.
   (b) a 1 percent cash discount may be taken if paid in 15 days; if no cash discount is taken, the balance is due 30 days after the invoice date.
   (c) a 1 percent cash discount may be taken if paid in 15 days; if no cash discount is taken, the balance is due 30 days after the end of the month.
   (d) a 1 percent discount may be taken on 15 percent of the purchase if the account is paid within 30 days after the end of the month.

   Answer: B
   Level of Difficulty: 1
   Learning Goal: 2
   Topic: Analyzing Credit Terms (Equation 15.1)

7. 3/10 net 45 EOM translates as
   (a) a 10 percent cash discount may be taken if paid in three days; if no cash discount is taken, the balance is due in 45 days.
   (b) a 3 percent cash discount may be taken if paid in 10 days; if no cash discount is taken, the balance is due 45 days after transaction is complete.
   (c) a 3 percent cash discount may be taken if paid in 10 days; if no cash discount is taken, the balance is due 45 days after the end of the month.
   (d) a 3 percent discount may be taken on 10 percent of the purchase if the account is paid within 45 days after the end of the month.

   Answer: C
   Level of Difficulty: 1
   Learning Goal: 2
   Topic: Analyzing Credit Terms (Equation 15.1)

8. One of the most common designations for the beginning of the credit period is
   (a) 2/10.
   (b) the date of invoice.
   (c) the end of the month.
   (d) the transaction date.

   Answer: B
   Level of Difficulty: 1
   Learning Goal: 2
   Topic: Analyzing Credit Terms

9. If the firm decides to take the cash discount that is offered on goods purchased on credit, the firm should
   (a) pay as soon as possible.
   (b) pay on the last day of the credit period.
   (c) take the discount no matter when the firm actually pays.
   (d) pay on the last day of the discount period.

   Answer: D
   Level of Difficulty: 2
   Learning Goal: 2
   Topic: Analyzing Credit Terms

10. The cost of giving up a cash discount on a credit purchase is
   (a) added on to the price of the goods.
   (b) deducted from the price of the goods.
   (c) the implied interest rate paid in order to delay payment for an additional number of days.
   (d) the true purchase price of the goods.

   Answer: C
   Level of Difficulty: 2
   Learning Goal: 2
   Topic: Cost of Giving Up a Cash Discount

11. When a firm stretches accounts payable without hurting its credit rating, the cost of foregoing the cash discount is
   (a) reduced.
   (b) increased.
   (c) unaffected.
   (d) immaterial.

   Answer: A
   Level of Difficulty: 2
   Learning Goal: 2
   Topic: Stretching Accounts Payable

12. As part of a union negotiation agreement, the United Clerical Workers Union conceded to be paid every two weeks instead of every week. A major firm employing hundreds of clerical workers had a weekly payroll of $1,000,000 and the cost of short-term funds was 12 percent. The effect of this concession was to delay clearing time by one week. Due to the concession, the firm
   (a) realized an annual loss of $120,000.
   (b) realized an annual savings of $120,000.
   (c) increased its cash cycle.
   (d) decreased its cash turnover.

   Answer: B
   Level of Difficulty: 3
   Learning Goal: 2
   Topic: Managing Accrued Liabilities

13. A firm purchased goods with a purchase price of $1,000 and credit terms of 1/10 net 30. The firm paid for these goods on the 5th day after the date of sale. The firm must pay _________ for the goods.
    (a) $990
    (b) $900
    (c) $1,000
    (d) $1,100

    Answer: A
    Level of Difficulty: 3
    Learning Goal: 2
    Topic: Analyzing Credit Terms (Equation 15.1)

14. A firm purchased goods on January 27 with a purchase price of $1,000 and credit terms of 2/10 net 30 EOM. The firm paid for these goods on February 9. The firm must pay _____ for the goods.
    (a) $1,000
    (b) $980
    (c) $800
    (d) $900

    Answer: B
    Level of Difficulty: 3
    Learning Goal: 2
    Topic: Analyzing Credit Terms (Equation 15.1)

15. By offering credit to customers, the firm may
    (a) increase the price of the good to cover its costs.
    (b) decrease its investment in accounts receivable.
    (c) decrease its investment in accounts payable.
    (d) decrease the cost of goods purchased.

