

**I. DEFINITIONS**

**OPERATING CYCLE**

- a 1. The length of time between the acquisition of inventory and the collection of cash from receivables is called the:
  - a. operating cycle.
  - b. inventory period.
  - c. accounts receivable period.
  - d. accounts payable period.
  - e. cash cycle.

**INVENTORY PERIOD**

- b 2. The length of time between the acquisition of inventory and its sale is called the:
  - a. operating cycle.
  - b. inventory period.
  - c. accounts receivable period.
  - d. accounts payable period.
  - e. cash cycle.

**ACCOUNTS RECEIVABLE PERIOD**

- c 3. The length of time between the sale of inventory and the collection of cash from receivables is called the:
  - a. operating cycle.
  - b. inventory period.
  - c. accounts receivable period.
  - d. accounts payable period.
  - e. cash cycle.

**ACCOUNTS PAYABLE PERIOD**

- d 4. The length of time between the acquisition of inventory by a firm and the payment by the firm for that inventory is called the:
  - a. operating cycle.
  - b. inventory period.
  - c. accounts receivable period.
  - d. accounts payable period.
  - e. cash cycle.

**CASH CYCLE**

- e 5. The length of time between the payment for inventory and the collection of cash from receivables is called the:
  - a. operating cycle.
  - b. inventory period.
  - c. accounts receivable period.
  - d. accounts payable period.
  - e. cash cycle.

**CARRYING COSTS**

## CHAPTER 19

- a 6. Costs of the firm that rise with increased levels of investment in its current assets are called \_\_\_\_\_ costs.
  - a. carrying
  - b. shortage
  - c. order
  - d. safety
  - e. trading

### SHORTAGE COSTS

- b 7. Costs of the firm that fall with increased levels of investment in its current assets are called \_\_\_\_\_ costs.
  - a. carrying
  - b. shortage
  - c. debt
  - d. equity
  - e. payables

### CASH BUDGET

- c 8. The forecast of cash receipts and disbursements for the next planning period is called a:
  - a. pro forma income statement.
  - b. statement of cash flows.
  - c. cash budget.
  - d. receivables analysis.
  - e. credit analysis.

### LINE OF CREDIT

- d 9. A prearranged, short-term bank loan made on a formal or informal basis, and typically reviewed for renewal annually, is called a:
  - a. letter of credit.
  - b. cleanup loan.
  - c. compensating balance.
  - d. line of credit.
  - e. roll-over.

### REVOLVING CREDIT ARRANGEMENT

- e 10. A prearranged credit agreement with a bank typically open for two or more years is called a:
  - a. letter of credit.
  - b. cleanup loan.
  - c. compensating balance.
  - d. line of credit.
  - e. revolving credit arrangement.

**COMPENSATING BALANCE**

- a 11. A fraction of the available credit on a loan agreement deposited by the borrower with the bank in a low or non-interest-bearing account is called a:
- a. compensating balance.
  - b. cleanup loan.
  - c. letter of credit.
  - d. line of credit.
  - e. roll-over.

**LETTER OF CREDIT**

- c 12. A \_\_\_\_\_ issued by a bank is a promise by that bank to make a loan if certain conditions are met.
- a. compensating balance
  - b. cleanup loan
  - c. letter of credit
  - d. line of credit
  - e. revolver

**ASSIGNED RECEIVABLES**

- b 13. A short-term loan where the lender holds the borrower's receivables as security is called:
- a. a compensating balance.
  - b. assigned receivables financing.
  - c. a letter of credit.
  - d. factored receivables financing.
  - e. a bond.

**FACTORED RECEIVABLES**

- d 14. A type of short-term loan where the borrower sells its receivables to the lender up-front, but at a discount to face value, is called:
- a. a compensating balance.
  - b. assigned receivables financing.
  - c. a letter of credit.
  - d. factored receivables financing.
  - e. a bond.

**INVENTORY LOANS**

- e 15. A short-term loan secured by the borrower's inventory, either directly or via an intermediary, is called a(n):
- a. debenture.
  - b. line of credit.
  - c. banker's acceptance.
  - d. compensating balance.
  - e. inventory loan.

## II. CONCEPTS

### SOURCES AND USES OF CASH

- e 16. Which one of the following is a source of cash?
- a. an increase in accounts receivable
  - b. an increase in fixed assets
  - c. a decrease in long-term debt
  - d. the payment of a cash dividend
  - e. an increase in accounts payable

### SOURCES AND USES OF CASH

- b 17. Which of the following are uses of cash?
- I. marketable securities are sold
  - II. the amount of inventory on hand is increased
  - III. the firm takes out a long-term bank loan
  - IV. payments are paid on accounts payable
- a. I and III only
  - b. II and IV only
  - c. I and IV only
  - d. II and III only
  - e. II, III and IV only

### NET WORKING CAPITAL

- e 18. Which one of the following will increase net working capital? Assume that the current ratio is greater than 1.0.
- a. using cash to pay an accounts payable
  - b. using cash to pay a long-term debt
  - c. selling inventory at cost
  - d. collecting an accounts receivable
  - e. using a long-term loan to buy inventory