    Answer: A
    Level of Difficulty: 3
    Learning Goal: 2
    Topic: Analyzing Credit Terms

16. If a firm gives up the cash discount on goods purchased on credit, the firm should pay the bill
    (a) as late as possible.
    (b) as soon as possible.
    (c) before the credit period ends.
    (d) on the last day of the credit period.

    Answer: D
    Level of Difficulty: 3
    Learning Goal: 2
    Topic: Analyzing Credit Terms

17. A firm is offered credit terms of 2/10 net 45 by most of its suppliers but frequently does not have the cash available to take the discount. The firm has a credit line available at a local bank at an interest rate of 12 percent. The firm should
(a) give up the cash discount, financing the purchase with the line of credit.
(b) take the cash discount and pay on the 45th day after the date of sale.
(c) take the cash discount and pay on the first day of the cash discount period.
(d) take the cash discount, financing the purchase with the line of credit, the cheaper source of funds.

Answer: D
Level of Difficulty: 3
Learning Goal: 2
Topic: Analyzing Credit Terms (Equation 15.1)

18. A firm is offered credit terms of 1/10 net 45 EOM by a major supplier. The firm has determined that it can stretch the credit period (net period only) by 25 days without damaging its credit standing with the supplier. Assuming the firm needs short-term financing and can borrow from the bank on a line of credit at an interest rate of 14 percent, the firm should
(a) give up the cash discount and finance the purchase with the line of credit.
(b) give up the cash discount and pay on the 70th day after the date of sale.
(c) take the cash discount and pay on the first day of the cash discount period.
(d) take the cash discount and finance the purchase with the line of credit, the cheaper source of funds.

Answer: B
Level of Difficulty: 3
Learning Goal: 2
Topic: Analyzing Credit Terms (Equation 15.1)

19. The cost of giving up a cash discount under the terms of sale 1/10 net 60 (assume a 360-day year) is
(a) 7.2 percent.
(b) 6.1 percent.
(c) 14.7 percent.
(d) 12.2 percent.

Answer: A
Level of Difficulty: 3
Learning Goal: 2
Topic: Cost of Giving up a Cash Discount (Equation 15.1)

20. The cost of giving up a cash discount under the terms of sale 5/20 net 120 (assume a 360-day year) is
(a) 15 percent.
(b) 18.9 percent.
(c) 15.8 percent.
(d) 20 percent.

Answer: B
Level of Difficulty: 3
Learning Goal: 2
Topic: Cost of Giving up a Cash Discount (Equation 15.1)

21. The major type of loan made by banks to businesses is the
    (a) fixed-asset-based loan.
    (b) short-term secured loan.
    (c) short-term self-liquidating loan.
    (d) capital improvement loan.

    Answer: C
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Short-term Self-liquidating Loans

22. Short-term loans that businesses obtain from banks and through commercial paper are
    (a) negotiated and secured.
    (b) negotiated and unsecured.
    (c) spontaneous and secured.
    (d) spontaneous and unsecured.

    Answer: B
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Unsecured Short-term Loans

23. Short-term self-liquidating loans are intended to
    (a) finance capital assets.
    (b) cover seasonal peaks in financing caused by inventory and receivable buildups.
    (c) finance merger/acquisition activity.
    (d) recapitalize the firm.

    Answer: B
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Short-term Self-liquidating Loans

24. A _________ is a type of loan made to a business by a commercial bank. This type of loan is made when the borrower needs additional funds for a short period but does not believe the need will continue or reoccur on a seasonal basis.
    (a) revolving credit agreement
    (b) line of credit
    (c) short-term self-liquidating loan
    (d) single payment note

    Answer: D
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Single Payment Notes

25. The _________ is the lowest rate of interest charged on business loans to the best business borrowers by the nation's leading banks.
    (a) prime rate
    (b) commercial paper rate
    (c) federal funds rate
    (d) treasury bill rate

    Answer: A
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Prime Interest Rate

26. Short-term self-liquidating loans are intended to
    (a) finance capital assets.
    (b) cover seasonal peaks in financing caused by inventory and receivables buildup.
    (c) finance merger and/or acquisition activity.
    (d) recapitalize the firm.