### NET WORKING CAPITAL

- c 19. Which one of the following will decrease the net working capital of a firm? Assume that the current ratio is greater than 1.0.
- a. selling inventory at a profit
  - b. collecting an accounts receivable
  - c. paying a payment on a long-term debt
  - d. selling a fixed asset for book value
  - e. paying an accounts payable

### OPERATING CYCLE

- d 20. Which one of the following will decrease the operating cycle?
- a. paying accounts payable faster
  - b. discontinuing the discount given for early payment of an accounts receivable
  - c. decreasing the inventory turnover rate
  - d. collecting accounts receivable faster
  - e. increasing the accounts payable turnover rate

**OPERATING CYCLE**

- a 21. Which one of the following will decrease the operating cycle?
  - a. decreasing the days sales in inventory
  - b. decreasing the days in accounts payable
  - c. decreasing the cash cycle by increasing the accounts payable period
  - d. decreasing the accounts receivable turnover rate
  - e. decreasing the speed at which inventory is sold

**OPERATING CYCLE**

- c 22. The operating cycle describes how a product:
  - a. is priced.
  - b. is sold.
  - c. moves through the current asset accounts.
  - d. moves through the production process.
  - e. generates a profit.

**OPERATING CYCLE**

- a 23. Which one of the following will not affect the operating cycle?
  - a. decreasing the payables turnover from 7 times to 6 times
  - b. increasing the days sales in receivables
  - c. decreasing the inventory turnover rate
  - d. increasing the average receivables balance
  - e. decreasing the credit repayment times for the firm's customers

**CASH CYCLE**

- d 24. Which one of the following will increase the cash cycle?
  - a. improving the cash discounts given to customers who pay their account early
  - b. having a larger percentage of customers paying with cash instead of credit
  - c. buying less raw materials to have on hand
  - d. paying your suppliers earlier to receive the discount they offer
  - e. ordering raw materials inventory only when you need it

**CASH CYCLE**

- d 25. An increase in which one of the following will decrease the cash cycle, all else equal?
  - a. payables turnover
  - b. days sales in inventory
  - c. operating cycle
  - d. inventory turnover rate
  - e. accounts receivable period

**CASH CYCLE**

- d 26. ABC Manufacturing historically produced products that were held in inventory until they could be sold to a customer. The firm is now changing their policy and only producing a product when they receive an actual order from a customer. All else equal, this change will:
  - a. increase the operating cycle.
  - b. lengthen the accounts receivable period.
  - c. shorten the accounts payable period.
  - d. decrease the cash cycle.
  - e. decrease the inventory turnover rate.

**CASH CYCLE**

- b 27. Which one of the following statements concerning the cash cycle is correct?
- a. The cash cycle is equal to the operating cycle minus the inventory period.
  - b. A negative cash cycle is actually preferable to a positive cash cycle.
  - c. Granting credit to slower paying customers tends to decrease the cash cycle.
  - d. The cash cycle plus the accounts receivable period is equal to the operating cycle.
  - e. The most desirable cash cycle is the one that equals zero days.

**CASH CYCLE**

- a 28. Which one of the following statements is correct concerning the cash cycle?
- a. The longer the cash cycle, the more likely a firm will need external financing.
  - b. Increasing the accounts payable period, increases the cash cycle.
  - c. A positive cash cycle is preferable to a negative cash cycle.
  - d. The cash cycle can exceed the operating cycle if the payables period is equal to zero.
  - e. Adopting a more liberal accounts receivable policy will tend to decrease the cash cycle.

**INVENTORY PERIOD**

- e 29. Which of the following actions will tend to decrease the inventory period?
- I. discontinuing all slow-selling merchandise
  - II. selling obsolete inventory below cost just to get rid of it
  - III. buying raw materials only as they are needed in the manufacturing process
  - IV. producing goods on demand versus for inventory
- a. I and III only
  - b. II and IV only
  - c. II, III and IV only
  - d. I, II and III only
  - e. I, II, III and IV

**ACCOUNTS RECEIVABLE PERIOD**

- d 30. Which of the following actions will tend to decrease the accounts receivable period?
- I. loosening the standards for granting credit to customers
  - II. increasing the discount for early payment by credit customers
  - III. increasing the finance charges applied to all customer balances outstanding over thirty days
  - IV. granting discounts for cash sales
- a. I and III only
  - b. II and IV only
  - c. I, II and IV only
  - d. II, III and IV only
  - e. I, II, III and IV

**ACCOUNTS RECEIVABLE PERIOD**

- b 31. An increase in which one of the following is most apt to be an indicator of an accounts receivable policy that is too restrictive?
- a. bad debts
  - b. accounts receivable turnover rate
  - c. accounts receivable period
  - d. credit sales
  - e. operating cycle

**ACCOUNTS PAYABLE PERIOD**

- b 32. If you delay paying your suppliers by an additional ten days, then:
  - a. your payables turnover rate will increase.
  - b. you will require less bank financing of your operations.
  - c. the cash cycle will increase by ten days.
  - d. your operating cycle will lengthen by ten days.
  - e. your stock-out costs will rise.