    Answer: B
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Short-term Self-liquidating Loans

27. Commercial banks lend unsecured short-term funds in the following three basic ways.
    (a) Single-payment note, lines of credit, and commercial paper.
    (b) Single-payment note, lines of credit, and revolving credit agreements.
    (c) Single-payment note, revolving credit agreements, and commercial paper.
    (d) Commercial paper, lines of credit, and revolving credit agreements.

    Answer: B
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Types of Unsecured Short-term Loans

28. In a line credit arrangement, the firm pays interest on
    (a) the full line of credit.
    (b) the unused portion of the line of credit.
    (c) only the amount actually borrowed.
    (d) only the amount actually borrowed and commitment fees on any unused portion of the loan.

    Answer: C
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Lines of Credit

29. Loans on which the interest is paid in advance are often called
    (a) premium loans.
    (b) reduced-principle loans.
    (c) called loans.
    (d) discount loans.

    Answer: D
    Level of Difficulty: 1
    Learning Goal: 3
    Topic: Discount Loans

30. The prime rate of interest fluctuates with
    (a) the changing supply and demand relationship for long-term funds.
    (b) the changing supply and demand relationship for short-term funds.
    (c) the risk of the firm borrowing the funds.
    (d) demand in the bond market.

    Answer: B
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Prime Interest Rate

31. A _________ is an agreement between a commercial bank and a business that states the maximum amount of unsecured short-term borrowing the bank will make available to the firm over a given period of time, provided sufficient funds are available.
    (a) revolving credit agreement
    (b) line of credit
    (c) short-term self-liquidating loan
    (d) single payment note

    Answer: B
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Lines of Credit

32. Seasonal build-ups of inventory and receivables are generally financed with
    (a) short-term loans.
    (b) long-term loans.
    (c) accruals.
    (d) stockholders' equity.

    Answer: A
    Level of Difficulty: 2
    Learning Goal: 3
    Topic: Short-term Loans

33. The effective interest rate is
    (a) higher on a loan if interest is paid at maturity.
    (b) lower if the loan is a discount loan.
    (c) higher if the loan is a discount loan.
    (d) not affected by whether the loan is a discount loan or a loan with interest paid at maturity.

    Answer: C
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Effective Interest Rate

34. A bank lends a firm $1,000,000 for one year at 12 percent on a discounted basis and requires compensating balances of 10 percent of the face value of the loan. The effective annual interest rate associated with this loan is
    (a) 12 percent.
    (b) 13.3 percent.
    (c) 13.6 percent.
    (d) 15.4 percent.

    Answer: D
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Effective Interest Rate (Equation 15.4)

35. _________ effectively raises the interest cost to the borrower on a line of credit.
    (a) An operating change restriction
    (b) An annual cleanup
    (c) A compensating balance
    (d) A commitment fee

    Answer: C
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Compensating Balances

36. A bank lends a firm $500,000 for one year at 8 percent and requires compensating balances of 10 percent of the face value of the loan. The effective annual interest rate associated with this loan is
    (a) 8.9 percent.
    (b) 8 percent.
    (c) 7.2 percent.
    (d) 7.0 percent.

    Answer: A
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Compensating Balances and Effective Interest Rates (Equation 15.3)

37. _________ ensure that money lent under a line of credit agreement is actually being used to finance seasonal needs.
    (a) Operating change restrictions
    (b) Annual cleanups
    (c) Compensating balances
    (d) Commitment fees

    Answer: B
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Annual Cleanups

38. A _________ guarantees the borrower that a specified amount of funds will be available regardless of the tightness of money.
    (a) revolving credit agreement
    (b) line of credit
    (c) short-term self-liquidating loan
    (d) single payment note

    Answer: A
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Revolving Credit Agreements

39. Compared to a line of credit, a revolving credit agreement generally will be
    (a) a lower cost, higher risk method of short-term borrowing.
    (b) a lower cost, lower risk method of short-term borrowing.
    (c) a higher cost, higher risk method of short-term borrowing.
    (d) a higher cost, lower risk method of short-term borrowing.

    Answer: D
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Lines of Credit versus Revolving Credit Agreements

40. In a revolving credit agreement, the firm pays interest on
    (a) the full line of credit.
    (b) the unused portion of the line of credit.
    (c) only the amount actually borrowed.
    (d) the amount actually borrowed and commitment fees on any unused portion of the loan.

    Answer: D
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Revolving Credit Agreements

41. With a floating-rate note, the interest rate on the note changes
    (a) when the risk level of the borrower changes.
    (b) when the prime rate changes.
    (c) when the demand for loans changes.
    (d) when bank profits change.

    Answer: B
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Floating Rate Notes

42. A firm arranges a discount loan at a 12 percent interest rate, and borrows $100,000 for one year. The stated interest rate is _________ and the effective interest rate is _________.
    (a) 12.00%; 12.00%
    (b) 13.64%; 12.00%
    (c) 12.00%; 13.64%
    (d) 12.00%; 10.71%

    Answer: C
    Level of Difficulty: 4
    Learning Goal: 3
    Topic: Computing the Effective Rate of Interest (Equation 15.4)

43. XYZ Corporation borrowed $100,000 for six months from the bank. The rate is prime plus 2 percent. The prime rate was 8.5 percent at the beginning of the loan and changed to 9 percent after two months. This was the only change. How much interest must XYZ corporation pay?
    (a) $2,476.
    (b) $5,417.
    (c) $18,212.
    (d) $21,500.

    Answer: B
    Level of Difficulty: 4
    Learning Goal: 3
    Topic: Computing Loan Interest (Equation 15.3)

44. A firm has a line of credit and borrows $25,000 at 9 percent interest for 180 days or half a year. What is the effective rate of interest on this loan if the interest is paid in advance?
    (a) 4.7 percent.
    (b) 9.4 percent.
    (c) 9.9 percent.
    (d) 10.3 percent.

    Answer: B
    Level of Difficulty: 4
    Learning Goal: 3
    Topic: Computing the Effective Rate of Interest (Equation 15.4)

45. A firm arranged for a 120-day bank loan at an annual rate of interest of 10 percent. If the loan is for $100,000, how much interest in dollars will the firm pay? (Assume a 360-day year.)
    (a) $10,000.
    (b) $30,000.
    (c) $3,333.
    (d) $1,000.

    Answer: C
    Level of Difficulty: 4
    Learning Goal: 3
    Topic: Computing Loan Interest (Equation 15.3)

46. _________ is a short-term, unsecured promissory note issued by firms with a high credit standing. These notes are primarily issued by commercial finance companies.
    (a) A line of credit
    (b) Commercial paper
    (c) A revolving line of credit
    (d) A self-liquidating loan

    Answer: B
    Level of Difficulty: 1
    Learning Goal: 4
    Topic: Commercial Paper

47. Most commercial paper has maturities ranging from
    (a) six months to one year.
    (b) one year to three years.
    (c) three days to 270 days.
    (d) seven days to 30 days.

    Answer: C
    Level of Difficulty: 1
    Learning Goal: 4
    Topic: Commercial Paper

48. Commercial paper is generally issued in multiples of
    (a) $1,000 or more.
    (b) $10,000 or more.
    (c) $100,000 or more.
    (d) $1,000,000 or more.

    Answer: C
    Level of Difficulty: 1
    Learning Goal: 4
    Topic: Commercial Paper

49. Much of the commercial paper is issued by
    (a) commercial finance companies.
    (b) small businesses.
    (c) venture capitalists.
    (d) small manufacturing firms.

    Answer: A
    Level of Difficulty: 1
    Learning Goal: 4
    Topic: Commercial Paper

50. Most commercial paper is purchased by
    (a) manufacturers.
    (b) governments and individuals.
    (c) banks and life insurers.
    (d) the federal government.

    Answer: C
    Level of Difficulty: 1
    Learning Goal: 4
    Topic: Commercial Paper

51. Commercial paper is usually sold at a discount from
    (a) its cost.
    (b) its par value.
    (c) the prime rate.
    (d) treasury notes.

    Answer: B
    Level of Difficulty: 1
    Learning Goal: 4
    Topic: Commercial Paper

52. A letter written by a company's bank to the company's foreign supplier, stating that the bank will guarantee payment of an invoiced amount if all the underlying agreements are met is called
    (a) a letter of invoice.
    (b) a letter of intent.
    (c) a letter of credit.
    (d) None of the above.