**ACCOUNTS PAYABLE PERIOD**

- b 33. Which one of the following will increase the accounts payable period, all else constant?
  - a. an increase in the cost of goods sold account value
  - b. an increase in the ending accounts payable balance
  - c. an increase in the cash cycle
  - d. a decrease in the operating cycle
  - e. a decrease in the average accounts payable balance

**SHORT-TERM FINANCIAL MANAGEMENT**

- b 34. Which one of the following managers is most likely in charge of establishing the accounts receivable policy?
  - a. purchasing manager
  - b. credit manager
  - c. controller
  - d. production manager
  - e. payables manager

**SHORT-TERM FINANCIAL MANAGEMENT**

- a 35. The manager responsible for the accounting information concerning cash flows is the:
  - a. controller.
  - b. payables manager.
  - c. credit manager.
  - d. purchasing manager.
  - e. production manager.

**SHORT-TERM FINANCIAL POLICY**

- d 36. Flexible short-term financial policies tend to:
  - a. maintain low accounts receivable balances.
  - b. support few investments in marketable securities.
  - c. minimize the investment in inventory.
  - d. maintain large cash balances.
  - e. tightly restrict credit sales.

**SHORT-TERM FINANCIAL POLICY**

- a 37. A restrictive short-term financial policy tends to:
  - a. reduce future sales more so than a flexible policy.
  - b. grant credit to more customers.
  - c. incur more carrying costs than a flexible policy does.
  - d. encourage credit sales over cash sales.
  - e. reduce order costs as compared to a more flexible policy.

**SHORT-TERM FINANCIAL POLICY**

- d 38. Which of the following are associated with a restrictive short-term financial policy?
- I. large investments in marketable securities
  - II. liberal credit terms for customers
  - III. minimal cash balances
  - IV. minimal credit sales
- a. I and III only
  - b. II and IV only
  - c. II and IV only
  - d. III and IV only
  - e. I, II and III only

**SHORT-TERM FINANCIAL POLICY**

- a 39. A restrictive short-term financial policy, as compared to a more flexible policy, tends to:
- I. cause a firm to lose sales due to a lack of inventory on hand.
  - II. increase the sales of a firm due to the firm's credit availability and terms.
  - III. increase the probability that a firm will face a cash-out situation.
  - IV. increase the ability of a firm to charge premium prices.
- a. I and III only
  - b. II and IV only
  - c. I and IV only
  - d. II and III only
  - e. I and II only

**SHORT-TERM FINANCIAL POLICY**

- a 40. A flexible short-term financial policy:
- a. is associated with firms where the carrying costs are considered to be less than the shortage costs.
  - b. applies mostly to firms where the shortage costs tend to be less than the carrying costs.
  - c. applies only to firms that strictly limit their credit sales.
  - d. tends to decrease the amount of current assets held by a firm.
  - e. is designed to utilize short-term external financing to fund all of the seasonal increases in current assets.

**SHORT-TERM FINANCIAL POLICY**

- b 41. A flexible short-term financial policy:
- a. increases the likelihood that a firm will face financial distress.
  - b. incurs an opportunity cost due to the rate of return that applies to short-term assets.
  - c. advocates a smaller investment in net working capital than a restrictive policy does.
  - d. increases the probability that a firm will earn high returns on all of its assets.
  - e. utilizes short-term financing to fund all of the firm's assets.



**CASH COLLECTIONS**

- e 42. If your accounts receivable period is 30 days, you will collect payment for your \_\_\_\_\_ sales during the second quarter of a calendar year.
- a. January and February
  - b. January, February and March
  - c. February and March
  - d. February, March and April
  - e. March, April and May

**CASH COLLECTIONS**

- d 43. Your firm collects 30 percent of sales in the month of sale, 55 percent of sales in the month following the month of sale and 13 percent of sales in the second month following the month of sale. Given this, you will collect \_\_\_\_\_ sales during the month of June.
- a. 30 percent of May
  - b. 55 percent of June
  - c. 13 percent of May
  - d. 55 percent of May
  - e. 13 percent of March

**CASH COLLECTIONS**

- b 44. A manufacturing firm has a 90 day collection period. The firm produces seasonal merchandise and thus has the least sales during the first quarter of a year and the highest level of sales during the third quarter of a year. The firm maintains a relatively steady level of production which means that its cash disbursements are fairly equal in all quarters. The firm is most apt to face a cash-out situation in:
- a. the first quarter.
  - b. the second quarter.
  - c. the third quarter.
  - d. the fourth quarter.
  - e. any quarter, equally.

**CASH DISBURSEMENTS**

- a 45. Which one of the following sentences is correct about a manufacturing firm with seasonal sales?
- a. The cash flows for the fixed expenses tend to remain relatively stable from one quarter to the next.
  - b. Purchases of raw materials are normally paid for at the time of purchase.
  - c. The primary suppliers to the firm are normally paid 30 days prior to supplying their goods to the firm.
  - d. Capital expenditures tend to be relatively constant throughout the course of a year.
  - e. The total cash disbursements tend to be relatively constant each quarter even though the cash collections vary considerably.