    Answer: C
    Level of Difficulty: 1
    Learning Goal: 4
    Topic: Letters of Credit

53. The cost of borrowing through the sale of commercial paper is typically _________ the prime bank loan rate.
    (a) lower than
    (b) the same as
    (c) unrelated to
    (d) higher than

    Answer: A
    Level of Difficulty: 2
    Learning Goal: 4
    Topic: Commercial Paper versus Bank Loans

54. A firm issued $2 million worth of commercial paper that has a 90-day maturity and sells for $1,900,000. The annual interest rate on the issue of commercial paper is
    (a) 5 percent.
    (b) 10 percent.
    (c) 17 percent.
    (d) 21 percent.

    Answer: D
    Level of Difficulty: 3
    Learning Goal: 4
    Topic: Commercial Paper

55. A firm has directly placed an issue of commercial paper that has a maturity of 60 days. The issue sold for $980,000 and has an annual interest rate of 12.24 percent. The value of the commercial paper at maturity is
    (a) $19,992.
    (b) $980,000.
    (c) $999,992.
    (d) $960,008.

    Answer: C
    Level of Difficulty: 3
    Learning Goal: 4
    Topic: Commercial Paper

56. Collateral is typically required for a
    (a) secured short-term loan.
    (b) line of credit.
    (c) short-term self-liquidating loan.
    (d) single payment note.

    Answer: A
    Level of Difficulty: 1
    Learning Goal: 5
    Topic: Secured Short-term Loans

57. Financing that matures in one year or less and has specific assets pledged as collateral is called
    (a) spontaneous financing.
    (b) unsecured short-term financing.
    (c) secured short-term financing.
    (d) none of the above.

    Answer: C
    Level of Difficulty: 1
    Learning Goal: 5
    Topic: Secured Short-term Loans

58. _________ involves the sale of accounts receivable.
    (a) A trust receipt loan
    (b) Factoring
    (c) A field warehouse arrangement
    (d) Pledging of accounts receivable

    Answer: B
    Level of Difficulty: 1
    Learning Goal: 5
    Topic: Accounts Receivable Factoring

59. All of the following goods represent appropriate collateral for a secured loan to a school supply manufacturer except
    (a) reams or rolls of paper.
    (b) unbound pages.
    (c) notebooks and binders.
    (d) index cards.

    Answer: B
    Level of Difficulty: 1
    Learning Goal: 5
    Topic: Appropriate Forms of Collateral

60. All of the following goods represent appropriate collateral for a secured loan to a candy manufacturer except
    (a) boxes.
    (b) cocoa beans.
    (c) individually wrapped chocolates.
    (d) cream.

    Answer: D
    Level of Difficulty: 1
    Learning Goal: 5
    Topic: Appropriate Forms of Collateral

61. Appropriate collateral for a secured short-term loan is
    (a) fixed assets.
    (b) raw materials inventory and receivables.
    (c) common stock in a privately-held corporation.
    (d) work-in-process inventory.

    Answer: B
    Level of Difficulty: 2
    Learning Goal: 5
    Topic: Appropriate Forms of Collateral

62. Lenders require collateral to
    (a) reduce the risk of default.
    (b) control the borrowing firm.
    (c) reduce the losses if the borrower defaults.
    (d) extend to the borrower an unsecured loan.

    Answer: C
    Level of Difficulty: 2
    Learning Goal: 5
    Topic: Use of Collateral

63. The interest rate charged on a secured short-term loan to a corporation is typically _________ the interest rate on an unsecured loan.
    (a) lower than
    (b) the same as
    (c) unrelated to
    (d) higher than

    Answer: D
    Level of Difficulty: 3
    Learning Goal: 5
    Topic: Secured versus Unsecured Short-term Loans

64. The interest rate charged on secured short-term loans to a corporation is generally higher than that charged on unsecured short-term loans because
    (a) secured loans are less risky than unsecured loans.
    (b) the risk of default is lower on secured loans.
    (c) it is costly to negotiate and administer secured loans.
    (d) lenders of secured loans must pay more for their funds.

    Answer: C
    Level of Difficulty: 3
    Learning Goal: 5
    Topic: Secured versus Unsecured Short-term Loans

65. The primary source of secured short-term loans to businesses are
(a) commercial banks and commercial finance companies.
(b) savings and loans and factors.
(c) commercial paper dealers and investment bankers.
(d) life insurance companies and government securities brokers.

Answer: A
Level of Difficulty: 3
Learning Goal: 5
Topic: Secured Short-term Loans

66. Pledges of accounts receivable and factoring of accounts receivable are made on _________ basis, respectively.
(a) a nonrecourse and a notification
(b) a nonnotification and a notification
(c) a notification and a recourse
(d) a notification and a nonrecourse

Answer: B
Level of Difficulty: 3
Learning Goal: 5
Topic: Pledging Accounts Receivable

67. Which of the following is NOT an advantage of factoring?
(a) Accounts receivable immediately turned into cash.
(b) Elimination of credit and collection department.
(c) Creation of a known pattern of cash flows.
(d) The effective interest rate.

Answer: D
Level of Difficulty: 3
Learning Goal: 5
Topic: Factoring Accounts Receivable

68. Lenders recognize that by having an interest in collateral they can reduce losses if the borrowing firm defaults,
(a) and the presence of collateral reduces the risk of default.
(b) but the presence of collateral has no impact on the risk of default.
(c) therefore lenders prefer to lend to customers from whom they are able to require collateral.
(d) therefore lenders will impose a higher interest rate on unsecured short-term borrowing.

Answer: B
Level of Difficulty: 4
Learning Goal: 5
Topic: Use of Collateral

69. Appropriate collateral for a loan secured under a floating inventory lien is
    (a) cars.
    (b) drill presses.
    (c) file cabinets.
    (d) paper clips.

    Answer: D
    Level of Difficulty: 1
    Learning Goal: 6
    Topic: Floating Inventory Liens

70. Appropriate collateral for a loan secured under a trust receipt inventory loan is
    (a) drill bits.
    (b) pencils.
    (c) recreation vehicles.
    (d) bananas.

    Answer: C
    Level of Difficulty: 1
    Learning Goal: 6
    Topic: Trust Receipt Inventory Loans

71. A terminal warehouse is
    (a) a warehouse located at the airport.
    (b) a warehouse on the borrower's premises.
    (c) a central warehouse storing the merchandise of several businesses.
    (d) a warehouse located near the lender.

    Answer: C
    Level of Difficulty: 1
    Learning Goal: 6
    Topic: Warehouse Receipt Loans

72. A field warehouse is
    (a) a warehouse outside the metropolitan area.
    (b) a warehouse on the borrower's premises.
    (c) a central warehouse storing the merchandise of several businesses.
    (d) a warehouse located near the lender.

    Answer: B
    Level of Difficulty: 1
    Learning Goal: 6
    Topic: Warehouse Receipt Loans

73. Tangshan Mining was extended credit terms of 3/15 net 30 EOM. The cost of giving up the cash discount, assuming payment would be made on the last day of the credit period, would be

(a) 75.25%.
(b) 18.56%.
(c) 72.99%.
(d) 37.12%.

Answer: A
Level of Difficulty: 3
Learning Goal: 1
Topic: Cost of Giving Up a Cash Discount (Equation 15.1)

74. Tangshan Mining was extended credit terms of 3/15 net 30 EOM. The cost of giving up the cash discount, assuming payment would be made on the last day of the credit period, is 75.25 percent. If the firm were able to stretch its accounts payable to 60 days without damaging its credit rating, the cost of giving up the cash discount would only be

(a) 18.81%.
(b) 18.25%.
(c) 21.90%.
(d) 22.58%.

Answer: D
Level of Difficulty: 4
Learning Goal: 1
Topic: Cost of Giving Up a Cash Discount (Equation 15.1)

75. Tangshan Mining was extended credit terms of 3/15 net 30 EOM. The cost of giving up the cash discount, assuming payment would be made on the last day of the credit period, would be _________. If the firm were able to stretch its accounts payable to 60 days without damaging its credit rating, the cost of giving up the cash discount would only be _________.

(a) 72.99%; 18.81%.
(b) 72.99%; 18.25%.
(c) 75.25%; 21.90%.
(d) 75.25%; 22.58%.