**CASH DISBURSEMENTS**

- b 46. Which two of the following four conditions are most apt to cause a quarterly cash shortfall for a firm which is financially sound?
- I. a relatively constant level of sales
  - II. periodic expenditures for major equipment purchases
  - III. a steady dependence on a constant level of external financing
  - IV. highly seasonal sales
- a. I and III only
  - b. II and IV only
  - c. III and IV only
  - d. I, II and III only
  - e. II, III and IV only

**CASH BALANCE**

- c 47. Which of the following statements are correct concerning the cash balance of a firm?
- I. Most firms plan on maintaining a minimum cash balance at all times.
  - II. The cumulative cash surplus shown on a cash budget is equal to the ending cash balance plus the minimum cash balance retained by the firm.
  - III. The cumulative cash surplus at the end of March is used as the beginning cash balance for April when you are compiling a projected monthly cash balance report.
  - IV. A negative cumulative cash surplus indicates a borrowing need by the firm.
- a. I and III only
  - b. II and IV only
  - c. I and IV only
  - d. II and III only
  - e. I and II only

**CASH BALANCE**

- a 48. A cumulative cash deficit indicates that a firm:
- a. has at least a short-term need for external funding.
  - b. is facing long-term financial distress.
  - c. will go out of business within the year.
  - d. is capable of funding all of its needs internally.
  - e. is using its cash wisely.

**SHORT-TERM BORROWING**

- e 49. The most common means of financing a temporary cash deficit is a:
- a. long-term secured bank loan.
  - b. short-term secured bank loan.
  - c. short-term issue of corporate bonds.
  - d. long-term unsecured bank loan.
  - e. short-term unsecured bank loan.

**SHORT-TERM BORROWING**

- b 50. The primary difference between a line of credit and a revolving credit arrangement is the:
- a. type of collateral used to secure the loan.
  - b. length of the time period covered by the loan agreement.
  - c. fact that the line of credit is a secured loan and the revolving credit arrangement is unsecured.
  - d. fact that the line of credit is an unsecured loan and the revolving credit arrangement is secured.
  - e. line of credit is a long-term financing agreement while the revolving credit arrangement is a short-term financing agreement.

**SHORT-TERM BORROWING**

- b 51. A compensating balance:
- I. is required when a firm acquires bank financing other than a line of credit.
  - II. increases the cost of short-term bank financing.
  - III. represents an opportunity cost to the lending institution.
  - IV. is often used as a means of paying for banking services received.
- a. I and III only
  - b. II and IV only
  - c. II and III only
  - d. I and IV only
  - e. I, II and IV only

**SHORT-TERM BORROWING**

- b 52. The Westward Ho! Company has \$100,000 in accounts receivable. To fund a purchase of equipment the company assigns these receivables to The Corner Bank. Which one of the following statements is true given this arrangement?
- a. Westward Ho! will immediately receive \$100,000 and does not have to be concerned any further with the receivables.
  - b. Westward Ho! will receive some amount of cash immediately while maintaining full responsibility for any account that is not collected.
  - c. The Corner Bank accepts full responsibility for the collection of the accounts and in exchange pays Westward Ho! an amount that is less than \$100,000.
  - d. The Corner Bank accepts responsibility for collecting the accounts receivable and pays Westward Ho! a discounted price after the normal collection period has elapsed.
  - e. Westward Ho! sells the accounts at a discounted price and receives the sale price immediately.

**SHORT-TERM BORROWING**

- d 53. Which one of the following statements is correct?
- a. A farmer generally uses a type of financing that employs trust receipts to provide financing during the growing season.
  - b. A third-party inventory manager is generally involved with the lender and the borrower in a floor plan arrangement.
  - c. A drug store is more apt to have a financing arrangement involving trust receipts than one involving a blanket lien.
  - d. Floor plan arrangements are most applicable to large, easily identifiable types of inventory.
  - e. A direct loan from a bank is generally less expensive than a loan involving commercial paper.

**SHORT-TERM FINANCIAL PLAN**

- e 54. Which of the following are benefits of compiling a short-term financial plan?
- I. knowing ahead of time when your firm will probably require external financing
  - II. being able to estimate how long of a time period your firm might need a loan
  - III. being able to determine when your firm can best afford to spend funds on a capital expenditure
  - IV. knowing when your firm should have excess funds that can be invested
- a. I and III only
  - b. I, II and IV only
  - c. II, III and IV only
  - d. I, II and III only
  - e. I, II, III and IV

**III. PROBLEMS**

**INVENTORY PERIOD**

- e 55. Stoney Brooke, Inc. has sales of \$890,000 and cost of goods sold of \$640,000. The firm had a beginning inventory of \$36,000 and an ending inventory of \$46,000. What is the length of the inventory period?
- a. 15.24 days
  - b. 15.61 days
  - c. 21.19 days
  - d. 21.71 days
  - e. 23.38 days

**INVENTORY PERIOD**

- b 56. Your firm has sales of \$628,000 and cost of goods sold of \$402,000. At the beginning of the year, your inventory was \$31,000. At the end of the year, the inventory balance was \$33,000. What is the inventory turnover rate?
- a. 11.23 times
  - b. 12.56 times
  - c. 18.60 times
  - d. 19.63 times
  - e. 29.06 times

**INVENTORY PERIOD**

- b 57. A firm has sales of \$720,000. The cost of goods sold is equal to 70 percent of sales. The firm has an average inventory of \$6,500. How many days on average does it take the firm to sell its inventory?
- a. 3.30 days
  - b. 4.71 days
  - c. 67.29 days
  - d. 77.54 days
  - e. 110.77 days

**ACCOUNTS RECEIVABLE PERIOD**

- a 58. Bilt Rite, Inc. has sales of \$610,000. The cost of goods sold is equal to 70 percent of sales. The beginning accounts receivable balance is \$21,000 and the ending accounts receivable balance is \$25,000. How long on average does it take the firm to collect its receivables?
- a. 13.76 days
  - b. 14.09 days
  - c. 21.07 days
  - d. 25.98 days
  - e. 26.52 days

**ACCOUNTS RECEIVABLE PERIOD**

- b 59. Weson, Inc. has sales of \$462,000, costs of goods sold of \$308,000 and average accounts receivable of \$48,900. How long does it take their credit customers to pay for their purchases?
- a. 36.09 days
  - b. 38.63 days
  - c. 41.23 days
  - d. 44.20 days
  - e. 57.95 days

**ACCOUNTS PAYABLE PERIOD**

- e 60. LoDo, Inc. has sales of \$642,000 and average accounts payable of \$36,400. The cost of goods sold is equivalent to 65 percent of sales. How long does it take LoDo to pay their suppliers?
- a. 11.46 days
  - b. 13.45 days
  - c. 20.69 days
  - d. 26.18 days
  - e. 31.84 days

**ACCOUNTS PAYABLE PERIOD**

- a 61. True Blue Stores had a beginning accounts payable balance of \$56,900 and an ending accounts payable balance of \$62,800. Sales for the period were \$670,000 and costs of goods sold were \$418,000. What is the payables turnover rate?
- a. 6.98 times
  - b. 7.35 times
  - c. 8.13 times
  - d. 11.19 times
  - e. 11.78 times

**OPERATING CYCLE**

- b 62. A firm has an inventory turnover rate of 16, a receivables turnover rate of 21 and a payables turnover rate of 11. How long is the operating cycle?
- a. 37.00 days
  - b. 40.19 days
  - c. 42.87 days
  - d. 63.08 days
  - e. 73.37 days

**OPERATING CYCLE**

- e 63. Your firm currently has an operating cycle of 64 days. You are analyzing some operational changes which are expected to decrease the accounts receivable period by 3 days and decrease the inventory period by 2 days. The accounts payable turnover rate is expected to increase from 7 to 9 times per year. If all of these changes are adopted, what will your firm's new operating cycle be?
- a. 47 days
  - b. 51 days
  - c. 54 days
  - d. 57 days
  - e. 59 days

**OPERATING CYCLE**

- d 64. Dallas and More (D&M) sells their inventory in 82 days on average. Their average customer charges their purchase on a credit card whereby payment is received in ten days. On the other hand, D&M takes 56 days on average to pay for their purchases. Given this information, what is the length of D&M's operating cycle?
- a. 26 days
  - b. 36 days
  - c. 66 days
  - d. 92 days
  - e. 128 days

**OPERATING CYCLE**

- b 65. Jaxson and Sons has an inventory period of 33 days, an accounts payable period of 41 days and an accounts receivable period of 27 days. Management is considering offering a 5 percent discount if their credit customers pay for their purchases within 10 days. If the new discount is offered the accounts receivable period is expected to decline by 13 days. If the new discount is offered, the operating cycle will decrease from \_\_\_\_\_ days to \_\_\_\_\_ days.
- a. 19; 6
  - b. 60; 47
  - c. 87; 74
  - d. 101; 88
  - e. 101; 91

**CASH CYCLE**

- e 66. Wislon, Inc. has an inventory turnover rate of 15, an accounts payable period of 54 days and an accounts receivable period of 37 days. What is the length of the cash cycle?
- a. -7.33 days
  - b. -2.00 days
  - c. 2.00 days
  - d. 6.50 days
  - e. 7.33 days

**CASH CYCLE**

- a 67. Drefus, Inc. has an inventory turnover of 15 and an accounts receivable turnover of 9. The accounts payable period is 51 days. What is the length of the cash cycle?
- a. 13.89 days
  - b. 14.07 days
  - c. 14.23 days
  - d. 18.79 days
  - e. 23.00 days

**CASH CYCLE**

- c 68. A firm currently has a 36 day cash cycle. Assume that the firm changes its operations such that it decreases its receivables period by 4 days, increases its inventory period by 1 day and decreases its payables period by 2 days. What will the length of the cash cycle be after these changes?
- a. 31 days
  - b. 33 days
  - c. 35 days
  - d. 37 days
  - e. 38 days

**CASH CYCLE**

- c 69. A firm currently has a 43 day cash cycle. Assume that the firm changes its operations such that it increases its receivables period by 2 days, decreases its inventory period by 1 day and increases its payables period by 3 days. What will the length of the cash cycle be after these changes?
- a. 38 days
  - b. 39 days
  - c. 41 days
  - d. 43 days
  - e. 45 days

**CASH COLLECTIONS**

- d 70. Martinque and Son have a 60 day collection period. Sales for the next calendar year are estimated at \$1,200, \$1,100, \$2,300 and \$1,800, respectively, by quarter starting with the first quarter of the year. Given this information, which one of the following statements is correct? Assume that a year has 360 days.
- a. The firm will collect \$1,133 in Quarter 2.
  - b. The accounts receivable balance at the beginning of Quarter 4 will be \$767.
  - c. The firm will collect \$367 from Quarter 2 sales in Quarter 3.
  - d. The firm will have an accounts receivable balance of \$1,200 at the end of the year.
  - e. The firm will collect a total of \$1,967 in Quarter 4.