Answer: D
Level of Difficulty: 4
Learning Goal: 1
Topic: Cost of Giving Up a Cash Discount (Equation 15.1)

76. Tangshan Mining borrowed $100,000 for one year under a line of credit with a stated interest rate of 7.5 percent and a 15 percent compensating balance. Normally, the firm keeps almost no money in its checking account. Based on this information, the effective annual interest rate on the loan is

(a) 7.5%
(b) 8.0%
(c) 8.8%
(d) 7.2%

Answer: C
Level of Difficulty: 3
Learning Goal: 3
Topic: Lines of Credit with Compensating Balances (Equation 15.3)

77. Tangshan Mining borrowed $100,000 for one year under a line of credit with a stated interest rate of 7.5 percent and a 15 percent compensating balance. Normally, the firm keeps a balance of about $10,000 in its checking account. Based on this information, the effective annual interest rate on the loan was 8.89 percent.
    (a) 7.5%
    (b) 8.0%
    (c) 8.8%
    (d) 7.2%

    Answer: A
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Lines of Credit with Compensating Balances (Equation 15.1)

78. Revolving credit agreements are
    (a) guaranteed loans that specify the maximum amount that a firm can owe the bank at any point in time.
    (b) non-guaranteed loans that specify the maximum amount that a firm can owe the bank at any one time.
    (c) credit arrangements made in cooperation with suppliers that allows the firms to roll over accounts payable each month.
    (d) None of the above

    Answer: A
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Revolving Credit Agreements

79. Tangshan Mining borrowed $100,000 for one year under a revolving credit agreement that authorized and guaranteed the firm access to $200,000. The revolving credit agreement had a stated interest rate of 7.5 percent and charged the firm a one percent commitment fee on the unused portion of the agreement. Based on this information, the effective annual interest rate on the loan was
    (a) 7.5%.
    (b) 8.0%.
    (c) 8.5%.
    (d) 9.0%.

    Answer: C
    Level of Difficulty: 3
    Learning Goal: 3
    Topic: Revolving Credit Agreements (Equation 15.1)

80. Tangshan Mining issued $1,000,000 of commercial paper for $992,500 for 45 days. Based on this information, the effective annual rate of interest on the commercial paper would be
    (a) 6.13%.
    (b) 6.29%.
    (c) 6.24%.
    (d) 6.08%.

    Answer: B
    Level of Difficulty: 3
    Learning Goal: 4
    Topic: Commercial Paper (Equation 15.1)

■ Essay Questions

1. ProntoPak Rapid Delivery Service is analyzing the credit terms of each of three suppliers, A, B, and C.

Supplier	Credit Terms
A	1/15 net 40
B	2/10 net 30
C	2/15 net 35

(a) Determine the approximate cost of giving up the cash discount.
(b) Assuming the firm needs short-term financing, recommend whether or not the firm should give up the cash discount or borrow from the bank at 10 percent annual interest. Evaluate each supplier separately.

Answers:

(a)

Supplier	Cost of Giving up the Cash Discount
A	14.6%
B	36.7%
C	36.7%

Even though Suppliers B and C appear to have different credit terms, the cost of giving up the discount is the same.

(b) The firm should borrow from the bank in all instances.

Level of Difficulty: 3
Learning Goal: 2
Topic: Cost of Giving Up a Cash Discount (Equation 15.1)

2. Mime Theatrical Supply is in the process of negotiating a line of credit with two local banks. The prime rate is currently 8 percent. The terms follow:

Bank	Loan Terms
1st National	1 percent above prime rate on a discounted basis and a 20 percent compensating balance on the face value of the loan.
2nd National	2 percent above prime rate and a 15 percent compensating balance.

(a) Calculate the effective interest rate of both banks.
(b) Recommend which bank's line of credit Mime Theatrical Supply should accept.

Answers:

(a) 1st National Bank effective cost $\dfrac{0.08+0.01}{1-0.09-0.20}=0.1268$

2nd National Bank effective cost $\dfrac{0.08+0.02}{1-0.15}=0.1176$

(b) Mime would choose the 2nd National Bank since it has the lowest effective interest rate (11.76 percent).

Level of Difficulty: 3
Learning Goal: 3
Topic: Computing the Effective Interest Rate (Equation 15.3 and Equation 15.4)

3. A&A Company purchased a new machine on October 20th, 2003 for $1,000,000 on credit. The supplier has offered A&A terms of 2/10, net 45. The current interest rate the bank is offering is 16 percent.