**CASH COLLECTIONS**

- a 71. ABC, Inc. has a beginning receivables balance on January 1<sup>st</sup> of \$430. Sales for January through April are \$240, \$250, \$330 and \$350, respectively. The accounts receivable period is 60 days. How much did the firm collect in the month of March? Assume that a year has 360 days.
- a. \$240
  - b. \$250
  - c. \$330
  - d. \$350
  - e. \$430

**CASH COLLECTIONS**

- c 72. Smith and Johnson have expected sales of \$380, \$340, \$430 and \$480 for the months of January through April, respectively. The accounts receivable period is 15 days. How much did the firm collect in the month of March? Assume that a year has 360 days.
- a. \$340
  - b. \$360
  - c. \$385
  - d. \$430
  - e. \$455

**CASH COLLECTIONS**

- e 73. Dokos, Inc. has a beginning receivables balance on January 1<sup>st</sup> of \$560. Sales for January through April are \$620, \$680, \$570 and \$550, respectively. The accounts receivable period is 30 days. How much did the firm collect in the month of March? Assume that a year has 360 days.
- a. \$550
  - b. \$570
  - c. \$620
  - d. \$625
  - e. \$680



**CASH COLLECTIONS**

- c 74. Baker Industries has a 45 day accounts receivable period. The estimated quarterly sales for this year, starting with the first quarter, are \$1,200, \$1,400, \$1,900 and \$3,200, respectively. How much does the firm expect to collect in the third quarter? Assume that a year has 360 days.
- \$1,300
  - \$1,400
  - \$1,650
  - \$1,900
  - \$2,550

**CASH COLLECTIONS**

- b 75. D & F, Inc. expects sales of \$620, \$650, \$730 and \$780 for the months of April through July, respectively. The firm collects 20 percent of sales in the month of sale, 50 percent in the month following the month of sale and 28 percent in the second month following the month of sale. The remaining 2 percent of sales is never collected. How much money does the firm expect to collect in the month of July?
- \$645
  - \$703
  - \$711
  - \$742
  - \$755

**CASH DISBURSEMENTS**

- c 76. Weisbro and Sons purchase their inventory one quarter prior to the quarter of sale. The purchase price is 60 percent of the sales price. The accounts payable period is 60 days. The accounts payable balance at the beginning of quarter one is \$27,500. What is the amount of the expected disbursements for quarter two given the following expected quarterly sales?

Quarter 1	\$31,000
Quarter 2	\$34,000
Quarter 3	\$42,000
Quarter 4	\$51,000

- \$19,200
- \$20,400
- \$22,000
- \$25,200
- \$32,000

**CASH DISBURSEMENTS**

- b 77. Birds Unlimited has a 45 day accounts payable period. The firm has expected sales of \$1,800, \$2,100, \$2,400 and \$2,800, respectively, by quarter for the next calendar year. The cost of goods sold for a quarter is equal to 65 percent of the next quarter sales. What is the amount of the projected cash disbursements for accounts payable for Quarter 2 of the next year? Assume that a year has 360 days.
- \$1,125.00
  - \$1,462.50
  - \$1,690.00
  - \$2,125.50
  - \$2,250.00

**CASH DISBURSEMENTS**

- d 78. Your firm sells \$2,000 worth of goods in December, \$1,700 worth in January, \$1,500 in February and \$1,600 in March. Your cost is 60 percent of the retail price. You have a receivables period of 30 days and a payables period of 45 days. You buy your products one month prior to selling them. Which one of the following statements is correct given this information?
- a. The accounts payable balance at the end of February is \$750.
  - b. Your January disbursements to your suppliers is \$960.
  - c. Your February disbursements to your suppliers is \$900.
  - d. Your March disbursements to your suppliers is \$930.
  - e. Your beginning accounts payable balance as of January 1<sup>st</sup> is \$450.

**CASH BALANCE**

- a 79. As of the beginning of the quarter, you have a cash balance of \$250. During the quarter you pay your suppliers \$310. Your accounts receivable collections are \$420. You also pay an interest payment of \$30 and a tax bill of \$180. In addition, you borrow \$75. What is your cash balance at the end of the quarter?
- a. \$225
  - b. \$245
  - c. \$255
  - d. \$275
  - e. \$285

**CASH BALANCE**

- a 80. On April 1<sup>st</sup>, your firm had a beginning cash balance of \$280. Your sales for March were \$460 and your April sales were \$510. During April you had cash expenses of \$130 and payments on your accounts payable to \$210. Your accounts receivable period is 30 days. What is your firm's beginning cash balance on May 1<sup>st</sup>?
- a. \$400
  - b. \$430
  - c. \$450
  - d. \$860
  - e. \$910

**CASH BALANCE**

- c 81. Pluto, Inc. has a beginning cash balance of \$430 on February 1<sup>st</sup>. The firm has projected sales of \$600 in January, \$800 in February and \$900 in March. The cost of goods sold is equal to 70 percent of sales. Goods are purchased one month prior to the month of sale. The accounts payable period is 30 days and the accounts receivable period is 15 days. The firm has monthly cash expenses of \$180. What is the projected ending cash balance at the end of February? Assume that every month has 30 days.
- a. \$150
  - b. \$360
  - c. \$390
  - d. \$450
  - e. \$570

**SHORT-TERM BORROWING**

- e 82. Your firm has a line of credit with your local bank for \$50,000. The loan agreement calls for interest of 9 percent with a 5 percent compensating balance requirement which is based on the total amount borrowed. What is the effective interest rate if you need \$42,750 for one year to cover your operating expenses?
- a. 8.55 percent
  - b. 9.00 percent
  - c. 9.13 percent
  - d. 9.38 percent
  - e. 9.47 percent

**SHORT-TERM BORROWING**

- e 83. The Babco Co. has a \$200,000 line of credit with an 8 percent interest rate and a 10 percent compensating balance requirement which is based on the total amount borrowed. What is the effective interest rate if the firm uses this source of funding to purchase a \$117,000 piece of equipment? The company plans on repaying the loan in a lump sum at the end of one year.
- a. 7.20 percent
  - b. 7.27 percent
  - c. 8.08 percent
  - d. 8.80 percent
  - e. 8.89 percent

**SHORT-TERM BORROWING**

- d 84. The Jetson Co. has an \$80,000 line of credit with a 12 percent interest rate and a 10 percent compensating balance requirement which is based on the total amount borrowed. What is the effective annual interest rate if the firm needs \$45,000 of cash for one year?
- a. 10.80 percent
  - b. 11.44 percent
  - c. 12.12 percent
  - d. 13.33 percent
  - e. 13.78 percent

**SHORT-TERM BORROWING**

- b 85. Your firm factors its accounts receivable immediately at a 3 percent discount. The average collection period is 41.95 days. Assume that all accounts are collected in full. What is the effective annual interest rate on this arrangement?
- a. 29.9 percent
  - b. 30.3 percent
  - c. 30.7 percent
  - d. 30.9 percent
  - e. 31.3 percent

**SHORT-TERM BORROWING**

- c 86. Your bank offers you a \$100,000 line of credit with an interest rate of 2.5 percent per quarter. The loan agreement also requires that 4 percent of the unused portion of the credit line be deposited in a non-interest bearing account as a compensating balance. Your short-term investments are paying 1.25 percent per quarter. What is your effective annual interest rate on this arrangement if you do not borrow any money on this credit line during the year? Assume that both the funds you borrow and the funds you invest use compound interest.
- a. 5.00 percent
  - b. 5.05 percent
  - c. 5.09 percent
  - d. 5.13 percent
  - e. 5.25 percent

**SHORT-TERM BORROWING**

- c 87. Your bank offers you a \$100,000 line of credit with an interest rate of 2.5 percent per quarter. The loan agreement also requires that 4 percent of the unused portion of the credit line be deposited in a non-interest bearing account as a compensating balance. Your short-term investments are paying 1.25 percent per quarter. What is your effective annual interest rate if you borrow the whole \$100,000 for the entire year? Assume that both the funds you borrow and the funds you invest use compound interest.
- a. 10.00 percent
  - b. 10.25 percent
  - c. 10.38 percent
  - d. 10.50 percent
  - e. 10.67 percent

**SHORT-TERM BORROWING**

- d 88. Your bank offers you a \$70,000 line of credit with an interest rate of 2.75 percent per quarter. The loan agreement also requires that 5 percent of the unused portion of the credit line be deposited in a non-interest bearing account as a compensating balance. Your short-term investments are paying  $\frac{1}{2}$  of 1 percent per month. What is your effective annual interest rate on this arrangement if you do not borrow any money on this credit line during the year? Assume that both the funds you borrow and the funds you invest use compound interest.
- a. 6.00 percent
  - b. 6.06 percent
  - c. 6.13 percent
  - d. 6.17 percent
  - e. 6.21 percent

**SHORT-TERM BORROWING**

- c 89. Your bank offers you a \$40,000 line of credit with an interest rate of 2.35 percent per quarter. The loan agreement also requires that 5 percent of the unused portion of the credit line be deposited in a non-interest bearing account as a compensating balance. Your short-term investments are paying 1.75 percent per quarter. What is your effective annual interest rate if you borrow the whole \$40,000 for the entire year? Assume that both the funds you borrow and the funds you invest use compound interest.
- a. 9.40 percent
  - b. 9.63 percent
  - c. 9.74 percent
  - d. 9.82 percent
  - e. 9.87 percent