(a) Compute the cost of giving up cash discount.
(b) Should the firm take or give up the cash discount?
(c) What is the effective rate of interest if the firm decides to take the cash discount by borrowing money on a discount basis?

Answers:

(a) Cost of foregoing cash discount $=\dfrac{0.02}{1-0.02}\times\dfrac{360}{35}=21\%$

(b) Since the cost of foregoing cash discount is greater than the bank's interest rate, the firm should take cash discount.

(c) Interest = 1,000,000 × 0.16 × (35/360) = $15,555.56

Effective rate = $\dfrac{15{,}555.56}{1{,}000{,}000-15{,}555.56}\times\dfrac{360}{35}=16.25\%$

Level of Difficulty: 3
Learning Goal: 3
Topic: Cost of Giving Up a Cash Discount (Equation 15.1)

4. General Aviation has just sold an issue of 30-day commercial paper with a face value of $5,000,000. The firm has just received $4,958,000. What is the effective annual interest rate on the commercial paper?

Answer: {($5,000,000 – $4,958,000)/$4,958,000} × 12 = 0.1017

Level of Difficulty: 3
Learning Goal: 4
Topic: Computing the Effective Interest Rate (Equation 15.3)

5. A&A Apple Company would like to manufacture and market a new packaging. A&A has sold an issue of commercial paper for $1,500,000 and maturity of 90 days to finance the new project. Compute the annual interest rate on the issue of commercial paper if the value of the commercial paper at maturity is $1,650,000.

Answers: Interest paid = $1,650,000 – 1,500,000 = $150,000

Annual interest rate = ($150,000/$1,500,000) (360/90) = 40%

Level of Difficulty: 3
Learning Goal: 4
Topic: Computing the Effective Interest Rate (Equation 15.3)

6. Giant Feeds, Inc. is considering obtaining funding through advances against receivables. Total annual credit sales are $600,000, terms are net 30 days, and payment is made on the average of 30 days. Western National Bank will advance funds under a pledging arrangement for 13 percent annual interest. On average, 75 percent of credit sales will be accepted as collateral. Commodity Finance offers factoring on a nonrecourse basis for a 1 percent factoring commission, charging 1.5 percent per month on advances and requiring a 15 percent factor's reserve. Under this plan, the firm would factor all accounts and close its credit and collections department, saving $10,000 per year.

(a) What is the effective interest rate and the average amount of funds available under pledging and under factoring?

(b) Which plan do you recommend? Why?

Answers:

(a) Western National Bank (pledging)

$$\frac{\$600,000}{12}(0.75) = \$37,500 \text{ funds available}$$

Commodity Finance (factoring)

Average accounts receivable ($600,000/12)	$50,000
Less: Reserve (15%)	7,500
Less: Factoring Commission	500
Funds available for advance	$42,000
Less: Interest on advance (1.5% × $42,000)	630
Proceeds from advance	$41,370

Western National effective interest rate = 13%

$$\text{Commodity Finance effective interest rate} = \frac{\$630}{\$41,370}(12) = 18.27\%$$

(b)

Western National

Annual interest cost = 37,500 × 0.13 = $4,875

Commodity Finance	
Annual interest cost	$ 7,560 (= 630 × 12)
Factor's commission	6,000 (= 500 × 12)
Total Cost	$13,560
–benefit of closing credit department	10,000
Net Cost	$ 3,560

Since the net cost of factoring receivables is less expensive than pledging receivables and also provides more available funds, Giant Feeds, Inc. should choose Commodity Finance.

Level of Difficulty: 4
Learning Goal: 5
Topic: Computing the Effective Interest Rate

7. Discuss and contrast the three types of loans discussed in the text that use inventory as collateral: floating inventory liens, trust receipt inventory loans, and warehouse receipt loans.

Answer: The blanket lien is certainly the easiest for the firm since the lender just takes a lien against the firm's entire inventory and the borrower typically does not have to give the lender precise lists of what constitutes inventory on a regular basis. Trust receipt financing requires the borrower and lender to specify the exact inventory that backs up each advance. This can be a time-consuming and cumbersome type of financing for the firm. Field warehouse financing requires an independent company supervise the collateral for the lender. This, too, can be a cumbersome type of financing.

Level of Difficulty: 3
Learning Goal: 6
Topic: The Use of Inventory as Collateral