**SHORT-TERM FINANCIAL PLAN**

- c 90. Your firm has a net cash inflow for the quarter of -\$30 (negative). The beginning cash balance is \$15. Company policy is to maintain a minimum cash balance of \$5 and borrow only the amount that is necessary to maintain that balance. How much does your firm need to borrow to have a zero cumulative surplus?
- a. \$10
  - b. \$15
  - c. \$20
  - d. \$25
  - e. \$30

**SHORT-TERM FINANCIAL PLAN**

- e 91. Your firm has a net cash inflow for the quarter of \$60. The beginning cash balance is \$35. Company policy is to maintain a minimum cash balance of \$15 and borrow only the amount that is necessary to maintain that balance. How much does your firm need to borrow or how much can it repay on its loans to have a zero cumulative surplus?
- a. borrow \$40
  - b. borrow \$10
  - c. repay \$10
  - d. repay \$40
  - e. repay \$80

**SHORT-TERM FINANCIAL PLAN**

- e 92. At the beginning of the year, you have an outstanding short-term loan of \$10 which was used to cover your cash needs for the previous year. During the current year, you expect to pay \$2 interest and have an annual net cash inflow of -\$10 (negative), excluding the interest payment. What is your anticipated loan balance at year end?
- a. \$0
  - b. \$2
  - c. \$12
  - d. \$18
  - e. \$22

#### IV. ESSAYS

##### **SECURED INVENTORY LOANS**

93. List and describe the three basic types of secured inventory loans. What are the advantages and disadvantages of each type of loan?

The three types are blanket lien, trust receipts and field warehouse financing. The blanket lien is certainly the easiest for the firm since the lender just takes a lien against all of the firm's 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.

##### **TOTAL COST CURVE**

94. Graphically depict shortage costs, carrying costs and the total cost curve showing the optimal investment in current assets. (Place costs on the vertical axis and current assets on the horizontal axis) Be sure to label the optimal level of current assets. Using the same format, illustrate what a flexible short-term financing policy looks like and also illustrate what a restrictive policy looks like.

Students should replicate Figure 19.2 in the text.

##### **RESTRICTIVE FINANCIAL POLICIES**

95. Restrictive short-term financial policies regarding current asset management include three basic actions. List and briefly describe each action.

The three actions are: Keep cash low with little invested in marketable securities, keep inventory low and minimize accounts receivable.

##### **SHORT-TERM FINANCIAL POLICY**

96. As the CFO of Billybob's Auto Recycling, you plan to implement a system whereby customers who pay their bills on time will receive a 10 percent rebate on their purchases. Those who pay earlier than required will receive a 15 percent rebate. Explain the impact of this proposal on the firm.

The obvious results of this policy change include an increase in expected sales (due to the lower effective purchase price for customers that pay early) and a reduction in gross profit associated with offering the large discounts. Less obvious are such effects as the potential reduction in the firm's average receivables balance (and the cost of carrying them), and the potential for strategic price-cutting (as well as other actions) by competitor firms (assuming the product in question can be treated as a commodity item).

**OPERATING AND CASH CYCLES**

97. It has been argued that if one could perfectly synchronize a firm's cash inflows and outflows, short-term financial planning would be unnecessary. Do you agree? What actions can the firm's financial decision-makers take to reduce the degree of asynchronization? Why should this be a concern?

This question asks the student to note the impact of the differential timing of the cash and operating cycles. We sometimes explain this to students in terms of a simple analogy. If we could arrange our finances so that our bills all came due on the day after we got paid, our checking account balance could be kept at a low level throughout the month. The fact that bills come due throughout the month, however, necessitates the maintenance of a greater level of spendable funds. The opportunity cost of this balance can be substantial for a firm with millions of dollars of inflows and outflows on a monthly basis. Financial decision-makers can influence the lengths of the cash and operating cycles by adjusting credit terms and making payments at different points as well as, from a longer-term perspective, investing in equipment that utilizes different production technologies and, therefore, different production times.

**COLLATERAL ON SHORT-TERM LOANS**

98. Accounts receivable and inventory are some of the most liquid assets a firm owns and their market value is typically fairly close to book value. Even so, in the eyes of many lenders, these assets make for inadequate collateral on loans, particularly if the business looking to borrow the money is in a liquidity crisis. Why do you think this is the case?

From a lender's standpoint, these assets can make inadequate collateral precisely due to their liquidity. They tend to be assets that are difficult to take a specific security interest in, plus they are easily converted into cash. If a firm runs into financial distress, it is not uncommon for the firm to convert its good receivables and most salable inventory into cash. If the lender is not monitoring the situation closely, it may find that by the time it becomes obvious the business won't survive, all of the good receivables and inventory are gone, leaving a pool of "liquid" assets that have questionable market value.

**COMPENSATING BALANCES**

99. Compensating balances are frequently a part of revolving lending arrangements with banks, yet they add to the cost of financing for the borrower. Why, then, would borrowers agree to such terms? What other types of financing are there that the firm could use as an alternative?

Revolvers are very flexible lending arrangements and it is likely the borrower will value this flexibility, particularly if they follow a restrictive current asset management policy. Furthermore, since the compensating balance is typically required only if the borrower draws on the line, it is only a cost to the firm when borrowing is actually required. Alternative types of financing include letters of credit, accounts receivable financing (including factoring), inventory loans, commercial paper and trade credit.